CURRENT CONDITIONS REPORT

FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Prepared For:
Motors Liquidation Company

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TABLE OF CONTENTS

Page

1.0 INTRODUCTION 1
1.1 GENERAL 1
1.2 AREAS OF INTEREST 3
1.3 SCOPE OF CCR 6
1.4 REPORT ORGANIZATION 7

2.0 REGIONAL ENVIRONMENTAL SETTING 8
2.1 TOPOGRAPHY 8
2.2 LAND USE 8
2.3 WATER SUPPLY/GROUNDWATER USE 8
2.4 DEMOGRAPHICS 8
2.5 CLIMATE 9
2.6 REGIONAL GEOLOGY 9
2.7 REGIONAL HYDROGEOLOGY 10
2.8 REGIONAL SURFACE WATER HYDROLOGY 11
2.9 REGIONAL ECOLOGICAL SETTING 11
2.9.1 REGIONAL PLANT LIFE 12
2.9.2 REGIONAL ANIMAL LIFE 12

3.0 FACILITY SETTING 13
3.1 FACILITY LAND USE 13
3.2 SURROUNDING LAND USE 13
3.2.1 ADJACENT PROPERTIES 13
3.3 PHYSIOGRAPHY AND TOPOGRAPHY 14
3.4 GEOLOGY 14
3.5 HYDROGEOLOGY 15
3.6 SURFACE WATER HYDROLOGY 16
3.7 GROUNDWATER USE 16
3.8 ECOLOGY 17

4.0 DESCRIPTION OF FACILITY 18
4.1 FACILITY LOCATION/DESCRIPTION 18
4.2 CURRENT AND HISTORICAL OWNERSHIP AND OPERATIONS 18
4.3 UTILITIES 24
4.4 RAW MATERIAL USAGE AND STORAGE 26
4.5 ABOVEGROUND STORAGE TANKS 28
4.6 UNDERGROUND STORAGE TANKS 30
4.7 CURRENT AND HISTORICAL WASTE MANAGEMENT PRACTICES 33
4.7.1 RCRA REGULATORY HISTORY 34
4.7.2 RCRA CORRECTIVE ACTION STATUS 34
4.7.3 WASTE MANAGEMENT 34
4.7.3.1 HAZARDOUS WASTE HANDLING/STORAGE AND DISPOSAL 34

4.7.3.2 SOLID NON HAZARDOUS AND INDUSTRIAL WASTE MANAGEMENT 36
4.8 INDUSTRIAL WASTEWATER 39
4.9 STORMWATER 43
4.10 POLYCHLORINATED BIPHENYLS (PCBS) 48
4.10.1 TRANSFORMER SUBSTATIONS 49
4.10.2 REGULATED CAPACITORS (> 3 LBS) 51
4.10.3 BALLASTS 52
4.10.4 HYDRAULIC SYSTEMS 52
4.10.5 SOLID PCB BULK PRODUCT MATERIALS 53
4.10.6 NON-POROUS SURFICIAL STAINING 53
4.11 ASBESTOS-CONTAINING MATERIALS 53
4.12 LEAD-BASED PAINT 57
4.13 AIR EMISSIONS 58
4.14 SPILLS/RELEASES 60
4.15 IONIZING RADIATION 61
4.16 ENVIRONMENTAL DATABASES SEARCH 62
4.16.1 DATABASE LISTING FOR THE FACILITY 64
4.16.2 DATABASE LISTINGS FOR ADJACENT PROPERTIES 68
4.16.3 ADDITIONAL AREA PROPERTIES 75
4.16.4 UNMAPPED PROPERTIES 86
4.17 HISTORICAL RECORDS REVIEW 86
4.17.1 SANBORN FIRE INSURANCE MAPS 86
4.17.2 HISTORICAL AERIAL PHOTOGRAPHS 88
4.17.3 CITY DIRECTORIES 92
4.17.4 HISTORICAL TOPOGRAPHIC MAPS 98
4.18 PUBLIC RECORDS REVIEW 100
4.18.4 U.S. EPA 100
4.18.5 MDNRE 101
4.18.6 LOCAL AGENCIES 101

5.0 SUMMARY OF PREVIOUS ENVIRONMENTAL INVESTIGATIONS 102
5.1 SOILS INVESTIGATION, GRAND RAPIDS TESTING SERVICE, OCTOBER 1972 106
5.2 IEPR, GMC, APRIL 14, 1978 106
5.3 IEPR, GMC, APRIL 10, 1981 107
5.4 INTER-ORGANIZATION MEMORANDUM, GMC, AUGUST 7, 1981 108
5.5 INTER-ORGANIZATION MEMORANDUM, GMC, AUGUST 25, 1981 109
5.6 HE OF AN OIL LEAKAGE, EDI, DECEMBER 1981 109
5.7 GROUNDWATER SAMPLING RESULTS, EDI, JANUARY 12, 1982 112
5.8 GROUNDWATER SAMPLING RESULTS, EDI, DECEMBER 23, 1982 112
5.9 IEPR, GMC, NOVEMBER 22, 1985 112
5.10 WATER SAMPLING AND ANALYSIS, EDI, FEBRUARY 14, 1986 113
5.11 HYDROGEOLOGIC INVESTIGATION, EDI, MARCH 1986 114
5.12 PHASE II HI, EDI, JUNE 1986 115
5.13 CORRESPONDENCE, GMC & MDNR, OCTOBER-NOVEMBER, 1986 117

5.14 PHASE III-A HI, EDI, MARCH 1987 118
5.15 PHASE III-B HI, EDI, JULY 1987 119
5.16 CORRESPONDENCE, GMC & MDNR, JUNE 15, 1987 AND OCTOBER 14, 1987 121
5.17 PHASE IV-A PILOT STUDY, EDI, AUGUST 1988 121
5.18 PHASE IV-B HI, EDI, JULY 1988 122
5.19 PHASE IV-C HI, EDI, JULY 1988 123
5.20 TCE RMP, EDI, MARCH 1989 125
5.21 AVAILABLE INFORMATION ON 1,1,1-TCA, EDI, SEPTEMBER 6, 1989 126
5.22 TCE EMISSION TESTING, EDI, SEPTEMBER 21, 1989 126
5.23 OFF-SITE GROUNDWATER PURGE EVALUATION, WW ENGINEERING & SCIENCE, APRIL 1993 126
5.24 ADDENDUM TO THE MAY 1993 GEOTECHNICAL REPORT, WW ENGINEERING, JUNE 17, 1993 128
5.25 17-BAY SOIL AND GROUNDWATER SAMPLING, EARTH TECH, OCTOBER 27, 1998 128
5.26 ABANDONMENT OF MONITORING WELL X-10, GMC, FEBRUARY 23, 1998 130
5.27 NOTICE OF MIGRATION OF CONTAMINATION, GMC, JUNE 9, 1999 130
5.28 20-BAY SOIL AND GROUNDWATER SAMPLING, EARTH TECH, MARCH 3, 1999 130
5.29 DOCUMENTATION OF COMPLIANCE WITH SECTION 20107A, CRA, JANUARY 2002 131
5.30 EVALUATION OF GROUNDWATER AND SVE TREATMENT SYSTEMS, CRA, AUGUST 13, 2002 132
5.31 MONITORING WELL NETWORK EVALUATION, CRA, AUGUST 13, 2002 134
5.32 4-BAY AND 5-BAY PRESS PIT EXCAVATION, AUGUST - NOVEMBER 2002 136
5.33 HISTORICAL DOCUMENTATION REVIEW SUMMARY, CRA, DECEMBER 23, 2002 139
5.34 ADDITIONAL HISTORICAL DOCUMENTATION REVIEW SUMMARY, CRA, JANUARY 21, 2003 139
5.35 NOTICE OF MIGRATION OF CONTAMINATION, GMC, SEPTEMBER 19, 2003 141
5.36 DATA REPORT, CRA, FEBRUARY 2004 142
5.37 2004 DATA REPORT, CRA, DECEMBER 2004 144
5.38 RESULTS OF PRESS PIT AND PERFORATED SUMP SYSTEM SAMPLING, CRA, JANUARY 6, 2006 149
5.39 SUMMARY OF SOIL INVESTIGATIONS-FORMER SVE SYSTEM AREA, CRA, SEPTEMBER 8, 2006 150
5.40 2005 BULK UNLOAD AREA INVESTIGATION SUMMARY, CRA, SEPTEMBER 8, 2006 151
5.41 2005-2006 INVESTIGATION DATA REPORT, CRA, APRIL 2007 154
5.42 SUMMARY OF ADJACENT PROPERTY REVIEW – CONICAL TOOL COMPANY, CRA, SEPTEMBER 12, 2007 157

5.43 2007 BULK UNLOAD AREA INVESTIGATION, CRA, OCTOBER 26, 2007 161
5.44 SUMMARY OF ADJACENT PROPERTY REVIEW–WEST SIDE OF COLE DRAIN, CRA, DECEMBER 5, 2007.....164
5.44.1 PRICE & COMPANY (FORMERLY WYOMING WAREHOUSE, INC.) 166
5.44.1.1 CLEAN-UP REPORT, GILLHESPY – RV SEAMAN, INC., DECEMBER 26, 1989.....166
5.44.1.2 LETTER TO MR. DAVID LINDSAY OF THE MDNR, WESTSHORE, FEBRUARY 8, 1991.....166
5.44.1.3 HYDROLOGICAL AND SOIL INVESTIGATION AT WYOMING WAREHOUSE, INC., WESTSHORE, APRIL 28, 1992 167
5.44.1.4 HYDROLOGICAL AND SOIL INVESTIGATION AT WYOMING WAREHOUSE, INC., WESTSHORE, DECEMBER 4, 1992 .168
5.44.1.5 LETTER TO MDNR FROM WESTSHORE, OCTOBER 18, 1993 169
5.44.1.6 LETTER TO MR. ORRIN SUNDE OF WYOMING WAREHOUSE FROM MDNR, NOVEMBER 17, 1993.....169
5.44.2 AMERICAN METALS AND PLASTICS, INC. (AMPI) 170
5.44.2.1 NPDES COC AND ASSOCIATED DOCUMENTATION 170
5.44.2.2 LETTER TO AMPI FROM MDEQ, AUGUST 10, 1998.....170
5.44.2.3 LETTER TO AMPI FROM MDEQ, FEBRUARY 12, 2004 171
5.44.2.4 LETTER TO MDEQ FROM AMPI, APRIL 15, 2004.....171
5.44.2.5 LETTER TO AMPI FROM MDEQ, NOVEMBER 9, 2006.....172
5.44.2.6 LETTER TO MDEQ FROM AMPI, DECEMBER 8, 2006.....172
5.44.3 440 32ND STREET SW 173
5.44.3.1 LETTER FROM THE KENT COUNTY HEALTH DEPARTMENT REGARDING IMPROPER DISPOSAL OF CUTTING/COOLING OIL AT 440 32ND STREET SW, OCTOBER 6, 1986.....173
5.45 SEMI-ANNUAL GROUNDWATER MONITORING REPORT, CRA, JANUARY 5, 2010.....174
5.46 PHASE I ENVIRONMENTAL SITE ASSESSMENT, CRA, AUGUST 5, 2010 176
5.47 DRAFT FACILITY ENVIRONMENTAL ASSESSMENT, CRA, OCTOBER, 2010.....177
5.48 2010 BULK UNLOAD AREA INVESTIGATION DATA REPORT, CRA, NOVEMBER, 2010.....178

6.0 SUMMARY OF PREVIOUS REMEDIAL ACTIONS 180
6.1 FACILITY GROUNDWATER FOUNDATION DRAIN SYSTEM 180
6.2 MISCELLANEOUS PRESS REMOVALS 180
6.3 MISCELLANEOUS EXCAVATIONS.....181
6.4 GROUNDWATER COLLECTION AND TREATMENT SYSTEM.....181
6.5 SOIL VAPOR EXTRACTION AND TREATMENT SYSTEM 182
6.6 BULK UNLOAD TRENCH DRAIN INSTALLATION AND EXCAVATION 183

7.0 AREAS OF INTEREST 184

7.1 AOI 1: ADJACENT PROPERTIES – EAST OF BUCHANAN AVENUE SW184
7.1.1 HISTORICAL OPERATIONS 184
7.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 184
7.1.3 CURRENT STATUS AND RECOMMENDATIONS....185
7.2 AOI 2: ADJACENT PROPERTIES – ALONG CLAY AVENUE SW 186
7.2.1 HISTORICAL OPERATIONS 186
7.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 186
7.2.3 CURRENT STATUS AND RECOMMENDATIONS....186
7.3 AOI 3: ADJACENT PROPERTIES – WEST SIDE OF COLE DRAIN 186
7.3.1 HISTORICAL OPERATIONS 186
7.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 187
7.3.3 CURRENT STATUS AND RECOMMENDATIONS....187
7.4 AOI 4: HISTORICAL SITE OPERATIONS 187
7.4.1 AOI 4.1: LONG-TERM INDUSTRIAL OPERATIONS – MAIN PARCEL188
7.4.1.1 HISTORICAL OPERATIONS 188
7.4.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 188
7.4.1.3 CURRENT STATUS AND RECOMMENDATIONS....188
7.4.2 AOI 4.2: HISTORICAL OPERATIONS – WESTERN PARCEL 188
7.4.2.1 HISTORICAL OPERATIONS 188
7.4.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 189
7.4.2.3 CURRENT STATUS AND RECOMMENDATIONS....189
7.4.3 AOI 4.3: HISTORICAL OPERATIONS – NORTHERN PARCEL 189
7.4.3.1 HISTORICAL OPERATIONS 189
7.4.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 190
7.4.3.3 CURRENT STATUS AND RECOMMENDATIONS....190
7.5 AOI 5: RELEASE FROM PRESS HS-5 190
7.5.1 HISTORICAL OPERATIONS 190
7.5.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 190
7.5.3 CURRENT STATUS AND RECOMMENDATIONS....191
7.6 AOI 6: LNAPL AND SVOC-IMPACTED GROUNDWATER 191
7.6.1 HISTORICAL OPERATIONS 191
7.6.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 191
7.6.3 CURRENT STATUS AND RECOMMENDATIONS....192
7.7 AOI 7: FORMER METAL FINISHING OPERATIONS....192
7.7.1 AOI 7.1 - BONDERIZING OPERATIONS 192
7.7.1.1 HISTORICAL OPERATIONS 192
7.7.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 192
7.7.1.3 CURRENT STATUS AND RECOMMENDATIONS....193
7.7.2 AOI 7.2 - LACQUER AND CEMENT SPRAY....193
7.7.2.1 HISTORICAL OPERATIONS 193
7.7.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 193
7.7.2.3 CURRENT STATUS AND RECOMMENDATIONS....193
7.7.3 AOI 7.3 - ANTI-RUST SPRAY BOOTH NO. 1 193
7.7.3.1 HISTORICAL OPERATIONS 193
7.7.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 194
7.7.3.3 CURRENT STATUS AND RECOMMENDATIONS....194

7.7.4 AOI 7.4 - ANTI-RUST SPRAY BOOTH NO. 2 194
7.7.4.1 HISTORICAL OPERATIONS 194
7.7.4.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 194
7.7.4.3 CURRENT STATUS AND RECOMMENDATIONS....194
7.7.5 AOI 7.5 - ANTI-RUST SPRAY BOOTH NO. 3 195
7.7.5.1 HISTORICAL OPERATIONS 195
7.7.5.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 195
7.7.5.3 CURRENT STATUS AND RECOMMENDATIONS....195
7.7.6 AOI 7.6 - ANTI-RUST SPRAY BOOTH NO. 4 195
7.7.6.1 HISTORICAL OPERATIONS 195
7.7.6.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 195
7.7.6.3 CURRENT STATUS AND RECOMMENDATIONS....196
7.7.7 AOI 7.7 - FORMER WEST PAINT BOOTH 196
7.7.7.1 HISTORICAL OPERATIONS 196
7.7.7.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 196
7.7.7.3 CURRENT STATUS AND RECOMMENDATIONS....196
7.7.8 AOI 7.8 - FORMER PAINT BOOTH (CURRENT STEAM CLEAN BOOTH) 196
7.7.8.1 HISTORICAL OPERATIONS 196
7.7.8.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 197
7.7.8.3 CURRENT STATUS AND RECOMMENDATIONS....197
7.7.9 AOI 7.9 - FORMER EAST PAINT BOOTH 197
7.7.9.1 HISTORICAL OPERATIONS 197
7.7.9.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 197
7.7.9.3 CURRENT STATUS AND RECOMMENDATIONS....197
7.8 AOI 8: UNDERGROUND STORAGE TANKS....198
7.8.1 AOI 8.1: MINERAL SPIRITS AND MINERAL SEAL OIL USTS....198
7.8.1.1 HISTORICAL OPERATIONS 198
7.8.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 199
7.8.1.3 CURRENT STATUS AND RECOMMENDATIONS....199
7.8.2 AOI 8.2: CURRENT GASOLINE AND DIESEL USTS....199
7.8.2.1 HISTORICAL OPERATIONS 199
7.8.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 200
7.8.2.3 CURRENT STATUS AND RECOMMENDATIONS....200
7.8.3 AOI 8.3: FORMER HEATING OIL AND OIL USTS 200
7.8.3.1 HISTORICAL OPERATIONS 200
7.8.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 200
7.8.3.3 CURRENT STATUS AND RECOMMENDATIONS....201
7.8.4 AOI 8.4: FORMER 5,000-GALLON AND 8,000-GALLON GASOLINE USTS 201
7.8.4.1 HISTORICAL OPERATIONS 201
7.8.4.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 201
7.8.4.3 CURRENT STATUS AND RECOMMENDATIONS....201
7.8.5 AOI 8.5: FORMER 1,000 GALLON GASOLINE UST NO. 1 202
7.8.5.1 HISTORICAL OPERATIONS 202
7.8.5.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 202

7.8.5.3 CURRENT STATUS AND RECOMMENDATIONS....202
7.8.6 AOI 8.6: FORMER 1,000 GALLON GASOLINE UST NO. 2....202
7.8.6.1 HISTORICAL OPERATIONS....202
7.8.6.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....203
7.8.6.3 CURRENT STATUS AND RECOMMENDATIONS....203
7.9 AOI 9: WASTEWATER TREATMENT PLANT (WWTP)....203
7.9.1 HISTORICAL OPERATIONS....203
7.9.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....204
7.9.3 CURRENT STATUS AND RECOMMENDATIONS....204
7.10 AOI 10: POWER HOUSE OPERATIONS....204
7.10.1 AOI 10.1: CURRENT POWER HOUSE....204
7.10.1.1 HISTORICAL OPERATIONS....204
7.10.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....205
7.10.1.3 CURRENT STATUS AND RECOMMENDATIONS....205
7.10.2 AOI 10.2: FORMER POWERHOUSE....205
7.10.2.1 HISTORICAL OPERATIONS....205
7.10.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....206
7.10.2.3 CURRENT STATUS AND RECOMMENDATIONS....206
7.11 AOI 11: FORMER AOF HOUSE....206
7.11.1 HISTORICAL OPERATIONS....206
7.11.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....206
7.11.3 CURRENT STATUS AND RECOMMENDATIONS....207
7.12 AOI 12: FORMER COOLING TOWER BASIN....207
7.12.1 HISTORICAL OPERATIONS....207
7.12.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....207
7.12.3 CURRENT STATUS AND RECOMMENDATIONS....207
7.13 AOI 13: FORMER COOLING WATER SPRAY POND....208
7.13.1 HISTORICAL OPERATIONS....208
7.13.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....208
7.13.3 CURRENT STATUS AND RECOMMENDATIONS....208
7.14 AOI 14: FORMER SLUDGE BED....208
7.14.1 HISTORICAL OPERATIONS....208
7.14.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....209
7.14.3 CURRENT STATUS AND RECOMMENDATIONS....209
7.15 AOI 15: BALER OPERATIONS....209
7.15.1 AOI 15.1: FORMER MAIN MANUFACTURING BUILDING BALERS 209
7.15.1.1 HISTORICAL OPERATIONS....209
7.15.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....209
7.15.1.3 CURRENT STATUS AND RECOMMENDATIONS....209
7.15.2 AOI 15.2: FORMER BALER HOUSE....210
7.15.2.1 HISTORICAL OPERATIONS....210
7.15.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....210
7.15.2.3 CURRENT STATUS AND RECOMMENDATIONS....210
7.15.3 AOI 15.3: CURRENT BALER HOUSE....210
7.15.3.1 HISTORICAL OPERATIONS....210
7.15.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....211

7.15.3.3 CURRENT STATUS AND RECOMMENDATIONS....211
7.16 AOI 16: FORMER HEAT TREAT OPERATIONS....211
7.16.1 AOI 16.1: MAIN MANUFACTURING BUILDING – AREA NO. 1....211
7.16.1.1 HISTORICAL OPERATIONS....211
7.16.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....211
7.16.1.3 CURRENT STATUS AND RECOMMENDATIONS....211
7.16.2 AOI 16.2: MAIN MANUFACTURING BUILDING – AREA NO. 2....212
7.16.2.1 HISTORICAL OPERATIONS....212
7.16.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....212
7.16.2.3 CURRENT STATUS AND RECOMMENDATIONS....212
7.16.3 AOI 16.3: FORMER HEAT TREAT BUILDING NO. 1....212
7.16.3.1 HISTORICAL OPERATIONS....212
7.16.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....212
7.16.3.3 CURRENT STATUS AND RECOMMENDATIONS....213
7.16.4 AOI 16.4: FORMER HEAT TREAT BUILDING NO. 2....213
7.16.4.1 HISTORICAL OPERATIONS....213
7.16.4.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....213
7.16.4.3 CURRENT STATUS AND RECOMMENDATIONS....213
7.17 AOI 17: FORMER TOOL AND DIE OPERATIONS....214
7.17.1 AOI 17.1: MAIN MANUFACTURING BUILDING OPERATIONS....214
7.17.1.1 HISTORICAL OPERATIONS....214
7.17.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....214
7.17.1.3 CURRENT STATUS AND RECOMMENDATIONS....214
7.17.2 AOI 17.2: HISTORICAL EXTERIOR DIE STORAGE....214
7.17.2.1 HISTORICAL OPERATIONS....214
7.16.2.1 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....215
7.17.2.3 CURRENT STATUS AND RECOMMENDATIONS....215
7.18 AOI 18: FORMER COOLANT RECOVERY SYSTEM....215
7.18.1 HISTORICAL OPERATIONS....215
7.18.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....215
7.18.3 CURRENT STATUS AND RECOMMENDATIONS....215
7.19 AOI 19: FORMER STAMPING OPERATIONS....216
7.19.1 HISTORICAL OPERATIONS....216
7.19.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....216
7.19.3 CURRENT STATUS AND RECOMMENDATIONS....216
7.20 AOI 20: ABOVEGROUND STORAGE TANKS (ASTS)....216
7.20.1 AOI 20.1: OIL STORES ASTS....217
7.20.1.1 HISTORICAL OPERATIONS....217
7.20.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....217
7.20.1.3 CURRENT STATUS AND RECOMMENDATIONS....217
7.20.2 AOI 20.2: CURRENT SOUTH PUMP HOUSE AST....217
7.20.2.1 HISTORICAL OPERATIONS....217
7.20.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....218
7.20.2.3 CURRENT STATUS AND RECOMMENDATIONS....218
7.20.3 AOI 20.3: FORMER NORTH PUMP HOUSE AST....218
7.20.3.1 HISTORICAL OPERATIONS....218

7.20.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 218
7.20.3.3 CURRENT STATUS AND RECOMMENDATIONS.....218
7.20.4 AOI 20.4: CURRENT COOLING TOWER PUMP HOUSE AST.....219
7.20.4.1 HISTORICAL OPERATIONS.....219
7.20.4.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 219
7.20.4.3 CURRENT STATUS AND RECOMMENDATIONS.....219
7.20.5 AOI 20.5: FORMER BULK DEADENER AST 219
7.20.5.1 HISTORICAL OPERATIONS.....219
7.20.5.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 219
7.20.5.3 CURRENT STATUS AND RECOMMENDATIONS.....220
7.21 AOI 21: SUBSTATIONS.....220
7.21.1 HISTORICAL OPERATIONS.....220
7.21.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 221
7.21.3 CURRENT STATUS AND RECOMMENDATIONS.....222
7.22 AOI 22: STORMWATER RETENTION POND 222
7.22.1 HISTORICAL OPERATIONS.....222
7.22.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 222
7.22.3 CURRENT STATUS AND RECOMMENDATIONS.....223
7.23 AOI 23: WOOD FLOOR BLOCK.....223
7.23.1 HISTORICAL OPERATIONS.....223
7.23.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 223
7.23.3 CURRENT STATUS AND RECOMMENDATIONS.....223
7.24 AOI 24: FORMER TAR HOUSE 224
7.24.1 HISTORICAL OPERATIONS.....224
7.24.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 224
7.24.3 CURRENT STATUS AND RECOMMENDATIONS.....224
7.25 AOI 25: FORMER MAINTENANCE DEGREASER.....224
7.25.1 HISTORICAL OPERATIONS.....224
7.25.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 224
7.25.3 CURRENT STATUS AND RECOMMENDATIONS.....225
7.26 AOI 26: ADDITIONAL FORMER DEGREASING OPERATIONS 225
7.26.1 AOI 26.1 – SHELL COOLER AFTER DEGREASER 225
7.26.1.1 HISTORICAL OPERATIONS.....225
7.26.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 226
7.26.1.3 CURRENT STATUS AND RECOMMENDATIONS.....226
7.26.2 AOI 26.2 – FORMER DEGREASER (U-46) 226
7.26.2.1 HISTORICAL OPERATIONS.....226
7.26.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 226
7.26.2.3 CURRENT STATUS AND RECOMMENDATIONS.....226
7.26.3 AOI 26.3 – FORMER DEGREASER (RS-9).....227
7.26.3.1 HISTORICAL OPERATIONS.....227
7.26.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 227
7.26.3.3 CURRENT STATUS AND RECOMMENDATIONS.....227
7.26.4 AOI 26.4 – FORMER DEGREASER (O-44) 227
7.26.4.1 HISTORICAL OPERATIONS.....227
7.26.4.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS 227

7.26.4.3 CURRENT STATUS AND RECOMMENDATIONS....227
7.27 AOI 27: OIL STORES BULK UNLOAD AREA....228
7.27.2 HISTORICAL OPERATIONS....228
7.27.3 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....228
7.27.4 CURRENT STATUS AND RECOMMENDATIONS....228
7.28 AOI 28: ADDITIONAL BULK LOAD AND UNLOAD AREAS....228
7.28.2 HISTORICAL OPERATIONS....228
7.28.3 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....229
7.28.4 CURRENT STATUS AND RECOMMENDATIONS....229
7.29 AOI 29: FORMER INCINERATORS....229
7.29.1 AOI 29.1 – FORMER INCINERATOR AREA NO. 1....229
7.29.1.1 HISTORICAL OPERATIONS....229
7.29.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....229
7.29.1.3 CURRENT STATUS AND RECOMMENDATIONS....230
7.29.2 AOI 29.2 – FORMER INCINERATOR AREA NO. 2....230
7.29.2.1 HISTORICAL OPERATIONS....230
7.29.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....230
7.29.2.3 CURRENT STATUS AND RECOMMENDATIONS....230
7.30 AOI 30: ELEVATOR PITS....230
7.30.1 AOI 30.1 – PASSENGER ELEVATOR....231
7.30.1.1 HISTORICAL OPERATIONS....231
7.30.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....231
7.30.1.3 CURRENT STATUS AND RECOMMENDATIONS....231
7.30.2 AOI 30.2 – FREIGHT ELEVATOR NO. 1....231
7.30.2.1 HISTORICAL OPERATIONS....231
7.30.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....231
7.30.2.3 CURRENT STATUS AND RECOMMENDATIONS....232
7.30.3 AOI 30.3 – FREIGHT ELEVATOR NO. 2....232
7.30.3.1 HISTORICAL OPERATIONS....232
7.30.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....232
7.30.3.3 CURRENT STATUS AND RECOMMENDATIONS....232
7.30.4 AOI 30.4 – FORMER FREIGHT ELEVATOR....232
7.30.4.1 HISTORICAL OPERATIONS....232
7.30.4.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....233
7.30.4.3 CURRENT STATUS AND RECOMMENDATIONS....233
7.31 AOI 31: SCRAP METAL STORAGE PAD....233
7.31.1 HISTORICAL OPERATIONS....233
7.31.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....233
7.31.3 CURRENT STATUS AND RECOMMENDATIONS....233
7.32 AOI 32: COMPACTOR....234
7.32.1 HISTORICAL OPERATIONS....234
7.32.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....234
7.32.3 CURRENT STATUS AND RECOMMENDATIONS....234
7.33 AOI 33: RAILROAD TRACK OPERATIONS....234
7.33.1 HISTORICAL OPERATIONS....234
7.33.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....235

7.33.3 CURRENT STATUS AND RECOMMENDATIONS....235
7.34 AOI 34: BATTERY CHARGING AREAS....235
7.34.1 HISTORICAL OPERATIONS....235
7.34.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....235
7.34.3 CURRENT STATUS AND RECOMMENDATIONS....235
7.35 AOI 35: PROCESS INFRASTRUCTURE....236
7.35.1 HISTORICAL OPERATIONS....236
7.35.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....236
7.35.3 CURRENT STATUS AND RECOMMENDATIONS....236
7.36 AOI 36: POTENTIAL ON-SITE FILL ACTIVITIES....236
7.36.1 HISTORICAL OPERATIONS....236
7.36.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....237
7.36.3 CURRENT STATUS AND RECOMMENDATIONS....237
7.37 AOI 37: HAZARDOUS WASTE STORAGE AREAS....237
7.37.1 AOI 37.1: FORMER HAZARDOUS WASTE STORAGE AREA – MAIN PLANT....238
7.37.1.1 HISTORICAL OPERATIONS....238
7.37.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....238
7.37.1.3 CURRENT STATUS AND RECOMMENDATIONS....238
7.37.2 AOI 37.2: FORMER HAZARDOUS WASTE STORAGE AREA – SOUTH OF WWTP....238
7.37.2.1 HISTORICAL OPERATIONS....238
7.37.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....238
7.37.2.3 CURRENT STATUS AND RECOMMENDATIONS....239
7.37.3 AOI 37.3: FORMER HAZARDOUS WASTE STORAGE AREA – WESTERN PROPERTY BOUNDARY....239
7.37.3.1 HISTORICAL OPERATIONS....239
7.37.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....239
7.37.3.3 CURRENT STATUS AND RECOMMENDATIONS....239
7.37.4 AOI 37.4: CURRENT HAZARDOUS WASTE STORAGE AREA....239
7.37.4.1 HISTORICAL OPERATIONS....239
7.37.4.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....240
7.37.4.3 CURRENT STATUS AND RECOMMENDATIONS....240
7.38 AOI 38: SWITCH HOUSE OPERATIONS....240
7.38.1 AOI 38.1: FORMER SWITCH HOUSE....240
7.38.1.1 HISTORICAL OPERATIONS....240
7.38.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....241
7.38.1.3 CURRENT STATUS AND RECOMMENDATIONS....241
7.38.2 AOI 38.2: CURRENT SWITCH HOUSE....241
7.38.2.1 HISTORICAL OPERATIONS....241
7.38.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS....241
7.38.2.3 CURRENT STATUS AND RECOMMENDATIONS....241

8.0 REFERENCES....243

LIST OF FIGURES
(Following Text)

FIGURE 1.1 SITE LOCATION

FIGURE 3.1 CROSS-SECTION A-A'

FIGURE 3.2 CROSS-SECTION B-B'

FIGURE 3.3 CROSS-SECTION C-C'

FIGURE 3.4 CROSS-SECTION D-D'

FIGURE 3.5 OCTOBER 11, 2010 POTENTIOMETRIC SURFACE MAP

FIGURE 4.1 ABOVEGROUND STORAGE TANK LOCATIONS

FIGURE 4.2 UNDERGROUND STORAGE TANK LOCATIONS

LIST OF PLANS
(Following Text)

PLAN 1 SITE LAYOUT AND SURROUNDING PROPERTIES

PLAN 2 LOCATIONS OF AOIs

PLAN 3 CROSS-SECTION LOCATIONS

PLAN 4 ANALYTICAL RESULTS OF HISTORICAL SOIL SAMPLES – AOIs 4.1, 4.3, 5, 19, 25

PLAN 5 ANALYTICAL RESULTS OF HISTORICAL SOIL SAMPLES – AOIs 4.1, 25

PLAN 6 ANALYTICAL RESULTS OF HISTORICAL SOIL SAMPLES – AOIs 4.1, 27

PLAN 7 ANALYTICAL RESULTS OF HISTORICAL GROUNDWATER SAMPLES – AOIs 1, 4.1, 4.3, 5, 6, 19, 25

PLAN 8 ANALYTICAL RESULTS OF HISTORICAL GROUNDWATER SAMPLES – AOIs 3, 25

LIST OF TABLES
(Following Text)

TABLE 3.1 HISTORICAL GROUNDWATER ELEVATIONS

TABLE 5.1 ANALYTICAL RESULTS OF SOIL SAMPLES

TABLE 5.2 ANALYTICAL RESULTS OF GROUNDWATER SAMPLES

TABLE 5.3 ANALYTICAL RESULTS OF BOREHOLE WATER SAMPLES

LIST OF APPENDICES

APPENDIX A ENDANGERED SPECIES FOIA RESPONSE

APPENDIX B ZONING MAP

APPENDIX C HISTORICAL TOPOGRAPHIC MAPS

APPENDIX D SOIL BORING STRATIGRAPHIC AND MONITORING WELL INSTRUMENTATION LOGS

APPENDIX E NATIONAL WETLANDS INVENTORY MAP

APPENDIX F PHOTOGRAPHIC LOG OF 2009 AND 2010 SITE INSPECTIONS

APPENDIX G ENVIRONMENTAL DATABASE SEARCH RESULTS

APPENDIX H SANBORN FIRE INSURANCE MAPS

APPENDIX I HISTORICAL AERIAL PHOTOGRAPHS

APPENDIX J CITY DIRECTORY SEARCH

APPENDIX K DOCUMENTATION

1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) has prepared this report to present a description of the current and historical conditions at the former General Motors Corporation (GM) Grand Rapids Metal Plant in Wyoming, Michigan [United Stated Environmental Protection Agency (U.S. EPA) Identification No. MID006020408] (Site). As a result of GM's recent bankruptcy, certain operating assets of GM were sold on July 10, 2009 to a newly formed company, which is now known as General Motors, LLC (GM LLC). Existing, non-conforming assets remained the property of GM, which is now known as Motors Liquidation Company (herein referred to as MLC). As such, the Site is now owned by MLC and this documentation of the current and historical conditions has been prepared on their behalf.

1.1 GENERAL

The current Site address for the former Grand Rapids Metal Plant facility is 300 36th Street SW in the City of Wyoming, Kent County, Michigan. The Site location is presented on Figure 1.1.

Based on the review of information available at the on-line Kent County Property Information System, April 2009 composite aerials from the Kent County Bureau of Equalization Property Description & Mapping Division, and information available at the on-line City of Wyoming Assessor, the Site is comprised of four parcels of land with associated addresses, as follows:

- Parcel Identification No. 41-17-24-178-007 - 3838 Clay Avenue SW
- Parcel Identification No. 41-17-13-455-049 – 229 36th Street SW
- Parcel Identification No. 41-17-24-201-007 – 300 36th Street SW
- Parcel Identification No. 41-17-13-455-050 – 301 36th Street SW

The property associated with the address of 3838 Clay Avenue SW is comprised of 7.50 acres of land and was primarily utilized as an asphalt-paved employee parking lot, with a portion used as an entrance to the overhead pedestrian trestle over the railroad into the Main Manufacturing Building, an aboveground storage tank (AST) associated with skimmed oil from the stormwater retention pond, and vegetated/landscaped areas. This portion of the Site is located to the west of the railroad tracks and main property and is zoned I2, which is Industrial District - General. An easement, dated June 27, 1978 is present between Consumers Energy Company and MLC for the "purposes of the

construction, use, maintenance, repair or removal of an enclosed pedestrian passageway (bridge) for pedestrians" from the Clay Avenue employee parking lot to the Main Manufacturing Building.

The property associated with the address of 229 36th Street SW is comprised of 0.19 acres of land and was utilized as an asphalt-paved employee parking lot. This portion of the Site is located to the north of 36th Street SW and is zoned as R2, which is Residential District – Single Family.

The property associated with the address of 300 36th Street SW is comprised of 75.00 acres of land and consists of the main portion of the Site. This portion of the Site was utilized for the manufacturing and support operations associated with the plant operations and consists of the majority of the Site structures. This portion of the Site is bound to the north by 36th Street SW, to the east by Buchanan Street SW, to the south by 40th Street SW, and to the west by the railroad tracks and is zoned as I2, which is Industrial District – General.

The property associated with the address of 301 36th Street SW is comprised of 5.84 acres of land and was primarily utilized as an asphalt-paved employee parking lot, with a portion of an entrance to the overhead pedestrian trestle over 36th Street SW into the Main Manufacturing Building and a small structure that is part of the inactive groundwater pump and treat system. This portion of the Site is located to the north of 36th Street SW and is zoned as P1, which is Vehicular Parking District.

It should be noted that the stormwater retention pond was constructed on property owned by Consumers Energy Company.

Easements are reportedly present on the Site, including: sewer and water main easement with the City of Wyoming; utility easements with Consumers Energy Company; reservation of easement in the vacated portions of 40th Street SW, Buchanan Avenue SW, and Birchwood Avenue on the Site; and easement for highway purposes with Kent County.

A Site layout is presented on Plan 1.

1.2 AREAS OF INTEREST

Thirty-eight Areas of Interest (AOIs) have been identified at the Site based on a review of available files, interviews with Site personnel, historical investigations and environmental activities, and Site inspections. AOIs are defined as those areas of known treatment, storage, disposal, or release of non hazardous and/or hazardous constituents to the environment or potential release of non hazardous and/or hazardous constituents to the environment. The AOIs identified for the Site are summarized below and further evaluated in Section 7.0.

AOI 1 Adjacent Properties – East of Buchanan Avenue SW
AOI 2 Adjacent Properties – Along Clay Avenue SW
AOI 3 Adjacent Properties – West Side of Cole Drain
AOI 4 Historical Site Operations
- AOI 4.1 Long-Term Industrial Operations – Main Parcel
- AOI 4.2 Historical Operations – Western Parcel
- AOI 4.3 Historical Operations – Northern Parcel

AOI 5 Release From Press HS-5
AOI 6 LNAPL and SVOC-impacted Groundwater
AOI 7 Former Metal Finishing Operations
- AOI 7.1 Bonderizing Operations
- AOI 7.2 Lacquer and Cement Spray
- AOI 7.3 Anti-Rust Spray Booth No. 1
- AOI 7.4 Anti-Rust Spray Booth No. 2
- AOI 7.5 Anti-Rust Spray Booth No. 3
- AOI 7.6 Anti-Rust Spray Booth No. 4
- AOI 7.7 Former West Paint Booth
- AOI 7.8 Former Paint Booth (Current Steam Clean Booth)
- AOI 7.9 Former East Paint Booth

AOI 8 USTs
- AOI 8.1 Former Mineral Spirits and Mineral Seal Oil USTs
- AOI 8.2 Current Gasoline and Diesel USTs
- AOI 8.3 Former Heating Oil and Oil USTs
- AOI 8.4 Former 5,000-Gallon and 8,000-Gallon Gasoline USTs
- AOI 8.5 Former 1,000-Gallon UST No. 1
- AOI 8.6 Former 1,000-Gallon UST No. 2

AOI 9 WWTP

AOI 10 Power House Operations
- AOI 10.1 Current Power House
- AOI 10.2 Former Power House

AOI 11 Former AOF House

AOI 12 Former Cooling Tower Basin

AOI 13 Former Cooling Water Spray Pond

AOI 14 Former Sludge Bed

AOI 15 Former Baler Operations
- AOI 15.1 Former Main Manufacturing Building Balers
- AOI 15.2 Former Baler House
- AOI 15.3 Current Baler House

AOI 16 Former Heat Treat Operations
- AOI 16.1 Main Manufacturing Building – Area No. 1
- AOI 16.2 Main Manufacturing Building – Area No. 2
- AOI 16.3 Former Heat Treat Building No. 1
- AOI 16.4 Former Heat Treat Building No. 2

AOI 17 Former Tool and Die Operations
- AOI 17.1 Main Manufacturing Building Operations
- AOI 17.2 Historical Exterior Die Storage

AOI 18 Former Coolant Recovery System

AOI 19 Former Stamping Operations

AOI 20 ASTs
- AOI 20.1 Oil Stores ASTs
- AOI 20.2 Current South Pump House AST
- AOI 20.3 Former North Pump House AST
- AOI 20.4 Current Cooling Tower Pump House AST
- AOI 20.5 Former Bulk Deadener AST

AOI 21 Substations
- AOI 21.1 Substation B
- AOI 21.2 Substation C
- AOI 21.3 Substation D
- AOI 21.4 Substation E
- AOI 21.5 Substation F
- AOI 21.6 Substation G
- AOI 21.7 Substation H
- AOI 21.8 Substation J
- AOI 21.9 Substation K
- AOI 21.10 Substation L
- AOI 21.11 Substation M

- AOI 21.12 Substation N
- AOI 21.13 Substation O
- AOI 21.14 Substation P
- AOI 21.15 Substation Q
- AOI 21.16 Substation R
- AOI 21.17 Substation S
- AOI 21.18 Substation T
- AOI 21.19 Substation U
- AOI 21.20 Substation V
- AOI 21.21 Substation W
- AOI 21.22 Substation X
- AOI 21.23 Substation Y
- AOI 21.24 Substation Z

AOI 22 Stormwater Retention Pond
AOI 23 Wood Floor Block
AOI 24 Former Tar House
AOI 25 Former Maintenance Degreaser
AOI 26 Additional Former Degreasing Operations

- AOI 26.1 Shell Cooler After Degreaser
- AOI 26.2 Former Degreaser (U-46)
- AOI 26.3 Former Degreaser (RS-9)
- AOI 26.4 Former Degreaser (O-44)

AOI 27 Oil Stores Bulk Unload Areas
AOI 28 Additional Bulk Load and Unload Areas
AOI 29 Former Incinerators

- AOI 29.1 Former Incinerator Area No. 1
- AOI 29.2 Former Incinerator Area No. 2

AOI 30 Elevator Pits

- AOI 30.1 Passenger Elevator
- AOI 30.2 Freight Elevator No. 1
- AOI 30.3 Freight Elevator No. 2
- AOI 30.4 Former Freight Elevator

AOI 31 Scrap Metal Storage Pad
AOI 32 Compactor
AOI 33 Railroad Track Operations
AOI 34 Battery Charging Areas
AOI 35 Process Infrastructure
AOI 36 Potential On-Site Fill Activities
AOI 37 Hazardous Waste Storage Areas

AOI 37.1 Former Hazardous Waste Storage Area – Main Plant
AOI 37.2 Former Hazardous Waste Storage Area – South of WWTP
AOI 37.3 Former Hazardous Waste Storage Area – Western Property Boundary
AOI 37.4 Current Hazardous Waste Storage Area
AOI 38 Switch House Operations
AOI 38.1 Former Switch House
AOI 38.2 Current Switch House

The approximate locations of the AOIs are presented on Plan 2.

1.3 SCOPE OF CCR

The purpose of the CCR is to describe the current and historical conditions at the Site resulting from the treatment, storage, disposal, or release of non-hazardous and/or hazardous constituents to the environment, and to identify if further action is warranted.

To prepare this CCR, CRA completed the following activities:

- Reviewed available documents concerning historical remediation, treatment, storage, releases, or disposal of hazardous waste and hazardous constituents
- Prepared a summary of previous environmental investigations and remedial activities completed at the Site
- Reviewed available information regarding local land use, climate, geology, hydrogeology, surface water hydrology, and ecology
- Interviewed personnel familiar with the Site's historical operations
- Conducted Site inspections in Fall 2009 and Spring 2010
- Evaluated existing soil and groundwater data with respect to applicable criteria

The CCR was compiled based on a review of information contained in MLC, CRA, U.S. EPA and Michigan Department of Natural Resources and Environment (MDNRE) files. In addition, other resources, including United States Geological Survey (USGS) data, were utilized to obtain information regarding local land use, water supply, demographics, topography, climate, geology, hydrogeology, hydrology, and ecology. Due to the large volume of information obtained and reviewed for the Site, not all material is appended to this document. Relevant information has been summarized

within the content of this document and referenced and/or appended where appropriate.

1.4 REPORT ORGANIZATION

The CCR is organized in the following sections:

i) Section 1.0 presents an introduction and outlines the organization of the CCR

ii) Section 2.0 summarizes the regional land use, water supply, demographics, topography, and regional ecology

iii) Section 3.0 provides Site-specific information regarding topography, geology, hydrogeology, hydrology, and ecology

iv) Section 4.0 summarizes the Site location, ownership, current and historical operations and waste management practices

v) Section 5.0 summarizes previous environmental investigations conducted at the Site

vi) Section 6.0 presents previous remedial actions conducted at the Site

vii) Section 7.0 presents details of each AOI

viii) Section 8.0 provides a list of references

The CCR includes the following appendices:

Appendix A Endangered Species Freedom of Information Act (FOIA) Response
Appendix B Zoning Map
Appendix C Historical Topographic Maps
Appendix D Soil Boring Stratigraphic and Monitoring Well Instrumentation Logs
Appendix E National Wetlands Inventory Map
Appendix F Photographic Log of 2009 and 2010 Site Inspections
Appendix G Environmental Database Search Results
Appendix H Sanborn Fire Insurance Maps
Appendix I Historical Aerial Photographs
Appendix J City Directory Search
Appendix K Documentation

2.0 REGIONAL ENVIRONMENTAL SETTING

2.1 TOPOGRAPHY

The State of Michigan covers an area of approximately 58,527 square miles. The State's topography ranges from 572 to 1,979 feet above mean sea level (AMSL). The lowest point of elevation is found in southeastern Michigan along Lake Erie. The highest point is Mount Arvon, located in the Upper Peninsula.

The topography of Kent County, in Western Michigan, is characterized by rolling foothills, agricultural valleys, and the Grand River, which is the largest river in Michigan. Site-specific topography is discussed in Section 3.0.

2.2 LAND USE

Land use in Michigan consists primarily of automobile manufacturing, farming with the primary crops being corn, soybeans, and wheat, timber, and fishing. Site-specific land use is discussed in Section 3.0.

2.3 WATER SUPPLY/GROUNDWATER USE

The Great Lakes are the primary source of public, rural, and industrial water supply in 89 percent of the State of Michigan. The other sources of water supply come from surface water and groundwater. The City of Wyoming provides potable water to the Site, and surrounding areas from the City of Wyoming Drinking Water Plant located in Wyoming, Michigan. The water source for the City of Wyoming Drinking Water Plant is Lake Michigan. Site-specific water supply and groundwater use is discussed in Section 3.0.

2.4 DEMOGRAPHICS

The Site is located in Kent County, Wyoming, Michigan. The Site property, including all the former manufacturing operations, is located within the limits of the City of Wyoming. According to the U.S. Bureau of Census, Kent County had an estimated population in 2009 of approximately 608,315. The population racial mix in Kent County is approximately 77.7-percent Caucasian; 9.2-percent African American; 0.5-percent American Indian and Alaska Native; 2.2-percent Asian; 0.1-percent Native Hawaiian or

other Pacific islander; 9.5-percent Hispanic or Latino origin; and 1.7-percent persons reporting two or more races. The male population in Kent County is approximately 300,508 and the female population is approximately 307,807 (U.S. Bureau of Census, 2009).

2.5 CLIMATE

Michigan has a temperate climate with well-defined seasons. The climate in Kent County, Michigan is temperate with warm summers, very cold winters, and no distinguishable wet or dry seasons. The average total precipitation in Wyoming, Michigan is approximately 37.13 inches with a peak of 4.28 inches in September. The average temperature in Wyoming, Michigan is 50.2 degrees Fahrenheit (^{O}F) with an average low of 15.6 ^{O}F in January and an average high of 82.3 ^{O}F in July.

Wind rose diagrams of the Grand Rapids Gerald R. Ford International Airport, which is located approximately 9 miles east of the Site, were reviewed. Based on the wind rose diagrams, the average wind speed at the Site is 8.5 knots (9.8 miles per hour) from the southwest.

2.6 REGIONAL GEOLOGY

Kent County is situated in an area near the southwestern margin of the Michigan Basin, in the Southern Upland physiographic region. Marshall Sandstone bedrock underlies all of Kent County and is Paleozoic in age from the Mississippian period. The Marshall Sandstone bedrock is overlain by the Michigan Formation. The Michigan Formation consists primarily of limestone, gypsum, and dolomite, interbedded with shale and sandstone. To the northeast, the Marshall Sandstone and Michigan Formation are progressively overlain by Bayport Limestone, Parma Sandstone, and then the Saginaw Formation. Overlying these rocks is a mass of glacial drift from the Wisconsinan Glacial stage consisting of moraines and former sand lake beds with thicknesses of less than 10 feet to several hundred feet. The glacial drift is characterized by ranges of materials from coarse gravel to fine lacustrine clays. The outwash is underlain by a clay layer that has been observed to generally slope to the west-northwest at a gradient of approximately 1 foot in 15 feet. Bedrock in the area of the Site is encountered at approximately 100 feet below graded surface (bgs).

The Jurassic "red beds" form the bedrock surface interface between the glacial sediments in portions of Kent County and range from 50 to 150 feet with

localized areas up to 200 feet thick. The "red beds" are often poorly consolidated or unconsolidated and consist primarily of clay, mudstone, siltstone, sandstone, shale, and gypsum. Beneath the Jurassic "red beds" the bedrock generally trends from northeast to southwest progression of the Saginaw Formation, Parma Sandstone/Bayport Limestone, Michigan Formation, and Marshall Sandstone with a general dip to the northeast. The Saginaw Formation consists of shale, coal, sandy shale, sandstone, limestone, and sandstone and ranges from 100 to 240 feet thick (Westjohn and Weaver, 1996a). The Parma Sandstone consists of medium-grained to coarse-grained sandstone, and is generally less than 100 feet thick (Cohee and others, 1951). The Bayport Limestone consists of a fossiliferous, cherty limestone, often with interbedded sandstone and varies considerably in thickness. The Bayport Limestone and Parma Sandstone appear to interfinger throughout the Michigan Basin (Westjohn and Weaver, 1996a). The Michigan Formation consists of shale and gypsum with lenses of sandstone and limestone (Stramel and others, 1954). The Marshall Sandstone is composed of stratigraphically continuous permeable sandstones. The upper sandstone is a quartzarenite to sublitharenite. A shale, siltstone, and/or carbonate layer separates the underlying lower sandstone. The lower Marshall sandstone ranges from a 50 to 125 foot fine-grained to medium-grained quartzarenite to sublitharenite to a 30 to 125 foot fine--grained to medium-grained litharenite. The Coldwater Shale consists of shale with lenses of sandstone, siltstone, and dolomite.

2.7 REGIONAL HYDROGEOLOGY

Shallow groundwater in this area of Kent County is generally encountered at less than 20 feet bgs. Groundwater flow is influenced by local topography and surface water drainage ways, such as creeks and streams.

Bedrock aquifers near the Site include, in descending order, the Bayport Limestone, the Michigan Formation, and the Marshall Sandstone. Elevated concentrations of naturally occurring sulfate, cadmium, and bicarbonate limit the use of the Bayport Limestone aquifer as a drinking water supply. The Michigan Formation aquifer generally yields only small quantities of poor quality groundwater. The deepest regional aquifer, the Marshall Sandstone aquifer, provides large quantities of better quality groundwater. Groundwater flow in the Bayport Limestone bedrock aquifer in the area is generally uniform and to the southeast.

2.8 REGIONAL SURFACE WATER HYDROLOGY

Michigan has over 36,000 miles of streams and rivers. The Site is located within the Lower Grand River drainage basin and the Plaster Creek watershed. The Lower Grand River drainage basin covers 3,020 square miles and includes the Rogue River, the Flat River, and the Thornapple River, which flow into the Grand River. Other tributaries to the Lower Grand River drainage basin include the Coldwater River, Buck Creek, Hager Creek, Sand Creek, Spring Creek, and Plaster Creek. The Plaster Creek watershed covers 58 square miles. Land use in the watershed consists in general of agricultural and urban use with other areas being forested or open land. Plaster Creek is located approximately 1.25 miles to the north-northeast of the Site. The Cole Drain, located adjacent to the west of the Site, discharges to Plaster Creek.

The Plaster Creek watershed meets the designated use for agriculture, is threatened for partial body contact, and is impaired for a warm water fishery, other indigenous aquatic life and wildlife, and total body contact recreation. The known stressors include sedimentation, nutrient loading, and Escherichia coli (E. coli) bacteria. The suspected stressors include thermal pollution and toxic substances.

2.9 REGIONAL ECOLOGICAL SETTING

The Plaster Creek watershed is located in the ecoregion identified as the Eastern Temperate Forest. This is a very large ecoregion, extending from the Great Lakes to the Gulf of Mexico, and west to Texas, Oklahoma, Missouri, Minnesota, and Iowa. The region is characterized by dense and diverse forest cover. The area is also densely urbanized (Commission for Environmental Cooperation, 2008b). Within this ecoregion are smaller regions including the Mixedwood Plains Level 2 ecoregion, in which the Site is located. According to the USGS, the Site is located within the Regional Landscape Sub-subsection (VI.4.1 Lansing).

Based on 1992 USGS land use and land cover data, high and low intensity development (38 percent) and agricultural use (38 percent) make up the largest percentage of land use within the Plaster Creek watershed. Other land use/land cover within the Plaster Creek watershed includes forest land (16 percent), open land (5 percent), wetland (2 percent), and water (1 percent).

2.9.1 REGIONAL PLANT LIFE

The Level 2 ecoregion (Mixedwood Plains) in which the Site is located is characterized by dense canopy cover consisting of tall broadleaf deciduous trees and needle leaf conifers. Common trees to the region are oaks, hickories, maples, beech and some pine and basswood. In addition, the Regional Landscape Sub-subsection (VI.4.1 Lansing) is characterized by beech and sugar maple forests and hardwood swamps.

Based on a threatened/endangered species review request response from the State of Michigan Department of Natural Resources and Environment (MDNRE) dated March 11, 2010, "there are no known occurrences of federal- or state-listed endangered, threatened, or otherwise significant species, natural plant communities, or natural features at the locations(s) specified." A copy of the response from the MDNRE is presented in Appendix A.

2.9.2 REGIONAL ANIMAL LIFE

Common animals that may be found in the region in which the Site is located include gray squirrel, raccoon, fox, and white-tailed deer (Commission for Environmental Cooperation, 2008b).

Based on a threatened/endangered species review request response from the MDNRE dated March 11, 2010, "there are no known occurrences of federal- or state-listed endangered, threatened, or otherwise significant species, natural plant communities, or natural features at the locations(s) specified." A copy of the response from the MDNRE is presented in Appendix A.

3.0 FACILITY SETTING

3.1 FACILITY LAND USE

The Site is zoned as Industrial District, General (I-2) on the City of Wyoming, Michigan February 2009 Zoning Map (City of Wyoming, Planning & Development Department Zoning Map) (Appendix B) and was formerly operated as an automobile metal fabrication and assembly plant. Currently, no manufacturing operations are conducted at the Site. Activities currently conducted include required compliance monitoring, equipment sales, decommissioning, and demolition activities, as well as administrative and ancillary operational activities in support of the aforementioned activities. The Site currently consists of 88.53 acres of land, including an approximately 2 million square-foot Main Manufacturing Building and several outlying buildings and ancillary structures (Wastewater Treatment Plant [WWTP], Power House, Press Staging Building, Primary Switch House, Baler House, Rack Make-Up Building, South Fire Pump House, West Fire Pump House, Storm Sewer Pump House, Cooling Tower Pump House, Metal Storage Shed, and Guard House), asphalt and concrete-paved areas, a stormwater retention pond, and vegetated and landscaped areas.

3.2 SURROUNDING LAND USE

The Site is located in a mixed industrial, commercial, residential and recreational area in the City of Wyoming, Michigan with Buchanan Ave SW and mixed industrial/residential to the east, mixed recreational and residential to the north, railroad tracks and mixed commercial/industrial to the west, and 40th Street SW and residential to the south as further discussed below.

3.2.1 ADJACENT PROPERTIES

The Site is abutted to the north by Price and Company, Godwin Heights Public Schools athletic fields and residential properties, with Hillcroft Park located beyond.

The Site is abutted to the east by Buchanan Street followed by an Amoco gas station, Tint Factory, N&A Auto Repair, Prestige Transport, LLC, Steil Property Management, RSP Investment Property, Inc., MSC Industrial Supply Co., Clean Rooms International, Independent Glass, Chase Creative Unlimited, Ter Molen & Hart Sheet Metal, Tracer Tool & Die Co., United Auto Workers (UAW) Hall, Conical Tapered Mills, a vacant

commercial/industrial building, a vacant lot, Mark Maker Company, and residential properties.

The Site is abutted to the south by 40th Street followed by Accurate Alignment & Brake and residential properties.

The Site is abutted to the west by railroad tracks, Cole Drain, Consumers high-tension power lines, Consumers Service Center, The Macomb Group, and Clay Avenue followed by Ryder Truck, Cummins, a vacant commercial/industrial building, K-Mac Plastics, Floyd's Electric, Consolidated Metal Products, Inc., Rose Pest Solutions, Donald Engineering, and Earl Jourdan Auto Parts.

3.3 PHYSIOGRAPHY AND TOPOGRAPHY

According to the Grand Rapids West, Michigan USGS 7.5 minute quadrangle, the Site is located approximately 675 feet AMSL, with regional elevations ranging from 650 to 690 feet AMSL. The Site and surrounding area display gently rolling to relatively flat topographical features, with local topography sloping towards Cole Drain and Plaster Creek.

Figure 1.1 presents the topography of the Site and surrounding area. Historical topographic maps are provided in Appendix C.

3.4 GEOLOGY

Information regarding the geologic conditions at the Site was collected during previous environmental investigations. Numerous soil borings were installed at the Site between 1981 and 2010.

The overburden at the Site consists of a sand and/or clay surficial layer containing various amounts of sand and gravel, underlain by interbedded layers of silt and clay material. Bedrock was not encountered during any of the environmental investigations conducted to date.

To better understand the surficial geology at the Site, four cross-sections were prepared, based on previous investigation results. Locations of the cross-sections are presented on Plan 3. Cross-sections A-A', B-B', C-C', and D-D' are presented on Figures 3.1, 3.2, 3.3,

and 3.4, respectively. Available stratigraphic and monitoring well instrumentation logs are presented in Appendix D.

3.5 HYDROGEOLOGY

Shallow groundwater in this area of Kent County is generally encountered at less than 20 feet bgs. Groundwater flow is influenced by local topography and surface water drainage ways, such as creeks and streams.

Bedrock aquifers near the Site include, in descending order, the Bayport Limestone, the Michigan Formation, and the Marshall Sandstone. Elevated concentrations of naturally occurring sulfate, cadmium, and bicarbonate limit the use of the Bayport Limestone aquifer as a drinking water supply. The Michigan Formation aquifer generally yields only small quantities of poor quality groundwater. The deepest regional aquifer, the Marshall Sandstone aquifer, provides large quantities of better quality groundwater. Groundwater flow in the Bayport Limestone bedrock aquifer in the area is generally uniform and to the southeast.

Groundwater is typically observed between 6 feet bgs (along Cole Drain) and 22 feet bgs (on the east side of the Site), but is known to exhibit seasonal fluctuations of up to a foot. Historical groundwater elevations recorded from December 1988 through October 2009 are summarized in Table 3.1. Groundwater contours from the October 2010 groundwater sampling event are provided on Figure 3.5. The potentiometric surface presented on Figure 3.5 indicates that Site groundwater flows to the north-northwest, towards the Cole Drain.

In-situ tests were conducted at select wells (85-1, 85-7, 86-2, 86-3, 87-8, and 87-9) to determine the hydraulic conductivity of the upper groundwater unit during subsurface investigations conducted between 1986 and 1987. Based on the results of the in-situ testing at these locations, the hydraulic conductivity ranged from 17.1 feet/day (85-1) and 192.6 feet/day (86-3), with an average hydraulic conductivity for 86-3, 87-8, and 87-9 of 149 feet/day. Based on the aforementioned average hydraulic conductivity and using a hydraulic gradient of 7.2 feet/mile and estimated porosity of 25 percent, the estimated groundwater velocity was calculated in 1987 to be 0.8 feet/day.

3.6 SURFACE WATER HYDROLOGY

Stormwater generated at the Site consists of precipitation and runoff from building roofs and impervious surfaces and groundwater collected from the foundation drain system associated with the Main Manufacturing Building. Stormwater generated at the Site either infiltrates the undeveloped portions of the property or flows via sheet flow to on-Site catch basins, which discharge to an on-Site stormwater retention pond and eventually to Cole Drain or discharge directly to Cole Drain under a National Pollutant Discharge Elimination System (NPDES) permit with the MDNRE. According to Site personnel, catch basins located in areas where chemicals may potentially come in contact with stormwater discharge to the on-Site WWTP prior to discharge to the City of Wyoming municipal sewer system. All other catch basins discharge to Cole Drain via the stormwater retention pond or directly to Cole Drain.

There are no natural surface water bodies on the Site. The nearest natural surface water body to the Site is the Cole Drain, which runs along the west side of the northern portion of the Site and flows north. Cole Drain discharges to Plaster Creek, which is part of the Lower Grand River drainage basin, and ultimately discharges to Lake Michigan. There are no lakes or significant ponds within one mile of the Site.

CRA reviewed the National Wetlands Inventory (NWI) map for the Grand Rapids West, Michigan quadrangle to determine if any wetlands were mapped for the Site. Based on the review of the NWI map, the stormwater retention pond is mapped as a Palustrine Unconsolidated Bottom Excavated (PUBx) wetland. A copy of the NWI map is presented in Appendix E. Based on information provided in the environmental database results, the Site is not located in a 100 or 500-year flood zone.

3.7 GROUNDWATER USE

The City of Wyoming provides potable water to the Site, and surrounding areas from the City of Wyoming Drinking Water Plant located in Wyoming, Michigan. The water source for the City of Wyoming Drinking Water Plant is Lake Michigan. The shallow groundwater at the Site is not used as a potable water supply. There are no known users of the shallow groundwater in the vicinity of the Site.

According to Site personnel, no water supply or irrigation wells are currently present on the Site. No evidence of any water supply or irrigation wells was observed by CRA during the Site inspection. Numerous monitoring wells, which were installed during on-going and historical subsurface investigations, are present at the Site.

Based on the review of available Site drawings and Sanborn maps, Deep Well No. 6 and an associated Pump House were historically located to the west of the Main Manufacturing Building, near Column ZZ, Row 8 ½, with the well located at Row 7. The well and Pump House were removed prior to 1971. No information was available regarding the abandonment procedures employed for the well. This area is currently underneath the Main Manufacturing Building. No information was available regarding potential wells associated with the former residential properties. In addition, Well Nos. 11 through 16 were located on the Clay Avenue Parking Lot portion of the Site from at least 1957 to 1960. Based on information obtained from the City of Wyoming, three pump houses and a garage structure were razed from this property in 1971. No further information regarding these wells was available.

A groundwater pump and treat system was historically located in the central portion of the Main Manufacturing Building (86-2) and along the northern property boundary (PW-Discharge). The on-Site groundwater pump and treat system operations were initiated in 1986, with PW-Discharge added in 1993. In May 2005, under the approval of the MDNRE, the groundwater pump and treat system was shut down.

Groundwater is collected from foundation drainage from the CX conveyor area and foundation drainage from PP1 area and discharged to the stormwater retention pond, prior to discharge to the Cole Drain via Outfall 010.

3.8 ECOLOGY

The Site is located in an urbanized and developed portion of the City of Wyoming that has been developed for approximately 75 years. The Site is located in the Mixedwood Plains Level 2 ecoregion, which is characterized by mainly plains, some hills, and many small lakes. Common industry in this ecoregion is agriculture and some forestry and tourism (Commission for Environmental Cooperation, 2008b).

Based on a threatened/endangered species review request response from the MDNRE dated March 11, 2010, "there are no known occurrences of federal- or state-listed endangered, threatened, or otherwise significant species, natural plant communities, or natural features at the locations(s) specified." A copy of the response from the MDNRE is presented in Appendix A.

4.0 DESCRIPTION OF FACILITY

4.1 FACILITY LOCATION/DESCRIPTION

The Site consists of the properties located at 229, 300 and 301 36th Street SW and 3838 Clay Avenue SW in Wyoming, Kent County, Michigan. The Site location is presented on Figure 1.1. The Site currently consists of 88.53 acres of land, including an approximately 2 million square-foot Main Manufacturing Building and several outlying buildings and ancillary structures (WWTP, Power House, Press Staging Building, Primary Switch House, Baler House, Rack Make-Up Building, South Fire Pump House, West Fire Pump House, Storm Sewer Pump House, Cooling Tower Pump House, Metal Storage Shed, and Guard House), asphalt and concrete-paved areas, a stormwater retention pond, and vegetated and landscaped areas. The Site layout and surrounding properties are presented on Plan 1.

Photographs taken during Site inspections conducted in Fall 2009 and Spring 2010 are included in Appendix F.

4.2 CURRENT AND HISTORICAL OWNERSHIP AND OPERATIONS

The Site was developed prior to 1936 for residential and cultivated agricultural uses. In 1936, development of the portion of the Site bound to the north by 36th Street SW, to the east by Buchanan Avenue SW, to the west by railroad tracks, and to the south by 40th Street SW, by GM for the purpose of an automobile manufacturing plant was conducted. The plant was dedicated on December 5, 1936 as Plant No. 1 of the Grand Rapids Stamping Division of Fisher Body. The original portion of the Main Manufacturing Building and original Power House were constructed in 1936 and comprised 437,351 square feet of floor space including both production and administrative space. Numerous additions/renovations to the Main Manufacturing Building occurred between 1937 and 2006, as identified below:

- 1937 – 42,656 square feet of production floor space
- 1939 – 341,553 square feet of production floor space
- 1950 – 208,297 square feet of production floor space
- 1954 – 271,305 square feet of production floor space
- 1964 – 32,745 square feet of production floor space
- 1978 – 122,612 square feet of production floor space

- 1986 – 128,292 square feet of production floor space
- 1988 – 60,685 square feet of production floor space
- 2006 – 50,000 square feet of 1988 addition renovated

The original Baler House was constructed in 1950, with a below grade scrap conveyor system that connected it to the press area within the Main Manufacturing Building. The current Baler House was constructed in 1965, with the original Baler House undergoing demolition during the 1964 expansion of the Main Manufacturing Building. The Cooling Tower Pump House, Cooling Towers, current Power House, and WWTP were constructed in 1970. The Press Storage Building was constructed in 1988. No information was available regarding the construction date of the Primary Switch House, Metal Storage Shed, South and West Fire Pump Houses, or Rack Make-Up Buildings. A Quonset hut is also identified to the south of the Press Staging Building on historical drawings; however, no information is available regarding the construction or demolition dates for this structure.

In 1942, the Site produced mounts for 90 mm anti-aircraft weapons, a 120 mm anti-aircraft dual-purpose gun, parts and assemblies for the B-29, B-25 and XP-75 aircraft, parts for the M-8, M-24, M-4, M-10, and M-26 tanks, five-inch naval gun breech housings, 155 mm shells, and machine tools in support of World War II. In 1945, operations returned to automotive part production.

In 1984, the Fisher Body Division dissolved and the Site became part of the Chevrolet-Pontiac-GM of Canada (CPC) Group. In 1992, during restructuring within GM, the Site became part of the Cadillac Luxury Car Division (CLCD). In 1997, the Site became part of the Metal Fabricating Division (MFD) of GMC North American Operations (NAO).

GMC continued to own and operate the Site until June 1, 2009, when they filed for bankruptcy under Chapter 11 of the United States Bankruptcy Code. On July 10, 2009, GMC, now known as MLC, pursuant to a bankruptcy court order, sold certain assets, to a new entity, which is now known as GM LLC. The Site was not included in the sale and ownership remains with MLC. Primary operations conducted at the Site by GMC ceased on May 29, 2009. GM LLC leased the Site from MLC beginning on July 10, 2009. From July 10, 2009 to December 17, 2009, GM LLC conducted limited Tool and Die Operations (TDO) on the Site, including the manufacture of tooling and dies for other GM LLC facilities, along with Site idling, decommissioning and support activities. GM LLC ceased operations and vacated the Site on June 30, 2010. The Site is currently vacant and in "caretaker" mode, while waiting to be sold or decommissioning/demolition anticipated to be conducted in 2011.

The Site was primarily operated as a metal fabrication and assembly plant. The primary manufacturing process involved several operations including tool and die operations, blanking, metal stamping (conventional and transfer presses), and assembly. The manufacturing process and support operations historically included metal stamping, plating operations, painting, acetylene gas generation, scrap metal handling, and heat treating. Ancillary operations conducted at the Site included the receipt and storage of raw materials, hazardous and non-hazardous waste management, equipment maintenance activities, product and materials handling, power generation, the shipment of final goods, wastewater treatment, scrap metal handling, and administrative activities.

An Acetylene-Oxygen and Ferrolene House (AOF House) was historically present to the west of the Main Manufacturing Building at Column ZZ, Rows 18 to 15. The AOF House was constructed circa 1936 and was demolished circa 1970. Available drawings indicate that the AOF originally included use of a 12,000-gallon UST containing oleum spirits; however, notes on the drawings indicated that the tank was never installed. Additionally, a 420-gallon ferrolene UST was present to the south of the AOF House. The AOF House consisted of the ferrolene room (including cyanide and lead pots), a pump room, the oxygen manifold and storage room, the carbide storage room, the acetylene storage room, the acetylene generator room, a loading platform serviced by a railroad siding, and sludge pits. Additional information regarding the chemicals utilized during the operation of the AOF House was not available.

A cooling tower and cooling tower basin are identified on a 1971 drawing to the west of the former Power House, to the north of the 500,000-gallon fire suppression water AST and associated pump house, and to the south of the former 250,000-gallon elevated fire suppression water AST, in line with Rows 19 to 22 for the Main Manufacturing Building. No further information regarding the operation and construction of the cooling water tower and basin was available, including information regarding water treatment chemicals utilized, process associated with the generation point of water cooled or sludge removal practices. This area is currently paved with concrete and/or asphalt.

A former snow melting pit is identified to the southeast of the pump house associated with the 500,000-gallon fire suppression water AST on a 1971 drawing, in line with Row 25 of the Main Manufacturing Building. No further information was available regarding the former snow melting pit. This area is currently paved with concrete and/or asphalt.

Heat treat operations were conducted in a variety of locations throughout the Site, as follows:

- A former Heat Treat Room was located near Column O, Row 4 on a 1936 drawing. This area was identified to consist of a homo furnace, oven furnaces, lead and cyanide pots, quenching tanks, a caustic tank, and a forge. Floor drains, a pit and a trench were identified in this area. No further information was available regarding the timeframe that this area was operated for heat treat operations.
- A former Heat Treat area was located between Columns U and W, Rows 26 and 27 on a 1944 drawing. This drawing identifies a large quench pit in this area, with four tanks shown in the pit and references at least one 12,000-gallon oil tank.
- A former Heat Treat Building was located between Columns J through M, Rows 29 to 30 ½ on a 1945 drawing. This area was identified to consist of a sand blast room, gas crackers and furnaces and associated pits. No further information was available regarding the timeframe that heat treat operations were conducted in this area; however, this area is present beneath an addition to the Main Manufacturing Building.
- A former Heat Treat Building was located to the south of the Main Manufacturing Building and the former Baler House in a 1955 drawing; however, no rows or columns were present on available drawings. It is estimated that this structure was located from approximately Columns H to 0, Rows 45 to 50. No further information was available regarding the timeframe that heat treat operations were conducted in this area. Based on the review of available historical aerial photographs, it is not present on the 1960 aerial photograph and it is currently beneath an addition to the Main Manufacturing Building that was built in 1986.

A cooling water spray pond was historically located to the west of the former Power House, between Rows 13 and 18 ½. The cooling water spray pond received process wastewater from air compressor blowdown and welding machine cooling water and discharged cooled water via return lines to the plant and to the storm sewer. No information was available regarding the potential use of algaecides/biocides was available, nor was information related to removal of sludges from the cooling water spray pond.

A "present sludge bed to be filled in" was identified on a 1954/1955 drawing of the Site. Based on the review of available aerial photographs, this sludge bed was located to the north of the former Power House, to the northwest of the former AOF Building, and to the east of the cooling water spray pond. The area was not observed to be utilized as a

sludge bed in the 1938 or 1960 aerial photographs; however, an undated aerial obtained from the Site dated prior to 1954 (based on facility construction) shows this area. This area is currently under a portion of the Main Manufacturing Building. No information was available regarding the nature of the sludges deposited in this area while operational or closure of the area.

A former Switch House was identified on a 1936 drawing, between Rows 1 and 2 ½, and is currently located under the Main Manufacturing Building. This structure is identified to have a 4-inch drain tile around the structure that discharged to the storm sewer. The basement of this building includes three floor drains, which discharged to a 3-foot by 3-foot by 4-foot sump that also discharged to the storm sewer. No information regarding any releases from electrical equipment previously operated in this area was available.

Based on the review of documentation from 1978, a "tar house", which was used to heat tar for floor block repairs, was located south of the Main Manufacturing Building at that time. According to Site personnel, the "tar house" was located adjacent to the Storm Sewer Pump House. No further information regarding the tar house was available.

Baling operations were conducted in a variety of locations throughout the Site, as follows:

- A Baler House is located to the south of the Main Manufacturing Building, adjacent to the west of the Power House. The Baler House was constructed in 1965 and consisted of four balers for scrap metal processing, which were set in pits. Significant oil staining and scrap metal were observed in the visually accessible portions of the Baler House pits during the Site inspection. Additionally, a sump is located in the corner of this building, which discharges to the WWTP.
- A former Baler House was located between Columns C and H, Rows 42 to 44. Scrap metal was conveyed to the former Baler House via an underground conveyor system, which was located between Columns E and F. An oil separator is identified to the north of the former Baler House on historical drawings. This Baler House was demolished during the 1964 expansion activities, with the current Baler House constructed in 1965. No further information was available regarding the timeframe that this area was operated for baling operations.
- An area with two balers is identified on 1936 and 1950 drawings between Columns Q to O, Rows 20 ½ to 22. No further information was available regarding the timeframe that this area was operated for baling operations.

Metal finishing operations were historically conducted in a variety of locations throughout the Site as follows:

- A bonderizing/prime system was identified on a 1951 drawing between Columns U and W, Rows 42 to 46. This system included an alkali rinse, hot rinse, bonderite, cold rinse, and chromic acid dip tanks, a blow off oven, a prime spray booth, a final spray booth, and a final oven. The drawing also identified floor drains and a sludge tank in this area.
- Lacquer and cement spray booth operations were identified on a 1939 drawing to have been historically conducted on instrument panels from Columns O to Q, Row 39 to 42. Site personnel also indicated that this area was historically utilized for zinc prime operations in subsequent years. No further information regarding these operations was available.
- Anti-rust oil spray booth operations, which included approximately 110-gallon oil tanks situated on the plant floor or in below grade pits, were identified on a 1937 drawing to have been historically conducted in the following areas: Booth #1 – circa 1937 - Columns U to X, Row 16; Booth #2 – circa 1937 - Columns O to R, Row 13; Booth #3 – circa 1937 - Columns U to X, Row 7; and Booth #4 – circa 1937 - Columns Q to T, Row 4. Site personnel also indicated that the general Booth #2 and #3 areas were historically utilized for zinc prime operations in subsequent years. No further information regarding these operations was available.

Degreasing operations were conducted in a variety of locations throughout the Site as follows:

- An area identified as "shell cooler after degreaser" was present on a 1944 drawing between Columns V and W, Row 34.
- A degreaser is identified on a 1953 drawing at Column U, Row 46.
- Degreasers were also historically located at Columns T, Row 27, Columns RS, Row 9, and Column O, Row 44. The vapor degreaser located at Column T-27 is known to have utilized trichloroethene (TCE) and was operated from April 1953 to August 1979. According to Site personnel, this degreaser was an open top metal tank situated in a concrete pit, where equipment was dipped using an overhead crane.

The property to the west of the main manufacturing property along Clay Avenue SW was historically utilized for agricultural purposes and for water supply wells, a softener plant, and a chlorinator building. A 1957 drawing and 1960 aerial photograph identify

the presence of small structures located on this property. The 1957 drawing identifies Well Nos. 11 to 16, a softener plant, and a chlorinator building on this property. No further information was available regarding these operations. This area currently consists of an asphalt-paved employee parking lot, with a portion an entrance to the overhead pedestrian trestle over the railroad into the Main Manufacturing Building, an AST associated with skimmed oil from the stormwater retention pond, and vegetated/landscaped areas.

The properties to the north of 36th Street SW were historically utilized for residential, agricultural, and commercial purposes. These areas currently include an asphalt-paved former employee parking lot, with a portion of an entrance to the overhead pedestrian trestle over 36th Street SW into the Main Manufacturing Building and a small structure that is part of the inactive groundwater pump and treat system.

4.3 UTILITIES

According to Site personnel, potable water is currently supplied to the Site by the City of Wyoming. According to Site personnel, no water supply, oil/gas, irrigation, or dry wells are currently or were historically present on the Site. No evidence of any water supply, oil/gas, irrigation, or dry wells was observed by CRA during the Site inspection. Numerous monitoring wells, which were installed during on-going and historical subsurface investigations, are present at the Site. Based on the review of available Site drawings and Sanborn maps, Deep Well No. 6 and an associated Pump House were historically located to the west of the Main Manufacturing Building, near Column ZZ, Row 8 ½, with the well located at Row 7. The well and Pump House were removed prior to 1971. No information was available regarding the abandonment procedures employed for the well or the demolition activities conducted for the structure. This area is currently underneath the Main Manufacturing Building. No information was available regarding potential wells associated with the former residential properties. In addition, Well Nos. 11 through 16 were located on the Clay Avenue Parking Lot portion of the Site from at least 1957 to 1960. Based on information obtained from the City of Wyoming, three pump houses and a garage structure were razed from this property in 1971. No further information regarding these wells was available.

The Site is currently connected to the City of Wyoming municipal sanitary sewer system for the discharge of domestic wastewater. According to Site personnel, no septic systems are currently or were historically present on the Site. No evidence of any septic systems was observed by CRA during the Site inspection. No information was available

regarding potential septic systems associated with the former residential properties. Process wastewater generated during former Site operations and from a portion of the foundation drain collection is discharged to the on-Site WWTP for treatment prior to discharge to the City of Wyoming Publicly Owned Treatment Works (POTW) under Industrial User Permit No. 0038 (see Section 4.8).

Stormwater generated at the Site consists of precipitation and runoff from building roofs and impervious surfaces and groundwater collected from the foundation drain system associated with the Main Manufacturing Building (see Section 4.9). Stormwater generated at the Site either infiltrates the undeveloped portions of the property or flows via sheet flow to on-Site catch basins, which discharge to an on-Site stormwater retention pond and eventually to Cole Drain or discharge directly to Cole Drain under a NPDES permit with the MDNRE. According to Site personnel, catch basins located in areas where chemicals may potentially come in contact with stormwater discharge to the on-Site WWTP prior to discharge to the City of Wyoming municipal sewer system. All other catch basins discharge to Cole Drain via the stormwater retention pond or directly to Cole Drain.

Electricity for the Site is supplied underground by Consumers Energy Company (Consumers), who has a substation and Switch House on the Site. Building heat for the Site was historically provided by steam generated in the Power House. The Power House is currently off-line. Air conditioning is supplied to the front office areas by roof-mounted central heating/air conditioning units, with individual office/break areas within the plant cooled by individual window-mounted air conditioning units. The current Power House was constructed at the Site in 1970 and is located to the south of the Main Manufacturing Building and adjacent to the east of the Baler House. The Power House is a multiple story building with a basement and includes three natural gas-fired boilers, which have the ability to burn waste oil, No. 2 oil, or No. 6 oil. A brine pit is present to the north of the Power House and to the south of the cooling water towers and pumps. A coal-fired Power House was constructed at the Site during the initial development of the property by GMC in 1936 and was operated until 1970/71 when the new Power House was brought on-line. The former Power House was located to the west of the Main Manufacturing Building, adjacent to Column ZZ, Rows 19 and 24, and included an ash silo, skip pit and coal hopper, and Power House Building. Coal was stored adjacent to the south of the former Power House, between Rows 24 and 33, in an area approximately 220 feet by 350 feet in area. Demolition plans for the former Power House indicated that the structural components, with the exception of the western wall of the building, were to be removed to the basement (or lowest floor) slab, with the concrete cracked for infiltration. A below grade tunnel, located between

Columns ZZ to W, Rows 22 ½ and 22, was also reportedly removed, with the exception of the concrete floor that was cracked, to the western edge of the Main Manufacturing Building. The former Power House utilized a four-inch drain tile around the perimeter of the building, as well as numerous crocks, floor drains, sumps, and catch basins throughout the structure. Demolition plan drawings did not indicate whether or not abandonment/demolition activities were proposed for the portion of the tunnel that was present beneath the Main Manufacturing Building. This area is currently beneath the Main Manufacturing Building. Consumers also supplies natural gas to the Power House.

4.4 RAW MATERIAL USAGE AND STORAGE

According to Site personnel and based on observations made during the Site inspection, raw materials and chemicals are used and/or stored at the Site. Raw materials currently used and stored at the Site in significant quantities include: soluble/insoluble oils in obsolete equipment; unleaded gasoline; diesel fuel; compressed gases (propane); boiler, welder water, and cooling tower treatment chemicals; WWTP chemicals (flocculant, coagulant, aluminum sulfate [Alum], sulfuric acid, and caustic soda); refrigerants; and miscellaneous adhesives, maintenance, and cleaning chemicals.

Raw materials and chemicals are generally stored near their point of use, in the maintenance areas, or in flammable goods cabinets, in 55-gallon drums, totes, aerosol cans, 5-gallon containers, USTs (see Section 4.6), or in ASTs (see Section 4.5). Based on discussions with Site personnel, all trenches and sumps near the chemical storage areas discharge to the on-Site WWTP via the process sewer system. Chemical storage areas were generally observed to have good housekeeping. Based on the review of available information and discussions with Site personnel, coal was historically stored to the south of the former Power House within a concrete bunker. No information regarding potential historical dust suppression practices was available.

Based on Site and agency records reviewed, raw materials and chemicals historically used in Site operations and/or stored at the Site in significant quantities included, but were not limited to: No. 2 fuel oil; No. 6 fuel oil; gasoline; diesel fuel; various oils, lubricants, and grease; fire resistant fluid; drawing compound; wastewater treatment polymers and chemicals; water and cooling tower treatment chemicals; halogenated solvents; benzene; toluene; xylenes; TCE (degreaser solvent); ethane; 1,1,1-trichloroethane (1,1,1-TCA); ethyl alcohol; specially denatured alcohol; sulfuric acid; mineral seal oil; mineral spirits; sound deadener; zinc-rich primer; various

adhesives; various paints, thinners and lacquers; anhydrous ammonia; antifreeze; lead; silver solder; chromium; copper; mercury; liquid steam cleaner; salt; and compressed gases (propane, oxygen, argon, nitrogen, ferrolene, and acetylene).

Based on the review of a 1950 drawing, a paint storage room was historically located at Columns Q-R, Rows 42-43 and an oil storage room was historically located at Columns Q-R, Rows 51-52.

Based on the review of Site documentation, the Site historically had an Industrial Use Permit (Permit No. SDA-MI-1215) with the Department of Treasury – Alcohol and Tobacco Tax and Trade Bureau for the use and storage of specially denatured alcohol (SDA). According to Site personnel, the Site does not currently store or use SDA.

An undated parts washer survey identified the following locations for 13 parts washers with capacities ranging from 5 to 80 gallons:

- TDO at Column V, Row 9 and Column R, Row 9
- 9 Bay at Column I, Row 22
- Pipefitters Shop at Column S, Row 25, Column X, Row 28, Column S, Row 26, and Column P, Row 52
- Crib 3 at Column X, Row 25
- WEMR Area at Column U, Row 26
- Tractor Shop at Column V, Row 30
- Machine Repair at Column S, Row 31
- 23 Bay at Column Q, Row 51
- Power House at Column A, Row 2

Based on Site records reviewed, paint used in plant operations in 1981 contained heavy metals including lead and chromium.

Based on discussions with Site personnel, the Site utilizes on-Site personnel for lawn maintenance and landscape maintenance. Biocides were historically used for boiler, cooling tower and welder water treatment.

Based on the reported historic use of the Site as cultivated farmland, agricultural chemicals, such as fertilizers, pesticides, and herbicides would likely have been used. The types of chemicals used, storage methodology, and the application rates could not

be determined. No determination could be made regarding potential residuals remaining in Site soils. However, if the chemicals were applied in accordance with manufacturer specifications, residuals remaining in Site soils would be expected to be similar to other area properties and be representative of background conditions for the area.

4.5 ABOVEGROUND STORAGE TANKS

According to Site personnel and available information, the following ASTs exist at the Site:

Contents	*Capacity (Gal.)*	*Location*	*Description*
Empty	9,700	Oil Stores	Steel, concrete secondary containment, within building
Empty	9,700	Oil Stores	Steel, concrete secondary containment, within building
Empty	6,000	Oil Stores	Steel, concrete secondary containment, within building
Empty	6,000	Oil Stores	Steel, concrete secondary containment, within building
Used Oil	100,000	WWTP	Steel, concrete secondary containment
Scum Holding Tank	3,000	WWTP	Steel, concrete secondary containment, within building containment
Used Oil (2)	6,000	WWTP	Steel, concrete secondary containment
WWTP Sludge	6,000	WWTP	Steel, within building
Oil/Water Separator	2,200	WWTP	Steel, within building
Diesel	500	Power House	Steel, within building
Diesel	900	Cooling Tower Pump House	Steel, within building
Diesel	400	South Pump House	Steel, within building
Water	500,000	Fire Pump Houses	Unknown

Contents	*Capacity (Gal.)*	*Location*	*Description*
Cleaner	6,000	Oil Stores	Fiberglass, concrete secondary containment, within building
Oily Wastewater	45,000	WWTP	Steel, concrete secondary containment
Empty	4,000	Retention Pond	Steel
Caustic	Unknown	WWTP	Steel, within building
Flocculant	9,000	WWTP	Steel, within building
Coagulant	Unknown	WWTP	Steel, within building

Figure 4.1 presents the aforementioned AST locations.

It should be noted that the above list does not include reservoirs or tanks associated with equipment. Numerous reservoirs containing hydraulic oil are present throughout the facility and are contained within the associated buildings. Based on discussions with individuals associated with the Site, all of the ASTs that require secondary containment either are situated within secondary containment or are of double-walled construction.

According to City of Wyoming Fire Department records reviewed, installation of a 100,000-gallon "fuel oil" AST at the Site was approved on September 15, 1988. Based on information reviewed, the AST would contain fuel oil for on-Site boilers. Based on review of MDNRE records, the 100,000-gallon AST was registered (Facility Identification No. 91041209) in 1990 as containing fuel oil; however, according to correspondence from the Site dated August 15, 2007, the AST never contained diesel fuel or fuel oil. The AST reportedly contained used (and dewatered) hydraulic and press oil with a flash point above 200 degrees Fahrenheit. Laboratory data verifying the flash point of the AST contents accompanied the correspondence. On this basis, the Site requested that the AST be removed from the MDNRE's registry. According to a Facility Inspection Report dated August 16, 2007, the MDNRE updated the registration information for the Facility to reflect that the AST contained an unregulated substance. Additional inspections of the AST were conducted in 1995, 2000 and 2003. No violations were cited with the exception of one labeling violation identified in the 1995 inspection report. Site records reviewed included waste characterization data for a "100,000-gallon liquid waste tank" dated April 23, 2004. Based on analytical data reviewed, no waste characterization parameters analyzed were detected above laboratory method detection limits.

Site records reviewed included waste characterization data for a "West 6,000-gallon oil tank" dated March 31, 2004, May 14, 2004, and June 15, 2004. Based on analytical data reviewed, tetrachloroethene (PCE), total organic halides, and barium were historically detected in the oil.

The 4,000-gallon AST, located on the west side of the retention basin, was historically used to store free floating product pumped from the retention basin via a skimmer installed in the outlet structure. This AST is empty and no longer in service.

According to MDNRE records reviewed, one 4,000-gallon AST containing bulk deadener was historically located in the "bulk deadener storage area" (P-51). The AST was identified in Permit to Install No. 20-78 issued February 28, 1978. No further information was available regarding the AST.

No information regarding potential historical heating oil AST use at the former residences was available.

4.6 UNDERGROUND STORAGE TANKS

Two currently-in-use USTs are present on the southwestern portion of the Site, including one 8,000-gallon gasoline UST and one 3,000-gallon diesel UST. These USTs are currently registered with the MDNRE, with a registration expiration date of February 28, 2011.

According to City of Wyoming Fire Department inspection records reviewed, one 3,000-gallon diesel fuel UST (UL# J-261175) and one 8,000-gallon gasoline UST (UL# J-261174) were installed at the Site on July 10, 1985. The USTs and associated piping were air tested on July 12 and 29, 1985 and dispensers were installed on August 27, 1985. Authorization to fill the tanks was granted by the Fire Department on August 19 and 27, 1985. Based on the review of the final inspection report dated February 20, 1986, installation of the USTs, piping, dispensers, and other related equipment met or exceeded all applicable State requirements and local ordinances. The final inspection report noted that the USTs were equipped with electronic leak detection equipment, tank level gauges, and overfill protection alarms. Based on MDNRE records reviewed, Site inspections and/or records requests relating to the USTs (Facility Identification No. 00016424) were conducted in January 1998, August 2001, January 2003, March 2003, April 2003, May 2003, April 2005, December 2006, and September 2008. Violations identified during the inspections generally related to

signage, release detection equipment, and the fuel dispensers. According to records reviewed, all violations identified during the inspections were found to be in compliance during subsequent follow-up inspections. A potential leak from the 8,000-gallon gasoline UST was reported to the MDNRE on April 27, 2006, based on leak detection readings (Incident No. S-0101-06). As a result, the Site is listed in the SPILLS database. It was noted in the database listing for the Site that the readings may have been due to a faulty sensor. Additional information reviewed at the Site indicated that the leak detection reading resulted from a faulty sensor board that needed replacement. The Site was not listed in the LUST Database for this incident. Testing of Gasoline and Diesel Fuel Underground Tanks forms completed on 12 occasions between 1991 and 1998 were available for review on Site. According to the information reviewed, the items tested during each event included monitor well N.E., monitor well N.W., monitor well S.E., monitor well S.W., gasoline containment vessel, diesel containment vessel, catch basin (reportedly 12 feet deep), and pollution alert electrical system. No significant issues associated with these items were identified during the inspections. According to on-Site records reviewed, the gasoline and diesel fuel USTs were equipped with leak detection equipment. Daily leak detection printouts dated between 1996 and 2001 were available for review and indicated relevant changes in fluid levels as "LD Failed." CRA identified 32 possible leaks from the gasoline UST ranging from 0.10 and 4.61 gallons per hour (gal/hr) and eight possible leaks from the diesel UST ranging from 0.12 and 3.02 gal/hr.

Based on the review of a 1951 drawing, a 1,000-gallon gasoline UST and pump were identified south of Row 35 (no Column available), and just south of the outside of the 1950 addition on the eastern side of the Main Manufacturing Building. On a 1955 drawing, a "gas tank and pump" were identified as being relocated. There are no Columns or Rows identified on the drawing; however, the tank is shown to the north of the former Heat Treat Building and to the west of the former Baler House. No further details were identified on the drawing. It could not be confirmed that the 1,000-gallon UST identified on the 1951 drawing (after the 1950 addition) was relocated to the south after the 1954 addition in this area.

A proposal to conduct leak testing for eight USTs at the Site was prepared by O.H. Materials Co. and dated September 7, 1984. Based on CRA's review of the proposal, the USTs to be leak tested were identified during a Site visit conducted on August 8, 1984 and included the following: two 50,000-gallon No. 2 fuel oil USTs, one empty 50,000-gallon UST, four 8,000-gallon USTs containing lubrication oils, and one 8,000-gallon gasoline UST. According to the information reviewed, at the time of the proposal, the 50,000-gallon USTs were approximately 14 years old, the gasoline UST was

approximately 25 years old, and the four lubrication oil USTs were approximately 4 years old.

Three 50,000-gallon fuel oil tanks for boiler backup for the Power House were installed in 1970 to the north of the east cooling tower. According to records reviewed, the three 50,000-gallon USTs were removed from the Site on August 21, 1985. The UST removal was overseen by the Fire Department and according to the inspection report, two of the USTs contained "oil" and one contained fuel oil. The USTs were reportedly cleaned by Great Lakes Tank Cleaning Company and removed and disposed off-Site by Hardman Construction Company. Photographs of the UST removal included in the Fire Department file for the Site were reviewed by CRA. None of the photographs available for review indicated a release from the USTs and the USTs appeared to be in good condition at the time of removal.

A drawing available for review in City of Wyoming Fire Department records showed four 8,000-gallon fiberglass fuel oil USTs, and one 5,000-gallon gasoline UST located south of the plant, east of Railroad Track No. 5, and west of the cooling towers. It was noted on the plan that these USTs were slated for removal. No other information relating to the removal of the USTs was available for review.

Based on the review of available documentation from 1981, the Site historically utilized mineral spirits to dilute mineral seal oil utilized in operations. The mineral spirits and mineral oil were stored in four USTs (one mineral spirits UST and three mineral seal oil USTs) located to the south of Row 51 between Columns R and S. Based on the review of an air emissions permit application for the mineral spirits UST, the capacity of the mineral spirits UST was approximately 7,800 gallons. The capacities of the mineral seal oil USTs were not identified; however, drawings of the tanks depict the three mineral seal oil USTs to be similar in size to the mineral spirits UST. According to review of the Environmental Impairment Liability Questionnaire dated October 13, 1982, mineral seal oil and mineral spirits were stored in underground tanks at that time. No further information regarding the mineral seal oil or mineral spirits USTs was available.

An internal memo reviewed on Site and dated May 29, 1984 noted that a "gasoline bulk storage tank," installed in 1959, was in need of upgrade. No further information was available regarding this tank.

Removal of one 5,000-gallon gasoline UST (UL# D-993642) was inspected by the Fire Department on September 19, 1985. According to the inspection report, the UST was removed by Bosch Mechanical and Riverside Gravel Co., cleaned, and disposed off Site.

Based on review of the inspection report, no evidence or indication of a release was observed at the time of removal.

A MDNRE Notification for Underground Storage Tanks dated April 24, 1986 was available for review in Site records. According to the Notification, six USTs were present at the Site at that time including one 3,000-gallon double-walled steel diesel UST, one 8,000-gallon double-walled steel gasoline UST, and four 8,000-gallon fiberglass reinforced plastic USTs. The 8,000-gallon plastic USTs reportedly contained mineral seal oil, mineral spirits, machine oil, and hydraulic oil. The 8,000-gallon plastic USTs were reported to be six years old and the gasoline and diesel USTs were reported to be one year old.

On Site records reviewed included plans and construction specifications prepared by FTC&H and dated April 1986 for the installation of one 8,000-gallon gasoline UST located west of the Executive Garage and modular buildings. A Post-It note attached to the plans indicated "never done." No other information was available for review.

Based on the review available drawings, a 12,000-gallon oleum spirits UST was planned for installation associated with the AOF House; however, hand-written notes on Site drawings indicate that the tank was not installed. Additionally, a 420-gallon ferrolene UST was present to the south of the AOF House. No further information was available regarding the AOF House USTs.

Review of available drawings indicates the presence of numerous tanks, likely containing hydraulic oil for the presses, located in pits beneath the presses throughout the blanking area. Dimensions of the tanks were identified to primarily consist of 4-foot by 8-foot tanks on concrete; however, it was not specified if they were on slab or pads. These tanks are identified with Press Lines E, F, G, H, J and K, which are identified to be located between Columns C and K, Rows 13 to 22. These tanks were identified on a 1939 addition drawing, which may not illustrate all of the tanks actually present.

Available UST locations are presented on Figure 4.2.

4.7 CURRENT AND HISTORICAL WASTE MANAGEMENT PRACTICES

An overview of the Site's Resource Conservation and Recovery Act (RCRA) regulatory history and status, and the Site's current and historical waste management practices are provided in the following subsections.

4.7.1 RCRA REGULATORY HISTORY

Based on review of available records, the Site submitted an initial Notification of Hazardous Waste Activity with U.S. EPA Identification No. MID0060204083 to the U.S. EPA in August 1980. According to the notification, the facility generated, treated, and stored hazardous wastes F010, F017, U238, and hazardous waste with toxic characteristics. The Site submitted a RCRA Hazardous Waste Part A Permit application to the U.S. EPA in November 1981. The facility reportedly operated two hazardous waste treatment tanks inside the main plant building and a zinc-primer residue storage area located south of the plant. It was reported that the treatment tanks and storage area contained only paint-related waste (F017). However, it was subsequently determined that F017 listed waste was temporarily suspended from regulation under RCRA. Furthermore, the paint-related waste was analyzed for hazardous waste characteristics and deemed non-hazardous. Therefore, in August 1982, GM filed a request for withdrawal of their Part A Permit. Withdrawal of the Part A Permit was approved by the U.S. EPA in a letter dated September 13, 1982 on the basis that wastes treated or stored at the facility were not defined as hazardous waste.

4.7.2 RCRA CORRECTIVE ACTION STATUS

No RCRA Corrective Action obligations have been identified to date based on the approved withdrawal of the Part A Permit as identified in Section 4.7.1.

4.7.3 WASTE MANAGEMENT

4.7.3.1 HAZARDOUS WASTE HANDLING/STORAGE AND DISPOSAL

According to an environmental database search (EDR, April 21, 2010), the Site was listed as a SQG of hazardous waste (U.S. EPA Identification No. MID006020408). The Site Identification information was reported to have been received by the MDNRE on May 4, 2008 regarding the generator status of the Site. The start date for the Site owner/operator associated with the generator identification number was December 15, 1935. The Site is identified as generating the following universal wastes at the time the notification was provided: devices containing elemental mercury; mercury thermometers; mercury switches; batteries; lamps; pesticides; and thermostats.

Historical generator forms and associated generator status received by the MDNRE are listed below:

- SQG – August 15, 1980; November 19, 1980; August 23, 1995; February 28, 2002; November 10, 2003; February 1, 2004; February 19, 2004; March 1, 2004; January 1, 2005; February 1, 2005; March 1, 2006; and April 4, 2006
- LQG – February 27, 1996; February 20, 1998; February 29, 2000; and March 1, 2002

Information provided in the environmental database search results from the biennial reporting year of 2005 indicated the following hazardous waste streams were generated at the Site during the timeframe addressed in the biennial report (i.e., 2004 and 2005):

- D001 – Ignitable
- D008 – Lead

Violations were listed in the environmental database search results, as follows:

- A written informal enforcement action was issued on May 25, 1994 for a "Generator – General" violation identified during a compliance evaluation inspection by the MDNRE on May 19, 1994. The Site achieved compliance for the violation on June 13, 1994.

Compliance evaluation inspections were also reported to have been conducted by the MDNR or MDEQ, as applicable at the time, on November 8, 1985, October 17, 1996, December 1, 1999, and November 25, 2003. No violations were identified in the database search results associated with the inspections conducted on the aforementioned dates.

Based on MDNRE records reviewed, RCRA inspections were conducted at the facility in February 1982, September 1987, May 1994, October 1996, December 1999, and November 2003. Violations were noted at the facility during the May 1994 inspection relating to container labeling and storage methods. According to an MDNRE letter dated June 30, 1994, the violations were corrected and the facility was in compliance.

Based on review of available records, the Site submitted an initial Notification of Hazardous Waste Activity with EPA I.D. Number MID006020408 to the U.S. EPA in August 1980. Subsequent Notifications or Site Identification Verifications available for review were submitted in 1986, 2000, 2002, 2003, and 2004. Based on information

reviewed, the facility was registered as a SQG or CESQG of hazardous waste from the early 1980s until mid 1995 and from October 2003 to 2009. In August 1994, the Site informed the MDNR that contaminated soil generated from press removal and relocation at the facility was classified as hazardous waste and would be shipped off-Site for disposal. According to the correspondence, the activity was a one-time occurrence and would not change the facility's status as a SQG. However, MDNR subsequently issued a Letter of Warning to the facility on August 9, 1995 citing that the facility exceeded the 2,200-pound SQG limit during at least five of the previous 12 months and required that the plant change its generator status to LQG. The Site submitted the change of status request to the MDNR on August 15, 1995. Based on information reviewed, the facility was registered as LQG from approximately 1995 to 2003 and the facility requested a temporary change to LQG status from SQG status for one month in January 2004.

According to notification information, and inspection and Biennial reports reviewed, hazardous waste generated at the Site between 1980 and 2005 included characteristically hazardous wastes that are ignitable (i.e., D001), corrosive (i.e., D002), reactive (i.e., D003), and hazardous waste with levels of barium, cadmium, lead, mercury, 1,1-dichloroethene, PCE, and benzene above the associated TCLP criteria. Listed hazardous waste generated at the Site included halogenated and non-halogenated solvents (i.e., F001, F002, F003, F004, and F005), off-specification/discarded (i.e., U220, U239, and U226) and residue associated with heat treating operations in which cyanides were used (i.e., F010). Universal waste generated on-Site included batteries and fluorescent lamps.

According to correspondence from the MDNR dated July 2, 1980, the Site was granted approval to transport and dispose hazardous waste stream No. 928. According to the attached Generator Waste Analysis Form, the hazardous waste consisted of "bottom settlings" from an oil separator. The Site reportedly generated approximately 4,000 gallons per year. As listed on the form, components of the waste content included oil, water, dirt and the following compounds; lead, zinc, nickel, copper, cadmium, chromium, mercury, phosphorus, cobalt, and lithium. No information regarding the process that generated the "bottom settlings" was available.

4.7.3.2 SOLID NON HAZARDOUS AND INDUSTRIAL WASTE MANAGEMENT

The Site currently generates general refuse, which is placed in a roll-off on the north side of the Main Manufacturing Building.

Prior to cessation of operations at the Site by GM LLC, the Site generated a variety of solid and special wastes with the associated on-Site management and off-Site disposal/recycling facility as listed below:

Wastestream	*On Site Management*	*Off Site Management*
Adhesives and Sealers, Aerosol Cartridges, Battery Charge Debris, Blanks Wash Filters, Myclex Filters, Parts Washer Filters, Plant Trash, General Refuse, Rags and Debris, Steam Clean Sludge, Used Grease, Used Oil Filters, Welder Water Filters, Non-Hazardous Floor Block, Railroad Ties, Cardboard, Wood, Plastic	Drums/Roll/Offs	Disposed – Waste Management
Batteries, Computer Equipment and Electronics, Fluorescent Bulbs, Mercury Devices, Non-PCB Ballasts, Non-PCB Small Capacitors, Smoke Detectors	Designated Containers	Universal Waste – Clean Lites
PCB Ballasts, PCB Contaminated Concrete, PCB Contaminated Wood Floor Block	Roll-off	Disposed – Wayne Disposal
Medical Waste	Bags	Disposed – Stericycle
Used Oil with Barium, Used Oil/WWTP Sludge	Drums/Tanker Truck	Recycled – General Oil
Asbestos	Bags/Roll-offs	Disposed – Waste Management
Concrete	Roll-off	Recycled – West Michigan Recycle
PCB Large Capacitors	Drum	Disposed - Veolia

The Site previously held a Certificate of Registration as a Producing Facility of Medical Waste; however, a request for termination was submitted to the Radiological Protection

and Medical Waste Section of the MDNRE-Waste and Hazardous Materials Division (WHMD).

According to Site personnel, no solid wastes have been disposed on Site. No evidence of the on-Site disposal of solid waste was observed by CRA during the Site inspection. Based on the review of a historical aerial photograph taken between 1950 and 1954, an area of potential fill activities was identified to the south of the Main Manufacturing Building. No further information was available regarding the potential on-Site fill activities.

Based on the review of historical drawings, the following incinerators were formerly located at the Site. One of the incinerator areas was located to the south of the former Power House, to the east of the railroad tracks and an incinerator area was identified along the western property boundary in a 1954/1955 drawing in line with Row 42 of the Main Manufacturing Building. It could not be confirmed from the available information if these were the same area; however, they appear to be in close proximity to each other. One of the incinerators was to the southwest of the former Baler House between Columns H and J, south of Row 40 (numbering did not extend that far south on the drawing). No information regarding the nature of the materials burned in the incinerators was available. No information regarding construction or demolition dates of the incinerators was available.

A "present sludge bed to be filled in" was identified on a 1954/1955 drawing of the Site. Based on the review of available aerial photographs, this sludge bed was located to the north of the former Power House, to the northwest of the former AOF Building, and to the east of the cooling water spray pond. The area was not observed to be utilized as a sludge bed in the 1938 or 1960 aerial photographs; however, an undated aerial obtained from the Site dated prior to 1954 (based on facility construction) shows this area. This area is currently under a portion of the Main Manufacturing Building. No information was available regarding the nature of the sludges deposited in this area while operational or closure of the area.

Based on the review of a 1953 drawing, a coolant recovery and chip disposal system, including sterilizer, was present between Columns Y-W, Rows 49-50. No further information regarding the system was available.

According to correspondence between the Site and the MDNR dated August 12, 1991, waste oil was burned using Boiler No. 1 beginning in at least 1980. Waste oil generated at the facility was tested semi-annually and deemed non-hazardous. However,

according to interoffice communication between MDNR-AQD and MDNR-WHMD dated October 8, 1991, analytical data submitted by GM showed some waste oils analyzed to contain greater than 1,000 ppm total halogens classifying the oil as hazardous waste. A memo available for review on Site regarding Alternative Boiler Fuels and dated April 15, 1980 indicated that "many of the waste oils checked thus far as possible boiler fuels contain traces of PCBs."

Based on the review of available documentation, an Automobile Manufacturers Industrial Solid Waste Survey completed for the Site in 1970. According to the survey, solid waste generated at the Site at that time consisted of the following classifications: garbage, cardboard, paper, wood, plastics, oils, flammable liquids, residues and tars, oily wastewater treatment sludge, inert solids, and special wastes. At that time, the Site noted that chloroethene waste and zincilate with xylol had to be disposed in sealed containers due to toxic and flammable properties.

An Environmental Impairment Risk Survey available for review at the Site and dated October 1982 indicated that waste materials stored at the Site at that time included oily sludge from the wastewater treatment plant and zinc primer residue. Approximately 40,000 gallons of oily sludge, containing oil, grease, aluminum hydroxide, and water, was generated per year and stored in an AST for off-Site disposal. Zinc primer residue (approximately 3,000 gallons per year) was stored in "barrels" for up to 60 days prior to being shipped back to the paint vendor for recycling.

Based on review of a GM Solid Waste Management Survey for calendar year 1979, solid waste processes or sources contributing to the waste stream at the Site included cafeteria, shipping, offices, production, construction, janitorial, press leaks and drawing compound, and wastewater treatment plant. The information reviewed further indicated that waste oil and oily sludge were stored in one of three on-Site ASTs (total capacity 15,000 gallons). Approximately 72,000 gallons per year of waste oil was used as boiler fuel and approximately 38,000 gallons per year of oily sludge was disposed off Site.

4.8 INDUSTRIAL WASTEWATER

Based on interviews with Site personnel and facility records reviewed, process wastewater and foundation drainage from the Z-1 press area generated at the Site is discharged to an on-Site WWTP. Once treated, process wastewater is discharged to the City of Wyoming sanitary sewer under Industrial User Permit No. 0038 (Wastewater

Permit). The Wastewater Permit was effective on April 4, 2006 and expires on April 3, 2011. The Wastewater Permit covers Outfall 021 (located on the east side of the Power House in the parking lot, which includes the discharge from the WWTP) and Outfall 022 (domestic wastewater). There are no monitoring requirements associated with the Wastewater Permit.

Based on a Listing of Plant Wastewater Outfalls (date unknown) available for review in Site records, seven wastewater Outfalls (020, 021, 022, 024, 023, 025, and 026) discharged from the Site to the City of Wyoming municipal sanitary sewer system. According to the information reviewed, treated process wastewater from the WWTP discharged from Outfall 020 and combines with process wastewater, sanitary wastewater, and cooling tower blow-down discharged via Outfall 021. The remaining outfalls discharged sanitary wastewater.

According to Site records reviewed, the WWTP was constructed in 1970. The WWTP was originally constructed to pre-treat process wastewater discharged from the heat treat, battery charge, steam clean, press pit, and elevator pit areas. Information dated 1987 indicated that areas covered by the process waste collection system included the steam clean booths, the heat treat area, metal assembly, the press room pits, the steel stores conveyor trench, and the battery wash area. According to the information reviewed, the following sump locations and wastes were associated with the areas covered by the collection system in 1987:

Area	Sump Location	Waste
Steam Clean Booths	Columns ZC-13 and O-28	Oil, grease, drawing compound
Heat Treat Area	Column O-3	Water, oil
Metal Assembly	48 sundry sumps	Water, fire retardant, hydraulic oil from weld presses and hydraulic units
Press Room Pits	Columns D-11, D-12, D-18, E-35, M-39, E-44, and A-55	Oil, drawing compound
Steel Stores	Columns C-36, AA-1, AA-6, AA-15, AA-24, and AA-32	Oil, mineral spirits, water, diesel fuel
Battery Wash Area	Column V-30	Dirt, oxides, sulfates, acid

Oily process wastewater from sump pits located in the press room and metal assembly area as well as from two steam clean booths are pumped to an aboveground 5,000-gallon oil skim tank located in the WWTP. Wastewater from the separator tank is discharged

to one of two 45,000-gallon holding and treatment tanks located on the east side of the WWTP. Oil from the 4,500-gallon separator tank was historically pumped to one of two 6,000-gallon waste oil "cooker" tanks also located east of the WWTP where it was heated to remove water and be used as boiler fuel in the Power House (used oil was not burned in the Power House boilers at the time that GM LLC ceased operations on the Site). Reclaimed used oil is currently discharged to a 100,000-gallon AST, which was noted on construction drawings to be situated on "oil soaked sands." Underground piping is present associated with the WWTP operations. When one of the holding tanks was near full and ready for treatment, the influent wastewater from the oil separator tank was directed to the other 45,000-gallon holding tank. Secondary containment is provided by a concrete berm around the tank area with drains that discharge to the WWTP. Concrete berm secondary containment is also present for the used oil ASTs.

The treatment process consists of air agitation for approximately one-half hour followed by manual addition of liquid cationic emulsion breaker and liquid aluminum chloride to initiate separation of oily sludge and water. Oily sludge was pumped to a 2,200-gallon separator tank before ultimately discharging to a 5,000-gallon oily sludge storage tank for off-Site disposal. Water from the 2,200-gallon separator tank was fed back to one of the holding and treatment tanks. Water separated in the treatment tanks was transferred to an air saturator tank, which discharged to a dissolved air flotation unit (DAF). As wastewater flowed through the DAF it was mixed with a coagulant aid polymer before discharging to the sanitary sewer. The remaining flocculant floating in the DAF unit was skimmed to the oily sludge tank.

Significant oil staining was observed in the WWTP during the Site inspection, and oil staining was noted near a sump adjacent to the two exterior 6,000-gallon ASTs.

Based on the review of available documentation and discussions with Site personnel, the City of Wyoming conducts outfall sampling on a routine basis. The Site has had exceedances of the permit limitations in the past, including, but not limited to oil and grease, five-day biochemical oxygen demand (BOD_5), ammonia, zinc, and beryllium; however, all but one incident has been closed out. A Significant Noncompliance was issued by the City of Wyoming to the Site on March 23, 2010 due to chronic exceedances of the Wastewater Permit limitations for BOD_5. GM LLC submitted a BOD Compliance Plan to the City of Wyoming on April 20, 2010, which identified the following actions related to mitigating the previous exceedances:

- The kitchen associated with the former cafeteria ceased operations in 2009. Young's Environmental cleaned the kitchen grease trap and flushed the piping from the grease trap to the main wastewater outfall on March 24, 2010.
- The Site no longer meets the definition of a Significant Industrial User per the City of Wyoming Ordinance based on current volumes of water utilized.
- GM LLC will be ceasing operations at the Site at the end of June 2010, at which time operations will be turned over to MLC. As such, any future activities impacting wastewater discharges from the Site were identified by GM LLC to be the responsibility of MLC.

The Site issued a request to the City of Wyoming to discharge approximately 100,000 gallons per day of groundwater to the City POTW dated July 31, 1998. According to the letter reviewed, the Site planned to excavate soil from Bays 17 and 20 to install new equipment beginning in September 1998 and groundwater would be pumped directly to the sanitary sewer from the excavation.

Based on review of an Inter-organization letter dated July 2, 1981, sink drains in TDO heat treat and the north weld booth were re-directed in April 1981 to discharge to the on-Site WWTP.

According to correspondence dated May 28, 1975, one of the on-Site cooling towers overflowed due to an equipment malfunction on May 25, 1975, causing a surge of 10,000 gallons of water to be discharged to the sanitary sewer during a 7-minute period. As a result, the City of Wyoming limit for zinc was exceeded. According to the information reviewed, the City of Wyoming was contacted and no violation was issued to the Site.

A trench drain is located in the bulk unload area. The trench drain is approximately 70 feet long by one-foot wide and drains to a sump located adjacent to the bulk unload area. From there, liquids are discharged to a sump within the plant inside an adjacent truck dock, which discharges to the on-Site WWTP via aboveground piping lines.

Michigan Act 293 Wastewater Reports for reporting years 1974, 1984 through 1991, 1993, and 1994 were available for review in Site records. The Facility Number was reported to be 410158. Based on review of the 1974 Report, activities generating wastewater at the Site included two steam clean booths and various sump pits which discharged to the on-Site WWTP. Critical materials were reported for one outfall, Outfall 01. Outfall 01 discharged an estimated 34 percent process wastewater and 66 percent sanitary wastewater to the municipal sanitary sewer. The critical materials reportedly

discharged through Outfall 01 included antimony, cadmium, chromium, copper, lead mercury, nickel selenium, silver, sulfides, zinc, ammonia, anilines, benzene, butyl alcohol, chlorinated benzene compounds, hydroquinone, naphthenic acid, phenolic compounds, phthalates, styrene, toluene, and xylenes.

Two outfalls, including sanitary sewer Outfall 021 and stormwater Outfall 010 were reported for the remaining reporting years. According to the reports, Outfall 021 discharged 95 percent process wastewater and 5 percent sanitary wastewater to the municipal sanitary sewer. Non-contact cooling water and stormwater run-off were discharged to Cole Drain, which discharges to Plaster Creek, through Outfall 010. The following critical materials associated with the Site and/or its operations were listed for one or more of the reporting years: antimony, cadmium, chromium, cobalt, copper lead, lithium, mercury, nickel, silver, selenium, zinc, xylene, benzene, acrylic acid, 1-chloro-2,3-epoxypropoane, di-n-butyl phthalate, di-h-octyl phthalate, bis(2-ethylhexyl) phthalate, diethylhexyl phthalate, hydroquinone, styrene, PCE, 1,1,2-TCA, 1,4-dioxane, chloroform, methylene chloride, toluene, phenol, asbestos, chlorine, and PCBs. These critical materials were listed as being discharged from Outfall 021 or with no outfall designation.

4.9 STORMWATER

The Site is listed in the NPDES database as having Individual Permit NPDES Permit No. MI0043877 with the MDNRE. The permit was issued on July 28, 2006 with an effective date of October 1, 2006 and an expiration date of October 1, 2010.

Stormwater generated at the Site consists of run-off from the Site structures and hard surfaced areas and general rainwater falling on unimproved surfaces. Rainwater falling on unimproved surfaces infiltrates Site soils or discharges by sheet-flow to the on-Site catch basins. Stormwater falling on hard surfaced areas and the building roofs is collected in underground drains and surface catch basins that discharge to the storm sewer system, the on-Site stormwater retention pond, or the on-Site WWTP, dependent upon location. According to Site personnel, catch basins located in chemical loading/unloading, waste storage, equipment storage, and other areas where chemicals may potentially come in contact with stormwater discharge to the on-Site WWTP prior to discharge to the City of Wyoming municipal sanitary sewer system.

The Site currently maintains NPDES Permit No. MI0043877, effective October 1, 2006 and with an expiration date of October 1, 2010. A renewal application for the NPDES

permit was submitted by MLC on April 29, 2010. The NPDES permit authorizes discharge of non-contact cooling water, foundation drainage, and stormwater from the Site retention pond to the Cole Drain via Outfall 010. The Site retention pond is an approximate 0.5-acre pond, approximately 5 feet deep, with a 610,000-gallon maximum capacity, which discharges to Cole Drain via Outfall 010. The permit further authorizes the discharge of unregulated stormwater to the Cole Drain from additional storm sewer Outfalls (011, 012, 013, and 014). The permit was issued with effluent limits (0.202 million gallons per day [MGD]) for Outfall 010 and monitoring requirements for two monitoring points, 010A and 011A. According to the permit, the Site is required to monitor total dissolved solids, chloride, and sulfate at monitoring point 010A on a quarterly basis. The Site is also required to monitor total copper in effluent at Monitoring Point 011A on a weekly basis and hexavalent chromium on a quarterly basis. The Site is required under the permit to submit Monthly Discharge Monitoring Reports (DMRs). The initial NPDES permit for the Site was not available for review. However, the current permit was preceded by renewed permits effective from January 1, 1997 to October 1, 2000 and July 1, 2001 to October 1, 2005. Based on review of the previous NPDES permits, monitoring for TCE, 1,1-DCA, and copper at Outfall 010 was historically required.

Based on review of correspondence dated January 5, 2010, GM LLC sent a request for reduced monitoring to the MDNRE Grand Rapids District Office on November 13, 2009. The request for reduced monitoring was based on the fact that production at the Site was limited and scheduled to cease entirely. Accordingly, the MDNRE approved the following changes to the monitoring requirements for the Site effective February 1, 2010: flow monitoring and outfall observations were eliminated at Outfall 010, hexavalent chromium monitoring and outfall observations were eliminated at Outfall 011, and total copper monitoring at Outfall 011 was changed from weekly to quarterly. Quarterly monitoring requirements for total dissolved solids, chloride, and sulfate remained the same. It was noted that quarterly monitoring would be conducted in January, April, July, and October 2010.

The earliest NPDES permit available for review was effective November 19, 1984 through October 31, 1989. The permit was based on an application submitted to the U.S. EPA and MDNR dated March 10, 1982 and updated July 6, 1982. Based on information reviewed, the permit was issued with the following monitoring requirements: weekly flow monitoring at Outfall 010 and weekly outfall observation at Outfalls 010, 011, 012, and 013. Outfall 014 was constructed at the Site sometime in 1986/87 concurrent with building expansion activities. The outfall was constructed to discharge water from roof drains associated with the building expansion only. A new

NPDES permit was issued effective July 1, 1988 to include Outfall 014. The permit had an expiration date of October 1, 1990 and superseded the previous permit set to expire on October 31, 1989. Based on information reviewed, a subsequent permit was issued August 22, 1991 and was effective December 1, 1991 through October 1, 1995 with same monitoring requirements as the preceding permit. The permit was modified in March 1994 to include monthly monitoring of TCE at Outfall 010, due to the discharge of treated groundwater from the groundwater extraction system, which was previously discharged to the City of Wyoming sanitary sewer system (see below).

A renewed NPDES permit issued on September 27, 1996 (effective January 1, 1997 through October 1, 2000) was also available for review in MDNRE records. Based on information reviewed, the Site contested the total copper effluent limitation and monitoring requirements set forth in the permit in a Petition for Contested Case Hearing dated November 25, 1996. A modified NPDES permit (MI0043877) was issued to the facility effective May 27, 1998 as a result of a Stipulation of Settlement of Contested Case agreed upon by the Site and the DNRE. The permit required the Site to develop and implement a Copper Source Identification Plan for the facility by July 1, 1999. Earth Tech, Inc. prepared a Copper Source Identification Plan for the Site dated August 1999. Based on review of the report, weekly monitoring for copper was conducted at Outfall 010 beginning June 13, 1997. Additional samples were collected from potential sources. The report indicated that no industrial process at the facility was identified as a likely source of copper in discharge from Outfall 010. A Site plan showing copper on the Main Manufacturing Building roof (dated March 27, 1997) and a survey identifying copper gutters and flashing at the Site (dated December 19, 1997) were reviewed at the Site. It was noted in correspondence between GMC and MDNRE representatives (dated between 1996 and 1998) that copper-containing construction materials or appurtenances in or on facility buildings may contribute copper to stormwater. However, it was decided that in accordance with the Clean Water Act, building materials could not be considered an industrial activity. Therefore, the Site was required to monitor copper in effluent, but the effluent limitation for copper originally imposed in the September 1996 permit was removed.

According to information reviewed, GMC requested in August 1993 that the NPDES permit authorize discharges of treated groundwater to Cole Drain via Outfall 010, which had previously discharged to the sanitary sewer system. The on-Site groundwater pump and treat system, which was the source of treated groundwater, was reportedly shut down and disconnected from the storm sewer system in May 2005. The system treated groundwater contaminated with chlorinated VOCs, primarily TCE. Accordingly, monthly monitoring for TCE (weekly monitoring was required until

April 1994) in effluent at Monitoring Point 010B was required during the period of time that the treatment system discharged to the stormwater system. 1,1-DCA was also detected in effluent from the groundwater treatment system in December 1994. Although 1,1-DCA was not detected above method detection limits in subsequent samples, the Site requested that monitoring requirements for this parameter be added to the NPDES permit in a letter dated June 6, 1996. Foundation drainage samples were collected in October 2005 and analyzed for 1,2-DCE, PCE, and TCE. According to correspondence from the Site dated November 4, 2005, PCE was detected in the samples; however, the letter indicated the PCE present in groundwater at the Site was known to have originated from on off-Site source.

NPDES Compliance Evaluation Inspections (CEIs) were conducted at the facility by WB personnel on February 22, 2000, April 30, 2003, August 30, 2004, March 24, 2005, September 25, 2006, May 31, 2007, and November 3, 2009. A violation was identified during the April 30, 2003 inspection. According to the inspection report, the NPDES permit effective July 1, 2001 required that the Site conduct a Stream Characterization Study, which included quarterly monitoring for total copper and total hardness at monitoring point 000A in Cole Drain (downstream of Outfall 010). Monitoring associated with the study had not commenced at the time of the inspection. Monitoring began immediately following the inspection and the first quarterly monitoring report was submitted to the DNRE on June 4, 2003.

The most recent (November 3, 2009) CEI was discussed in correspondence issued to the Site by the DNRE dated November 18, 2009. According to the letter, only Outfalls 010 and 011 were regulated by the NPDES permit at the time of the inspection. All other process flows were directed to the sanitary sewer. Outfall 010 consisted of storm water drainage from the south parking area, foundation drainage from the CX conveyor area, and foundation drainage from PP1 area. Outfall 011 consisted of plant roof drainage and stormwater drainage from the 36th Street parking area. The Site was determined to be in compliance with the NPDES permit requirements at the time of the inspection.

A Chronic Toxicity Assessment of Outfall 010 Effluent was conducted by DNRE personnel in April 2004. According to information reviewed, the effluent was not toxic to *Ceriodaphnia dubia*.

Based on review of an Industrial Environmental Performance Review conducted at the Facility in April 1981, stormwater from outdoor storage areas was directed to the retention basin prior to discharging to Cole Drain. However, it was also noted that at

the time of the report, all roof drains and some yard drains discharged directly to the municipal storm sewer without passing through the retention basin.

According to the 1982 NPDES permit application, the following parameters were detected in stormwater at Outfall 010: fluoride, nitrate-nitrite, oil & grease, sulfate, surfactants, cobalt, iron, manganese, antimony, copper, lead, mercury, nickel, thallium, zinc, and phenols. The same parameters were also detected in stormwater at Outfall 011 with the exception of cobalt, thallium, and phenols and addition of cadmium and chromium. According to Michigan Act 293 Wastewater Reports (for reporting years 1989, 1990, 1991, 1993, and 1994) available for review in Site records, critical materials reported in the discharge from Outfall 010 at that time included antimony, cadmium, chlorine, copper, selenium, chloroform, diethylhexyl phthalate, nickel, and zinc.

Based on Site records reviewed, discoloration and elevated biochemical oxygen demand (BOD), chemical oxygen demand (COD), total organic carbon (TOC), and copper were observed in a sample collected from Outfall 011 in June 1987. An investigation was subsequently conducted by EDI to determine the cause of the abnormalities in the storm water discharge. Based on review of the EDI report dated August 14, 1987 and GM-MDNR-EDI correspondence dated between July 1987 and January 1988, the elevated BOD, COD, and TOC concentrations and discoloration were attributed to organic material leached from the asphaltic building roof. The elevated copper concentrations were believed to result from leaching of copper from downspouts during a highly acidic rain event.

Based on files reviewed at the facility, the stormwater retention basin was originally constructed in 1972 on property owned by Consumers, for which the Site secured an easement agreement. CRA conducted an inspection of the retention basin in May 2001 and provided the Site with recommendations for repairs. The basin was reported to be lined with a rubber liner and equipped with two containment booms that were used to divert floating oil to a skimmer installed in the basin outlet. Oil was pumped from the skimmer to a 4,000-gallon AST located adjacent to the west of basin. Significant sediment accumulation and vegetation growth were also observed in the retention basin during the inspection. Recommended repairs or upgrades included: replacement and upgrade of the basin liner; removal of sediment; grading of banks to increase storage capacity; concrete repair; boom replacement; and holding tank refurbishment. In 2002/2003, modifications were implemented to the stormwater retention pond. Sediment samples collected from the retention pond in September 2002 were analyzed for metals, 1,2-DCA, select VOCs, and PCBs. TCLP analysis for metals, select VOCs, and SVOCs was also conducted. No VOCs, SVOCs, or PCBs were detected above laboratory

method detection limits. Metals, including arsenic, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc were detected in the sediment above laboratory method detection limits in both the total metals and TCLP metals analysis.

4.10 POLYCHLORINATED BIPHENYLS (PCBs)

The Site was identified as begin listed in the PADS database; however, no information was provided relative to this listing.

According to Site personnel and based on information reviewed, historical and current use of PCB-containing equipment exists at the Site. Potential PCB-containing materials include: dielectric fluids; impacted concrete and metal surfaces; light ballasts; natural gas lines; non-electrical oil-containing equipment such as elevators, air compressors and dock levelers; and solid PCB bulk product materials.

According to Site documentation dated January 30, 1984, the MDNR conducted a PCB inspection at the Site on January 25, 1984 and January 26, 1984. Samples of oil, cooling fluid, and drawing compound were reportedly collected during the inspection and analyzed for PCBs; however, no analytical results were available for review by CRA. According to the letter, no leaks or discharges were observed and the only issues identified during the inspection related to record keeping and labeling. According to the documentation, the issues were being addressed by the Site Engineer.

A Notification of PCB Activity was submitted to the U.S EPA on March 29, 1990 and was acknowledged by the U.S. EPA in a letter dated May 24, 1990. According to the Notification of PCB Activity, the Site was a "generator with onsite storage facility."

According to Site records reviewed, the U.S. EPA issued an administrative subpoena on August 15, 1990 to GMC requesting information relating to potential PCB contamination and disposition of flooring materials in GMC plants located in Region V. As a result, Site personnel reviewed relevant records and issued a response dated October 30, 1990 and an addendum response letter dated November 14, 1990. According to the response letters, PCB use at the plant was primarily limited to electrical equipment including capacitors, transformers, fluorescent lights, and lighting ballasts. A review of analytical data for 75 samples of various oils and oily sludge dated between October 1978 and March 1990 identified that PCBs were detected above method detection limits on four occasions. In March 1987, Aroclor 1242 was detected at a concentration of 27 ppm in a waste oil sample collected from a trench at Column Q-44. PCBs were also detected at a

concentration of 1 ppm in one waste oil sample collected in 1979. In March 1980, PCBs were detected in samples collected of specific oil products that were being considered for use on the Site (Thomas Oil Co. crankcase oil – 28 ppm Aroclor 1242 and Stoddard crankcase oil – 18 ppm Aroclor 1254). Use of the Thomas oil was discontinued in 1985 and based on the analytical results for PCBs, the Stoddard oil was never put to use at the Site. According to information reviewed, PCBs were not detected in any other new or waste oil samples collected between October 1978 and March 1990; however, it should be noted that the information provided only includes results for Aroclors 1242, 1254 and 1260, with not all samples analyzed for all three Aroclors. According to Site records reviewed, a capacitor leak occurred on March 10, 1987 at Column Q-44. Wood floor blocks in the vicinity of the leak were suspected to be contaminated with PCBs. Therefore, 0.4 cubic yards of floor block were removed and stored in 55-gallon drums in Substation K prior to being transported off-Site for incineration on November 24, 1987.

4.10.1 TRANSFORMER SUBSTATIONS

Electricity for the Site is supplied by Consumers, who leases a portion of the Site to a substation and Switch House on the Site. The substation consists of a fenced gravel paved area with electrical equipment on concrete pads/footings, if appropriate. The electrical equipment in the substation was not observed to be labeled as to PCB content. Access to the Consumers portion of the Switch House, which is shared with the Site, was not available. Staining was noted on the gravel surface beneath one of the transformers in the substation. The Switch House consists of an exterior switch yard, which is a fenced area with gravel paving. The majority of the equipment in the switch yard appeared to be labeled as non-PCB. No staining was observed in the switch yard area. As the owner of the electrical equipment, Consumers would be responsible for any inspection, reporting or response to releases from the electrical equipment pursuant to the Toxic Substances Control Act (TSCA), if applicable.

Electricity is provided on Site by the following substations:

- Roof-Top Substations: Substations D, E, G, J, L, N, O, P, S, T, U, W, X, Y, and Z (Main Manufacturing Building) and Substations H and Q (Power House Substation)
- Basement Substations: Substations B, C, F, K, M and V (Main Manufacturing Building)
- Ground Floor Substations: Substation R (Baler House)

No information was available regarding the potential historical presence of Substations A or I on the Site. These substations may have been associated with a former Site structure (i.e., former Power House, etc.); however, that could not be confirmed.

Based on observations during the Site inspection, discussions with Site personnel, and review of available information, there are no PCB transformers currently present at the Site. Transformers located at the Site are currently dry-type gas-filled with either nitrogen (N_2), octafluorocyclobutane (C_4F_8)(R-1318), or hexafluoroethane (C_2F_6)(R-116).

All of the roof-top substations, with the exception of the Substations H and Q, are currently located inside roof-top penthouses on the Main Manufacturing Building. The transformers associated with Substations H and Q are located on a fenced concrete pad. A roof drain, which reportedly leads to the storm sewer system, is present in this area. Minor staining was observed on the concrete pad in the Substations H and Q. It should be noted that Substations H and Q historically included six PCB transformers, which were removed in 1981. Substations D and E have a concrete pad with overhead caging present on the exterior. Roof drains, which reportedly lead to the storm sewer system, are present in these areas. No observable staining was noted on the concrete pads. Based on the review of historical aerial photographs, the locations of these caged concrete areas correspond to what appears to be exterior caged substations. In addition, Substations G and J have areas that are currently enclosed, with roof drains, which correspond to two additional exterior caged substations. The concrete in these areas is different from that in the current interior substations, appears scarified, and no equipment is currently present in these areas. No staining was observed on the concrete in these areas. Evidence of a release on one of the transformers in Substation Y was noted by CRA during the Site inspection. A large capacitor labeled as PCB was observed in Substation E, with minor evidence of a release noted. No other evidence of releases from any of the electrical equipment in the roof-type substations was noted during the Site inspection; however, it should be noted that the majority of the floors in the substations were painted.

Staining was noted on the concrete floor in each of the basement substations in the Main Manufacturing Building. In addition, floor drains and/or sumps were observed in Substations B, C, F, and M, which reportedly discharge to the on-Site WWTP. Labeled PCB capacitors were observed in Substation B. It should be noted that Substation K historically included two PCB transformers and was used for long term PCB waste storage.

No significant staining was observed on the concrete floor or equipment in Substation R, located inside the Baler House.

Based on Site records reviewed for the period from 1977 to 1984 regarding PCB transformers present at the Site, eight PCB transformers were historically located at the Site including: Substation K (two transformers); Substation Q (three transformers); and Substation H (three transformers). A minor release from one Substation K transformer was identified during an inspection conducted on January 30, 1984. According to inspection records reviewed, a leak was observed from an un-capped pipe. The inspection record indicates that "both pipes" were subsequently capped and that this response action stopped the leak. Other "small leaks" from the Substation K transformers were identified during quarterly PCB Transformer Interim Measure Program inspections conducted between August 1981 and November 1983. However, no significant releases were reported. According to records reviewed, the six PCB-containing transformers located over the Power House in Substations Q and H were removed from the Site in August 1981. The two remaining PCB transformers in Substation K were removed from the Site sometime between February and May 1984. Substation K was historically utilized as a long term storage area for PCB wastes.

4.10.2 REGULATED CAPACITORS (> 3 LBS)

Based on the review of the 2008 PCB Annual Log prepared by the Site on May 29, 2009, there are 109 large PCB capacitors (greater than 3 pounds) currently present at the Site.

CRA reviewed available Site PCB Annual Document Logs dated between 1986 and 1998. The earliest log available for review (for calendar year July 1, 1986 through June 30, 1987) indicated that a total of 409 large low-voltage regulated PCB capacitors (5230.5 kg PCBs) were in service at the Site as of June 30, 1987, including 238 capacitors located in TDO, 169 capacitors located in Metal Assembly, and two capacitors located in the Tannewitz Building (off-Site). Additionally, 18 large high-voltage PCB capacitors (180.6 kg PCBs), located in the Power House, were recorded as "in service" for the same time period. A list of Site capacitors dated July 7, 1977 available for review indicated 55 capacitors were identified to be present in TDO and 52 capacitors were present in Metal Assembly at that time.

Additional information regarding regulated capacitors is presented in Section 4.10.1.

4.10.3 BALLASTS

Fluorescent lighting and high intensity discharge (HID) lights were observed throughout the Site. Fluorescent and HID light ballasts may contain PCBs in the potting material, or within small capacitors located within the ballast. According to Site personnel, in the event a ballast containing PCBs is encountered, the ballast is segregated from non-PCB ballasts and shipped off Site for proper disposal. The hazardous waste storage area is utilized as an accumulation area for PCB wastes, prior to off-Site disposal.

Hazardous Materials Committee Meeting notes dated October 27, 1988 reviewed at the Site noted the presence of PCBs in fluorescent lighting at the Site. Based on CRA's review of PCB Annual Document Logs dated between 1986 and 1998, numerous lighting ballasts containing PCBs were removed from the Site during that period of time. After removal, PCB ballasts were stored in 55-gallon drums at Substation K prior to disposal off Site.

4.10.4 HYDRAULIC SYSTEMS

A compactor, balers, hydraulic elevators, air compressors, hydraulic dock levelers, lighting ballasts, conveyors, cranes, and various manufacturing equipment (presses, etc.) are present at the Site, which currently utilize or historically utilized hydraulic fluids. In addition, heat treat operations were historically conducted at various locations on the Site, which utilized quench oils (see Section 4.2).

According to Site file information dated April 30, 2002, on April 2, 2002, Site personnel randomly selected and sampled 20 percent of the hydraulic equipment installed at the plant prior to 1978. No PCBs were detected in the hydraulic fluids analyzed. Based on the review of historical documentation, hydraulic fluids utilized at the Site were reported to be ethylene glycol-based lubricants.

A folder labeled "PCB Cleanup TDO Presses C-1, C-2, C-3" and dated November 2002 was available for review at the Site. Based on information reviewed, eight-inch drip pans were located in the center of each press between floors. Aroclor 1254 was detected in wipe samples collected from the presses in October and November 2002. The presses were subsequently cleaned using solvent. No PCBs were detected in wipe samples collected after the presses were rinsed with solvent. No PCBs were detected above laboratory method detection limits in oil samples collected from the presses.

4.10.5 SOLID PCB BULK PRODUCT MATERIALS

GM submitted a letter to the U.S. EPA on March 10, 1999 requesting authorization to store bulk PCB remediation waste in covered roll-off boxes at the Site. Authorization to store bulk PCB remediation waste in lined and covered roll-off boxes for up to 180 days was granted in correspondence from the U.S. EPA dated March 9, 2000, and February and July 2004.

Based on the review of the 2008 PCB Annual Log prepared by the Site on May 29, 2009, 141,853 kilograms of bulk PCB waste (wood floor block) was removed from the Site for the 2008 calendar year. Floor block is currently present at various locations throughout the facility.

4.10.6 NON-POROUS SURFICIAL STAINING

CRA observed staining of non-porous surfaces during the Site inspections. Historical documents indicate the use of PCB-containing oils, as described above. Non-porous surfaces such as I-beams, sheet metal walls, metal grate and mezzanine floors, and ceiling areas near equipment that utilizes or have operated historically with PCB oils could be stained with PCB oils.

4.11 ASBESTOS-CONTAINING MATERIALS

An asbestos survey was not conducted as part of this CCR. According to Site personnel and based on the review of available documentation, a comprehensive asbestos survey was conducted at the Site. An asbestos survey was conducted by K-Tech Environmental Consultants, Inc. (K-Tech) and summarized in a report dated May 4, 2009. The asbestos survey was conducted on the Main Manufacturing Building, WWTP, Cooling Tower Pump House, Cooling Towers, Gas Meter House, South Pump House, West Pump House, Stormwater Pump House, Truck Gate Guard House, Baler House, Retention Pond, and Power House. Based on a lack of suspect ACM noted by K-Tech, no sampling was performed on the Press Storage Building, Rack Make-Up Building, Metal Storage Building, or Electric Meter House. A total of 140 homogeneous areas were sampled for ACM throughout the facility by K-Tech, with 588 bulk samples collected for analysis utilizing Polarized Light Microscopy (PLM) from accessible areas. Based on the PLM results, the following ACM were identified, as described below.

Based on the review of the ACM survey results, the following ACM was identified in the Main Manufacturing Building by K-Tech:

- Approximately 61,536 square feet of mastic associated with 12-inch by 12-inch brown floor tile with white streaks. The material was observed to be in good condition by K-Tech and was located in the first and second floors of the office areas.
- Approximately 240 square feet of cork insulation in the walk-in fridge. The material was observed by K-Tech to be in good condition and was located in the second floor north refrigerator ceiling.
- Approximately 10,486 square feet of mastic associated with 12-inch by 12-inch brown marble floor tile. The material was observed to be in good condition by K-Tech and was located in the first and mezzanine-central offices, material handling office, and custodial closet.
- Approximately 64 square feet of freight elevator door seal. The material was observed to be in good condition by K-Tech and was located in Bays D-25 and M-45, and the basement.
- Approximately 23,920 lineal feet of 0 to 6-inch pipe insulation. The material was observed to be in good condition by K-Tech and was located throughout the plant.
- Approximately 30,430 lineal feet of 6 to 12-inch pipe insulation. The material was observed to be in good condition by K-Tech and was located throughout the plant.
- Approximately 1,915 lineal feet of 12 to 18-inch pipe insulation. The material was observed to be in good condition by K-Tech and was located throughout the plant.
- Approximately 1,199 lineal feet of greater than 18-inch pipe insulation. The material was observed to be in good condition by K-Tech and was located throughout the plant.
- Approximately 462 square feet of condensate tank insulation. The material was observed to be in good condition by K-Tech and was located on Bay X-23 Platform and in Bay X-22 Basement.
- Approximately 50 square feet of hot water tank insulation. The material was observed to be in good condition by K-Tech and was located on Bay X-23 Platform.
- Approximately 496,848 lineal feet of window glazing. The material was observed to be in good condition by K-Tech and was located throughout the plant.
- Approximately 39,747 lineal feet of interior window caulk. The material was observed to be in good condition by K-Tech and was located throughout the plant.
- Approximately 39,747 lineal feet of exterior window caulk. The material was observed to be in good condition by K-Tech and was located throughout the plant.

- Approximately 40 lineal feet of 4-inch electrical cable wrap. The material was observed to be in good condition by K-Tech and was located in Substation E.
- Approximately 88 lineal feet of 0 to 6-inch pipe insulation. The material was observed to be in good condition by K-Tech and was located in Substation E.
- Approximately 585 lineal feet of 6 to 12-inch pipe insulation. The material was observed to be in good condition by K-Tech and was located on the roof.
- Approximately 550 lineal feet of 12 to 18-inch pipe insulation. The material was observed to be in good condition by K-Tech and was located on the roof.
- Approximately 2,200 lineal feet of greater than 18-inch pipe insulation. The material was observed to be in good condition by K-Tech and was located on the roof.
- Approximately 25,696 square feet of galbestos siding. The material was observed to be in good condition by K-Tech and was located on the roof and second floor.
- Approximately 38,852 square feet of skim coat on concrete walls. The material was observed to be in good condition by K-Tech and was located on the roof.
- Approximately 600 square feet of plain transite wall. The material was observed to be in good condition by K-Tech and was located in Substation G.
- Approximately 34 square feet per fire door. The material was observed to be in good condition by K-Tech and was located throughout the plant.

Based on the review of the ACM survey results, the following ACM was identified in the Ancillary Buildings by K-Tech:

- Approximately 270 square feet of tank insulation. The material was observed to be in good condition by K-Tech and was located on an used oil AST in the WWTP.
- Approximately 12 lineal feet of 6 to 12-inch valve insulation. The material was observed to be in good condition by K-Tech and was located in the Cooling Tower Pump House.
- Approximately 2,170 square feet of corrugated transite panels. The material was observed to be in good condition by K-Tech and was located in the tower walls of the Cooling Tower Pump House.
- Approximately 172 square feet of roof flashing. The material was observed to be in good condition by K-Tech and was located on the South Pump House.
- Approximately 3 lineal feet per 0 to 6-inch fitting insulation on fiberglass lines. The material was observed to be in good condition by K-Tech and was located in the West Pump House.

- Approximately 216 lineal feet of window glazing. The material was observed to be in good condition by K-Tech and was located in the West Pump House.
- Approximately 162 lineal feet of window glazing. The material was observed to be in good condition by K-Tech and was located in the Stormwater Pump House.
- Approximately 190 square feet of mastic associated with 12-inch by 12-inch gray marbleized floor tile. The material was observed to be in good condition by K-Tech and was located in the Truck Gate Guard House.
- Approximately 32 square feet of condensate receiver tank insulation. The material was observed to be in good condition by K-Tech and was located in the Baler House.
- Approximately 135 lineal feet of 0 to 6-inch fitting insulation on fiberglass lines (each). The material was observed to be in good condition by K-Tech and was located in the Baler House.
- Approximately 64 square feet of tank end insulation. The material was observed to be in good condition by K-Tech and was located on the AST associated with the retention pond.
- Approximately 680 square feet of condensate tank insulation. The material was observed to be in good condition by K-Tech and was located on the second level of the Power House.
- Approximately 1,410 square feet of feed water heater tank insulation. The material was observed to be in good condition by K-Tech and was located on the second level of the Power House.
- Approximately 80 square feet of continuous blow down tank insulation. The material was observed to be in good condition by K-Tech and was located on the second level of the Power House.
- Approximately 20 lineal feet of 6 to 12-inch pipe insulation. The material was observed to be in good condition by K-Tech and was located on the first level of the Power House.
- Approximately 5 lineal feet of greater than 18-inch pipe insulation. The material was observed to be in good condition by K-Tech and was located on the first level of the Power House.
- Approximately 20 lineal feet of canvas wrap on 0 to 6-inch pipes. The material was observed to be in good condition by K-Tech and was located on the second level of the Power House.
- Approximately 96 square feet of tar on fiberglass duct insulation. The material was observed to be in good condition by K-Tech and was located on the roof of the Power House.

According to Site personnel, the ACM survey is updated as new information is identified (i.e., removal and testing of presumed ACM is conducted). According to individuals associated with the Site, the Site has formal written procedures for any work conducted in an area with ACM. According to individuals associated with the Site, these protocols are followed by certified individuals during any activities that may disturb ACM (i.e., renovation or demolition). Site personnel indicated that numerous ACM removal activities have occurred over the course of operations at the facility where asbestos is removed on an as needed basis by a subcontractor, with third party air monitoring.

CRA observed potential ACM in accessible areas during the Site inspection, including floor tile and associated mastic, ceiling tile, wall board, boiler equipment, duct and pipe wrap, fire doors, laboratory countertops, potential galbestos siding, cooling tower slats, and roofing materials. Areas of ACM were observed to be labeled with signs at various locations throughout the Site. All observed ACM appeared to be in good condition.

Based on the age of the Site structures, it is likely that ACM were utilized during construction. Additional potential ACM may be present in areas not accessible to CRA during the Site inspection.

4.12 LEAD-BASED PAINT

A LBP survey was not conducted as part of the CCR. Exterior building materials consist primarily of metal, concrete, and glass. Most interior surfaces are painted. Evidence of chipped or flaking paint was observed at various locations during the Site inspection. Additional painted surfaces may be present in areas not accessible during the Site inspection. Lead content of paint cannot be verified without proper analysis. Based on the dates of construction, it is likely that painted surfaces contain LBP.

Based on the review of an internal memorandum dated April 7, 2004, eight paint chip samples were collected from the 22/23-Bay mezzanine column line on March 29, 2004 in order to confirm lead content identified during sampling conducted on March 4, 2004. Three of paint chip samples were reported to contain lead. Subsequently additional paint chip samples were collected from 22, 23 and 24 Bay areas on April 1, 2004 to confirm the results and evaluate additional areas. The April 1, 2004 results indicated that the paint previously identified in 22 Bay as containing lead, which was applied in

1999, did not contain lead; however, lead was identified in various other locations at the Site.

4.13 AIR EMISSIONS

The Site (State Registration No. B1726) is listed in the AIRS database as having an Air Permit (Permit No. 79-99) with the MDNRE. The date the Air Permit application was received was February 24, 1999.

According to information reviewed, the Site submitted a Renewable Operating Permit (ROP) Application for the Site in 1996. Based on CRA's review of correspondence between the Site and the MDNRE dated December 21, 1998, the Site requested voiding of the ROP application based on operational changes at the facility. As such, ROP Application No. 199600097 was voided on June 5, 2002 and an Opt Out Permit with a source class of "synthetic minor" was issued to the Site on May 28, 2002. The Site is currently operating under MDNRE Permit to Install (PTI) No. 79-99. The PTI was approved on February 28, 2002 and applies to facility-wide air emissions. Based on the review of available documentation, GM LLC submitted the Michigan Air Emission Reporting System (MAERS) report for reporting year 2009 on December 10, 2009.

The PTI covers the following Emissions Units:

- Three boilers (Boiler No. 1 [EU-BOILER-1], Boiler No. 2 [EU-BOILER-2], and Boiler No. 3 [EU-BOILER-3]) located in the Power House, with a maximum heat input of 66 MM BTU/hr and capable of burning natural gas, No. 2 fuel oil, No. 4, fuel oil, No. 6 fuel oil, and waste oil
- All maintenance paint booths at the facility (EU-PAINT)
- All mineral spirit using devices at the facility (EU-MIN-SPRT)

Additionally, the PTI covers the following Flexible Groups:

- All equipment at the facility including equipment covered by other permits, grandfathered equipment and exempt equipment (FG-FACILITY)
- Facility boilers (FG-BOILERS)

According to the cover letter attached to PTI No. 79-99, PTI Nos. 92-88, 245-86, and 19-74 were voided as of February 28, 2002 because the equipment covered under those permits

was included under PTI No. 79-99. This included the SVE system (PTI No. 92-88) operated at the Site between 1989 and 2003.

Based on the review of available information, various other PTIs and Permits to Operate (PTOs) were issued to the Site over the course of the operation of the facility. The PTIs and PTOs were issued for various paint, sound deadener, and zinc-rich primer spray booths, printing machines, and adhesive dispensing systems. These permits were voided by the MDNR/MDEQ between 1986 and 2002, either due to removal of equipment or coverage of equipment under another PTI. Two sound deadener spray booths and two zinc-primer spray booths were identified in PTI No. 20-78 issued February 28, 1978. The permit document did not indicate that the PTI had been voided.

According to information reviewed, the three powerhouse boilers covered under the current PTI operated since December 1970. Prior to that, four coal-fired boilers reportedly operated at the Site, which are assumed to have been associated with the former Power House. According to correspondence between GM and the MDNR dated August 12, 1991, waste oil was burned using Boiler No. 1 beginning in at least 1980. Boiler No. 1 was reportedly decommissioned in 2008 according to the Compliance Inspection Report dated January 28, 2009. The inspection report also noted that no waste oil was burned in Boiler No. 2 or 3. Waste oil was reportedly tested semi-annually and deemed non-hazardous. However, according to interoffice communication between MDNR divisions dated October 8, 1991, analytical data submitted by GM showed some waste oils analyzed to contain greater than 1,000 ppm total halogens classifying the oil as hazardous waste.

CRA reviewed compliance inspection reports for inspections conducted at the facility by MDNR/MDNRE between 1974 and 2009. Violations were identified during the operational period for the facility. Based on records reviewed, the facility currently has no outstanding notices of violation.

A waterfall-type (i.e., wet) paint booth with below grade water tanks and sump pits was historically been associated with the Site, which was described as "gun carriage" on a drawing circa 1942, located at Columns P to Q, Rows 24 to 25. No further information was available regarding this paint booth.

A dry-type paint booth is present adjacent to the steam clean booth near Oil Stores. This paint booth is not currently used. The current steam clean booth located at Column N-47, was reportedly historically used as a wet paint booth. Additionally,

according to Site personnel, a former wet paint booth/steam clean booth was historically located near Columns O to N, Rows 26 to 28.

Additional air emissions sources at the Site include regulated chlorofluorocarbons (CFCs), which are used in air conditioning units, chillers, and other miscellaneous refrigeration units (i.e., pop machines, drinking fountains, etc.). CFCs currently utilized at the Site include R12, R22, R-134a, R-409a, R-500, R-502, and HP-62. On November 11, 2009, GM LLC submitted a name change for an operator with refrigerant recovery or recycling device. According to Site personnel, no Halon systems are currently present; however, they did exist at the Site in the past. CFC units are serviced by certified personnel. Based on the review of available documentation from 1992 and 1993, refrigerants historically utilized at the Site included R-11, R-12, R-22, R-500, R-502, Halon 1211, and Halon 1301.

4.14 SPILLS/RELEASES

The Site was listed in the ERNS, Spills and SHWS Databases.

The Site was listed in the ERNS as having reported a release described as "materials released from a drainage ditch due to weather conditions" on February 3, 2003. A rainbow sheen from an unknown oil was observed to be approximately 20 feet long and four feet wide was observed on Cole Drain. An estimated 2 gallons of oil was reported as released. Booms were placed in the water to contain the material. No further information was available in the ERNS regarding the release.

The Site is listed in the Spills database as having reported a suspected release from the gasoline UST at the Site on April 27, 2006. The description of the release in the database search results is "04/27/2006 04:06 PM Leak check on underground gas tanks shows it might be leaking; thinks it might be faulty senser (sic) though, but not sure yet. " The Site was also listed in the ERNS related to the aforementioned release. No further information was provided in the database search results regarding this release.

The Site was listed in the SHWS database as General Motors – CPC Metals (Facility Identification No. 41000115) and a status of "interim response in progress." The Site was scored on October 8, 2004. According to the database listing for the Site, pollutants released at the Site include TCE and oil. Past releases of TCE and oil at the Site and associated response actions are discussed in Section 4.1.1.

Several other incidental spills were reported in Site files reviewed; however, a majority of the spills reported were small in volume, occurred on competent surfaces, and were promptly addressed. Therefore, further discussion is not warranted. It should be noted that the spill reports available for review were limited to the timeframe from August 2001 to January 2004.

4.15 IONIZING RADIATION

According to Site personnel, no commercial sources of ionizing radiation are present at the Site. No labeled commercial sources of ionizing radiation (e.g., fill level controllers) were observed by CRA personnel during the Site inspection. Site personnel indicated that an x-ray machine was previously present in the medical department, but had been removed several years ago. Historical Site drawings indicate the presence of an x-ray room near Column P, Row 24. No information was available regarding the decommissioning of this area. This area is currently used for storage.

GMC previously maintained a Nuclear Regulatory Commission (NRC) Radioactive Materials License (License No. 21-20057-01; Docket No. 030-17694) with the NRC. The Radioactive Materials License was maintained by the Site for 27 sealed sources of Americium-241 (Am-241) that were present in dewpointers in TDO. The dewpointers were registered with the State of Michigan on August 22, 1980 (12) and May 17, 1984 (15), with the sources received by the Site between September 8, 1982 and August 31, 1988. All of the sources were removed from the Site on December 6, 2002 and disposed at Thermo Measure Tech of Round Rock, Texas (License No. 42-01485-04). Prior to removal, final leak tests were completed on the units to confirm no releases. No releases were identified during the leak tests. Available documentation indicates that the Radioactive Materials License was terminated on July 8, 2003.

Based on the review of Site records from 1982, "gamma ray probes" were historically present at the Site, which were reportedly used to detect missing parts in welded door subassemblies along the "door lines." Additionally, a Site record dated May 14, 1981 indicated that "gamma ray probes" were stored in the Engineering Department and in "tool." No further information was available regarding the "gamma ray probes."

According to Site personnel, no tritium exit signs are present on Site.

Individuals associated with the Site were unaware of any radon gas testing having been conducted at the Site. The U.S. EPA has determined Kent County to be in a Level 2

radon zone. The predicted indoor screening levels of radon gas are expected to be between greater than or equal to 2 picocuries per liter (pCi/L) and less than or equal to 4 pCi/L. The U.S. EPA has established 4 pCi/L as a level at which further evaluation is warranted. A basement is present under a part of the eastern portion of the Site, utility tunnels are present beneath the Site, and several below grade pits are present throughout the Site.

4.16 ENVIRONMENTAL DATABASES SEARCH

CRA contracted EDR to conduct a search of state and federal regulatory databases to identify recorded concerns for the Site and surrounding properties. The databases were searched within a half-mile expanded radius to the approximate minimum search distances as specified in ASTM Standard Practice E 1527-05, "Phase I Environmental Site Assessment Process" to account for the size of the Site. The database search is provided as Appendix G.

Review of the EDR report revealed the following pertinent information.

Database	Search Radius	Site	0 – 1/8 mile	1/8 – ¼ mile	¼ - ½ mile	½ - 1 mile	< 1 mile
NPL (National Priority List)	1.5 mile	No	0	0	0	1	0
Proposed NPL	1.5 mile	No	0	0	0	0	0
NPL Liens (Federal Superfund Liens)	Site	No	0	0	NR	NR	0
Delisted NPL	1.5 mile	No	0	0	0	0	0
CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System)	1.0 mile	No	0	0	0	1	NR
Federal Facility	1.5 mile	No	0	0	0	0	0
CERCLIS-NFRAP (No Further Remedial Action Planned)	1.0 mile	No	0	0	0	2	NR
RCRA CORRACTS (Corrective Action Report)	1.5 mile	No	0	0	0	1	0
RCRA TSDF (Transporters, Storage, and Disposal Facilities)	1.0 mile	No	0	0	0	0	NR
RCRA-LQG Generator	Site/Adjacent	No	0	0	0	2	NR

Database	Search Radius	Site	0 – 1/8 mile	1/8 – ¼ mile	¼ - ½ mile	½ - 1 mile	< 1 mile
	Property						
RCRA-SQG Generator	Site/Adjacent Property	Yes	0	1	0	2	NR
RCRA-CESQG Generator	Site/Adjacent Property	No	0	4	7	8	NR
RCRA-Non Generator (Non-Gen)	Site/Adjacent Property	No	0	3	9	8	NR
US Engineering Controls	1.0 mile	No	0	0	0	1	NR
US Institutional Controls	1.0 mile	No	0	0	0	1	NR
ERNS (Emergency Response Notification System)	Site	Yes	1	1	1	NR	NR
TRIS (Toxic Chemical Release Inventory System)	Site	Yes	0	0	0	NR	NR
Superfund (CERCLA) Consent Decrees (Consent)	1.5 mile	No	0	0	0	0	0
Records of Decision (ROD)	1.5 mile	No					
Department of Defense (DOD)	1.5 mile	No	0	0	0	0	0
Formerly Used Defense Sites (FUDS)	1.5 mile	No	0	0	0	0	0
CERCLA Lien Information (LIENS 2)	Site	No	0	0	0	NR	NR
SHWS (Contaminated Sites)	1.5 mile	Yes	0	0	0	6	NR
State & Tribal SWF/LF (Solid Waste Facilities Database)	1.0 mile	No	0	0	0	0	NR
State LUST (Leaking Underground Storage Tank Sites)	1.0 mile	No	0	1	6	15	NR
State USTs (Underground Storage Tanks)	Site/Adjacent Property	Yes	1	5	8	17	NR
State ASTs (Aboveground Storage Tanks)	Site/Adjacent Property	Yes	0	1	2	2	NR
Indian LUST	1.0 mile	No	0	0	0	0	NR
Indian UST	Site/Adjacent Property	No	0	0	0	0	NR

Database	Search Radius	Site	0 – 1/8 mile	1/8 – ¼ mile	¼ - ½ mile	½ - 1 mile	< 1 mile
Indian Reservations	1.5 mile	No	0	0	0	0	0
State & Tribal Brownfields	1.0 mile	No	0	0	0	2	NR
US Brownfields	1.0 mile	No	0	0	0	0	NR
HIST LF (Inactive Solid Waste Facilities)	1.0 mile	No	0	0	0	0	NR
US CDL (Clandestine Drug Labs)	Site	No	0	0	0	NR	NR
DEL SHWS (Delisted List of Contaminated Sites)	1.5 mile	No	0	0	0	0	4
DRYCLEANERS (Dry-cleaning Establishment)	0.75 mile	No	0	0	0	0	NR
NPDES (Active National Pollutant Discharge Elimination System)	Site	Yes	0	0	0	NR	NR
AIRS (Permit and Emissions Inventory Data)	Site	Yes	0	0	0	NR	NR
BEA (Baseline Environmental Assessment Database)	0.5 mile	No	0	0	5	NR	NR
Engineering and Institutional Controls (AUL)	1.0 mile	No	0	0	0	1	NR
Spills	Site	Yes	0	2	1	NR	NR

4.16.1 DATABASE LISTING FOR THE FACILITY

The Site address was identified on the following aforementioned federal and/or state regulatory databases searched by EDR: RCRA-SQG, ERNS, Spills, SHWS, UST, NPDES, AST, TRIS, and AIRS. It should be noted that in addition to the aforementioned databases, the Site address was listed in the FINDS, PADS and Manifest Databases. Definitions for these additional databases are included in Appendix F.

RCRA-SQG

The Site address was listed as General Motors Corporation (currently MLC) as a SQG of hazardous waste (U.S. EPA Identification No. MID006020408). The Site Identification information was reported to have been received by the DNRE on May 4, 2008 regarding

the generator status of the Site. The start date for the Site owner/operator associated with the generator identification number was December 15, 1935.

Historical generator forms and associated generator status received by the DNRE are listed below:

- SQG – February 28, 2002; November 10, 2003; February 1, 2004; February 19, 2004; March 1, 2004; February 1, 2005; March 1, 2006; and April 4, 2006
- LQG – August 23, 1995; February 27, 1996; February 20, 1998; February 29, 2000; March 1, 2002; January 1, 2004; and January 1, 2005
- Not a Generator - November 19, 1980

Violations were listed in the environmental database search results, as follows:

- A written informal enforcement action was issued on May 25, 1994 for a "Generator – General" violation identified during a compliance evaluation inspection by the MDNRE on May 19, 1994. The Site achieved compliance for the violation on June 13, 1994.

Compliance evaluation inspections were also reported to have been conducted by the DNRE on November 8, 1985, October 17, 1996, December 1, 1999, and November 25, 2003. No violations were identified in the database search results associated with the inspections conducted on the aforementioned dates.

The Site address was also listed as General Motors Company as a SQG of hazardous waste (U.S. EPA Identification No. MIK467733846). The Site Identification information was reported to have been received by the MDNRE on October 13, 2009 regarding the generator status of the Site. The start date for the Site owner (MLC) associated with the generator identification number was December 15, 1935 with the start date for the Site operator (GM LLC) listed as July 10, 2009. No violations were listed in the environmental database search results regarding U.S. EPA Generator Identification No. MIK467733846.

ERNS

The Site was listed in the ERNS as having reported a release described as "materials released from a drainage ditch due to weather conditions" on February 3, 2003. A rainbow sheen from an unknown oil was observed to be approximately 20 feet long and

4 feet wide was observed on Cole Drain. An estimated two gallons of oil was reported as released. Booms were placed in the water to contain the material. No further information was available in the ERNS regarding the release.

Spills

The Site is listed in the Spills database as having reported a suspected release from the gasoline UST at the Site on April 27, 2006. The description of the release in the database search results is "04/27/2006 04:06 PM Leak check on underground gas tanks shows it might be leaking; thinks it might be faulty senser (sic) though, but not sure yet." The Site was also listed in the ERNS related to the aforementioned release. No further information was provided in the database search results regarding this release.

SHWS

The Site was listed in the SHWS database as General Motors – CPC Metals (Facility Identification No. 41000115) and a status of "interim response in progress. " The Site was scored on October 8, 2004. According to the database listing for the Site, pollutants released at the Site include TCE and oil. Past releases of TCE and oil at the Site and associated response actions are discussed in Section 4.1.1.

UST

The Site was listed in the UST Database as General Motors Grand Rapids Metal Plant (Facility Identification No. 00016424) as having four removed USTs (Tank Identification Nos. 1 through 4) and two currently-in-use USTs (Tank Identification Nos. 5 and 6). The four removed USTs include: two 8,000-gallon hazardous substance USTs (Tank Nos. 1 and 2); one 8,000-gallon machine oil UST (Tank No. 3); and one 8,000-gallon hydraulic oil UST (Tank No. 4). All of the removed USTs were reported to have been installed on April 24, 1980. The hazardous substance USTs and the hydraulic oil UST were reported to have been removed on January 1, 1986 and the machine oil UST was reported to have been removed on January 1, 1987. The tanks were identified to be of fiberglass reinforced plastic construction with "plastic wrapped" piping. No information regarding leak detection devices on the tanks or piping were available in the database search results. The two currently-in-use USTs include one 8,000-gallon gasoline UST and one 3,000-gallon diesel UST. The currently-in-use USTs were reportedly installed on April 24, 1985 and are of cathodically protected double-walled steel, with fiberglass reinforced double-walled plastic. The USTs are reportedly equipped with automatic

tank gauging and interstitial monitoring for leak detection. No further information was provided in the database search results.

NPDES

The Site is listed as having Individual Permit NPDES Permit No. MI0043877 with the MDNRE. The permit was issued on July 28, 2006 with an effective date of October 1, 2006 and an expiration date of October 1, 2010.

AST

The Site (Site Identification No. 91041209) is listed in the AST database as a "Closed" type site. The status of the AST is listed as closed as of August 16, 2007; however, the tank status is listed as "Change in Service. " The AST is identified as a 100,000-gallon AST containing a Flammable Liquid/Combustible Liquid (FL/CL).

TRIS

The Site was listed in the TRIS database as GMC Grand Rapids Metal Center. No further information was provided in the database search results regarding this listing.

AIRS

The Site (State Registration No. B1726) is listed in the AIRS database as having an Air Permit (Permit No. 79-99) with the MDNRE. The date the Air Permit application was received was February 24, 1999.

FINDS

The Site was listed in the FINDS database (Registry Identification No. 110001840615) as being listed in the following databases: Aerometric Information Retrieval System (AIRS) Facility System (AFS); National Emissions Inventory (NEI); U.S. EPA TRIS; RCRAInfo; Permit Compliance System (PCS); and U.S. EPA Reasonably Available Control Technology (RACT)/Best Available Control Technology (BACT)/Lowest Achievable Emission Rate (LAER). No further information was provided in the database search results regarding this listing.

PADS

The Site was listed in the PADS database as a generator of PCB waste. The certification data is identified as March 29, 1990, with a received date of June 25, 1990. No further information was provided in the database search results regarding PCB activity at the Site.

Manifest

The Site was listed in the NY Manifest database as General Motors Corporation. The Site was identified as generating D005 characteristically hazardous waste, "B007 – other miscellaneous PCB wastes," "B005 – PCB articles with 500 ppm or > PCB, " and "B004 – PCB articles with 50 ppm but < 500 ppm" in 2002 and 2003 that were removed from the Site for transportation and/or disposal using a State of New York Manifest.

4.16.2 DATABASE LISTINGS FOR ADJACENT PROPERTIES

Based on review of the EDR database report, 129 listings for mapped facilities were identified within 1.5 miles of the Site as listed on the aforementioned federal and/or state regulatory databases. The following is a summary of the mapped properties identified adjacent to the Site:

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
Cummins Bridgeway, LLC 3715 Clay Avenue SW, Wyoming, MI	East adjacent property beyond Clay Avenue SW	RCRA-SQG FINDS	• SQG of hazardous waste. Generator No. MID981775547. No violations. • RCRA information system.
Godwin Heights Schools 111 36th Street SW and 50 35th Street SW, Wyoming, MI	Northeast adjacent property beyond the intersection of 36th Street SW and Buchanan Avenue SW	RCRA-CESQG	• CESQG of hazardous waste. Generator No. MIK283969483. No violations.

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
Conical Tool Company 3890 Buchanan Avenue SW, Wyoming, MI	West adjacent property beyond Buchanan Avenue SW	RCRA-CESQG BEA	• CESQG of hazardous waste. Generator No. MI0000264929. No violations. • BEA No. 1428. Category S BEA (same hazardous substance use). Submitted for disclosure on 5/19/04. No Section 7a submitted.
Consumers Energy Company 4000 Clay Avenue SW, Wyoming, MI	Southwest adjacent property beyond railroad tracks	RCRA-CESQG FINDS Manifest	• CESQG of hazardous waste. Generator No. MID079297453. No violations. • RCRA and National Compliance Data Base information systems. • Waste codes reported: B007 (other miscellaneous PCB wastes)
Grand Rapids Service Center 4000 Clay Avenue SW, Wyoming, MI	Southwest adjacent property beyond railroad tracks	LUST UST	• Facility ID 00017429. Leak Nos. C-0577-94, C-1037-90, C-1363-01, C-1423-92, and C-2735-90. For Leak No. C-0577-94, a release of an unknown substance occurred on 6/9/94, which was closed on 1/20/95. For Leak No. C-1037-90, a release of an unknown substance occurred on 6/11/90, which was closed on 6/15/93. For Leak No. C-1363-01, a release of gasoline occurred on 11/2/01, which was closed on 2/7/02. For Leak No. C-1423-92, a release of used oil occurred on 8/14/92, which was closed on 12/4/92. For Leak No. C-2735-90, a release of an unknown substance occurred on 12/18/90, which was closed on 12/20/91. • Facility ID 00017429. One 15,000-gallon gasoline UST was installed on 4/24/67 and

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
			removed on 10/18/01. Two 500-gallon used oil USTs were installed on 4/24/67 and removed on 8/19/91. One 10,000-gallon diesel UST was installed on 4/23/80 and removed on 10/18/01. One 10,000-gallon used transmission oil UST was installed on 4/23/76 and removed on 8/17/92. One 1,200-gallon diesel UST was installed on 4/24/67 and removed on 10/25/90. Two 10,000-gallon transmission oil USTs were installed on 4/23/80 and were removed on 10/12/94 and 10/13/94, respectively. One 500-gallon kerosene UST was installed on 4/24/67 and removed on 9/30/90.
Buchanan Auto and Truck Repair 3720 Buchanan Avenue SW, Wyoming, MI	East adjacent property beyond Buchanan Avenue SW	RCRA-CESQG FINDS	• CESQG of hazardous waste. Generator No. MID985651603. No violations. • RCRA information system.
Total Transportation Service 3720 Buchanan Avenue SW, Wyoming, MI	East adjacent property beyond Buchanan Avenue SW	RCRA-NonGen FINDS	• Former SQG. Generator No. MID985622190. No violations. • RCRA information system.
Toering Electric 3714 Buchanan Avenue SW, Wyoming, MI	East adjacent property beyond Buchanan Avenue SW	RCRA-CESQG FINDS	• CESQG of hazardous waste. Generator No. MIK454591223. No violations. • RCRA information system.
Fed-Ex Freight	East adjacent	RCRA-CESQG	• CESQG of hazardous waste.

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
3740 Buchanan Avenue SW, Wyoming, MI	property beyond Buchanan Avenue SW	FINDS UST	Generator No. MID985599281. No violations. • RCRA information system. • Facility ID 00000465. One 12,000-gallon diesel UST and one 15,000-gallon gasoline UST were installed on 3/17/66 and removed on 9/27/90.
No Entity Listed 3740 Buchanan Avenue SW, Wyoming, MI	East adjacent property beyond Buchanan Avenue SW	HMIRS	• 38 release incidents associated with address reported to DOT.
Vitran Express 3773 Clay Avenue SW, Wyoming, MI	West adjacent property beyond Clay Avenue SW	RCRA-CESQG FINDS LUST UST	• CESQG of hazardous waste. Generator No. MIR000007930. No violations. • RCRA information system. • Facility ID 00016761. Leak No. C-1543-90. A release of an unknown substance occurred on 8/16/90, which was closed on 7/19/95. • Facility ID 00016761. One 10,000-gallon diesel UST was installed on 4/18/72 and removed on 8/17/90.
No Entity Listed 3773 Clay Avenue SW, Wyoming, MI	West adjacent property beyond Clay Avenue SW	HMIRS	• 2 release incidents associated with address reported to DOT.
Ryder Transportation Serv. #262 3663 Clay Avenue SW, Wyoming, MI	West adjacent property beyond Clay Avenue SW	LUST UST RCRA-NonGen FINDS	• Facility ID 00020040. Leak Nos. C-C-0400-94, C-0735-94, and C-4022-85. For Leak No. C-0400-94, a release of an unknown substance occurred on 5/3/94, which was closed on 8/30/00. For Leak No. C-0735-94, a release of used oil and an unknown substance occurred on 7/19/94, which was closed on 8/30/00. For Leak No. and C-4022-85, a release of an unknown substance occurred

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
			on 10/1/87, which is still open. • Facility ID 00020040. One 12,000-gallon diesel UST was installed on 2/9/82 and removed on 5/12/94. One 12,000-gallon diesel UST was installed on 2/9/80 and removed on 9/1/88. One 4,000-gallon diesel UST was installed on 2/9/71 and removed on 7/1/87. Two 4,000-gallon diesel and three 4,000-gallon gasoline USTs were installed on 2/9/71 and removed on 7/19/87. One 4,000-gallon used oil UST and two 4,000-gallon motor oil USTs were installed on 2/9/75 and removed on 6/16/94. One 4,000-gallon used oil UST was installed on 2/9/79 and removed on 5/12/94. One 12,000-gallon gasoline UST was installed on 2/9/82 and removed on 5/12/94. One 12,000-gallon gasoline UST was installed on 2/9/88 and removed on 5/12/94. One 12,000-gallon diesel UST was installed on 2/9/88 and removed on 6/16/94. Two 20,000-gallon diesel USTs were installed on 6/13/94 and 6/16/94, respectively, and are currently in use. One "non-registered" UST was also listed; however, no further information was available. • Former LQG and SQG. Generator No. MID985603505. No violations. • RCRA information system.

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
No Entity Listed 3663 Clay Avenue SW, Wyoming, MI	West adjacent property beyond Clay Avenue SW	Spills	• An incident was reported on 2/1/06 regarding "vehicle accident in parking lot; ruptured fuel tank resulted in a loss of approximately 50 gallons onto the pavement and possibly storm drains."
Modern Molds, Inc. 3831 Clay Avenue, Wyoming, MI	West adjacent property beyond Clay Avenue SW	UST	• Facility ID 00003756. One 1,000-gallon gasoline UST was installed on 4/22/72 and removed on 1/3/92.
Amoco Oil Co. 3565 Buchanan SW, Wyoming, MI	East adjacent property beyond Buchanan Avenue SW	UST	• Facility ID 00021227. Two 2,000-gallon USTs (contents unknown) were installed on 6/2/75 and closed in ground "1/1/74." One 500-gallon UST and one 250-gallon UST (contents unknown) were installed on 6/1/77 and closed in ground 1/1/77.
Hartwick Welding Supply 3700 Buchanan Avenue SW, Wyoming, MI	East adjacent property beyond Buchanan Avenue SW	UST	• Facility ID 00017563. One 1,000-gallon gasoline UST was installed on 4/28/66 and was removed on 1/1/82.
36th Street Amoco Food Shop/Amoco Oil Co. 150 36th Street SW, Wyoming, MI	East adjacent property beyond Buchanan Avenue SW	UST	• Facility ID 00018071. Three 4,000-gallon gasoline USTs, one 6,000-gallon gasoline UST, one 10,000-gallon UST, and one 500-gallon used oil UST were installed on 5/2/76 and removed on 7/26/90. Two 10,000-gallon gasoline USTs, one 6,000-gallon gasoline UST, and one 4,000-gallon diesel UST were installed on 1/1/89 and are currently in use.
Amoco Oil Co. 150 36th Street SW, Wyoming, MI	East adjacent property beyond Buchanan Avenue SW	RCRA-NonGen FINDS	• Former SQG. Generator No. MID985633882. No violations. • RCRA information system.

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
Grand Rapids Commercial Heat 3832 Buchanan Avenue SW, Wyoming, MI	East adjacent property beyond Buchanan Avenue SW	UST	• Facility ID 00032880. One 8,000-gallon quench oil UST was installed on 6/23/80 and removed 2/7/01. One 100-gallon gasoline UST was installed on an unreported date and removed 2/7/01.
No Entity Listed 3832 Buchanan Avenue SW, Wyoming, MI	East adjacent property beyond Buchanan Avenue SW	BEA	• BEA No. 938. Category N BEA (no hazardous substance use). Submitted for disclosure on 8/31/01. No Section 7a submitted.
Commercial Heat Treating Co. 3840 Buchanan Avenue SW, Wyoming, MI	East adjacent property beyond Buchanan Avenue SW	UST	• Facility ID 00040617. One 1,000-gallon gasoline UST was installed on 4/22/72 and removed 1/3/92.
Airgas Great Lakes 3700 Buchanan SW, Wyoming, MI	East adjacent property beyond Buchanan Avenue SW	AST	• Facility ID 92041114. One 1,850-gallon liquid propane AST and one 1,000-gallon liquid propane AST were installed on an unreported date and removed 1/1/91. One 1,850-gallon liquid propane AST was installed on 7/1/85 and removed on 1/1/95. Two 1,000-gallon hazardous substance ASTs were installed on 8/8/97 and removed on 11/30/00. One 1,000-gallon liquid propane AST was installed on 4/1/91 and removed on 1/1/95. One 12,000-gallon liquid propane AST was installed on 1/23/95 and removed on 11/30/00. One 1,000-gallon liquid propane AST was installed on 2/24/93 and removed on 1/1/95.

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
Entity Not Listed 3940 Clay Avenue SW, Wyoming, MI	West adjacent property beyond railroad tracks	BEA	• BEA No. 2325. Category N BEA (no hazardous substance use). Submitted for determination on 6/27/08. Determination affirmed. No Section 7a submitted.
Floyds Electric Service 3781 Clay Court SW, Wyoming, MI	West adjacent property beyond Clay Avenue SW	RCRA-CESQG FINDS	• CESQG of hazardous waste. Generator No. MID985640424. No violations. • RCRA information system.

Based on the groundwater gradient at the Site, to the north-northwest, it appears none of the identified properties on the federal and/or state regulatory databases adjacent to the Site represent an environmental concern except for eastern and western adjacent properties, which are located upgradient and crossgradient of the Site. Therefore, based on CRA's review of the EDR Radius Map report it appears known or suspect environmental concerns are present associated with the eastern adjacent properties. The environmental concerns identified during the course of this investigation are discussed in detail in Section 7.0.

4.16.3 ADDITIONAL AREA PROPERTIES

Based on review of the EDR database report, 129 listings for mapped facilities were identified within 1.5 miles of the Site, based on the Site address location, as listed on the aforementioned federal and/or state regulatory databases. The following is a summary of the additional mapped properties identified within the ASTM-designated radii of the Site:

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
Timmers Service Center 3600 Division Avenue SW, Wyoming, MI	2,132 feet east of Site	LUST UST	• Facility ID 00034055. Leak No. C-1128-90. A release of an unknown substance occurred on 6/20/90, which is open. • Facility ID 00034055. One 10,000-gallon gasoline UST was installed on an unreported date and removed on 6/19/90.

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
Rite Aid #1823 3617 Division Avenue SW, Wyoming, MI	2,153 feet east of Site	LUST UST	• Facility ID 00039023. Leak No. C-0302-96. A release of gasoline occurred on 5/13/96, which is open. • Facility ID 00039023. One 10,000-gallon gasoline UST was installed on an unreported date and removed on 5/2/96. One "non-registered tank" is also reported to be associated with this property, with no further details provided.
Value Mkt. Express #0476 3470 Division Avenue, Wyoming, MI	2,284 feet east-northeast of Site	LUST UST	• Facility ID 00012334. Leak Nos. C-0144-04 and C-1158-97. For Leak No. C-0144-04, a release of gasoline occurred on 4/15/04, which is open. For Leak No. C-1158-97, a release of gasoline occurred on 11/20/97, which is open. • Facility ID 00012334. Two 6,000-gallon gasoline USTs were installed on 5/2/57 and removed on 11/19/97. One 8,000-gallon gasoline UST was installed on 5/3/71 and removed on 11/19/97. One "non-registered tank" is also reported to be associated with this property, with no further details provided. Two 12,000-gallon gasoline USTs were installed on 11/21/ 97 and are currently in use.
No Entity Listed 3462 South Division Avenue, Wyoming, MI	2,304 feet east-northeast of Site	BEA	• BEA No. 2608. Category S BEA (same hazardous substance use). Submitted for disclosure on 11/10/09. No Section 7a submitted.
Godwin Plumbing, Inc. 3703 Division Avenue SW,	2,326 feet east-southeast	LUST UST	• Facility ID 00007787. Leak No. C-0274-98. A release of gasoline occurred on 4/15/98, which was closed 6/8/99.

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
Wyoming, MI			• Facility ID 00007787. One 12,000-gallon gasoline UST was installed on 3/27/74 and removed on 4/14/98. One "non-registered tank" is also reported to be associated with this property, with no further details provided.
Godwin Heights 3712 South Division, Wyoming, MI	2,353 feet east-southeast	LUST	• Facility ID 00014553. Leak No. C-0262-89. A release of an unreported substance occurred on 6/14/89, which is open.
No Entity Listed 3364 South Division Avenue, Wyoming, MI	2,592 feet northeast of Site	BEA	• BEA No. 2609. Category S BEA (same hazardous substance use). Submitted for disclosure on 11/10/09. No Section 7a submitted.
Fox Motor Group LLC DBA Fox Saab 3340 Division Avenue SW, Wyoming, MI	2,655 feet northeast of Site	RCRA-NonGen FINDS LUST UST	• Former CESQG. Generator No. MID982204604. No violations. • RCRA information system. • Facility ID 00002507. Leak No. C-0831-00. A release of an unreported substance occurred on 10/6/00, which is open. • Facility ID 00002507. One 500-gallon used oil UST was installed on 6/23/72 and removed 10/20/91. One 250-gallon used oil UST was installed on an unreported date and removed on 10/6/00. One "non-registered tank" is also reported to be associated with this property, with no further details provided.
Speedway #3571 3315 Division Avenue SW, Wyoming, MI	2,769 feet northeast of Site	LUST UST	• Facility ID 00011072. Leak No. C-1915-90. A release of an unreported substance occurred on 9/28/90, which was closed on 8/27/98. • Facility ID 00011072. One

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
			12,000-gallon gasoline UST, one 10,000-gallon gasoline UST, and one 10,000-gallon diesel UST were installed on 11/1/90 and are currently in use. One 12,000-gallon gasoline UST was installed on 5/7/74 and removed on 10/30/90. One 6,000-gallon gasoline UST was installed on 5/7/66 and removed on 10/30/90. One 4,000-gallon gasoline UST was installed on 5/7/85 and is currently in use. One 6,000-gallon gasoline UST was installed on 5/7/84 and removed on 10/30/90.
No Entity Listed 3887 South Division Avenue, Wyoming, MO	2,970 feet southeast of Site	SHWS	• Facility ID 41001048. Inactive – no actions taken to address contamination. Pollutants include PCE.
Etna Supply Co. 529 32nd Street, Wyoming, MI	3,027 feet north-northwest of Site	LUST UST	• Facility ID 00005170. Leak No. C-2200-94. A release of gasoline occurred on 12/14/92, which was closed on 9/24/96. • Facility ID 00005170. One 2,000-gallon diesel UST and one 1,500-gallon gasoline UST were installed on 4/15/80 and removed 12/14/92. One "non-registered tank" is also reported to be associated with this property, with no further details provided.
Dwar Oil Co. 3910 Division Avenue, Wyoming, MI	3,062 feet southeast of Site	SHWS LUST UST Brownfields	• Facility ID 41000977. See LUST Database. Pollutants include 1,2,4-TMB, 1,3,5-TMB, benzene, benzo(a)pyrene, ethylbenzene, MTBE, naphthalene, xylenes, and n-propylbenzene. • Facility ID 00013770. Leak

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
			No. C-0596-98. A release of an unreported substance occurred on 7/8/98, which is open. • Facility ID 00013770. Two 10,000-gallon gasoline USTs, one 4,000-gallon gasoline UST, one 4,000-gallon kerosene UST, two 4,000-gallon diesel USTs, one 2,000-gallon diesel UST, and one 1,000-gallon used oil UST were installed on 5/7/71 and removed 10/14/99. One "non-registered tank" is also reported to be associated with this property, with no further details provided. • Facility ID 00013770. Status listed as monitoring.
Thrifty Petroleum – Clyde Park 3600 Clyde Park Avenue SW, Wyoming, MI	3,119 feet west of Site	AUL	• A Restrictive Covenant (RC-RRD-213-08-019) under Part 213 is pending for this property.
SDP Corp. 3600 Clyde Park Avenue SW, Wyoming, MI	3,119 feet west of Site	LUST UST	• Facility ID 00004192. Leak No. C-0149-90. A release of an unreported substance occurred on 1/23/90, which was closed on 5/29/08. • Facility ID 00004192. One 2,500-gallon gasoline UST, one 5,000-gallon gasoline UST, one 1,000-gallon kerosene UST, and two 4,000-gallon gasoline USTs were installed on 4/16/76 and removed on 11/11/90. Two 12,000-gallon gasoline USTs, one 10,000-gallon gasoline UST, one 4,000-gallon gasohol UST, one 4,000-gallon diesel UST, and 4,000-gallon kerosene UST were installed on 11/15/90 and are currently in use.

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
Admiral Petroleum #23 3221 South Division, Wyoming, MI	3,166 feet northeast of Site	LUST UST	• Facility ID 00005993. Leak No. C-0541-92. A release of gasoline occurred on 4/7/92, which is open. • Facility ID 00005993. One 10,000-gallon gasoline UST, two 8,000-gallon gasoline USTs, and two 6,000-gallon kerosene USTs were installed on 5/6/87 and are currently in use. One 1,000-gallon used oil UST was installed on 5/6/87 and removed 7/19/95. One 1,000-gallon bulk oil UST was installed on 6/1/88 and removed 7/19/95. One "non-registered tank" is also reported to be associated with this property, with no further details provided.
CVS Clyde Park Inc./Michigan Corp. 3601 Clyde Park Avenue SW, Wyoming, MI	3,167 feet west of Site	LUST UST	• Facility ID 00040405. Leak Nos. C-0695-00 and C-4032-85. Releases of unknown substances occurred on 7/28/00 and 8/12/85, respectively, which are open. • Facility ID 00040405. One 500-gallon used oil UST was installed on an unreported date and removed 5/1/00. One "non-registered tank" is also reported to be associated with this property, with no further details provided.
Grantex, Inc. 3560 Jefferson Avenue SE, Wyoming, MI	3,235 feet east of Site	SHWS	• Facility ID 41000862. Interim Response in Progress. Pollutants include PCE.
Northtown Center 3540 Jefferson Avenue, Wyoming, MI	3,238 feet east of Site	LUST UST	• Facility ID 00035735. Leak No. C-2151-91. A releases of an unknown substance occurred on 10/14/91, which was closed on 12/5/91.

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
			• Facility ID 00035735. One 550-gallon gasoline UST was installed on an unreported date and removed 11/7/91. One "non-registered tank" is also reported to be associated with this property, with no further details provided.
No Entity Listed 3011 Hillcroft SW, Wyoming, MI	3,440 feet north of Site	SHWS	• Facility ID 41001053. Inactive – no actions taken to address contamination. Pollutants include PCE.
Speedway #6275 3155 South Division, Wyoming, MI	3,522 feet northeast of Site	LUST UST	• Facility ID 00011831. Leak No. C-0321-91. A release of an unknown substance occurred on 3/4/91, which was closed on 5/1/96. • Facility ID 00011831. Four 8,000-gallon gasoline USTs, one 8,000-gallon empty UST, one 6,000-gallon kerosene UST, and one 8,000-gallon diesel UST were installed on 5/2/68 and removed on 4/11/95 or 4/12/95. One 10,000-gallon gasoline UST and one 15,000-gallon gasoline UST were installed on 7/14/95 and are currently in use. One 4,000-gallon diesel UST and one 4,000-gallon kerosene UST were installed on 7/17/95 and are currently in use.
Chem Central 2940 Stafford Avenue SW, Wyoming, MI	3,905 feet north of Site	NPL CERCLIS RCRA-LQG US Eng Controls US Inst Controls SHWS Brownfields ROD	• Proposed date of 12/30/82. Finalized date of 9/8/83. Currently on the Final NPL. Contaminants include PCBs (groundwater and surface water pathways), PCE (no pathway indicated), toluene (no pathway indicated), xylenes (no pathway indicated), and "waste

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
		FINDS	solvents" (groundwater pathway). Pathways include groundwater, surface water, and unidentified pathway. • Site ID 0502743. Alias Wolverine Chemical Solvent and Recovery. Discovery on 10/1/78. Hazard Ranking System Package on 8/1/82. Site Inspection on 9/1/82. Proposed for NPL on 12/30/82. Preliminary Assessment on 1/1/83. Final listing on NPL on 9/8/83. Notice letters issues 9/25/86. Administrative Order on Consent on 6/30/87. Removal Assessment, Risk/Health Assessment and Ecological Assessment on 7/15/90. Removal Assessment on 8/1/91. PRP RI/FS on 9/30/91. ROD on 9/30/91 for Final Remedy Selected at Site for Operable Unit 01, including groundwater treatment via air stripping, pump and treat, monitoring, and oil/water separation with soil treatment via carbon adsorption, physical/chemical treatment, and soil vapor extraction. RD/RA Negotiations on 3/31/92. • LQG of hazardous waste. Generator No. MID017108192. Violations exist. • Site ID 0502743. Institutional controls not otherwise specified on 9/30/91 for groundwater in ROD. • Facility ID 41000011. Interim Response in Progress.

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
			Pollutants include 1,1,1-TCA, 1,1-DCA, ethylbenzene, PCE, TCE, VC, xylenes, and cis-1,2-DCE. • Status listed as "PLP". Facility ID not reported. • RCRA, AFS, NEI, CERCLIS, ICIS, and PCS Information System
Hobart Sales & Service 4064 Division Avenue, Wyoming, MI	3,906 feet southeast of Site	LUST UST	• Facility ID 00008170. Leak No. C-1897-92. A release of gasoline occurred on 10/26/92, which was closed on 10/18/01. • Facility ID 00008170. One 550-gallon gasoline UST was installed on 3/31/69 and removed 10/26/92. One "non-registered tank" is also reported to be associated with this property, with no further details provided.
Univar USA 2940 Stafford Avenue SW, Wyoming, MI	3,565 feet north of Site	AST	• Facility ID 91041051. Twenty 12,000-gallon flammable liquid ASTs and one 10,000-gallon flammable liquid AST were installed on an unknown date and are currently in use.
Pony Express Courier Corp. 4130 South Division, Wyoming, MI	4,316 feet south-southeast of Site	LUST UST	• Facility ID 00016455. Leak No. C-0871-91. A release of an unknown substance occurred on 5/6/91, which was closed on 6/10/94. • Facility ID 00016455. One 10,000-gallon diesel UST and one 5,000-gallon diesel UST were installed on 4/16/76 and removed on 6/5/91.
Pkg Corp. of America 200 Colrain SW, Wyoming, MI	4,402 feet north of Site	LUST UST	• Facility ID 00015454. Leak No. C-1088-98. A release of an unknown substance occurred on 11/2/98, which is open. • Facility ID 00016455. One

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
			4,000-gallon gasoline UST was installed on 4/13/66 and removed 11/2/98. One "non-registered tank" is also reported to be associated with this property, with no further details provided.
Benteler Industries 3721 Hagen Drive Southeast, Wyoming, MI	4,464 feet east of Site	CERC-NFRAP CORRACTS RCRA-SQG FINDS Manifest	• Site ID 0506892. Discovery on 1/28/92. Preliminary Assessment on 9/11/92. Site archived on 12/18/95. • Action: CA075LO (low CA prioritization) and CA050 (RFA completed). • SQG of hazardous waste. Generator No. MID000776104. No violations. • RCRA, AFS, NEI, TRIS, and ICIS information systems. • Waste code reported: D002 (non-listed corrosive wastes)
ICS MI LLC 4336 Hansen Avenue SW, Wyoming, MI	4,918 feet south-southwest of Site	CERC-NFRAP RCRA-NonGen FINDS	• Site ID 0502418. Discovery on 8/26/86. Preliminary Assessment on 12/31/86. Site inspection on 8/21/90. Site archived on 9/28/94. • Former LQG. Generator No. MID017073222. Violations. • RCRA, AFS, and NEI information systems.
Belfer Drum and Barrel 4336 Hansen Avenue SW, Wyoming, MI	4,918 feet south-southwest of Site	SHWS	• Facility ID 41000006. Interim Response in Progress. Pollutants include PCBs.
Mansco/Lakeshore 2851 Buchanan Avenue SW, Wyoming, MI	4,919 feet north of Site	LUST UST	• Facility ID 00033447. Leak No. C-0549-90. A release of an unknown substance occurred on 3/29/90, which was closed on 8/26/91. • Facility ID 00033447. One 550-gallon gasoline UST was

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
			installed on 3/14/82 and removed on 3/14/90. One 1,000-gallon used oil UST was installed on an unreported date and removed on 3/19/90.
Erb Lumber Co. Inc. 2850 Division Avenue SW, Grand Rapids, MI	5,218 feet north-northeast of Site	LUST UST	• Facility ID 00010848. Leak No. C-0147-91. A release of an unknown substance occurred on 1/31/91, which was closed on 7/2/91. • Facility ID 00010848. One 2,000-gallon diesel UST was installed on 5/2/85 and removed on 9/30/91. One 1,000-gallon gasoline UST was installed on 5/2/86 and removed on 9/30/91. One 1,000-gallon gasoline UST was installed on 5/3/71 and removed on 6/1/87.
Rapid Pattern & Plastics, Inc. 2935 Madison SE, Grand Rapids, MI	6,022 feet northeast of Site	DEL SHWS	• Facility ID 41000214. Delisted – no longer meets criteria specified in rules.
No Entity Listed 2610 Buchanan Avenue SW, Grand Rapids, MI	6,501 feet north of Site	DEL SHWS	• Facility ID 41000944. Delisted – no longer meets criteria specified in rules.
No Entity Listed 1021 28th Street SW, Wyoming, MI	6,501 feet north of Site	DEL SHWS BEA	• Facility ID 41001008. Delisted – no longer meets criteria specified in rules. • BEA No. 1345. Category N BEA (no hazardous substance use). Submitted for determination on 1/26/04. Determination affirmed. No Section 7a submitted. BEA No. 1346. Category N BEA (no hazardous substance use). Submitted for determination on 1/26/04. Determination affirmed. No Section 7a submitted.

Entity Listed / Address	Approximate Location Relative to Site	Database	Comments / Status of Listing
No Entity Listed 3664 Eastern Avenue SE, Grand Rapids, MI	7,302 feet east of Site	DEL SHWS	• Facility ID 41001058. Delisted – no longer meets criteria specified in rules.

Based on the groundwater gradient at the Site, to the north-northwest, a number of properties within the ASTM radii and upgradient of the Site (i.e., southeast) are known to have impacts of PCE, including a property located at 3887 South Division Avenue that is listed on the SHWS and is approximately a quarter-mile east of the Site. The environmental concerns identified during the course of this investigation are discussed in detail in Section 7.0.

4.16.4 UNMAPPED PROPERTIES

In addition to the properties identified above, the database search identified a number of properties that could not be mapped by EDR based on the address information within the database system, also referred to as "orphan" sites in the database search results. A complete listing of the unmapped properties is included in Appendix G.

CRA reviewed the list of unmapped properties and confirmed that none of the listed properties are located adjacent to or in close proximity to the Site based on the available information.

4.17 HISTORICAL RECORDS REVIEW

4.17.1 SANBORN FIRE INSURANCE MAPS

Sanborn Fire Insurance Maps assist in the identification of historical land use and commonly indicate the existence and location of aboveground and underground storage tanks, structures, improvements, and facility operations. Sanborn maps were available for portions of the Site and portions of the surrounding properties and were reviewed by CRA for the years 1950, 1953, 1966, and 1985. Copies of available Sanborn maps are provided in Appendix H.

On the 1950 Sanborn maps, the main portion of the Site is identified as the Grand Rapids Stamping Division, General Motors Corporation, Metal Stamping. The Main

Manufacturing Building is identified. A transformer house (the former Switch House) is identified to the northwest of the Main Manufacturing Building. The pump house for the former on-Site water supply well and former AOF House (identified as Acetylene Plant) are present to the west of the Main Manufacturing Building. The former Power House is present to the west of the Main Manufacturing Building, with an ash pit shown at the southeast corner of the Power House. An open coal dock, with a concrete floor and concrete retaining wall, are shown to the south of the former Power House. A spray booth is identified in the southeastern corner of the Main Manufacturing Building. Railroad sidings enter the Site from the west, three of which run along the western side of the Main Manufacturing Building to the AOF House, the west side of the Main Manufacturing Building, and into the southwestern corner of the Main Manufacturing Building. 36th Street SW (Allen Road SW) is present adjacent to the north of the Main Manufacturing Building. Buchanan Avenue SW is present adjacent to the east of the Main Manufacturing Building. Properties to the east of the Site across Buchanan Avenue SW include: Air Reduction Company (manufacturer of oxygen) is present at 3700 Buchanan Avenue SW, which includes a "gasometer" and buried oil tank; a paint shop is present at 3818 Buchanan Avenue SW; auto repair facilities are present at 3826 and 3846 Buchanan Avenue SW; a heat treating facility is present at 3832 Buchanan Avenue SW; a cement factory is present at 3840 Buchanan Avenue SW; an aluminum foundry is present at 3841 Opal Avenue SW; a machine shop is present at 3890 Buchanan Avenue SW; and residential dwellings. No Sanborn coverage is available for the properties to the south of the Site, to the north of 36th Street SW, or to the west of the main portion of the Site (including the Clay Avenue parking lot).

On the 1953 Sanborn maps, the Site appears essentially unchanged from the 1950 Sanborn maps, with the exception that the former Baler House (identified as a warehouse on the Sanborn map) and the former Heat Treat Building (identified as a warehouse on the Sanborn map) have been constructed to the south and southeast of the Main Manufacturing Building. The adjacent properties to the east of the Site across Buchanan Avenue SW remain essentially unchanged from the 1950 Sanborn map, except for the following: a machine shop is present at 3800 Buchanan Avenue SW; a garage for trucks is present at 3840 Buchanan Avenue SW; and a spring factory is present at 3852 Buchanan Avenue SW. Residential dwellings are present along Buchanan Avenue SW between 39th Street SW and Wadsworth Street SW, with no coverage to the south of this area. Multiple railroad tracks are present adjacent to the west of the main portion of the Site. No Sanborn coverage is available for the properties to the south of the Site, to the north of 36th Street SW, or to the west of the main portion of the Site (including the Clay Avenue parking lot).

On the 1966 Sanborn maps, the Site remains essentially unchanged from the 1953 Sanborn map, with the following exceptions: a water tower is present to the northwest of the former Power House and west of the AOF House; a "FR water cooler" is located to the northwest of the former Power House; a 500,000-gallon reservoir and pump house (current 500,000-gallon fire suppression AST and West Fire Pump House) are located to the west-southwest of the former Power House; the former Baler House is correctly identified to the south of the Main Manufacturing Building; the former Heat Treat Building is no longer present to the east-southeast of the Main Manufacturing Building; an addition has been constructed on the southwestern portion of the Main Manufacturing Building; and an additional rail spur is present on the east side of the former Baler House. The adjacent properties to the east of the Site across Buchanan Avenue SW remain essentially unchanged from the 1953 Sanborn map, with the following exceptions: a filling station is present on the southeast corner of the intersection of 36th Street SW and Buchanan Avenue SW at 144 36th Street SW; an auto repair shop is present at 3620 Buchanan Avenue SW; a wholesaler of welding supplies is present at 3700 Buchanan Avenue SW (the buried tank remains present); a truck garage is present at 3720 Buchanan Avenue SW; a motor freight station is present at 3740 Buchanan Avenue SW; a union hall is present at 3853 Buchanan Avenue SW; and a plumbing shop is present at 3900 Buchanan Avenue SW. Additional commercial/light industrial properties are present in the surrounding area to the east of the Site. Godwin Heights Public School Physical Education Building is present to the northeast of the Site, across Buchanan Avenue SW and 36th Street SW. No Sanborn coverage is available for the properties to the south of the Site, to the north of 36th Street SW, or to the west of the main portion of the Site (including the Clay Avenue parking lot).

On the 1985 Sanborn maps, which are identified to not have been updated since November 1965, the Site and adjacent properties appear unchanged from the 1966 Sanborn maps. No Sanborn coverage is available for the properties to the south of the Site, to the north of 36th Street SW, or to the west of the main portion of the Site (including the Clay Avenue parking lot).

4.17.2 HISTORICAL AERIAL PHOTOGRAPHS

Aerial photographs assist in the identification of Site features and outdoor activities of potential environmental concern. Aerial photographs of the Site for the years 1938, 1939 to 1950 (exact date unknown), 1950 to 1954 (exact date unknown), 1960, 1967, 1978, 1993, 1997, and 2005 were available from EDR and were reviewed by CRA. In addition, historical aerial photographs were provided by the Site; however, dates were not

available for the aerials. Based on the construction of the Main Manufacturing Building in the aerials, they appear to have been taken at varying dates between 1939 and 1954. Copies of available aerial photographs of the Site are presented in Appendix I. Following is a summary of observations based on the review of the aerial photographs.

The 1938 aerial photograph is at a scale of one inch equals 500 feet and depicts the southern portion of the Site as developed with the original Site structures, including the initial Main Manufacturing Building, the former Power House, the AOF House, the cooling water pond, the former Switch House, and various guard houses. A coal pile is present to the south of the former Power House. Railroad spurs enter the southwestern and southeastern portions of the building. Areas of surficial disturbance are present around the cooling pond, Power House, AOF House, and on the southern portion of the Site. The area immediately to the south of the Main Manufacturing Building is utilized for vehicle parking. The northern portion of the Site consists of vacant land with some residential structures. The western portion of the Site, beyond the railroad tracks, consists of cultivated agricultural land. Allen Road (currently 36th Street) is present traversing the northern portion of the Site. Buchanan Avenue is present to the east of the Site. 40th Avenue is present to the south of the Site. Railroad tracks and Cole Drain are present to the west of the Site. The areas to the north, south, east, and west of the Site appear to be residential properties or cultivated agricultural land. Some commercial-type structures are present in the general vicinity of the Site.

The aerial photographs taken between 1939 and 1950 (based on facility construction) are at an unknown scale. Additions have been constructed on the Main Manufacturing Building. Exterior storage is present to the south of the former Power House and a drainage ditch appears to be present along the western side of the Site. A low-lying area and potential fill activities are noted to the south of the western portion of the Main Manufacturing Building. Areas of surficial disturbance are present on the western and southern portions of the main property. The western and northern portions of the Site appear essentially unchanged from the 1938 aerial photograph. The adjacent properties appear essentially unchanged from the 1938 aerial photograph, with the exception of the properties to the east of the Site, which have additional commercial-types structures present.

The aerial photograph taken between 1950 and 1954 (based on facility construction) are at an unknown scale. The former Baler House and former Heat Treat Building are present to the south of the Main Manufacturing Building, which has been expanded to include the 1950 addition. Exterior storage of materials is present to the south of the Main Manufacturing Building. A settling pond of some type is present to the north of

the former Power House, northwest of the former AOF Building, and to the east of the cooling water pond. This level of the material in this pond appears to be lower topographically than the surrounding features. The adjacent properties to the south of the Site consist of residential and commercial-type structures and the adjacent properties to the north of the Site consist of residential-type structures. Residential-type and commercial-type structures are present on the northern portion of the Site. Various small structures are present to the west of the railroad tracks, on what may be a portion of the Site. Coverage was not available for the adjacent properties to the east of the Site on this aerial.

The 1960 aerial photograph is at a scale of one inch equals 500 feet and depicts the Site as further developed. Additions to the Main Manufacturing Building have occurred. The former Baler House is present to the southeast of the Main Manufacturing Building. The cooling water pond is no longer present. A large AST and small structure are present to the west of the former Power House. Exterior storage is present on the southwestern portion of the Site, which appears to be on an unpaved surface. Storage is also present to the southeast and west of Main Manufacturing Building. The southeastern portion of the Site is a parking lot. The western portion of the Site, beyond the railroad tracks, includes vacant and wooded land, with some small structures and low-lying areas. The northern portion of the Site consists of vacant land and some residential-type structures. The adjacent property to the north of the Site appears to be used as a baseball diamond. Residential properties are present to the northeast of the Site. The properties to the east of the Site appear to consist of a mixture of residential and commercial/small industrial properties. The adjacent properties to the south of the Site are residential in nature. The adjacent properties to the west of the Site include vacant and wooded land, with some small structures. Clay Avenue and U.S. 131 have been constructed to the west of the Site.

The 1967 aerial photograph is at a scale of one inch equals 500 feet and depicts the main portion of the Site as having an addition to the southeastern portion of the Main Manufacturing Building. The former Baler House is still present, with the current Baler House present as well, to the southeast of the Main Manufacturing Building. The southwestern and majority of the western portion of the property continues to be used for exterior storage. A water tower and cooling tower have been constructed to the northwest of the former Power House. Parking is conducted on the northwestern and southeastern portions of the main portion of the Site. The northern portion of the Site consists of vacant land and some residential/small commercial-type structures. Areas of surficial disturbance and potential stockpiling/filling are present on the western portion of the Site, with some small structures present. The properties to the north of the Site

consist of a park with a baseball diamond and residential properties. The adjacent properties to the east of the Site consist of residential and commercial/small industrial properties. The adjacent properties to the south of the Site consist of residential properties. The adjacent properties to the west of the Site appear to be under development, with areas of surficial disturbance and some commercial-type structures present.

The 1978 aerial photograph is at a scale of one inch equals 600 feet and depicts the main portion of the Site as having an addition to the southeastern portion of the Main Manufacturing Building. The former Power House, Acetylene Building, cooling tower, and coal pile are no longer present to the west of the Main Manufacturing Building. The Rack Make Up Building has been constructed to the west of the Main Manufacturing Building. The western and southern portions of the Site are utilized for exterior storage. The current Power House has been constructed to the south of the Main Manufacturing Building. The northern portion of the Site is utilized as a parking lot. The employee parking lot and stormwater pond have been constructed on the western portion of the Site. The adjacent properties to the north of the Site continue to be utilized as a park and residential properties. The adjacent properties to the east of the Site continue to be residential and commercial/small industrial in nature. The adjacent properties to the south of the Site continue to be residential in nature. The adjacent properties to the west of the Site appear to be commercial and small industrial properties.

The 1993 aerial photograph is at a scale of one inch equals 600 feet and depicts the main portion of the Site as having additions to the eastern and southern portions of the Main Manufacturing Building. The overhead employee trestle has been constructed from the western portion of the Site to the main portion of the Site and from the northern portion of the site to the main portion of the Site, from each of the employee parking lots. The fire pump house and tank on the southeastern portion of the property are present. Additional smaller structures/features have been constructed on the southern portion of the Site; however, the quality of the aerial does not allow for full evaluation. The northern portion of the Site appears essentially unchanged from the 1978 aerial photograph. The adjacent properties appear essentially unchanged from the 1978 aerial photograph.

The 1997 aerial photograph is at an unknown scale and depicts the Site and adjacent properties as essentially unchanged from the 1993 aerial photograph. The water tower has been removed from the western portion of the Site. The Site appears to be in its current configuration.

The 2005 aerial photograph is at a scale of one inch equals 505 feet and depicts the Site as and the surrounding area to be essentially the same as shown in the 1997 aerial photograph.

4.17.3 CITY DIRECTORIES

City directories assist in the identification of Site and surrounding property usage based on the names of occupants listed for the Site and surrounding property addresses. A review of available city directories was completed by EDR from the earliest available record to the present. Available directories were reviewed by EDR for the Site addresses of 300 36th Street SW and 3838 Clay Avenue SW at approximately five-year intervals starting in 1914 and ending in 2009. 300 36th Street SW was not listed in the 1914, 1919, 1923, 1928, 1932, 1933, or 1943 city directories. It should be noted that 36th Street was historically known as Allen Road SW and that the Site historically covered a range of addresses from 200 to 400 36th Street SW. 3838 Clay Avenue SW was not listed in the 1914, 1919, 1923, 1928, 1933, 1938, 1943, 1948, 1953, 1957, 1961, 1966, 1971, 1975, 1980, 1985, 1990, 1995, 1999, 2004, or 2009 city directories. The following occupants were reported during the specified time period for the Site addresses.

Date	*Address*	*Listed Business Entity*
1928	229 36th Street SW	Residential
	245 36th Street SW	Residential
	255 36th Street SW	Residential
1933	205 36th Street SW	Residential
	207 36th Street SW	Residential
	209 36th Street SW	Residential
	229 36th Street SW	Residential
	239 36th Street SW	Residential
	255 36th Street SW	Residential
	263 36th Street SW	Residential
1938	205 36th Street SW	Residential
	207 36th Street SW	Residential
	209 36th Street SW	Residential
	229 36th Street SW	Residential
	239 36th Street SW	Residential
	241 36th Street SW	Andrew Kacos (restr.)
	255 36th Street SW	Residential
	263 36th Street SW	Residential

1938	300 36th Street SW	General Motors Corp. GR Stamping Div.
1948	209 36th Street SW	Residential
	229 36th Street SW	Leta Louks (restr.)
	239 36th Street SW	Vacant
	241 36th Street SW	Andrew Kacos (restr.)
	255 36th Street SW	Residential
	259 36th Street SW	Residential
	300 36th Street SW	Fisher Body Div General Motors Corp.
	333 36th Street SW	Helmus Garage & Body Shop
1953	209 36th Street SW	Residential
	229 36th Street SW	Leta Louks (restr.)
	236 36th Street SW	Residential
	237 36th Street SW	Campbell's Cafeteria
	255 36th Street SW	Residential
	259 36th Street SW	Residential
	300 36th Street SW	Fisher Body Div General Motors Corp.
	333 36th Street SW	Helmus Garage & Body Shop
1957	209 36th Street SW	Residential
	229 36th Street SW	Gem Restr.
	237 36th Street SW	Vacant
	263 36th Street SW	Residential
	300 36th Street SW	Fisher Body Div General Motors Corp.
	333 36th Street SW	Helmus Garage & Body Shop
1961	209 36th Street SW	Residential
	229 36th Street SW	Gem Restr.
	263 36th Street SW	Residential
	300 36th Street SW	Fisher Body Div. General Motors Corp. G.R. Plant No. 1
1961	333 36th Street SW	Helmus Garage & Body Shop
1966	229 36th Street SW	Vacant Store

1966	300 36th Street SW	Fisher Body Div. General Motors Corp. G.R. Plant No. 1
	333 36th Street SW	Helmus Garage & Body Shop
1971	229 36th Street SW	Raenell Press (printers)
	300 36th Street SW	Fisher Body Div. General Motors Corp. G.R. Plant No. 1 (auto parts mfrs.)
	333 36th Street SW	Fisher Body (parking lot)
1975	229 36th Street SW	Raenell Press (printers)
	300 36th Street SW	Fisher Body Div. General Motors Corp. G.R. Plant No. 1 (auto parts mfrs.)
	333 36th Street SW	Fisher Body (parking lot)
1980	229 36th Street SW	Vacant
	300 36th Street SW	Fisher Body Div. General Motors Mtl. Fab. Plnt. (auto parts mfrs.)
	333 36th Street SW	Fisher Body (parking lot)
1985	229 36th Street SW	Residence
	300 36th Street SW	Fisher Body Div. General Motors Mtl. Fab. Plnt. (auto parts mfrs.)
	333 36th Street SW	Fisher Body (parking lot)
1990	300 36th Street SW	Chevrolet Pontiac Canada Group Div. General Motors (auto parts mfrs.)
1990	333 36th Street SW	CPC Group (parking lot)
1995	300 36th Street SW	Cadillac Luxury Car Division (auto parts mfrs.)
	333 36th Street SW	CLCD (parking lot)
1999	300 36th Street SW	Electronic Data Systems Corp. (data proc.) General Motors Corp. (mrt. vhcl. prts. acc.) Restaura (eating place)

		United Auto Aerospace Agriculture (labor org.)
2004	300 36th Street SW	EDS Corp. (nonclassified) General Motors Corp. (auto stampings) Regional Personnel Workers Com (consultants) UAW-GM Stamping (labor org.)
2009	300 36th Street SW	American Food & Vending (vending mach.) EDS (internet serv.) GM Grand Rapids Metal Ctr. (auto stampings) IV, Inc. (unclassified) Regional Personnel Workers Com (consultants) UAW-GM Stamping (labor org.)

A city directory search was also conducted for the properties surrounding the Site on 36th Street SW, 36th Street SW (a/k/a Allen Road SW), Clay Avenue SW and Buchanan Avenue SW at approximately five-year intervals starting in 1914 and ending in 2009. 36th Street SW was not listed in the 1914, 1919, 1923, or 1943 city directories. 36th Street SW (a/k/a Allen Road SW) was not listed in the 1914, 1919, or 1923 city directories. The following properties were reported along the aforementioned road during the specified time periods:

Date	***Address***	***Listed Business Entity***
1933	415 36th Street SW	Residential
1938	415 36th Street SW	Residential
	416 36th Street SW	Residential
	3636 Buchanan Avenue SW	Don's Service Sta. (filling station)
1948	211 36th Street SW	UAW (CIO) Local 730
	415 36th Street SW	Albert G. Hooyer (mkt. gardener)
	416 36th Street SW	Residential
	3636 Buchanan Avenue SW	John Marsman

		(filling station)
	3800 Buchanan Avenue SW	Conical Tool Co. (mfrs.)
1953	211 36th Street SW	UAW (CIO) Local 730
	415 36th Street SW	Residential
	416 36th Street SW	Residential
	3565 Buchanan Avenue SW	Moorhead Standard Service (gas station)
	3636 Buchanan Avenue SW	Hydraulic Jack Serv. Co. (machy)
	3800 Buchanan Avenue SW	Conical Tool Co. (mfrs.)
1957	211 36th Street SW	Stampers Federal Credit Union
	415 36th Street SW	Residential
	3565 Buchanan Avenue SW	Luke's Standard Service (gas station)
	3636 Buchanan Avenue SW	Hydraulic Jack Serv. Co. (machy)
	3800 Buchanan Avenue SW	Conical Tool Co. (mfrs.)
1961	211 36th Street SW	Stampers Federal Credit Union
	3565 Buchanan Avenue SW	Lang's Standard Service (gas station)
	3636 Buchanan Avenue SW	Meyer Hydraulics
	3800 Buchanan Avenue SW	Tracer Tool & Die Co., Inc. (mfrs.)
1966	211 36th Street SW	Stampers Federal Credit Union
	3565 Buchanan Avenue SW	Lang's Standard Service (gas station)
	3636 Buchanan Avenue SW	Lang's Carburetor Service (auto repairs)
	3800 Buchanan Avenue SW	Tracer Tool & Die Co., Inc.
1971	211 36th Street SW	Stampers Federal Credit Union
	3565 Buchanan Avenue SW	Groen's Car Care Center (gas station)
	3636 Buchanan Avenue SW	Lang's Carburetor Service (auto repairs)
		Norm's Auto Service

		(auto repairs)
	3800 Buchanan Avenue SW	Tracer Tool & Die Co., Inc.
	4000 Clay Avenue SW	Consumers Power Co.
1975	211 36th Street SW	Stampers Federal Credit Union
	3565 Buchanan Avenue SW	Lang Service Center (gas station)
	3636 Buchanan Avenue SW	Lang's Carburetor Service (auto repairs)
	3800 Buchanan Avenue SW	Tracer Tool & Die Co., Inc.
	4000 Clay Avenue SW	Consumers Power Co.
1980	211 36th Street SW	Stampers Federal Credit Union
	3565 Buchanan Avenue SW	Vacant
	3636 Buchanan Avenue SW	Jack's Tune-Up Service (auto repairs)
	3800 Buchanan Avenue SW	Tracer Tool & Die Co., Inc.
	4000 Clay Avenue SW	Consumers Power Co.
1985	211 36th Street SW	Stampers Federal Credit Union
	3800 Buchanan Avenue SW	Tracer Tool & Die Co., Inc.
	4000 Clay Avenue SW	Consumers Power Co.
1990	211 36th Street SW	Stampers Federal Credit Union
	3800 Buchanan Avenue SW	Tracer Tool & Die Co., Inc.
	4000 Clay Avenue SW	Consumers Power Co.
1995	211 36th Street SW	Stampers Federal Credit Union
	3636 Buchanan Avenue SW	Tint Factory (window tinting)
	3800 Buchanan Avenue SW	Tracer Tool & Die Co., Inc.
	4000 Clay Avenue SW	Consumers Power Co.
1999	211 36th Street SW	Stampers Federal Credit Union
	3636 Buchanan Avenue SW	Tint Factory (auto svcs.)
	4000 Clay Avenue SW	Consumers Power Co. (elec. svcs.)
2004	211 36th Street SW	Stampers Federal Credit

		Union
	3636 Buchanan Avenue SW	All Car Wrecker Svc.
		Tint Factory (glass coating and tinting)
	3800 Buchanan Avenue SW	Tracer Tool & Die Co. (molds)
	4000 Clay Avenue SW	24 Seven Tower Cleaning (janitor serv.)
		Consumers Power Co. (mktg. program & serv.)
2009	3636 Buchanan Avenue SW	Grand Rapids Solar Control (glass coating & tinting)
		Tint Factory (glass coating and tinting)
	3800 Buchanan Avenue SW	Tracer Tool & Die Co. (molds)
	4000 Clay Avenue SW	Consumers Power Co. (elec. companies)

A copy of the city directory search results are presented in Appendix J.

4.17.4 HISTORICAL TOPOGRAPHIC MAPS

Historical topographic maps were reviewed to assist in the identification of historical land use, to document the general development of the Site and properties in the vicinity of the Site, and to identify potential on-Site fill activities. Historical topographic maps of the Site and surrounding areas for the years 1914, 1967, 1972 (photorevised from 1967), 1981 (photorevised from 1967), and 1996 were available from EDR and were reviewed by CRA. The historical topographic maps are at a scale of 1:24,000, with the exception of the 1914 topographic map, which is at a scale of 1:62,500. Following is a summary of observations based on review of the historical maps.

The 1914 topographic map depicts the Site as primarily vacant land, with numerous residential-type structures identified along the east side of the Site. Buchanan Avenue is present to the east of the Site. Allen Road (currently 36th Street SW) traverses the northern portion of the Site, with vacant land and residential-type structures located beyond. Goodwin School, "Old Fairground" and residential-type structures are identified to the northeast of the Site. Residential-type structures and vacant land are

identified to the east of the Site, beyond Buchanan Avenue. Vacant land is identified to the south of the Site. Railroad tracks are depicted to the west of the Site, with vacant land and a cemetery located beyond.

The 1967 topographic map depicts the Site as having a portion of the manufacturing building present. A water tower and two smaller structures are present near the northwest corner of the main building. The former Baler House is present to the southeast of the main building, with the current Baler House located further to the south. A roadway enters the Site from the northwest corner, runs due south along the western side of the main building, and turns east along the southern boundary of the main building. Railroad spurs enter the Site from the south and enter the southwestern and southeastern portions of the building. Commercial-type structures are identified to the east of the Site, beyond Buchanan Avenue. The 32nd Street Park is identified to the north of the Site. Cole Drain, to the north of the Site in the 32nd Street Park, is depicted as flowing through the central portion of the park. The "Old Fairground" is no longer present to the northeast. No additional structures are identified to the east, south and north of the Site, with the Site and the surrounding area is identified as developed; however, due to the density of the structures, the size of the Site and the scale of the topographic map, smaller individual structures are not shown. Additional railroad tracks are present to the west of the Site, with several small structures identified beyond. Clay Avenue and U.S. 131 have been constructed further to the west.

The 1972 topographic map depicts the Site as essentially unchanged from the 1967 topographic map, with the exception that the current Power House has been constructed to the south of the Main Manufacturing Building, along with the WWTP. An additional railroad spur is identified between the two new structures. Additional commercial development has occurred to the west and northwest of the Site. The northern portion of the Site is identified as vacant land. The portion of Cole Drain that runs through the 32nd Street Park has been re-routed to its current course and the football field stands have been constructed. The adjacent and surrounding properties to the east and south of the Site appear essentially unchanged from the 1967 topographic map.

The 1981 topographic map depicts the Site as having additions to the western and southeastern portions of the Main Manufacturing Building. Additional structures have been constructed on the southern portion of the Site, in the area of the Staging Building; however, the configuration of the structures does not match facility construction records or aerial photographs reviewed. Two small structures have been constructed on the adjacent property to the northern portion of the Site. Additional commercial and industrial-type structures have been constructed in the surrounding area.

The 1996 topographic map depicts the Site and adjacent and surrounding properties as essentially unchanged from the 1981 topographic map.

It should be noted that topographic maps do not always accurately depict Site structures and development as of the date of the map.

No areas of concern indicative of potential environmental impact to the Site were observed on the historical topographic maps reviewed.

Copies of available historical topographic maps of the Site are presented in Appendix C.

4.18 PUBLIC RECORDS REVIEW

CRA submitted Freedom of Information Act (FOIA) requests to the United States U.S. EPA Region 5, the MDEQ, the Kent County Health Department – Environmental Health Division, the City of Wyoming Fire Department, and the City of Grand Rapids Fire Department for the Site address of 300 36th Street SW, Wyoming, Michigan. Environmental records associated with utilities (i.e. septic systems, wells, etc.), hazardous and solid waste, water, air, remediation, emergency responses, spills/releases, underground and aboveground storage tanks were requested. Information requested during the FOIAs has not been received to date, except as described below. It should be noted that summarized information received from the agencies is not intended to be all inclusive of the complete files obtained from the agencies; only to briefly summarize significant findings.

4.18.4 U.S. EPA

CRA submitted a FOIA request to the U.S. EPA Region 5 for the Site address of 300 36th Street SW, Wyoming, Michigan in preparation of this CCR.

A written response was received from the U.S. EPA Region 5 Land and Chemicals Division (LCD) on October 1, 2009. Based on the response from the U.S. EPA Region 5 LCD, no files exist for the requested Site address.

A written response was received from the U.S EPA Region 5 Superfund Division on October 8, 2009. Based on the response from the U.S. EPA Region 5 Superfund Division, no files exist for the requested Site address.

No responses have been received from the Office of Enforcement and Compliance, Air and Radiation Division, or Water Division to date.

4.18.5 MDNRE

CRA submitted a FOIA request to the MDNRE for the Site addresses of 229, 300, and 301 36th Street SW and 3838 Clay Avenue SW, Wyoming, Michigan.

Information received to date from the MDNRE for the Site addresses of 229, 300 and 301 36th Street SW and 3838 Clay Avenue SW, Wyoming, Michigan is incorporated in this report, as appropriate.

4.18.6 LOCAL AGENCIES

CRA submitted a FOIA request to the Kent County Health Department – Environmental Health Division, the City of Wyoming Fire Department and the City of Grand Rapids Fire Department for the Site addresses of 229, 300, and 301 36th Street SW and 3838 Clay Avenue SW, Wyoming, Michigan in preparation of this CCR.

Information received to date from or reviewed at the City of Wyoming Fire Department and Kent County Health Department – Environmental Health Division for the Site addresses of 229, 300 and 301 36th Street SW and 3838 Clay Avenue SW, Wyoming, Michigan is incorporated in this report, as appropriate.

It should be noted that summarized information received from the agency is not intended to be all inclusive of the complete files obtained from the agency; only to briefly summarize significant findings.

5.0 SUMMARY OF PREVIOUS ENVIRONMENTAL INVESTIGATIONS

The following previous environmental investigation reports were prepared for the Site and were available for CRA review. Copies of select documents are presented in Appendix K.

- Report on Soils Investigation for Fisher Body Retention Basin prepared by Grand Rapids Testing Service and dated October 1972
- Industrial Environmental Performance Review (IEPR) prepared by General Motors Corporation and dated April 14, 1978
- IEPR prepared by General Motors Corporation and dated April 10, 1981
- Inter-Organization Memo – Flood Lube Leak at HS-5 Press prepared by General Motors Corporation and dated August 7, 1981
- Inter-Organization Memo – Groundwater Monitoring prepared by General Motors Corporation and dated August 25, 1981
- Hydrogeologic Evaluation (HE) of an Oil Leakage prepared by Environmental Data, Inc. (EDI) and dated December 1981
- Groundwater Sampling Results prepared by EDI and dated January 12, 1982
- Groundwater Sampling Results prepared by EDI and dated December 23, 1982
- IEPR prepared by General Motors Corporation and dated November 22, 1985
- Water Sampling and Analysis at the Plant Construction Area prepared by EDI and dated February 14, 1986
- Hydrogeologic Investigation (HI) prepared by EDI Engineering & Science (EDI) and dated March 1986
- Phase II HI prepared by EDI and dated June 1986
- Correspondence between GM and MDNR dated between October 2, 1986 and November 14, 1986
- Phase III-A HI prepared by EDI and dated March 1987
- Phase III-B HI prepared by EDI and dated July 1987
- Correspondence between GM and MDNR dated between June 15, 1987 and October 14, 1987
- Phase IV-A Soil Vapor Pilot Study (Pilot Study) prepared by EDI and dated August 1988
- Phase IV-B HI prepared by EDI and dated July 1988
- Phase IV-C HI prepared by EDI and dated July 1988

- TCE Remediation Monitoring Program (RMP) prepared by EDI and dated March 1989
- Available Information on 1,1,1-TCA prepared by EDI and dated September 6, 1989
- TCE Emission Testing (ET) Report prepared by EDI and dated September 21, 1989
- Off-Site Groundwater Purge Evaluation prepared by WW Engineering & Science and dated April 1993
- Addendum to the May 1993 Geotechnical Investigation Report for the Proposed Press Pit, 13-Bay Area - Soil Characterization Results prepared by WW Engineering & Science and dated June 17, 1993
- Abandonment of Monitoring Well X-10 prepared by GMC and dated February 23, 1998
- Results of Soil and Groundwater Sampling Performed in 17-Bay prepared by Earth Tech, Inc. (Earth Tech) and dated October 27, 1998
- Results of Soil and Groundwater Sampling Performed in 20-Bay prepared by Earth Tech and dated March 3, 1999
- Notice of Migration of Contamination prepared by GMC and dated June 9, 1999
- Documentation of Compliance with Section 20107a of Part 201 of Michigan Act 451 Pursuant to Administrative Rule 1003(4)(a) prepared by CRA and dated January 2002
- Evaluation of Groundwater and Soil Vapor Extraction Treatment Systems prepared by CRA and dated August 13, 2002
- Monitoring Well Network Evaluation prepared by CRA and dated August 13, 2002
- 4-Bay and 5-Bay Press Pit Excavation (Site records) dated August to November 2002
- Historical Documentation Review Summary prepared by CRA and dated December 23, 2002
- Additional Historical Documentation Review Summary prepared by CRA and dated January 21, 2003
- Notice of Migration of Contamination prepared by GMC and dated September 19, 2003
- Data Report, Activities from March to December 2003 prepared by CRA and dated February 2004
- 2004 Data Report prepared by CRA and dated December 2004;
- Results of Press Pit and Perforated Sump System Sampling prepared by CRA and dated January 6, 2006

- Summary of Soil Investigations – Former Soil Vapor Extraction System Area prepared by CRA and dated September 8, 2006
- 2005 Bulk Unload Area Investigation Summary prepared by CRA and dated September 8, 2006
- 2005-2006 Investigation Data Report prepared by CRA and dated April 2007
- Summary of Adjacent Property Review – Conical Tool Company prepared by CRA and dated September 12, 2007
- 2007 Bulk Unload Area Investigation Summary prepared by CRA and dated October 26, 2007
- Summary of Adjacent Property Review – West Side of Cole Drain prepared by CRA and dated December 5, 2007
- October 2009 Semi-Annual Groundwater Monitoring Report prepared by CRA and dated January 5, 2010
- Phase I Environmental Site Assessment prepared by CRA and dated August 9, 2010
- Draft Facility Environmental Assessment (FEA) prepared by CRA and dated October 2010
- 2010 Bulk Unload Area Investigation Data Report prepared by CRA and dated November 2010

The pertinent facts that guide the appropriate application of the Michigan Act 451, Part 201 generic industrial or commercial standards are as follows:

i) the Site is zoned and utilized for industrial or commercial purposes

ii) appropriate security measures (e.g. security fence, security patrols, etc.) are currently in place to restrict Site access

iii) future land use plans contemplate the continued industrial or commercial use of the Site

iv) the Site is serviced by municipal water supplied by the City of Wyoming

v) the lower overburden and bedrock water bearing zones are protected by the significant overlying lacustrine clay aquitard

vi) the perched water table zone is shallow (<25 feet bgs) and would be prohibited from use as a potable water supply (regardless of potential yield) by Michigan Department of Community Health (MDCH) Rules (Act 368, Part 127)

vii) groundwater sample results will be screened against groundwater criteria in lieu of screening soil sample results against soil criteria protective of groundwater exposures

Both MDCH and MDNRE prohibit the use of groundwater from the perched water table zone for use as a potable water source, and potentially usable aquifers at depth are protected by overlying aquitards.

Based upon the factors summarized above, historical data have been evaluated qualitatively and quantitatively, along with other existing information, to identify conditions that warrant further investigation. The qualitative review considered sample locations and depths, chemicals analyzed, analytical methods, and any related field observations. The quantitative review is based on a comparison of the historical data for soil and groundwater samples with the Michigan Act 451, Part 201 generic cleanup criteria that the MDNRE has developed under the authority of the Natural Resources and Environmental Protection Act (1994 PA 451, as amended).

The Michigan Act 451, Part 201 criteria for residential exposures were used as screening criteria to identify chemicals in the historical data that may be potentially significant at off-Site locations. The Michigan Act 451, Part 201 criteria for industrial exposures were used as screening criteria to focus on the chemicals and concentrations that have the highest potential to be significant at on-Site locations based on current and reasonably expected future land uses. A Site-specific risk-based approach may be utilized in the future to more accurately identify potential risks that may exist at the Site (as required).

The soil, groundwater and borehole water data collected during historical environmental investigations is presented in Tables 5.1, 5.2 and 5.3, respectively, and compared to current Michigan Act 451, Part 201 generic cleanup criteria. A detailed discussion of the comparison of historical data to screening criteria is presented further in Section 5.0 and in Section 7.0 as it relates to specific AOIs.

Analytical results for the soil and groundwater samples were compared to criteria presented at the time of the previous investigations as discussed below; however, soil and groundwater results were evaluated during the development of this CCR against the following Generic Cleanup Criteria and Screening Levels established in Part 7 of Administrative Rules, effective December 21, 2002, pursuant to Part 201, Environmental Remediation, 1994 PA 451, as amended, in the attached Tables and Databox Plans (Plans 4 through 8):

Soil:

- Soil Volatilization to Indoor Air Inhalation Criteria (SVIIC)
- Particulate Soil Inhalation Criteria (PSIC)

- Direct Contact Criteria (DCC)

Groundwater:

- Drinking Water Criteria (DWC)
- Groundwater Surface water Interface Criteria (GSIC)
- Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)
- Groundwater Contact Criteria (GCC)

5.1 SOILS INVESTIGATION, GRAND RAPIDS TESTING SERVICE, OCTOBER 1972

A Report on Soils Investigation was prepared for the Fisher Body Retention Basin by Grand Rapids Testing Service and dated October 1972.

The purpose of the investigation was to determine soil classification, soil bearing capacity, and groundwater information.

According to the report, four borings were advanced to 20 feet below ground surface (bgs). Soils at the Site were characterized as fibrous organic peat overlying granular materials (course sand and pebbles). Groundwater was encountered in borings 1, 2, 3, and 4 at 14.3 feet bgs, 14 feet bgs, 1-foot bgs, and 0.5 feet bgs, respectively. No boring location map was included in the report. The report further discussed the bearing capacity of soils in the locations where foundations for structures to be placed in or around the retention basin were proposed.

A subsequent letter prepared by Grand Rapids Testing Service and dated October 25, 1972 indicated that the material comprising the basin slopes was highly organic and should not be relied upon to support any structure. It was recommended that soils in the area of the proposed embankment be removed prior to completing the retention basin.

5.2 IEPR, GMC, APRIL 14, 1978

The GMC Plant Environment Department of Environmental Activities Staff (EAS) conducted an IEPR at the Site dated April 14, 1978. The purpose of the IEPR was to

determine the plant's status with regard to Environmental Regulations and recommended procedures for Plant Engineering.

Based on review of the report, the following areas of potential concern were identified relating to air quality, water quality, waste materials, and hazardous materials:

- Calculated hydrocarbon emissions from the deadener and zinc primer spray booths exceeded limits specified in associated Permits to Operate (PTOs)/Permits To Install (PTIs)
- No PTO or PTI had been obtained for the tar house located south of the manufacturing building used to heat tar for floor block repairs
- Sulfur content of No. 2 fuel oil had not been tested to verify compliance with regulations
- Testing of specific parameters in water at all outfalls per the recommendations of bulletin WPC-77 had not been performed
- PCB transformers on the roof of the powerhouse were located near a roof drain and small leaks from the transformers were observed
- The diesel AST (associated with fire suppression system) was located near an open storm drain
- Copies of waste haulers and disposal sites licenses were not on file

5.3 IEPR, GMC, APRIL 10, 1981

The GMC Plant Environment Department of EAS conducted an IEPR at the Site dated April 10, 1981. The purpose of the IEPR was to re-evaluate deficiencies identified during a previous review conducted in 1978 and in response to revised regulations and plant conditions since the previous review. The review consisted of records review and plant observations.

Based on review of the report, the following areas of potential concern were identified relating to air quality, water quality, waste materials, and hazardous materials:

- Discharges to the sanitary sewer in the previous November, January, and February exceeded permit and code limitations for oil and grease.
- Not all testing according to Bulletin WPC 81-1 (previously 77-3) had been performed at outfalls.

- Trace concentrations of PCBs had been detected in sewer discharges and not all hydraulic systems fluids had been analyzed to determine the presence of PCBs.
- PCB transformers on the roof of the Power House were located adjacent to roof drains. Based on review of the report, a small leak was observed on one of the transformers.

In a plant disposition letter dated October 15, 1981, the following actions were taken to address the above issues:

- Testing for oil and grease in wastewater was increased and attempts to characterize the oil residue were made. The plant also requested that the City of Wyoming increase the limit to 100 ppm from 50 ppm.
- It was noted that storm sewer and sanitary sewer outfalls that were not being tested (per bulletin WPC 81-1) only received water from employee parking areas and sanitary wastewater from one guard house.
- Seventy-two hydraulic systems were tested for PCBs and no PCBs were detected above laboratory method detection limits. Additionally, waste oil and oily sludge were regularly tested for PCBs and had been below detection limits.
- PCB transformers on the roof of the Power House were replaced.

5.4 INTER-ORGANIZATION MEMORANDUM, GMC, AUGUST 7, 1981

A memorandum was prepared regarding a flood lube leak at HS-5 press dated August 7, 1981. The memorandum included a historical overview of operations and problems associated with HS-5 press. According to the information reviewed, the press was installed in approximately 1973 or 1974. A leak from HS-5 press occurred in March 1979, which leaked into the press pit of an adjacent press (Z-1 press) and a new pan was installed in April or May of 1979. Oil was again observed on the press pit wall in June and July 1981 whenever HS-5 press was operating; therefore, the press was removed in July 1981. At that time, the containment area around the flood lube sump pan was observed to be leaking onto the underlying concrete floor and into cracks in the floor. A section of floor was removed to evaluate the ground surface. Visual and olfactory evidence of impact was observed to at least five feet bgs in the area between HS-5 press and Z-1 press.

5.5 INTER-ORGANIZATION MEMORANDUM, GMC, AUGUST 25, 1981

A memorandum was prepared by GMC, dated August 25, 1981, discussing historical soil boring data reviewed for the Site. According to the memorandum, test borings were advanced at the Site in 1954 and 1977. Boring logs were reviewed in order to understand subsurface conditions and the potential for leaked oil to migrate. Based on review of the data provided from the borings, the following information was obtained and summarized in the memo:

- Soils beneath the Site consisted of medium to fine-grained sand with gravel to a depth of approximately 40 feet bgs. This was underlain by a saturated fine sand situated between layers of silty clay.
- Bedrock was observed between 60 and over 100 feet bgs across the Site. It was suggested that a valley was present in the bedrock running from southeast to northwest across the Site.
- Groundwater appeared to flow generally toward the west across the Site at a rate of two to four feet per day. Groundwater flow along the west side of the plant was to the southwest as indicated by the 1954 borings and changed to the north as indicated by the 1977 borings.
- Groundwater flow, at the time of the memorandum, was suspected to be radial towards the plant due to dewatering activities taking place over several years.

Based on review of the memorandum, GMC concluded it was unlikely that oil leaked to the subsurface had migrated a significant distance; however, current groundwater flow conditions were unknown. It was recommended that monitoring wells be installed across the Site to monitor static water levels and groundwater quality in the upper aquifer.

5.6 HE OF AN OIL LEAKAGE, EDI, DECEMBER 1981

A Hydrogeologic Evaluation (HE) of an Oil Leakage report was prepared for the Site by EDI and dated December 1981.

An oil leak was identified at the Site from the sump pan of press HS-5 in 1979. Approximately 5,500 gallons of water soluble oil was released from the sump to the underlying and adjacent sandy soils. The leak was detected when oil from the release began infiltrating an adjacent press pit. The sump was repaired, and the infiltration ceased. In June 1981, the infiltration resumed and it was determined that the sump pan

containment was releasing the oil to the ground. No information regarding the construction or depth of the sump was available. To investigate the extent of the impact from the releases, a section of the floor in the plant was removed and the underlying soil was examined. Black staining was observed directly beneath the floor, and odors were detected in soil samples collected to a depth of 5 feet bgs. According to individuals associated with the Site, press HS-5 was formerly located at Column B-35 in the plant. Based on the aforementioned information, EDI was contracted to conduct a hydrogeologic investigation.

Available geologic information from the installation of the building foundation indicated that the overburden below the plant consisted of sand to a depth of approximately 40 feet bgs. A silty blue clay layer was present beneath the surficial sand, with interbedded sand and clay layers below the blue clay to bedrock. Bedrock below the plant was identified to vary from 60 to 120 feet bgs. The Michigan formation underlies the glacial overburden. The HE identifies this formation is a fresh water aquifer, and the source of potable water for a City of Wyoming well field, located to the west of the Site, across the Cole Drain. However, later information obtained by CRA from the City of Wyoming indicates that the source of water for the City of Wyoming is currently Lake Michigan. It is unknown if the well field was still in use at the time the HE was prepared. Static water levels in the upper aquifer were reportedly located at approximately 21 feet bgs. The groundwater flow direction in the upper aquifer was anticipated to be to the west, towards the Cole Drain, which was anticipated to act as a discharge boundary for the upper aquifer. Therefore, EDI concluded that potential impacts from the oil release would be to the upper aquifer below the Site, with no potential downgradient receptors.

The SOW for the HE included: the evaluation of the toxicity and degradability of the leaked oil; an analytical scan for phenolic compounds; the collection of soil samples for analysis for grease and oil, and chlorinated paraffin; and the installation of one temporary monitoring well and the collection of groundwater samples for analysis for grease and oil, total organic carbon (TOC), and chlorinated paraffin.

The oil used in the press was Tuf-Draw D-S Compound 21305 and was supplied by the Franklin Oil Company. Based on the review of the material safety data sheet (MSDS) for the product, the constituents of the oil were liquefied paraffin wax, oil soluble petroleum sulfonate, lard oil, ethoxylated alcohols, tri-ethanolamine, and chlorinated paraffin.

A soil boring was installed near the HS-5 press to a depth of approximately 45 feet bgs, to the blue clay layer. A total of 11 soil samples and four groundwater samples were

collected and analyzed for grease and oil, and chlorinated paraffin. In addition, the groundwater samples were analyzed for TOC. Analytical results for grease and oil, and chlorinated paraffins indicated decreasing concentrations with depth in soil. Analytical results for groundwater indicated higher concentrations of grease and oil, and TOC in the sample collected from 40.5 to 43.5 feet bgs. Soil samples were collected from 2-foot split spoon intervals from 0.7 to 2 feet bgs, 2 to 4 feet bgs, 4 to 6 feet bgs, 6 to 8 feet bgs, 8 to 10 feet bgs, 10 to 12 feet bgs, 12 to 14 feet bgs, 14 to 16 feet bgs, 16 to 18 feet bgs, 18 to 20 feet bgs, and 20 to 22 feet bgs. Groundwater grab samples were collected during the installation of the soil boring at 21 to 24 feet bgs, 25.5 to 28.5 feet bgs, and 30.5 to 32.5 feet bgs. The monitoring well was installed with a screen from 40.5 to 43.5 feet bgs and a groundwater sample was collected from the monitoring well. Based on the review of the soil boring/monitoring well construction log, upon completion the monitoring well was covered with a two ½-inch thick, 18-inch by 18-inch steel plate. No information regarding the current status of the well is available and individuals currently associated with the Site were unaware of the former location of the monitoring well.

Based on the results of the HE, EDI provided the following conclusions:

- All of the constituents in the oil are non-toxic, with the exception of the chlorinated paraffins, which are biodegradable. However, a detailed description of the contents of the chlorinated paraffins could not be obtained from the manufacturer.
- Oil has penetrated the unsaturated soils to the water table beneath the Main Manufacturing Building. The highest concentrations were detected in the upper 6 feet of soil. Based on the lack of potential for migration to the groundwater table from precipitation due to the presence of the slab, the soil contamination will naturally degrade without impact to potential receptors beneath the floor of the plant.
- Groundwater does not appear to be impacted by the release; however, TOC and grease and oil were detected in the groundwater sample collected above the clay layer.

Based on the results of the HE, EDI provided the following recommendations:

- Collection of one additional groundwater sample from the monitoring well for grease and oil, and TOC. If analytical results indicate the same levels of grease and oil, and TOC, further analysis for Priority Pollutants is recommended. In addition, EDI recommended that the monitoring well be left in place and screened at the water table.

5.7 GROUNDWATER SAMPLING RESULTS, EDI, JANUARY 12, 1982

A letter was prepared by EDI and dated January 12, 1982 discussing laboratory analytical data for a groundwater sample collected from the monitoring well installed adjacent to HS-5 press. According to the analytical report, the sample was collected from TW1 on December 15, 1981. The sample was analyzed for oil & grease and TOC. Oil & grease was detected at a concentration of 0.4 mg/L, a decrease from the concentration of 20 mg/L detected in a previous sample collected from the same location. TOC was detected at a concentration of 8 mg/L, which remained unchanged from the previous sampling event. According to EDI, the analytical results supported the conclusion made in the December 1981 HE report that no substantial impact to groundwater had occurred as a result of the leak from HS-5 press.

5.8 GROUNDWATER SAMPLING RESULTS, EDI, DECEMBER 23, 1982

A letter was prepared by EDI and dated December 23, 1982 discussing laboratory analytical data for a groundwater sample collected from the monitoring well installed adjacent to HS-5 press on November 9, 1982. The sample was analyzed for Priority Pollutants and no constituents were detected above laboratory method detection limits. According to the letter, no further monitoring at this well location was needed to investigate the oil leak from HS-5 press. It was recommended that the well be removed.

5.9 IEPR, GMC, NOVEMBER 22, 1985

The GM Plant Environment Department of EAS conducted an IEPR at the Site dated November 22, 1985. The purpose of the IEPR was to re-evaluate deficiencies identified during a previous review conducted in April 1981. Site records were reviewed and plant observations were made relating to air quality, water quality, waste materials, and hazardous materials.

Based on review of the report, the following areas of potential concern were identified:

- Zinc exceeded City of Wyoming Order of Determination limits in two of four wastewater samples collected between October 1984 and November 1985.
- 1,1,1-TCA and bis (2-ethylhexyl)phthalate were detected in stormwater samples collected from Outfalls 010 and 011 above the GM Plant Environment recommended

level of 10 ppb. It was recommended that an investigation be conducted to identify and eliminate the source of these chemicals.

- It was noted that wastewater treatment sludge, zinc primer residue, steam clean sump pit sludge, maintenance sump pit sludge, and oil separator sludge should be characterized to determine if any of these waste streams are hazardous waste. If the wastes were considered hazardous, then the Site's SQG status would not be valid.
- Other labeling and record-keeping issues were also identified in the report.

5.10 WATER SAMPLING AND ANALYSIS, EDI, FEBRUARY 14, 1986

Water sampling was conducted on November 13, 1985 and January 13, 1986 from discharge points and dewatering wells in an area under construction at the south end of the plant. The results of the sampling were summarized in a letter prepared by EDI and dated February 14, 1986.

Sampling activities at the dewatering wells and the intermediate discharge points that drained into the stormwater retention basin were conducted at the request of the MDNR.

Dewatering was conducted from five wells, BH-1, BH-2, BH-3, BH-4, and 1, near the edge of the excavation in the southern portion of the building where new building construction was occurring. Water collected from the dewatering wells was collected and discharged to the Baler House discharge point. In addition, the water from dewatering well 1 discharged to the oil storage discharge point. Both the Baler House and oil storage points discharged to the stormwater retention pond.

Water samples were collected on November 13, 1985 from the Baler House and oil storage discharge points and were analyzed for volatile Priority Pollutants. 1,1-DCE and 1,1,1-TCA were detected in the Baler House discharge above the Michigan Act 451, Part 201 (Part 201) Generic Residential Cleanup Criteria (GRCC). PCE and TCE were detected in the Baler House and oil storage discharges above Part 201 GRCC.

Water samples were collected on January 13, 1985 from the dewatering well discharge points BH-1, BH-2, BH-3, and BH-4, the oil storage discharge, and the stormwater retention pond effluent and were analyzed for volatile Priority Pollutants. PCE was detected in the water samples collected from BH-1, BH-2, BH-3, and the oil storage discharge above the Part 201 GRCC. TCE was detected in the groundwater samples collected from BH-1, BH-3, and the oil storage discharge above the Part 201 GRCC.

5.11 HYDROGEOLOGIC INVESTIGATION, EDI, MARCH 1986

A HI was conducted at the Column A-15 excavation at the Site by EDI and was summarized in a report dated March 1986.

An excavation was installed during plant modernization activities in June 1985. The excavation was approximately 20 feet in depth, and was located near Column A-15 of the plant. Soil was removed in particular areas to the water table, where a layer of free product was observed. The free product was believed to consist of mineral spirits. Based on the visual and olfactory presence of contamination, an HI was undertaken by EDI to determine the extent of the oil contamination.

A total of seven monitoring wells, 85-1, 85-2, 85-3, 85-4, 85-5B, 85-6, and 85-7, were installed during the HI in November and December 1985. In addition to the seven monitoring wells installed by EDI in November and December 1985, soil borings 201 through 213 and 304 through 312 were installed in March and April 1985 by Soils and Materials Engineers, Inc. (SME). A copy of a report summarizing the field activities conducted by SME was not available for review. Four of the wells were installed around the excavation, in the northeastern portion of the plant, and three wells were installed outside the plant on the north, northwest, and west sides of the plant. The monitoring wells were installed to monitor the static groundwater levels and the levels of potential free product in select monitoring wells. Free product was observed in monitoring wells 85-3, 85-4, and 85-5B. Groundwater flow was determined to be to the north-northwest in the monitoring wells, towards Cole Drain and Plaster Creek. Geology and hydrogeology at the Site were investigated during the HI. Based on the HI, the plant is underlain by glacial outwash sediments comprised of sand and gravelly sand.

Groundwater samples were collected from each of the monitoring wells for laboratory analysis for Priority Pollutants. Based on the analytical results, TCE was detected in groundwater samples collected from monitoring wells 85-2 and 85-7 above the Part 201 GRCC. Fluoranthene, fluorene, phenanthrene, and pyrene were detected in the groundwater sample collected from monitoring well 85-3 above the Part 201 GRCC. No other parameters were detected above the Part 201 GRCC; however, trans-1,2-DCE, toluene, 1,1-DCA, PCE, 1,1,1-TCA, naphthalene, bis(2-ethylhexyl) phthalate, and di-n-butyl phthalate were identified above the laboratory method detection limits.

Based on attached correspondence dated February 24, 1986, as of February 13, 1986, 2,670 tons of potentially contaminated soil had been removed from the Column A-15 area for off-Site disposal and it was estimated that 12,000 tons of soil still needed to be removed from the Steel Stores area. Processes similar to those used at Column A-15 were also used in this area.

Based on the results of the HI, EDI provided the following recommendations:

- The collection of groundwater samples on a semi-annual basis and analyzed for Priority Pollutant volatiles in all monitoring wells, and for Priority Pollutant base neutrals in monitoring wells 85-3, 85-4, and 85-5B
- Monitoring should be reduced to detected constituents only after 1 year
- The installation of four additional monitoring wells along the north side of the plant and the collection of groundwater samples for Priority Pollutants
- The installation of one additional well adjacent to 85-7 for the detection of TCE
- The installation of a nested well series comprised of two wells, one well set to straddle the water table and one well set on top of the clay layer, near the north end of the plant downgradient of 85-7

5.12 PHASE II HI, EDI, JUNE 1986

A Phase II HI was conducted at the Site by EDI and was summarized in a report dated June 1986.

The MDNR reviewed the previous HI report prepared by EDI. The work plan for the Phase II HI report incorporated MDNR's comments received by GM in a letter dated April 2, 1986.

The purpose of the Phase II HI was to determine the source of the TCE contamination identified during the HI in monitoring well 85-7, if the TCE contamination was limited to the Site, and to identify if the oil identified in the excavation near Column A-15 had migrated downgradient to the edge of the plant.

The Phase II HI indicated that historical plant records identified a former parts cleaner station near Column T-27. Records indicated that the parts cleaner was installed in 1953, removed in 1979, and utilized TCE as a degreaser. One monitoring well, 86-2, was installed near the former parts cleaner station location. Six soil and three groundwater

samples were collected during the installation of 86-2 for vertical definition of contamination in the suspected source area for analysis for TCE. TCE was detected in the soil sample collected from 86-2 (at 24 to 25.5 feet bgs) above Part 201 GRCC. TCE was detected in the groundwater samples collected from 86-2 (at 30 to 33 feet bgs, at 40 to 43 feet bgs, and 45 to 48 feet bgs) above the Part 201 GRCC. TCE was not identified in any other groundwater samples above the applicable Michigan Act 451, Part 201 GRCC.

One monitoring well, 86-3, was installed to investigate the contamination at the downgradient boundary of the Site. Six groundwater samples were collected during installation from monitoring well 86-3 for analysis for TCE. TCE was detected in all of the groundwater samples collected from monitoring well 86-3 (at 21 to 24 feet bgs, 34 to 36 feet bgs, 44 to 46 feet bgs, 53 to 55 feet bgs, 63 to 65 feet bgs, and 64 to 69 feet bgs) above the Part 201 GRCC. TCE was not identified in any other groundwater samples above the Part 201 GRCC.

One monitoring well, 86-1, was installed to determine if the oil observed near the excavation at Column A-15 has migrated downgradient. Six soil samples and three groundwater samples were collected during the installation of 86-1. TCE was not reported to be detected in soil or groundwater samples at concentrations above the Part 201 GRCC.

In addition, a total of eight groundwater samples were collected from each of the on-Site monitoring wells, 85-1, 85-2, 85-3, 85-6, 85-7, 86-1, 86-2, and 86-3, for analysis for Priority Pollutant volatiles. TCE was detected in the groundwater samples collected from monitoring wells 85-2, 85-7, and 86-3 above the Part 201 GRCC. TCE was also detected in the groundwater sample collected from monitoring well 86-2 above the Part 201 Residential GRCC. PCE was detected in the groundwater samples collected from monitoring wells 85-6 and 86-2 above the Part 201 GRCC. No other parameters were identified above the Part 201 GRCC; however, 1,1,1-TCA, trans-1,2-DCE, 1,1-DCE, and chloroform were detected in the groundwater samples above laboratory method detection limits.

In addition to the installation of monitoring wells, field activities included a city water search for potential downgradient off-Site receptors (i.e., private water supply wells). The City of Wyoming was contacted by ET to obtain a list of the residences that were connected to the municipal water supply immediately downgradient of the Site. Locations of residences searched included those located on Hillcroft, Birchwood, Buchanan, 34th and 35th Streets. Based on the results of the search, a survey

was further conducted for field verification of addresses not appearing on the City of Wyoming provided list. The results of the search indicated that three wells were present within a mile radius of the Site. One well, located approximately three-quarters of a mile north of the Site, was identified to be utilized for commercial purposes. The other two wells are located upgradient of the Site, approximately one half-mile southwest of the Site. The remainder of the properties appeared to be connected to the City of Wyoming municipal water supply at the time of the search.

Static water levels were collected from the monitoring wells on May 5, 1986 in order to determine the groundwater flow direction and velocity. The groundwater flow direction was determined to be north, the hydraulic gradient was calculated to be 6.9 ft/mile, and the groundwater flow velocity was calculated to be between 0.089 to 1.01 ft/day. In-situ tests were conducted at select wells to determine the hydraulic conductivity of the upper groundwater unit.

Based on the results of the Phase II HI, TCE concentrations were highest in the vicinity of the suspected source area, the former parts cleaner. In addition, elevated levels of TCE were identified in the groundwater samples collected from the monitoring well located on the northern portion of the Site.

5.13 CORRESPONDENCE, GMC & MDNR, OCTOBER-NOVEMBER, 1986

A letter was issued to the Site by the MDNR dated October 2, 1986. The letter confirmed details of a September 12, 1986 meeting between the two parties discussing the results of the Phase II HI and further investigation and remediation activities.

According to the letter, GMC proposed the following investigative and remedial actions related to the TCE release identified during the Phase II HI:

- Installation of air purge and vacuum recovery wells in the TCE source area
- Use of the air purge and vacuum recovery wells in a pilot study to remove TCE from soil and groundwater in-situ
- Delineate the plume along the northern Site boundary using soil gas and monitoring wells
- Sample collection from Cole Drain for analysis of TCE

A Work Plan and implementation schedule were to be submitted to the MDNR by October 17, 1986. The letter also indicated that GMC would be required to document the extent of off-Site TCE contamination.

According to a separate letter available for review, the Work Plan for the Phase III HI and remediation strategy was submitted to the MDNR on October 14, 1986. According to the letter, the Work Plan also included the investigation of two other potential degreaser locations that were believed to be present in the late 1940s and early 1950s.

The MDNR reviewed the Phase III Work Plan as discussed in correspondence to GM dated November 14, 1986. According to the letter, the Work Plan was tentatively approved pending a schedule for implementation was submitted to the MDNR. The letter also noted that the locations of former degreasing operations had been identified since the Phase III HI Work Plan was submitted. It was stated that a separate Work Plan to investigate these areas was not required pending that procedures followed those approved in the Phase II HI Work Plan and that results could be incorporated into the Phase III HI report.

5.14 PHASE III-A HI, EDI, MARCH 1987

A Phase III-A HI was conducted at the Site by EDI and was summarized in a report dated March 1987.

The purpose of the Phase III-A HI was to delineate the extent of TCE contamination in soil and groundwater at the Site.

Soil vapor samples were collected from below the plant floor in three areas (Column T-27, Column O-44, and Column RS-9) and along the south side of 36th Street. A total of 50 soil vapor samples were collected for analysis for TCE. Elevated levels of TCE were identified in soil vapor samples collected from the area near Column T-27. Based on the results of the Phase III-A HI, EDI determined that the extent of the soil vapor contamination had been defined and was sufficient for removal utilizing soil vapor extraction.

A total of five soil borings/monitoring wells, 87-1, 87-2, 87-3, 87-4, and 87-5, were installed during the Phase III-A HI. A total of 25 soil and 16 groundwater samples were collected during the Phase III-A HI. Soil and discrete groundwater samples were analyzed for TCE. Groundwater samples collected from monitoring wells were

analyzed for volatile, acid, and base neutral Priority Pollutants, hardness, pH, iron, and grease and oil. TCE was identified in the soil samples collected from soil boring 87-3 (at 14 to 15.5 feet bgs and 18 to 19.5 feet bgs) above the Part 201 GRCC. TCE was not detected in any other soil samples above the Part 201 GRCC. TCE was identified in the discrete groundwater samples collected from soil borings 87-1 (at 25 to 28 feet bgs, 34.5 to 37.5 feet bgs, and 43.5 to 46.5 feet bgs), 87-2 (at 25 to 28.5 feet bgs, 35 to 38.5 feet bgs, and 43 to 46 feet bgs), 87-4 (at 22.3 to 24.3 feet bgs and 32 to 35 feet bgs), and 87-5 (at 22 to 24 feet bgs, 31 to 34 feet bgs, 41 to 44 feet bgs, and 51 to 54 feet bgs) above the Part 201 GRCC. TCE was identified in the discrete groundwater samples collected from monitoring wells 87-1, 87-2, and 87-5 above the Part 201 GRCC. TCE was detected in the groundwater sample collected from monitoring well 86-2 above the Part 201 GRCC. TCE was detected in the groundwater samples collected from monitoring wells 87-1, 87-2, 87-4, and 87-5 above the Part 201 GRCC. Bis-2-ethyl hexyl phthalate was detected in groundwater samples collected from monitoring wells 86-2, 87-2, and 87-4 above the Part 201 GRCC. No other parameters were identified in the soil or groundwater samples above the Part 201 GRCC.

Static water levels were collected on two occasions during the implementation of the Phase III-A HI. Groundwater flow direction was determined to be to the north-northwest, which was consistent with previous groundwater flow calculations. The groundwater flow velocity and gradient were observed to be consistent with previous calculations.

The wells installed in the source area were constructed for use in vapor recovery. Wells 87-1, 87-2, 87-4, and 87-5 were installed with 10-foot screens in the vadose zone for the removal for vapors. Based on the results of the soil vapor sampling conducted during the Phase III-A HI and the installation of the soil vapor wells, EDI recommended a work plan for soil vapor extraction.

5.15 PHASE III-B HI, EDI, JULY 1987

A Phase III-B HI was conducted at the Site by EDI and was summarized in a report dated July 1987.

The purpose of the Phase III-B HI was to determine the potential impact of the TCE plume on the water quality of the Cole Drain, to determine the width of the plume on the northern portion of the Site, and to obtain information about the aquifer characteristics on the northern portion of the Site.

Soil vapor samples were collected along the south side of 36th Street to determine the locations for two additional monitoring well installations. The results of the soil vapor sample collection identified that the TCE plume was present 400 feet east and 300 feet west of monitoring well 85-7. Based on the results of the soil vapor sampling, two additional monitoring wells, 87-8 and 87-9 were installed to the east and west of current monitoring well 86-3.

Seven surface water samples were collected from Cole Drain and analyzed for Priority Pollutant volatiles. Low, uniform levels of TCE were identified near the stormwater pond outfall, as well as upgradient and downgradient of the outfall location. It should be noted that PCE was identified at a concentration of 11 µg/L in the surface water sample collected from the Cole Drain adjacent to Clay Avenue, located upstream of the Site.

Five groundwater samples were collected during the installation of monitoring well 87-8 and seven groundwater samples were collected during the installation of monitoring well 87-9 for analysis for TCE. TCE was identified in the groundwater samples collected from monitoring wells 87-8 (at 18.7 to 19.7 feet bgs, 28 to 31 feet bgs, and 58 to 61 feet bgs) and 87-9 (at 16 to 17.5 feet bgs, 22 to 25 feet bgs, 32 to 35 feet bgs, 41 to 44 feet bgs, 52 to 55 feet bgs, and 62 to 65 feet bgs) above the Part 201 GRCC.

In addition, a total of four groundwater samples were collected from monitoring wells 85-7, 86-3, 87-8 and 87-9 for analysis for grease and oil, total iron, hardness, pH, and Priority Pollutants. TCE was detected in monitoring wells 85-7, 87-8, and 87-9 above the Part 201 GRCC. TCE was detected in monitoring well 86-3 above the Part 201 GRCC. Bis-2(ethylhexyl) phthalate was detected in monitoring well 85-7 above the Part 201 GRCC. Butyl benzyl phthalate was detected in monitoring well 86-3 above the Part 201 GRCC. No other parameters were reported to be detected above the Part 201 GRCC.
The average hydraulic conductivity across the Site was calculated to be 149 ft/day, with a hydraulic gradient of 7.2 ft/mile. Porosity at the Site was estimated to be 25%, with an estimated velocity of 0.8 ft/day.

Based on the results of the Phase III-B HI, the core of the plume was approximately 300 feet wide on the north Site boundary. The plume had traveled approximately 1,200 feet from the suspected source area; however, due to the lack of information regarding the date of the release, the extent of off-Site migration could not be speculated. In addition, the Phase III-B HI included a work plan scope of work for the recommended next phase of work.

5.16 CORRESPONDENCE, GMC & MDNR, JUNE 15, 1987 AND OCTOBER 14, 1987

A letter was issued to the Site by the MNDR dated June 15, 1987. The letter confirmed details of a June 11, 1987 meeting between the two parties discussing the results of the Phase III-A HI and remediation activities.

According to the letter, the Site was granted verbal approval to initiate a soil vapor recovery pilot study. Pump testing was also set to begin in relation to groundwater purge activities at well 87-5.

The preliminary findings of the Phase III-B HI were also discussed at the June 11, 1987 meeting and according to the letter, the lateral extent of the TCE plume along the northern Site boundary had been defined. Furthermore, water samples collected from Cole Drain, upstream and downstream of the Site, exhibited similar concentrations.

Based on review of correspondence dated October 14, 1987, the MDNR approved the findings of the Phase III-B HI report with no additional comments or recommendations. According to the letter, verbal approval had been given to the Site to initiate a soil gas study and install five additional wells at the Site.

5.17 PHASE IV-A PILOT STUDY, EDI, AUGUST 1988

A Phase IV-A Soil Vapor Pilot Study (Pilot Study) was conducted at the Site by EDI and was summarized in a report dated August 1988.

The purpose of the Pilot Study was to develop the required data to design a remediation system.

Eight ½-inch probes, P1 through P8, were installed in the general vicinity of the vapor recovery well, 87-3. P1 was installed to a depth of 10 feet bgs and P2 through P8 were installed to a depth of 15 feet bgs. Three day trial runs were conducted on the probes at air flows of 38, 52, and 110 cubic feet per minute. In addition, a 30 day trial run at 110 cubic feet per minute was conducted separately after reviewing the results of the three initial trials.

Based on the results of the Pilot Study, EDI provided the following conclusions:

- The upper portion of the soil vapor extraction well screen should be blanked off to enhance the rate of TCE recovery
- An air flow rate of 100 cubic feet per minute (cfm) is sufficient for removing the TCE from the soils and no economic advantage is gained by increasing the air flow above 100 cfm
- Based on the available data, an asymptotic concentration of TCE or the anticipated duration of the TCE removal could not be determined
- Based on the available data, a PTI application could be submitted to the MDNR to propose operation of an SVE system

5.18 PHASE IV-B HI, EDI, JULY 1988

A Phase IV-B HI was conducted at the Site by EDI and was summarized in a report dated July 1988.

The purpose of the Phase IV-B HI was to determine the potential for removal of TCE from the groundwater and the control of groundwater flow in the source area for future source migration to groundwater.

Formation characteristics in the vicinity of monitoring wells 86-2, 87-1, 87-4, and 87-5 were determined through a pump test. In addition, the pump test was utilized to determine a potential location for a treatment system extraction well.

Pumping tests conducted on monitoring well 87-5, previously installed with the intention of use as a purge well, indicated that the yield of the monitoring well was too low to use as a purge well.

Pumping tests conducted on monitoring well 86-2 indicated that the yield was sufficient. In addition, monitoring well 86-2 is located near the source area. Based on pumping tests, the capture zone for monitoring well 86-2 is approximately 20,000 square feet. Based on this calculation, it would take 80 days to remove one capture zone volume of water.

Monitoring wells 87-1 and 87-4 are located to the east and west of the source area and are screened across the vadose zone for use with the SVE system, as well as screening in the saturated zone. Based on the configuration of these wells, the use of these wells for

purging purposes would not be optimal. In addition, the yield of the wells was determined during pumping tests to be too low to use as a purge well.

Based on the results of the Phase IV-B HI, EDI provided the following conclusions:

- Monitoring well 87-5 cannot be utilized as a purge well due to low yield
- Monitoring well 86-2 should be utilized as a purge well due to sufficient yield
- The zone of influence of monitoring well 86-2 includes a large portion of the source area

Based on the results of the Phase IV-B HI, EDI provided the following recommendations:

- Installation of a shallow well pump in monitoring well 86-2 to recover impacted groundwater
- Treatment of groundwater either through steam stripping or aqueous carbon adsorption
- Discharge of the treated water to the sanitary or storm sewer
- Evaluation of the performance of the groundwater recovery system during the first month of operation to determine the effectiveness of the system and estimate groundwater TCE concentration trends
- Installation of two additional shallow monitoring wells in the source area if the cone of depression for monitoring well 86-2 cannot be determined

5.19 PHASE IV-C HI, EDI, JULY 1988

A Phase IV-C HI was conducted at the Site by EDI and was summarized in a report dated July 1988.

The purpose of the Phase IV-C HI was to define the horizontal and vertical extent of the off-Site contamination for TCE and the applicable degradation products, determine the groundwater flow direction and velocity in the plume area, and determine the relationship between Cole Drain and the aquifer.

A soil gas survey was conducted within the area bounded by 36th Street to the south, Buchanan Avenue to the east, US 131 to the west, and 32nd Street to the north to

determine potential soil boring locations. Three lines of sampling were conducted near the north Site boundary, northwest of the Site, and north of the Site. Soil gas sampling was terminated after the completion of the three lines of sampling, due to the fact that TCE was not detected in any of the samples collected from those lines.

Nine soil borings, 87-10, 87-11, 87-12, 87-13, 88-1, 88-2, 882D, 88-3, and 88-4 were installed in the area north of the Site, including five soil borings installed along the west side of Cole Drain. Soil borings 88-1, 88-2, 88-2D, 88-3, and 88-4 were installed in the right-of-way on Consumers Energy property. Groundwater samples were collected during the installation of all soil borings from temporary wells at 10-foot intervals. A total of 43 groundwater samples were collected for analysis for trans-1,2-DCE, TCE, and vinyl chloride (VC). TCE was detected in the groundwater samples collected from monitoring wells 87-10 (at 19.5 to 22.5 feet bgs, 29 to 32 feet bgs, 38.5 to 41.5 feet bgs, 48 to 51 feet bgs, and 58 to 61 feet bgs), 87-11 (at 36.4 to 39.4 feet bgs and 48 to 51 feet bgs), and 87-13 (at 20 to 23 feet bgs, 30 to 33 feet bgs, and 40 to 43 feet bgs) above the Part 201 GRCC. In addition, TCE was detected in the groundwater sample collected from monitoring well 87-11 (at 28 to 31 feet bgs) above the Part 201 GRCC.

Seven monitoring wells, 87-10, 87-11, 87-13, 88-1, 88-2, 88-3, and 88-4, were installed at the Site. Monitoring wells 88-1, 88-2, 88-3, and 88-4 were installed in the right-of-way on Consumers Energy property. Groundwater samples were collected from the new monitoring wells and from monitoring wells for 86-3, 87-8, and 87-9 for analysis for volatiles. TCE was detected in the groundwater samples collected from monitoring wells 86-3, 87-8, 87-10, and 87-13 above the Part 201 GRCC. In addition, TCE was detected in the groundwater sample collected from 87-11 above the Part 201 GRCC.

Three surface water samples were collected from the Cole Drain. Surface water samples were analyzed for TCE. TCE was not detected in any of the surface water samples above the Part 201 GRCC.

Groundwater flow direction was determined by EDI to be towards the northeast west of Cole Drain and towards the northwest to the east of the Cole Drain (i.e., towards the Cole Drain).

Based on the results of the Phase IV-C HI, EDI provided the following conclusions beyond those identified in the Phase IV-B HI:

- The plume flows northwest upon exiting the Site with a final discharge into Cole Drain near monitoring well 87-11

- The plume does not flow past the Cole Drain to the west and groundwater converges toward the Cole Drain
- TCE levels identified in Cole Drain vary
- The relatively low levels of TCE in the Cole Drain samples is indicative that TCE levels are being diluted upon entering the Drain
- Under the assumption that the plume developed 9 years ago, the plume would have reached the Cole Drain
- Approximately 35 to 40 gallons per minute of groundwater with low levels of TCE is estimated to be migrating north of the Site property line

5.20 TCE RMP, EDI, MARCH 1989

A TCE RMP report was prepared by EDI dated March 1989.

The RMP includes the scope for groundwater monitoring and surface water sampling from Cole Drain.

The groundwater monitoring includes hydraulic monitoring in 22 monitoring wells and 2 purge wells. Hydraulic monitoring will be conducted on a quarterly basis. Groundwater samples were identified to be collected on a monthly basis from 85-7, 86-3, 87-1, 87-2, 87-4, 87-5, 87-8, 87-9, 87-10, 87-11, and 87-13, and the purge well discharge for analysis for TCE, cis-1,2-DCE, and trans-1,2-DCE. Groundwater samples from monitoring wells 86-3, 87-8, 87-9, 87-10, 87-11, and 87-13 and the purge well discharge will also be analyzed for 1,1-DCE and VC during the fourth quarter. Beginning in 1989, the purge well discharge was to be monitored monthly. Purge well 86-2 and the monitoring well at X-10 will be analyzed on a monthly basis for TCE.

In addition to the groundwater monitoring, surface water monitoring will be conducted in the Cole Drain. Sampling would be conducted at three locations on a quarterly basis for analysis for TCE, cis-1,2-DCE, and trans-1,2-DCE. In addition, water levels will be collected on a monthly basis from the Cole Drain.

Soil vapor recovery monitoring will be conducted at the Site. Air flow readings will be collected on a monthly basis to verify that the vacuum well is steady. Air samples will be collected on a monthly basis for TCE. In addition, pressure readings and the air flow rate will be determined each month. Soil vapor samples will be collected from the influent and effluent for analysis for TCE on a quarterly basis.

Quarterly results will be summarized in a report for submittal to the MDNR within 60 days after sampling events.

5.21 AVAILABLE INFORMATION ON 1,1,1-TCA, EDI, SEPTEMBER 6, 1989

A letter regarding available information on 1,1,1-TCA detected in historical water samples collected at the Site prepared by EDI and dated September 6, 1989. The letter appeared to have been prompted by then recent (June 1989) detections of 1,1,1-TCA in samples collected from temporary wells set at Column X-10 between 40 and 63 feet bgs. Based on review of the report, 1,1,1-TCA was also detected above method detection limits in groundwater samples collected from 85-4 and 85-5B in 1985; 85-3, 85-7, 86-2, 86-3, dewatering wells BH-1 through BH-4, and the conveyor drain sump in 1986; and in 86-3 and the retention pond inlet and outlet in 1987.

The source of 1,1,1-TCA was unknown and it was identified by EDI that is could have been from an off-Site source.

5.22 TCE EMISSION TESTING, EDI, SEPTEMBER 21, 1989

A TCE Emission Testing (ET) report was prepared by EDI dated September 21, 1989. The ET report was prepared for the SVE system exhaust.

The purpose of the ET was to determine compliance with the conditions set forth on the MDNR PTI No. 92-88.

Based on the results of the TCE emission testing, TCE was non-detect at a detection limit of 0.0017 mg/m3 for the three samples collected, which is below the permitted limit of 16.0 mg/m3.

5.23 OFF-SITE GROUNDWATER PURGE EVALUATION, WW ENGINEERING & SCIENCE, APRIL 1993

An Off-Site Groundwater Purge Evaluation (Evaluation) was prepared by WW Engineering & Science dated April 1993.

A combination system was installed in 1989 to remediate the chlorinated compounds plume at the Site. The remediation system consisted of a SVE system for the removal of vapors from the vadose zone and two purge groundwater wells for removal of contaminated groundwater. Both systems discharged to two activated carbon treatment systems consisting of two carbon tanks per system. The treated air was discharged to the outdoors via a roof stack and the treated groundwater was discharged to the on-Site stormwater retention pond and eventually to Cole Drain. The plume discharged to Cole Drain beyond the treatment system; however, the drain had been monitored during operations and maintenance activities and no adverse impact to the water quality of the drain had been identified.

The purpose of the Evaluation was to determine the capture and effectiveness of an off-Site treatment purge well. Three scenarios were assessed during the Evaluation: the purging scenario in effect at the time of the report, an additional purging well near Cole Drain at C-3 and monitoring well 87-11 at a pumping rate of 10 gallons per minute (gpm) and at 40 gpm.

A contaminant transport model and a groundwater flow model were utilized to determine the simulated Site-specific conditions. Based on the results of the modeling, scenario outputs were computed for December 1997, December 2002, and December 2007.

Based on the results of the Evaluation, WW Engineering & Science provided the following conclusions:

- The purge well in the north parking lot (PW-DISCH) was preventing the off-Site migration of TCE from beyond the Site boundary. Plume progress beyond PW-DISCH could not be identified from historic data because of the off-Site monitoring well configuration.
- An off-Site purge well would reduce the TCE contamination in the vicinity of monitoring well 87-11; however, modeling had indicated that the additional purge well would not significantly decrease the duration of the clean up.
- Modeling indicated that off-Site purging at 40 gpm had the potential for the contaminants to bypass PW-DISCH.
- Between 7.5 and 11 pounds of contaminant mass was modeled to be collected by the additional purge well.

- Modeling indicated that the installation of the additional purge well would not increase the clean up rate and that the TCE plume in the off-Site area would be remediated within a reasonable time frame (approximately 10 to 15 years).
- Cost analysis indicated that the costs associated with the additional well would be approximately $50,000 per pound of TCE.
- Access would have to be obtained from off-Site property owners.

5.24 ADDENDUM TO THE MAY 1993 GEOTECHNICAL REPORT, WW ENGINEERING, JUNE 17, 1993

An addendum to a May 1993 Geotechnical Report for the investigation of the proposed 13-Bay area press pit was prepared by WW Engineering & Science and dated June 17, 1993. The May 1993 report was not available for review by CRA.

According to the addendum report, soil samples were collected in the area of 13-Bay for characterization purposes. A total of five soil borings (SB-1 through SB-5) were advanced in the central portion of the plant between C-30/32 and L-30/32. Excavation activities were planned in the 13-Bay area for a proposed press pit. The characterization data was collected for soil disposal purposes.

According to the addendum report, a composite soil sample was collected from boring locations SB-1 and SB-2. TCE was reportedly detected in the sample at a concentration of 120 ppb; however, it was not detected in the TCLP leachate. Barium, copper, and zinc were detected in the TCLP leachate from the composite soil sample below regulatory limits for disposal.

The report further discussed PID readings from soil samples collected from all five soil borings advanced during the investigation. PID readings were summarized in a table included in the addendum report. According to the table, the highest reading (2,000 ppm) was detected in the sample collected between 30 and 31.5 feet bgs at SB-1.

5.25 17-BAY SOIL AND GROUNDWATER SAMPLING, EARTH TECH, OCTOBER 27, 1998

Soil and groundwater samples were collected and analyzed in the 17-Bay area of the plant (C-38 to M-41) for characterization purposes. Excavation activities were planned in this area to set a foundation for new equipment.

According to the report, 14 soil borings (17-1 through 17-14) were advanced between August 3, 1998 and August 12, 1998. A composite soil sample was collected from each boring and analyzed for inorganic parameters, VOCs, PCBs, SVOCs, metals, and pesticides. Four of the soil samples (17-1, 17-3, 17-12, and 17-14) were also analyzed for hazardous waste characterization parameters, TCLP VOCs, TCLP SVOCs, TCLP metals, ignitability, corrosivity, and reactivity. Additionally, groundwater samples were collected from two of the soil borings (17-5 and 17-10A) and analyzed for VOCs.

Analytical data were compared to GM Inert Guideline Criteria and Part 201 GRCC. Fluoride exceeded Part 201 Groundwater Protection Criteria and GM Criteria in the soil samples collected from nine of the boring locations. Furthermore, selenium also exceeded the GM Criteria and the Part 201 State Default Background Level (SDBL) in soil from eight of the boring locations.

Acetone, TCE, ethylbenzene, xylenes, bis(2-ethyl hexyl) phthalate, chrysene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno (1,2,3-cd)pyrene, phenanthrene, pyrene, aluminum, arsenic, barium, calcium, chromium, cobalt, copper, iron, lead, manganese, nickel, silver, vanadium, and zinc were also detected in select soil samples above laboratory method detection limits but below Part 201 GRCC. TCE, bis(2-ethyl hexyl) phthalate, phenanthrene, fluoranthene, chrysene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno (1,2,3-cd) pyrene, aluminium, arsenic, copper, iron, lead, manganese, nickel, silver, and zinc were detected in one or more soil samples above the GM Criteria.

Cis-1,2-DCE and TCE were detected in the groundwater sample collected from the temporary well set at 17-5 above laboratory method detection limits, with TCE detected at a concentration above the Part 201 GRCC. Toluene was detected above laboratory method detection limits, but below the Part 201 GRCC in the groundwater sample collected from 17-10A.

According to the report, the four samples collected for waste characterization analysis did not display any characteristics of hazardous waste; therefore, excavated soils were deemed suitable for disposal at another GM Site or in a Type II landfill.

5.26 ABANDONMENT OF MONITORING WELL X-10, GMC, FEBRUARY 23, 1998

Correspondence regarding the abandonment of monitoring well X-10 was prepared by GMC and submitted to the DNRE on February 23, 1998.

Monitoring well X-10 was installed at the Site in June 1989 with a screened interval from 35 to 45 feet bgs as part of the TCE remediation program implemented to address concentrations of VOCs in groundwater at the Site above the Part 201 GRCC. The location for X-10 was selected as a point between the source area at purge well 86-2 and the purge well in the northern parking lot, PW-DISCH. TCE was not detected in groundwater samples collected from X-10; however, 1,1,1-TCA was detected at concentrations above the Part 201 GRCC. Subsequent monitoring in this location identified a reduced concentration trend of 1,1,1-TCA in this well, and both 1,1,1-TCA and TCE were near non-detect in this well at the time of abandonment.

The well was abandoned in place by cutting the casing off four feet below the bottom of the press pit, grouting the casing, and filling the remainder of the annulus with natural soils.

5.27 NOTICE OF MIGRATION OF CONTAMINATION, GMC, JUNE 9, 1999

A Notice of Migration of Contamination (1999 Notice) was submitted to the DNRE by GMC on June 9, 1999. The 1999 Notice was submitted for exceedances of Part 201 GRCC in groundwater of TCE and cis-1,2-DCE.

5.28 20-BAY SOIL AND GROUNDWATER SAMPLING, EARTH TECH, MARCH 3, 1999

Soil and groundwater samples were collected in the location of a press scrap conveyor trench in the 20-Bay area of the plant (F-44 to I-44) for characterization purposes. Excavation and dewatering activities were planned in this area.

According to the report, three soil borings (SB-1 through SB-3) were advanced on February 2, 1999 and February 3, 1999. Two of the soil borings (SB-1 and SB-3) were converted to temporary monitoring wells (TW-1 and TW-2). A composite soil sample was collected from each boring and analyzed for PCBs and hazardous waste

characterization parameters, TCLP VOCs, TCLP SVOCs, TCLP metals, ignitability, corrosivity, and reactivity. The groundwater samples were analyzed for VOCs.

Based on review of the report, TCE was detected in the groundwater sample collected from TW-1 above laboratory method detection limits, but below Part 201 GRCC. None of the other parameters were detected above laboratory method detection limits. Based on the analytical data for groundwater, it was concluded that output from the de-watering system was likely to meet City of Wyoming discharge standards for TCE. Based on the waste characterization analysis of the soil samples collected, the soil in the excavation area was deemed suitable for disposal in a Type II landfill. No PCBs were detected in soil above laboratory method detection limits.

5.29 DOCUMENTATION OF COMPLIANCE WITH SECTION 20107A, CRA, JANUARY 2002

Documentation of Compliance with Section 20107a of Part 201 of Michigan Act 451 Pursuant to Administrative Rule 1003(4)(a) was prepared by CRA and dated January 2002.

The Site was listed on the Part 201 Contaminated Sites List based on known VOC and SVOC impacted soil and/or groundwater at the Site at levels above Part 201 GRCC. As such, the Site was deemed a "facility" pursuant to Act 451, Part 201.

The report provided a review of potentially pertinent exposure pathways for the Site. According to the report, all potential pathways for the Site were eliminated in relationship to response activities with the exception of 'groundwater contamination risk for indoor air hazards' and 'groundwater contamination risk from dermal exposure.' These pathways were related to SVOC exceedances in monitoring well 85-3 and TCE exceedances in monitoring well 86-2 for groundwater samples collected in 1986. Current concentrations of these compounds from the October 2009 groundwater monitoring activities did not identify exceedances of these pathways currently.

These exposure pathways were identified upon re-evaluation of available historical environmental investigation documentation for the Site. Based on the minimal number of SVOCs detected at elevated concentrations in the groundwater from limited sized area, it was not expected that the minimal number of SVOCs were present at unacceptable levels. In addition, it was believed that the concentrations of SVOCs likely decreased over time to acceptable levels through natural attenuation processes.

Nevertheless, response activities to eliminate potential exposure pathways were proposed. Response activities included conducting groundwater sampling of existing monitoring wells in the vicinity of the historical contamination to evaluate current risk levels. These response activities were to be conducted by GM to eliminate potential unacceptable exposure to hazardous substances and/or exacerbation of existing identified contamination.

5.30 EVALUATION OF GROUNDWATER AND SVE TREATMENT SYSTEMS, CRA, AUGUST 13, 2002

CRA prepared a memorandum regarding Evaluation of Groundwater and Soil Vapor Extraction Treatment Systems dated August 13, 2002.

The purpose of the memorandum was to provide the results of a preliminary evaluation of the groundwater extraction (GWE) and SVE treatment systems at the Site to address the presence of chlorinated compounds in Site soil and groundwater. The evaluation was undertaken by review of existing information and analytical data for the chlorinated compounds, primarily TCE, to meet the following objectives:

1. Establish historical analytical data trends.
2. Evaluate historical performance to verify the adequacy of the treatment systems' design.
3. Identify whether the existing systems should be maintained, abandoned or upgraded and recommend improvements to current systems, if applicable.
4. Discuss potential alternatives.

According to the report, analytical data trends were evaluated for TCE in the SVE system influent, in the GWE system pumping wells, and in the groundwater monitoring wells located throughout the Site and downgradient of the Site. Based on review of the available current and historical data for the Site at the time of the evaluation, the following observations were reported:

- SVE system data indicated that TCE concentrations in the SVE influent had consistently decreased since initial operation of the SVE system and that SVE influent concentrations remained steady at very low concentrations for approximately 10 years.

- SVE historical data indicated that the SVE system had removed and treated significant TCE mass from soil vapor; however, the SVE system had not been capturing significant TCE mass for approximately 10 years due to having reached steady state as is typical of such systems.
- TCE concentration trends in groundwater collected at the GWE system influent and at groundwater quality monitoring wells indicated that TCE concentrations have steadily decreased or remained stable since the initiation of GWE and treatment at the Site.
- TCE concentrations in the GWE influent streams remained stable and relatively low for approximately 5 to 8 years.
- TCE and 1,2-DCE concentrations in downgradient monitoring wells generally decreased along the groundwater flow path, with the exception of high TCE concentrations detected in 87-10 and 87-11.
- PCE and 1,1,1-TCA had historically been detected in Site groundwater and may have been Site-related contaminants; however, there was insufficient monitoring data to determine spatial or temporal concentration trends for PCE and 1,1,1-TCA.
- Groundwater quality data indicated that natural attenuation processes, including biodegradation, could be contributing significantly to the attenuation of TCE in Site groundwater.

Based on these findings, the following recommendations were made:

- Based on the long-term evidence of steady-state function and very low TCE concentrations in the SVE system influent, it is appropriate to consider decommissioning of the SVE system at this time.
- Based on the steady-state function of the GWE system and relatively low concentrations of TCE in the GWE system influent it is recommended that alternatives to the GWE system be considered, such as monitored natural attenuation and/or enhanced in situ remediation, including bioremediation.
- It is recommended that the source, nature and extent of PCE and 1,1,1-TCA previously detected in Site groundwater be investigated.
- It is recommended that the next groundwater sampling event include analysis of VOCs and natural attenuation parameters including PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, 1,1-DCE, vinyl chloride, 1,1,1-TCA, 1,1-DCA, chloroethane, ethene, ethane, dissolved oxygen, oxidation-reduction potential, methane, nitrate, sulfate and dissolved iron.

- It is recommended that the GWE system continue to operate pending initial evaluation of remedial alternatives because there is some uncertainty regarding adequate source control at the Site.
- It is further recommended that an additional groundwater monitoring well be installed directly downgradient and near the PW well so that a test can be conducted to evaluate the effects of decommissioning of the GWE system on groundwater quality.

5.31 MONITORING WELL NETWORK EVALUATION, CRA, AUGUST 13, 2002

CRA prepared a memorandum summarizing a Monitoring Well Network Evaluation dated August 13, 2002.

The purpose of the memorandum was to provide the results of a preliminary evaluation of the monitoring well network at the Site and to provide recommendations for improvements to the monitoring well system and groundwater monitoring plan.

CRA obtained and reviewed available historical information regarding the monitoring well network at the Site. The information was evaluated for completeness, the appropriateness of well and screen placement, and trends in the concentrations of chlorinated compounds in groundwater, particularly TCE and 1,2-DCE, obtained from analytical result for groundwater samples collected from individual wells. Specifically, monitoring well/soil boring construction logs, analytical results for soil, groundwater, and soil gas samples, and static water level data were reviewed during this evaluation.

Based on a review of the report, the following conclusions were made:

- Logs for 87-6, 87-7, and 93-1 were not available. Based on available information, it was believed that no monitoring wells identified as 87-6 and 87-7 were ever installed at the Site and that a log was not completed for 93-1 based on the installation technique utilized.
- Wells are screened in very fine to very coarse sand. No correlation between concentrations detected and geologic material around the screen was observed.
- The well screens were reportedly stainless steel, whereas the well casings were constructed from galvanized steel. This may be an issue for the measurement of dissolved iron from these wells if a natural attenuation remedy is proposed in the future.

- The screens of the 85-X series wells straddled the water table, and were deemed valuable for hydraulic investigations or for monitoring floating free product. However, these monitoring wells were not optimal for the monitoring of chlorinated compounds.
- A well depth survey was undertaken to assess the then current condition of the wells and their continued suitability as monitoring locations. It was determined that the depths of most wells were consistent with the depths on the well logs, with the exception of 86-1 and 87-10, which were approximately 5 feet above their listed depths. It is likely that the well logs incorrectly list the screen depths of these wells.
- The source area of chlorinated compound contamination had not been adequately defined. TCE, PCE and 1,1,1-TCA concentrations had been detected upgradient and cross-gradient from the identified source at Column T-27.
- The source of free product near Column A-15 and its nature and extent had not been fully defined.
- The downgradient edge of the chlorinated compound groundwater plume had not been fully delineated to applicable Part 201 GRCC.
- Based on the above, the monitoring well network was deemed inadequate to properly determine groundwater flow at the Site.

Based on these conclusions, CRA made the following recommendations:

- The depths of the well screens at 86-1 and 87-10 should be determined, and the measured depths should be verified. If the well screens at these locations were obstructed and redevelopment was not possible, it was recommended that the wells be abandoned.
- Three additional wells should be installed upgradient and cross-gradient from the Column T-27 area to investigate the chlorinated compound concentrations upgradient and cross-gradient of the Column T-27 area.
- It was determined that a background well was required for a proper evaluation of potential use of natural attenuation as a remedial strategy. The upgradient source investigation wells could be used for this purpose if no other chlorinated compounds were detected at these locations.
- The source of free product in the vicinity of Column A-15 and the nature and extent of this free product had to be determined.
- Three additional wells should be installed along the downgradient edge of the plume. These wells would not only allow for the better delineation of groundwater

contamination at the Site, but would also provide valuable hydrologic data regarding the groundwater flow regime.

- It was recommended that the next groundwater sampling event include analysis of the following group of VOCs: PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, 1,1-DCE, vinyl chloride, 1,1,1-TCA, 1,1-DCA, and chloroethane as well as the following natural attenuation indicator parameters: ethene, ethane, dissolved oxygen, oxidation-reduction potential, methane, nitrate, sulfate and dissolved iron.

5.32 4-BAY AND 5-BAY PRESS PIT EXCAVATION, AUGUST - NOVEMBER 2002

Based on Site records reviewed, an unknown number of presses were removed from Bays 4 and 5 in 2002. Some of the presses were replaced or relocated elsewhere in the Site and others were sold or disposed off-Site. According to analytical data available for review in Site files, various oil, floor block, wipe, concrete, and soil samples were collected in association with press removal and/or pit excavation between August and November 2002.

Seven floor block samples were collected from the 4-Bay and 5-Bay areas on August 14, 2002. The sample locations were identified as Col-J7, Col-K6, Col-K10, Col-L10, Col-N13, Col-O6, and Misc. 6. The samples were analyzed for PCBs, metals, TCLP VOCs, and TCLP SVOCs. According to analytical results, barium, chromium, copper, lead, and zinc were detected above laboratory method detection limits in all of the samples with one exception; copper was not detected above laboratory method detection limits in the floor block sample collected from Col-O6. Aroclor-1254 was detected above laboratory method detection limits in the samples collected from Col-K10 (7.5 mg/kg), Col-L10(9.0 mg/kg), and Col-J7 (1.5 mg/kg), and TCLP cresol was detected above laboratory method detection limits in the samples collected from Col-L10 and Col-J7.

Three soil core samples were collected from the 4-Bay and 5-Bay area on August 21, 2002 from the following locations; J10/K10, L10/K10 Walkway, and L10/K10 Pit. Samples were analyzed for PCBs, metals, select VOCs, 1,2-DCA, TCLP VOCs, TCLP SVOCs, and TCLP metals. One composite concrete sample was also collected and analyzed for PCBs, TCLP VOCs, TCLP SVOCs, and TCLP metals. Chromium, copper, lead, and zinc were detected above method detection limits in all three soil samples collected, arsenic was detected above method detection limits in the L10/K10 Walkway sample, and cadmium was detected above method detection limits in the J10/K10 sample. TCLP barium and

TCLP lead were detected above method detection limits in all of the soil samples collected. TCLP copper and TCLP zinc were detected in the J10/K10 sample and TCLP zinc was also detected in the L10/K10 Walkway sample. TCLP barium was detected above laboratory method detection limits in the composite concrete sample. None of the other analyzed constituents were detected above laboratory method detection limits in the samples collected.

One additional soil sample (4&5 Bay Soil) was collected on August 26, 2002. The sample was analyzed for PCBs, metals, select VOCs, TCLP VOCs, TCLP SVOCs, and TCLP metals. Arsenic, copper, lead, zinc, TCLP barium, and TCLP zinc were detected in the soil sample above laboratory method detection limits.

Six wipe samples were collected from Press C-6 in September 2002, which according to the equipment decommissioning checklist dated September 24, 2002, was drained, cleaned, and removed for off-Site disposal. Based on analytical data reviewed, the wipe samples were analyzed for PCBs. No PCBs were detected above laboratory method detection limits. According to the checklist, not all hydraulic reservoirs were tested for PCBs.

Eight wipe samples were collected from Press C-4 in October 2002, which according to the equipment decommissioning checklist dated December 9, 2002, was drained, cleaned, and removed for off-Site disposal. Based on analytical data reviewed, the wipe samples were analyzed for PCBs. No PCBs were detected above laboratory method detection limits. According to the checklist, all hydraulic reservoirs were tested for PCBs.

Eight wipe samples were collected from Press B-6 in September 2002, which according to the equipment decommissioning checklist dated September 13, 2002, was drained, cleaned, and removed for off-Site disposal. Based on analytical data reviewed, the wipe samples were analyzed for PCBs. No PCBs were detected above laboratory method detection limits. According to the checklist not all hydraulic reservoirs were tested for PCBs; however, all PCB containing items were removed.

Eight wipe samples were collected from Press A-6 in September 2002, which according to the equipment decommissioning checklist dated September 24, 2002, was drained, cleaned, and removed for off-Site disposal. Based on analytical data reviewed, the wipe samples were analyzed for PCBs. No PCBs were detected above laboratory method detection limits. According to the checklist not all hydraulic reservoirs were tested for PCBs.

Eight wipe samples were collected from press D-6 in September 2002, which according to the equipment decommissioning checklist dated October 1, 2002, was drained, cleaned, and removed for off-Site disposal. Based on analytical data reviewed, the wipe samples were analyzed for PCBs. No PCBs were detected above laboratory method detection limits. According to the checklist not all hydraulic reservoirs were tested for PCBs.

Eight wipe samples were collected from Press D-5 in September 2002, which according to the equipment decommissioning checklist dated October 4, 2002, was drained, cleaned, and removed for sale. Based on analytical data reviewed, the wipe samples were analyzed for PCBs. No PCBs were detected above laboratory method detection limits. According to the checklist all hydraulic reservoirs were tested for PCBs.

Eight wipe samples were collected from each of the following presses in September 2002; Press D-2, Press D-3 and Press D-4 in September 2002. According to the equipment decommissioning checklists dated October 31, 2002, the presses were drained, cleaned, and removed for sale. Based on analytical data reviewed, the wipe samples were analyzed for PCBs. No PCBs were detected above laboratory method detection limits. According to the checklists, all hydraulic reservoirs were tested for PCBs.

Eight wipe samples were collected from each of the following presses in October 2001; Press B-3, Press B-4, and Press B-5. According to the equipment decommissioning checklists dated October 31, 2002, the presses were drained, cleaned, and removed for sale. Based on analytical data reviewed, the wipe samples were analyzed for PCBs. No PCBs were detected above laboratory method detection limits. According to the checklists, all hydraulic reservoirs were tested for PCBs.

Eight wipe samples were collected from each of the following presses in October 2002; Press A-1, Press A-2, Press A-3, Press A-4, and Press A-5. According to the equipment decommissioning checklists dated January 27, 2003, the presses were drained, cleaned, and removed for disposal. The checklists also noted that all hydraulic reservoirs were tested for PCBs. Based on analytical data reviewed, the wipe samples were analyzed for PCBs. Aroclor 1254 was detected above laboratory method detection limits in two wipe samples collected from A-1, one wipe sample collected from A-2, and one wipe sample collected from A-3.

Based on review of analytical data in Site files, six oil samples were collected from presses removed from the Site for sale (B-3, B-4, D-2, D-3, D-4, and D-5). The oil samples were analyzed for PCBs and no PCBs were detected above method detection limits.

5.33 HISTORICAL DOCUMENTATION REVIEW SUMMARY, CRA, DECEMBER 23, 2002

A Historical Documentation Review Summary was prepared by CRA and provided in correspondence dated December 23, 2002. The purpose of the Historical Documentation Review Summary was to obtain and review documentation regarding historical investigations and remedial measures conducted at the Site relative to the VOC-impacted groundwater. The following documents were reviewed as part of the Historical Documentation Review Summary:

- HE of an Oil Leakage, EDI, December 1981
- Water Sampling and Analysis at the Plant Construction Area, EDI, February 14, 1986
- HI, EDI, March 1986
- Phase II HI, EDI, June 1986
- Phase III-A HI, EDI, March 1987
- Phase III-B HI, EDI, July 1987
- Phase IV-A Soil Vapor Pilot Study, EDI, August 1988
- Phase IV-B HI, EDI, July 1988
- Phase IV-C HI, EDI, July 1988
- TCE RMP, EDI, March 1989
- TCE ET Report, EDI, September 21, 1989
- Off-Site Groundwater Purge Evaluation, WW Engineering & Science, April 1993

These reports are summarized above.

5.34 ADDITIONAL HISTORICAL DOCUMENTATION REVIEW SUMMARY, CRA, JANUARY 21, 2003

An Additional Historical Documentation Review Summary was prepared by CRA and summarized in a memorandum dated January 21, 2003. The purpose of the

memorandum was to address information presented in the Phase III-B HI relating to the collection and analysis of water samples from the Site and Cole Drain.

The Phase III-B HI was conducted at the Site by EDI Engineering and Science and was summarized in a report dated July 1987, as summarized above. One purpose of the Phase III-B HI was to determine the potential impact of the chlorinated compound plume identified during previous investigations on the water quality of the Cole Drain.

Four surface water samples were collected on January 7, 1987 at four locations along the Cole Drain. Sample C-1 was collected immediately below the retention pond outfall. Based on the extent of the plume, both at the time of the sample collection and currently, this location is located upstream of any contribution to Cole Drain by impacted groundwater from the chlorinated compound plume. Samples C-2, C-3, and C-4 were collected at various downstream locations between 36th and 28th Streets. Three additional surface water samples were collected on June 15, 1987 from the retention pond inlet, retention pond outfall, and the Cole Drain outfalls adjacent to Clay Avenue. The surface water samples collected on January 7, 1987 were analyzed for TCE. The surface water samples collected on June 15, 1987 were analyzed for Priority Pollutant volatile organic compounds. It should be noted that the sample location figure provided by EDI in the Phase III-B HI was presented on a USGS quadrangle map with a large scale and did not provide exact sample locations.

TCE was identified in all of the surface water samples collected from C-1, C-2, C-3, C-4, retention pond inlet, retention pond outfall, and the upstream Clay Avenue outfalls at concentrations of 4.4 µg/L, 3.6 µg/L, 4.8 µg/L, 2.7 µg/L, 2.0 µg/L, 2.0 µg/L, and 4.0 µg/L, respectively, which are below the Part 201 Residential and Commercial Drinking Water Criteria (RDWC) of 5 µg/L and the Groundwater Surface Water Interface Criteria (GSIC) of 200 µg/L. The sample collected from the Cole Drain adjacent to the Clay Avenue Outfalls was to assess the water quality coming into the Cole Drain, which had not passed through the stormwater retention pond. PCE was identified in the upstream surface water sample collected from the Cole Drain adjacent to the Clay Avenue outfalls at a concentration of 11 µg/L, which is above the Part 201 RDWC of 5 µg/L and below the GSIC of 45 µg/L. Additional chlorinated compounds identified in surface water samples included bromodichloromethane, which was detected in the sample collected from the pond inlet at a concentration of 3 µg/L, which is below the Part 201 RDWC and GSIC of 100 µg/L; chloroform, which was detected in the samples collected from the pond inlet and pond outfall at concentrations of 5 µg/L and 3 µg/L, respectively, which are below the Part 201 RDWC and GSIC of 100 µg/L; and 1,1,1-TCA, which was detected in the samples collected from the pond inlet and

pond outfall at concentrations of 8 µg/L and 4 µg/L, which are below the Part 201 RDWC and GSIC of 200 µg/L. No other parameters were reported to be detected in the surface water samples collected in January and June 1987.

Based on the review of the information presented in the Phase III-B HI, TCE was detected at consistently low concentrations for all samples collected. Based on the TCE concentrations measured in the upstream sample and uniformly low concentrations of TCE identified downstream, it appears that the Site is not contributing significantly to levels of TCE in the Cole Drain. It should be noted that concentrations of TCE in the pond influent and outfall were approximately half of the concentrations of TCE identified in the upstream and downstream Cole Drain samples.

PCE was identified in the upstream sample location, the Clay Avenue outfalls at a concentration of 11 µg/L, which is above the Part 201 RDWC of 5 µg/L, but below the GSIC of 45 µg/L. PCE was not detected in the pond inlet or outfall samples at concentrations above the laboratory detection limit of 1 µg/L. The downstream surface water samples were not analyzed for PCE. Additional chlorinated compounds identified in the samples collected from the pond inlet and outfall include bromodichloromethane, chloroform, and 1,1,1-TCA. These compounds were not detected in the upstream sample at a concentration above the laboratory detection limit of 1 µg/L. The downstream surface water samples were not analyzed for the additional chlorinated compounds. The variance in detected compounds indicates an upstream source for the PCE contamination.

Based on the information reviewed in the Phase III-B HI, no parameters were detected at concentrations above the Part 201 GSIC; however, Part 201 GSIC and RDWC are groundwater screening criteria, and not necessarily applicable to surface water.

CRA recommended that future evaluation of Site impacts relative to Cole Drain that involve sampling and analysis of surface water samples from Cole Drain, should include sampling and analysis at points in the Cole Drain upstream from the retention pond outfall.

5.35 NOTICE OF MIGRATION OF CONTAMINATION, GMC, SEPTEMBER 19, 2003

A Notice of Migration of Contamination (2003 Notice) was submitted to the DNRE by GMC on September 19, 2003. The 2003 Notice was submitted for exceedances of Part 201 GRCC in groundwater of TCE and VC.

5.36 DATA REPORT, CRA, FEBRUARY 2004

A Data Report for activities conducted between March and December 2003 was prepared by CRA and dated February 2004.

The purpose of the environmental investigation was to outline the activities necessary to further evaluate and delineate chlorinated compound impacts to groundwater above the Part 201 GRCC; to further define hydrogeologic conditions at the Site; to evaluate the extent and nature of the LNAPL identified at the Site; to evaluate potential groundwater and indoor air issues associated with the identified LNAPL and potentially impacted groundwater therefrom; and evaluate the current effectiveness of the groundwater extraction system.

Investigative activities (as presented in the November 2002 Work Plan submitted to the MDNRE) included the installation of soil borings and monitoring wells, the collection and analysis of discrete groundwater samples utilizing a hydropunch method, the collection of groundwater samples from monitoring wells and the collection and analysis of a LNAPL sample. In addition, the investigation included conducting a LNAPL recovery test.

A total of seven soil borings, HP1-03 through HP7-03, were advanced at the Site in June 2003. Soil samples collected during the environmental investigation were examined by a CRA geologist for odor and visual impact and screened with a PID. No soil samples above the water table were observed to exhibit contamination; therefore, no soil samples were collected and submitted for laboratory analysis.

To evaluate the potential extent of LNAPL, a recovery test was conducted. Measurements of LNAPL and groundwater levels were collected from monitoring wells 85-3, 85-5b, and 86-1, which were monitored on a monthly, quarterly, or annual basis in the area of the identified LNAPL, utilizing an oil-water interface probe. Approximately 0.02 feet of LNAPL was observed in 85-3. LNAPL was not observed in other wells during this investigation; however, a sheen was observed in wells 85-5B, 85-6 and 86-1. Due to the insufficient LNAPL volume identified in monitoring well 85-3, a sample was not collected.

The vertical and horizontal extent of contamination in groundwater was investigated during the environmental investigation through the collection and analysis of

68 groundwater samples from seven soil borings, HP1-03 through HP7-03; twenty monitoring wells; MW1-03 through MW7-03, 85-3, 87-8, 87-9, 87-10, 87-11, 93-1, 87-13, 87-4, 87-5, 87-2, 87-1, 86-3, and 85-7; and two groundwater extraction wells; 86-2 and PWDISCH. Discrete groundwater samples were collected from soil borings HP1-03 through HP7-03 utilizing a hydropunch for vertical aquifer sampling (VAS). After completion of the VAS and receipt of analytical data, a second soil boring was advanced adjacent to the VAS soil boring, and a monitoring well was constructed, based on the analytical results from the VAS.

All groundwater samples were analyzed for TCL VOCs. In addition, all wells were sampled for select natural attenuation parameters (alkalinity, chloride, hardness, nitrate, nitrite, sulfate, sulfide, total organic carbon (TOC), calcium, magnesium, manganese, ethane, ethene, and methane) and well 85-3 was sampled for TCL SVOCs.

Bis(2-ethylhexyl) phthalate was detected in the groundwater sample collected from 85-3 above the Part 201 GRCC. No other TCL SVOCs were detected in the groundwater samples collected during the investigation above the Part 201 GRCC.

PCE was detected in groundwater samples collected from MW2-03 and MW1-03 above the Part 201 GRCC. PCE was also detected in groundwater samples collected from HP2-03 and HP1-03 above laboratory method detection limits. TCE was detected in groundwater samples collected from MW5-03, 87-10, 87-11, 87-1, and 87-2 above the Part 201 GRCC. TCE was also detected in groundwater samples collected from HP5-03 above laboratory method detection limits. VC was detected in the groundwater sample collected from 87-11, 87-5, and 87-1 above the Part 201 GRCC. No other TCL VOCs were detected in the groundwater samples collected during the investigation above the Part 201 GRCC.

Based upon the distribution of contaminant concentrations identified across the Site, and the results of the natural attenuation parameters, there was an indication that natural attenuation was occurring at the Site. There appeared to be two distinct areas where natural attenuation was occurring; one located just north of the extraction well 86-2, and one located downgradient of the second recovery well PW-DISCH. Both areas identified contained detectable concentrations of 1,1-DCE, 1,1-DCA, cis-1,2-DCE, and VC (daughter products of PCE and TCE). Field parameters also provided indirect evidence of natural attenuation with low levels of dissolved oxygen and negative oxidation-reduction potential in both areas noted above. Groundwater from all sampled monitoring wells was also submitted for laboratory analysis of natural attenuation indicator parameters (ethene, ethane, methane, nitrogen, and sulfate). The analytical

results for these parameters indicated that natural attenuation was occurring in the two areas noted above (i.e., methane detections and reduced concentrations of nitrogen and sulfate).

According to the report, a FOIA review was also conducted in April 2003, to identify any potential upgradient sources of contamination, which may be migrating onto the Site. Based on the review of available information obtained from the FOIA request, the Conical Tool property, assumed to be located hydraulically upgradient from the Site, was identified as a potential source of TCE. TCE was identified in soil and groundwater at concentrations above the Part 201 GRCC. PCE was also detected in groundwater above the Part 201 GRCC from the Conical Tool site. However, it was not clear from the information reviewed whether all soil samples were analyzed for PCE. Insufficient information from the DNRE files was present to determine a possible source location for PCE at the Conical Tool site. Additionally, the vertical extents of TCE and PCE in groundwater were not determined, based on the information reviewed. Based on environmental investigation reports reviewed, excavation was conducted in two areas at the Conical Tool site. Neither of these excavations was conducted where the TCE was detected in soil above the Part 201 GRCC.

According to the report, based on the results of the environmental investigation, additional investigation of LNAPL as well as TCE and associated chlorinated compounds in groundwater at the Site was warranted.

5.37 2004 DATA REPORT, CRA, DECEMBER 2004

A Data Report summarizing environmental investigations conducted at the Site in 2004 was prepared by CRA and dated December 2004.

The purpose of the environmental investigation was to further evaluate and delineate chlorinated compound impacts to groundwater above the Part 201 GRCC, to further define hydrogeologic conditions at the Site, to evaluate the current effectiveness of the groundwater extraction system, to evaluate the effectiveness of select monitoring wells for long term monitoring, and to determine the soil conditions in the area of the SVE system.

According to the report, the investigations included the installation of soil borings and monitoring wells, the collection and analysis of discrete groundwater samples utilizing a hydropunch method, the collection and analysis of groundwater samples from

monitoring wells, the collection and analysis of soil samples in the area of the SVE system, and the abandonment of the SVE extraction well and associated pressure wells.

Five soil borings, SB1-04 through SB5-04, were advanced at the Site in July 2004 and a total of 55 soil samples were collected to define then current soil conditions in the historic VOC release area. The five soil borings, SB1-04 though SB5-04, were installed in the area surrounding air purge well 87-3, associated with the former SVE treatment system, to vertically and horizontally determine the then current concentrations of chlorinated compounds in the vadose, or unsaturated zone. All soil samples were analyzed for TCL VOCs.

A total of nine soil borings, HP8-04 through HP16-04, were advanced during the implementation of the investigation for vertical aquifer profiling and monitoring well placement. Six of the borings, HP8-04 though HP13-04, were installed downgradient of the former degreaser location to further delineate the extent of the chlorinated compound contamination. One soil boring, HP14-04, was installed to the north of monitoring well 87-5 to further evaluate vinyl chloride contamination in groundwater. Two soil borings, HP15-04 and HP16-04, were installed to the northwest and west of the plant, respectively, to further define chlorinated compound contamination in groundwater and confirm conditions relative to local surface water. VAS was conducted at each of the soil boring locations to determine the vertical extent of contamination at that location. Fifty-six discrete groundwater samples were collected from soil borings HP8-04 through HP16-04 utilizing a hydropunch for VAS. All groundwater samples were analyzed for TCL VOCs.

After completion of the VAS and receipt of analytical data, a second soil boring was advanced adjacent to the VAS soil boring, and a monitoring well was constructed, based on the analytical results from the VAS, excluding HP12-04 and HP16-04, where existing wells were deemed adequate for the area. MW8-04 though MW11-04, and MW13-04 were installed downgradient of the former degreaser location to further delineate the extent of the chlorinated compound contamination. MW14-04 was installed to the north of monitoring well 87-5 to further evaluate vinyl chloride contamination in groundwater. MW15-04 was installed to the northwest of the plant to further define chlorinated compound contamination in groundwater and confirm conditions relative to local surface water.

The vertical and horizontal extent of contamination in groundwater was investigated during the environmental investigation through the collection and analysis of

40 groundwater samples from thirty-six monitoring wells including the existing and newly installed wells; MW1-03 through MW7-03, MW8-04 through MW11-04, MW13-04 through MW15-04, 85-1, 85-2, 85-3, 85-5B, 85-6, 85-7, 86-1, 86-3, 87-1, 87-2, 87-4, 87-5, 87-8, 87-9, 87-10, 87-11, 87-13, 88-2, 88-3, and 88-4; and two groundwater extraction wells; 86-2 and PW-DISCH, and three surface water samples from three culvert locations; C-1, C-2, and C-3. Groundwater monitoring qualified as the June/July 2004 Quarterly Groundwater Monitoring event, but was actually conducted in August 2004. All groundwater samples were analyzed for TCL VOCs. In addition wells 85-3, 85-5B, 85-6, and 86-1 were sampled for TCL SVOCs.

Based on review of the report, TCE was detected in the soil samples collected from SB1-04 (at 0 to 2 feet bgs), SB2-04 (at 0 to 2 feet bgs), SB3-04 (at 0 to 2 feet bgs), SB4-04 (at 0 to 2 feet bgs), and SB5-04 (at 0 to 2 feet bgs) at concentrations above the Part 201 GRCC and Generic Industrial Cleanup Criteria (GICC). TCE was also detected in the soil samples collected from SB2-04 (at 0 to 2 feet bgs) and SB5-04 (at 0 to 2 feet bgs) at concentrations exceeding the Part 201 GRCC and GICC. No other TCL VOCs were detected in the soil samples collected from SB1-04 through SB5-04 at concentrations above Part 201 GRCC or GICC.

Prior to drilling activities, an evaluation was conducted for the SVE system to determine if the SVE system was removing significant VOC mass from the soil. The results of the study were presented in the Data Report submitted to the DNRE on March 2, 2004 and identified that the SVE system was not removing significant mass. Subsequently, the system was shut down, under approval of the DNRE. Based on discussions with the DNRE following the aforementioned review of the system effectiveness, it was determined that additional evaluation of the current concentrations of VOCs in the vadose zone in the former source area was required for closure of this area. The soil results presented above confirmed that there was no longer a significant mass of VOCs in the vadose zone, and that the majority of the VOC mass was present in the top two feet of the soil column. No TCL VOCs were detected in the soil samples collected at concentrations above criteria for complete exposure pathways.

Based on the fact that the majority of the TCE in soil had been removed via the SVE system, it was concluded that the residual concentrations of TCE in soil appeared to be limited in extent vertically, and there were no forces acting to laterally disperse the detected residual contamination. It was recommended that a restrictive deed limiting the use of the property to industrial uses be implemented for the property.

Based on groundwater monitoring activities conducted during the investigation, it was concluded that significant TCE mass had been removed by the on-Site pump and treat system from extraction wells 86-2 and PW-DISCH, which was evident from historical high concentrations of 100,000 µg/L and 180 µg/L, respectively, to levels of 4.7 µg/L and 1.6 µg/L, respectively. The extent of VOC contamination had been delineated to Part 201 GRCC both vertically and horizontally on the Site. Based on the distance from the 87-5 location to the Cole Drain, the fact that additional wells were located between the exceedance of VC and the drain that do not exhibit concentrations above the GSI Criteria, and the fact that the belowground utility corridors in the area of 87-5 were situated above the water table, it was not considered likely that VC would reach the Cole Drain above the GSI Criteria.

An off-Site, downgradient VOC plume had been identified at the Godwin Heights Public School property (GHPS Property) north of the Site's 36th Street parking lot. VOC concentrations in the off-Site plume above Part 201 GRCC included TCE and PCE. Off-Site concentrations had not been identified above any other Part 201 GRCC. It was believed that there was a separation of the plumes associated with the release, likely because portions of the release migrated downgradient laterally prior to the installation of the pump and treat system purge well at the property boundary in the Site parking lot in 1993.

Significant TCE mass had been removed by PW-DISCH at the border of the GHPS property. However, VOC contamination off-Site had migrated outside of the PW-DISCH capture zone and, based on the distance from the monitoring wells exhibiting the concentrations of TCE and PCE above the Part 201 GRCC, the treatment system was not effective in remediating impacted groundwater from this area. The extent of contamination had been sufficiently delineated to Part 201 GRCC both vertically and horizontally. Based on the determined groundwater flow direction, from south-southeast to north-northwest and the elevation of the Cole Drain relative to the groundwater table, groundwater in the vicinity of the Cole Drain was discharging to the drain, which acted as a gaining stream. No VOCs were detected at concentrations exceeding Part 201 GSI Criteria.

Based on the above, it was recommended that the pump and treat system be turned off as of February 28, 2005, that quarterly monitoring in select wells for TCL VOCs and select natural attenuation parameters be performed for four consecutive quarters beginning in March 2005, and that remedial alternatives to address the residual contamination as part of an interim closure be evaluated.

Historically, free product from an unknown source had been identified on-Site in the northeast corner of the Plant in the stamping press area. Primarily, the observations were as accumulated LNAPL in monitoring wells 85-3 and 85-5B, and as detections of SVOCs in monitoring wells 85-3, 85-5B, and 85-6. The thickness of LNAPL fluctuated from one historic observation of four inches to periodically observed sheens during monitoring events conducted in 2003-2004. SVOCs detected above the Part 201 GRCC included benzo(a)anthracene, benzo(b)fluoranthene, and bis(2-ethylhexyl)phthalate. No evidence of the presence of LNAPL as recoverable "free product" existed at the time of the report, due to a lack of volume of product present (i.e., observed as a sheen or less than an eighth of an inch in thickness).

The extent of SVOC contamination had not yet been established as a then recent sampling showed a detection of bis(2-ethylhexyl)phthalate above the Part 201 GRCC at 85-6 (a duplicate sample at the same location was below the detection limit).

Based on the lack of consistent observations of the presence of "free product" and the analytical data for SVOCs in this area, it was recommended that one year of quarterly monitoring at the current locations be conducted to further establish the presence or absence of conditions needing further attention.

Based on the review of documents during a previous FOIA request, PCE and TCE were determined to be present in groundwater at concentrations exceeding the Part 201 GRCC at an upgradient industrial property. Based on available documentation, no other potential sources were identified upgradient of the Site during this review. This property is upgradient to the southeastern portion of the Site, where PCE was identified in groundwater above the Part 201 GRCC in three locations, MW1-03, MW2-03, and MW11-04. PCE was identified at depths below the groundwater table migrating onto the Site, which was considered consistent with concentrations that would be present downgradient of a source area/release.

The time of release, specific up-gradient/source area concentrations, and fate of PCE migrating on to the Site had not been identified. PCE was migrating to the Site in the area of MW1-03 above the Part 201 GRCC. The screened interval for MW1-03 is from 30 to 35 feet bgs. Based on the review of analytical results obtained during the 2003 investigation conducted by CRA and summarized in a Data Report submitted to the DNRE on March 2, 2004, vertical profiling results at the water table indicated a concentration of PCE at 7.0 µg/L (7.1 µg/L in a duplicate sample) in a groundwater sample collected at 24 feet bgs from HP1-03 in this area were below the GSIC. This was noted as important because at that location and depth, and at that concentration, it was

unlikely that PCE was being collected by the Site's groundwater foundation drain system, which was present at approximately 20 feet bgs and served to collect groundwater in the areas surrounding the building foundation. Groundwater was collected in the drain system and discharged to the on-Site retention pond, and then discharged to the Cole Drain, pursuant to an NPDES permit. The upgradient source PCE may also have commingled with the TCE release from the Site, and been similarly affected by the Site pump and treat system. The detection of PCE at monitoring well MW11-04 may also have been a remnant of the upgradient plume prior to the installation of the pump and treat system.

Based on the above, it was recommended that an investigation be conducted to evaluate the impact the off-Site source may have on the foundation drain system at the Site by installing a sampling port in the discharge of the foundation drain system and sampling the discharge three times for PCE, TCE, cis-1,2-DCE, and VC.

5.38 RESULTS OF PRESS PIT AND PERFORATED SUMP SYSTEM SAMPLING, CRA, JANUARY 6, 2006

This memorandum presents the results of the excavation pit and sump sampling conducted by CRA in 2005. The purpose of these environmental investigations was to further evaluate the potential for off-Site PCE contamination to migrate onto and into the foundation drain system.

Four groundwater samples were collected from the dewatering activities during the installation of the new press pit foundation. Dewatering activities took place during April 2005 and May 2005. Water was pumped from the excavation through a 6-inch diameter pipe into a temporary equalization basin, then pumped to the City of Wyoming POTW through a 4-inch diameter pipe. The groundwater samples were collected on April 25, 2005, May 2, 2005, May 13, 2005 and May 20, 2005 from the 6-inch diameter pipe outfall to the temporary equalization basin. Samples were analyzed for select VOCs: 1,1,1-TCA, 1,1-DCA, 1,1-DCE, cis-1,2-DCE, PCE, TCE, and VC.

Two groundwater samples were collected from the sump system. The sump system is a passive perforated foundation drain system used by the Site to prevent water from entering the basement. Perforated drainpipe runs on the southern portion of the plant along the east side parallel to Buchanan Street. Water flows through the perforated drainpipe into a sump were the water is then pumped to the stormwater retention pond. The groundwater samples were collected on August 25, 2005 and September 1, 2005 from the spout that was installed in the basement pipe above the sump pump. Samples

were analyzed for select VOCs: 1,1,1-TCA, 1,1-DCA, 1,1-DCE, cis-1,2-DCE, PCE, TCE, and VC.

Laboratory analytical results were compared to Part 201 RDWC, IDWC, GSIC, Residential Groundwater Volatilization to Indoor Air Inhalation Criteria (RGVIAC), Industrial Groundwater Volatilization to Indoor Air Inhalation Criteria (IGVIAC), and GCC.

PCE was detected in three Pit samples (May 5, 2005, May 13, 2005 and May 20, 2005) and in both Sump samples at concentrations above the Part 201 RDWC and IDWC. PCE was also detected in the April 25, 2005 Pit sample; however, the concentration was below the Part 201 GRCC and GICC.

TCE was detected in all the Pit samples and in both Sump samples; however, the concentrations were below the Part 201 GRCC and GICC. Cis-1,2-DCE was detected in three Pit samples (May 5, 2005, May 13, 2005, and May 20, 2005) and one Sump sample (September 1, 2005); however, the concentrations were below the Part 201 GRCC and GICC. No other select VOCs were detected above laboratory detection limits.

Sample results indicate that PCE is present in the Sump system at levels above Part 201 Criteria which is protective for drinking water. However, levels of PCE and other substances are not above Part 201 GSI, RGVIAC, IGVIAC, or GCC, which are more relevant and applicable Part 201 Criteria at this location.

Based on the above, CRA recommended that the Sump system continues to be sampled on a regular basis (sampled with other regular scheduled sampling events), to ensure levels of PCE do not exceed relevant criteria.

5.39 SUMMARY OF SOIL INVESTIGATIONS-FORMER SVE SYSTEM AREA, CRA, SEPTEMBER 8, 2006

CRA prepared a memorandum regarding the Summary of Soil Investigations – Former SVE System Area dated September 8, 2006. The purpose of this memorandum was to present a summary of the soil investigations conducted by CRA in the vicinity of the former SVE system at the Site. The soil investigations were conducted to evaluate and delineate VOC concentrations in the vicinity of the former SVE system.

Subsequent to the SVE system shutdown in 2003, subsurface investigation activities were conducted to assess VOC concentrations in the vadose, or unsaturated zone in July 2004, July 2005, and December 2005, respectively.

The results of these investigations are summarized in the above discussion of the 2004 Data Report dated December 2004 and the below discussion of the 2005-2006 Investigation Data Report dated April 2007.

Based on review of the report, it was concluded that additional investigation was required to delineate the extent of VOC contamination in soil at the Site to Part 201 GRCC, which was subject to Part 201.

It was recommended that a Work Plan be developed and submitted to the MDNRE to further evaluate the extent of VOCs present in soil.

5.40 2005 BULK UNLOAD AREA INVESTIGATION SUMMARY, CRA, SEPTEMBER 8, 2006

A 2005 Bulk Unload Area Investigation Summary was prepared for the Site by CRA and dated September 8, 2006.

In November 2004, Site personnel installed a trench drain in the bulk unload area near the northwest corner of the plant. The trench drain was approximately 70 feet long by 1-foot wide and drained to a sump located adjacent to the bulk unload area.

Prior to disposal, Site personnel sampled excavated soils from the area for waste characterization. Analysis conducted for the waste characterization of the excavated soils included TCLP metals, oil and grease, and TPH as gasoline, diesel, and "other." TCLP analysis of the waste soil sample had detections of barium, cadmium, copper, lead, and zinc. Totals analysis was also preformed on lead, TPH diesel, and TPH "other" for which there were detections. The soils were disposed of as a hazardous waste due to the concentration of lead identified.

Based on these findings, an investigation in the bulk unload area was initiated. Seven soil borings, SB19-05 through SB25-05 (SB19 through SB25), were advanced at the Site on December 12, 2005 and a total of 33 soil samples were collected to define soil conditions in the vicinity of the trench drain. The soil samples were analyzed for PNAs and TAL metals. Laboratory analytical results were compared to Part 201 GRCC and GICC.

Arsenic was detected at concentrations above the Part 201 Residential DWPC, DCC, and SDBL in the soil samples collected from SB20 (at 0 to 2 ft bgs and 4 to 6 ft bgs), SB21 (at 4 to 6 ft bgs), and SB25 (at 2 to 4 ft bgs). Arsenic was detected at concentrations above the Part 201 Industrial DWPC and SDBL in the soil samples collected from SB20 (at 0 to 2 ft bgs and 4 to 6 ft bgs), SB21 (at 4 to 6 ft bgs), and SB25 (at 2 to 4 ft bgs).

Barium was detected at concentrations above the Part 201 Residential and Industrial GSIC and the SDBL in the soil samples collected from SB20 (at 0 to 2 ft bgs), SB21 (at 4 to 6 ft bgs), and SB25 (at 2 to 4 ft bgs).

Cadmium was detected at concentrations above the Part 201 Residential and Industrial GSIC and the SDBL in the soil samples collected from SB20 (at 0 to 2 ft bgs), SB21 (at 4 to 6 ft bgs), and SB25 (at 2 to 4 ft bgs). Additionally, cadmium was detected at concentrations above the Part 201 Residential and Industrial DWPC in the soil samples collected from SB21 (at 4 to 6 ft bgs) and SB25 (at 2 to 4 ft bgs).

Total chromium was detected at concentrations above the Part 201 Residential and Industrial GSIC and SDBL in the soil samples collected from SB19 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB20 (at 0 to 2 ft bgs, 2 to 4 ft bgs, 4 to 6 ft bgs), SB21 (at 0 to 2 ft bgs, 2 to 4 ft bgs, 4 to 6 ft bgs, and 6 to 8 ft bgs), and SB25 (at 2 to 4 ft bgs and 4 to 6 ft bgs). Total chromium was detected above the Part 201 Residential and Industrial DWPC in the soil samples collected from SB19 (at 2 to 4 ft bgs), SB20 (at 0 to 2 ft bgs, 2 to 4 ft bgs, and 4 to 6 ft bgs), SB21 (at 4 to 6 ft bgs and 6 to 8 ft bgs), and SB25 (at 2 to 4 ft bgs and 4 to 6 ft bgs). Total chromium was detected above the Part 201 Residential and Industrial Particulate Soil Inhalation Criteria (PSIC) in soil samples collected from SB19 (at 2 to 4 ft bgs), SB20 (at 0 to 2 ft bgs), SB21 (at 4 to 6 ft bgs and 6 to 8 ft bgs), and SB25 (at 2 to 4 ft bgs). Total chromium was detected above the Part 201 Residential DCC in soil samples collected from SB21 (at 4 to 6 ft bgs) and SB25 (at 2 to 4 ft bgs), but below the Part 201 Industrial DCC.

Lead was detected above the Part 201 Residential DCC and SDBL in the soil samples collected from SB20 (at 0 to 2 ft bgs), SB21 (at 4 to 6 ft bgs), and SB25 (at 2 to 4 ft bgs), with the concentrations at SB21 (at 4 to 6 ft bgs) and SB25 (at 2 to 4 ft bgs) also exceeding the Part 201 Industrial DCC. Lead was detected above the Part 201 Residential and Industrial DWPC and GSIC in the soil samples collected from SB21 (at 4 to 6 ft bgs) and SB25 (at 2 to 4 ft bgs).

Mercury was detected above the Part 201 Residential and Industrial GSIC and SDBL in the soil sample collected from SB20 (at 0 to 2 ft bgs).

Selenium was detected above the Part 201 Residential and Industrial GSIC and SDBL in the soil samples collected from SB19 (at 2 to 4 ft bgs), SB20 (at 0 to 2 ft bgs), and SB21 (at 0 to 2 ft bgs and 6 to 8 ft bgs).

Silver was detected above the Part 201 Residential GSIC and SDBL in the soil samples collected from SB19 (at 2 to 4 ft bgs), SB20 (at 0 to 2 ft bgs), SB21 (at 4 to 6 ft bgs and 6 to 8 ft bgs), SB25 (at 2 to 4 ft bgs). Additionally, silver was detected above the Part 201 Residential DWPC in the soil samples collected from SB21 (at 4 to 6 ft bgs and 6 to 8 ft bgs) and SB25 (at 2 to 4 ft bgs), with the concentrations at SB21 (at 4 to 6 ft bgs) and SB25 (at 2 to 4 ft bgs) also exceeding the Part 201 Industrial DWPC.

Benzo(a)anthracene was detected above the Part 201 Residential DCC in the soil sample collected from SB20 (at 0 to 2 ft bgs), but below the Part 201 Industrial DCC.

Benzo(a)pyrene was detected above the Part 201 Residential DCC in the soil samples collected from SB20 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB21 (at 2 to 4 ft bgs), and SB25 (at 0 to 2 ft bgs). Additionally, concentrations detected in soil samples from SB20 (at 0 to 2 ft bgs and 2 to 4 ft bgs) and SB21 (at 2 to 4 ft bgs) exceeded the Part 201 Industrial DCC.

Benzo(b)fluoranthene was detected above the Part 201 Residential DCC in the soil samples collected from SB20 (at 0 to 2 ft bgs) and SB21 (at 2 to 4 ft bgs), but below the Part 201 Industrial DCC.

Dibenz(a,h)anthracene was detected above the Part 201 Residential DCC in the soil samples collected from SB20 (at 0 to 2 ft bgs) and SB21 (at 2 to 4 ft bgs), but below the Part 201 Industrial DCC.

Fluoranthene was detected above the Part 201 Residential and Industrial GSIC in the soil samples collected from SB20 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB21 (at 2 to 4 ft bgs), and SB25 (at 0 to 2 ft bgs).

Naphthalene was detected above the Part 201 Residential and Industrial GSIC in the soil samples collected from SB20 (at 0 to 2 ft bgs and 2 to 4 ft bgs).

Phenanthrene was detected above the Part 201 Residential and Industrial GSIC in the soil samples collected from SB20 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB21 (at 2 to 4 ft bgs), and SB25 (at 0 to 2 ft bgs).

Based on these findings, additional investigation in the bulk unload area was recommended to further delineate the horizontal and vertical extent of contamination.

5.41 2005-2006 INVESTIGATION DATA REPORT, CRA, APRIL 2007

A 2005-2006 Investigation Data Report was prepared by CRA and dated April 2007.

The purpose of the environmental investigation was to further evaluate and delineate chlorinated compound impacts to groundwater above the Part 201 GRCC, to further define hydrogeologic conditions at the Site, and evaluate current conditions in source area soil.

Investigative activities included the advancement of sixteen soil borings with two of the soil borings completed as monitoring wells and the collection and analysis of soil and groundwater samples. Thirteen soil borings, SB6-05 through SB18-05, were advanced at the Site on July 11, 2005 to July 12, 2005 and December 3, 2005, and a total of 136 soil samples were collected to define current soil conditions at the former degreaser location. The thirteen soil borings were installed in the area surrounding air purge well 87-3, associated with the former SVE treatment system, to vertically and horizontally determine the current concentrations of chlorinated compounds in the vadose, or unsaturated zone. Soil borings were advanced to a terminal depth of 20 feet bgs, which was immediately above the water table. One soil sample was collected per two-foot interval from each boring for analysis of TCL VOCs.

One soil boring, HP17-06, was advanced on August 7, 2006, on the west side of Cole Drain across from MW11D-04 and MW11S-05 to evaluate potential chlorinated compound contamination in groundwater west of Cole Drain and confirm groundwater flow conditions relative to the Cole Drain. Discrete groundwater samples were collected from the soil boring utilizing VAS via a hydropunch. VAS was conducted at HP17-06 at 10-foot intervals beginning at the water table and continuing until the clay confining layer was encountered. Discrete groundwater samples were analyzed for TCL VOCs.

Two monitoring wells, MW11S-05 and MW17-06, were installed on December 12, 2005 and August 17, 2006, respectively, to evaluate potential chlorinated compound

contamination in groundwater adjacent to Cole Drain and confirm groundwater flow conditions relative to the Cole Drain. MW11S-05 was installed adjacent to MW11D-04 and MW17-06 was installed directly across the Cole Drain. The depth of monitoring well MW11S-05 screen was set from 5 to 10 feet bgs, to straddle the water table to further evaluate the vertical and horizontal groundwater flow regime adjacent to the Cole Drain. The depth of monitoring well MW17-06 screen was set at 51 to 56 feet bgs, consistent with the maximum detected levels of VOCs during the VAS, to further evaluate the vertical and horizontal groundwater flow regime adjacent to the Cole Drain.

According to the report, quarterly groundwater and surface water sampling was conducted in April, June and December 2005, and semi-annual groundwater and surface water sampling was conducted in September 2006. Sampling of all monitoring wells was conducted in accordance with the 2005 Groundwater Monitoring Work Plan, which was submitted on April 12, 2005 to the DNRE and verbally approved on April 28, 2005.

Based on review of the report, the results of the July 2005 soil investigation indicated that TCE was detected in the soil samples collected from SB7-05 (at 0 to 2 feet bgs, 2 to 4 feet bgs, 14 to 16 feet bgs, and 16 to 18 feet bgs), SB8-05 (at 0 to 2 feet bgs, 2 to 4 feet bgs, 10 to 12 feet bgs, and 16 to 18 feet bgs), SB10-05 (at 0 to 2 feet bgs), SB12-05 (at 0 to 2 feet bgs, 2 to 4 feet bgs, 4 to 6 feet bgs, and 14 to 16 feet bgs), SB13-05 (at 0 to 2 feet bgs, 12 to 14 feet bgs, and 16 to 18 feet bgs), and SB14-05 (at 0 to 2 feet bgs and 16 to 18 feet bgs) at concentrations above the Part 201 Residential and Industrial DWPC. TCE was also detected in the soil samples collected from SB8-05 (at 0 to 2 feet bgs and 10 to 12 feet bgs), SB12-05 (at 2 to 4 feet bgs) at concentrations exceeding the Part 201 Residential and Industrial GSIC. The concentration of TCE detected in the soil sample collected from SB8-05 (at 0 to 2 feet bgs) also exceeded the Part 201 Residential and Industrial SVIAC. Xylenes were detected in the soil sample collected from SB12-05 (at 2 to 4 feet bgs) at a concentration above the Part 201 Residential and Industrial GSIC. No other TCL VOCs were detected in the soil samples collected from SB5-05 through SB14-05 at concentrations above the Part 201 GRCC or GICC.

The results of the December 2005 soil investigation indicated that TCE was detected in the soil samples collected from SB15-05 (at 0 to 2 feet bgs and 10 to 12 feet bgs), SB16-05 (at 0 to 2 feet bgs and 6 to 8 feet bgs) at concentrations above the Part 201 Residential and Industrial DWPC. TCE was also detected in the soil sample collected from SB15-05 (at 10 to 12 feet bgs) at a concentration exceeding the Part 201 Residential and Industrial GSIC. The concentration of TCE in the soil sample collected from SB15-05 (at 10 to 12 feet bgs) also exceeded the Part 201 Residential SVIAC, but was below the Part 201

Industrial SVIAC. No other TCL VOCs were detected in the soil samples collected from SB15-05 through SB18-05 at concentrations above the aforementioned comparison Part 201 GRCC or GICC.

Based on the detected VOCs present in soil, it was noted that additional investigation was required to delineate the extent of contamination which may be subject to Michigan Act 451, Part 201. A risk assessment was being conducted to further evaluate the impacts detected in soil in this area. Based on the results of the risk assessment, a recommendation would be made regarding additional assessment of the area or other measures as needed to address Site conditions.

Based on the review of available documentation and analytical results, it was determined that a property located upgradient to the east of the Site, Conical Tool, had documented impacts to groundwater, including chlorinated compounds, specifically PCE. Based on the known upgradient impacts and concentrations of PCE detected along the Site's eastern boundary upgradient of the historic TCE release area, it was deemed likely that the upgradient source was contributing to on-Site concentrations of PCE and the related degradation products (TCE, cis-1,2-DCE, and VC).

Furthermore, significant TCE mass was reported to be removed by the pump and treat system from 86-2, which was evident from a historical high concentration of 100 mg/L reduced to a concentration of 0.0028 mg/L identified during this investigation. Current conditions at PW-DISCH could not be evaluated due to the system shutdown; however, the TCE concentration detected in MW7-03 in September 2006 was 0.00045 mg/L (qualified value). Based on the above, the pump and treat system was turned off on February 28, 2005.

The off-Site, downgradient VOC plume had been identified at the Godwin Heights Public School property (GHPS Property) north of the 36th Street SW parking lot. VOC concentrations in the off-Site plume above Part 201 DWC included PCE, TCE and cis-1,2-DCE. Off-Site concentrations had not been identified above any other Part 201 Cleanup Criteria. As discussed above, there was a separation of the plumes associated with this release, because portions of the release migrated downgradient laterally prior to the installation of the pump and treat system purge well at the property boundary in the parking lot in 1993.

Significant TCE mass had been removed by PW-DISCH at the border of the GHPS Property. However, VOC contamination off-Site had migrated outside of the PW-DISCH capture zone and, based on the distance from the monitoring wells

exhibiting the concentrations of TCE and PCE above the Part 201 Residential and Industrial DWC, the former treatment system was not effective in further removal of residual downgradient VOCs. The extent of contamination had been sufficiently delineated to Part 201 Residential DWC vertically; however due to detections in MW4-03 the extent of contamination was yet to be precisely defined laterally. Based on the determined groundwater flow direction, from south-southeast to north-northwest and the elevation of the Cole Drain relative to the groundwater table, groundwater in the vicinity of the Cole Drain appeared to be discharging to the drain, which in turn acted as a gaining stream. PCE, TCE, and cis-1,2-DCE were detected in MW17-06, located on the west side of Cole Drain, at concentrations above the Part 201 Residential and Industrial DWC. PCE and TCE were also detected in MW11D-04, located on the east side of Cole Drain across from MW17-06, at concentrations above the Part 201 Residential and Industrial DWC. It should be noted that PCE and TCE concentrations were higher on the west side of the Cole Drain, potentially indicating VOC sources west of the Site.

Based on the above, it was recommended to conduct further groundwater investigation activities to the east of MW4-03 to confirm the lateral extent of groundwater impacts. It was also recommended that research should be completed on properties to the west of Cole Drain to determine if these are a potential source of VOCs in local groundwater.

No SVOCs were detected during the September 2006 groundwater monitoring event at concentrations above the Part 201 GRCC or GICC. Monitoring information gave no evidence of the presence of LNAPL as recoverable "free product", due to a lack of volume of product present (i.e., observed as a sheen or less than an eighth of an inch in thickness).

Based on the lack of consistent observations of the presence of "free product" and the analytical data for SVOCs in this area, it was recommended that one year of semi-annual monitoring at the current locations be conducted to further establish the presence or absence of conditions needing further attention.

5.42 SUMMARY OF ADJACENT PROPERTY REVIEW – CONICAL TOOL COMPANY, CRA, SEPTEMBER 12, 2007

A Summary of Adjacent Property Review was conducted for the Conical Tool Company property and summarized in a memorandum prepared by CRA and dated September 12, 2007. The purpose of this memorandum was to summarize the adjacent property FOIA review completed in conjunction with the ongoing groundwater and soils investigations at the Site. The adjacent Conical Tool Company (Conical Tool)

property, located at 3890 Buchanan Avenue, is located hydraulically upgradient and immediately adjacent to the southeast of the Site.

CRA previously completed an adjacent property review in the immediate upgradient vicinity of the Site on April 24, 2003. Based on the results of the adjacent property identification, a written FOIA request was submitted to the MDEQ Remediation and Redevelopment Division (RRD) on April 29, 2003. The FOIA request included numerous properties adjacent to the Site.

One file was identified for all requested properties: Conical Tool, located at 3890 Buchanan Avenue. On May 13, 2003, CRA performed a file review at the MDEQ RRD office located in Wyoming, Michigan. Documentation that was available for CRA's review on May 13, 2003 included:

- Phase II Environmental Site Assessment (ESA) prepared by Dixon Environmental Consulting, Inc. (Dixon), dated January 28, 2002
- Preliminary Soil and Groundwater Data for Conical Tool Company prepared by Dixon, dated September 3, 2002

Based on the review of available documentation during the previous FOIA summary, CRA provided the following conclusions:

- TCE was detected in soil, and TCE and PCE have been identified in groundwater on the Conical Tool property, located hydraulically upgradient of the Site. Insufficient information was available to determine whether PCE is present in soil at this property.
- The vertical extent of TCE and PCE in groundwater at the Conical Tool site was not determined.
- Insufficient information was available to determine the actual source of PCE upgradient of the Grand Rapids Metal Plant. However, the file review does confirm that PCE is present in groundwater located hydraulically upgradient of the Site at concentrations above the Residential Criterion, pursuant to Part 201 of Michigan Act 451 of 1994, as amended.
- Additional potential upgradient properties including Accurate Metal Finishing and Travis Collision were observed; however, no documentation was available during the FOIA review for these properties.

A written FOIA request was submitted to the MDEQ RRD on July 30, 2007. It should be noted that the FOIA request covered the period from April 24, 2003 to July 30, 2007 only. Two file documents were identified for Conical Tool for the requested time period, including:

- NPDES Certificate of Coverage (COC) and termination of COC
- Category S Baseline Environmental Assessment (BEA) for Conical Tool Company 3890 Buchanan Avenue, SW, Wyoming, Michigan dated April 21, 2004 and conducted by Dixon Environmental Consulting, Inc. (DEC)

A NPDES COC was approved in a May 28, 1996 letter to Harriet Stanaback of Conical Tool under COC No. MIR11G119. The COC classified the facility as an A.1.i Storm Water Management Industrial Site. The effective date of the coverage for the COC was May 24, 1996. According to a letter to Harriet Stanaback of Conical Tool, dated April 22, 1996, an investigation of the facility was conducted on April 18, 1996, which determined that the facility discharges to Buck Creek. An anonymous complaint was attached to the letter, which was submitted to the MDEQ Surface Water Quality Division on April 18, 1996. The complaint stated that oils, coolants, cutting fluids and mineral spirits were being disposed outside of the site buildings and acid was being disposed into sinks within the buildings.

The NPDES COC was terminated in a letter to Harriet Stanaback, dated December 16, 1998. The coverage was terminated on December 14, 1998 based on the fact that storm water discharges were no longer coming into contact with industrial activities at the property.

A Category S BEA, dated April 21, 2004, was completed for the Conical Tool facility by DEC. According to the BEA, the site consisted of a commercial building, an asphalt paved parking area, and an unpaved parking area. No USTs or discarded containers were identified during completion of the BEA. Conical Real Estate, L.L.C. planned to purchase the property on or about April 30, 2004 and Cut Above Tool Company, Inc. intended to begin metallic tooling operations, similar to current operations, as soon as engineering controls and isolation zones were installed at the property.

According to the BEA, tooling operations were anticipated to consist of grinding, cutting and shaping metallic rods into tapered end mill bits, storage of rods and the storage and use of cutting oils, cooling oils, and lubricant oil. The processes at the site produce shavings and grinding sludge, which are recycled off-site by a third party. Hazardous

substances (chromium, iron, molybdenum, and nickel) that were previously encountered in shallow site soils are found in the shavings and grinding sludge.

According to the BEA, Cut Above Tool Company did not intend to use, store, handle or manage significant quantities of TCE or PCE at the property. Cut Above Tool Company would utilize engineering controls and isolation zones as a means of distinguishing any new release after acquisition from any pre-existing contamination. The site would be divided into Zone A (Proposed Isolation Zone) and Zone B (Proposed Concrete and Asphalt Engineering Control). Cut Above Tool Company did not intend to have any significant hazardous substance use within Zone A at the site and clean topsoil would be installed, seeded and maintained in the area. Zone B would be utilized for hazardous substance use during site operations, which include metal grinding operations and storage of metal shavings. Zone B included the concrete flooring within the site building and any outside concrete or asphalt areas. Future releases of hazardous substances in Zone B would be separated from the pre-existing contamination by a physical barrier. The concrete asphalt areas will be visually inspected quarterly and repaired as necessary to maintain this barrier.

According to the BEA, previous investigations indicated that chromium, iron, molybdenum and nickel were detected at concentrations which exceeded the Part 201 Residential DWPC for soil. One shallow soil sample under the site building contained detections of TCE above the Part 201 Residential DWPC. Concentrations of PCE and TCE were also detected in groundwater at the site above the Part 201 Residential DWC.

Based on the observed groundwater flow direction at the Site, the Conical Tool property is assumed to be located hydraulically upgradient. However, no property-specific groundwater flow direction information for the Conical Tool site was presented in the documentation reviewed by CRA.

Based on the review of available information obtained from the FOIA request, it appears possible that there was a former or current source of TCE and PCE at the Conical Tool site. TCE was identified in soil and groundwater at concentrations above the Part 201 Residential DWPC and DWC, respectively. PCE was also detected in groundwater above the Part 201 Residential DWC from the Conical Tool site. However, it is not clear from the information reviewed whether all soil samples were analyzed for PCE. Insufficient information from the DNRE files was present to determine a possible source location for PCE at the Conical Tool site. Additionally, the vertical extents of TCE and PCE in groundwater were not determined, based on the information reviewed.

Selected excavation was conducted in two areas at the Conical Tool site. Neither of these excavations was conducted where the TCE was detected in soil above the Part 201 GRCC.

During the investigations conducted by DEC, five monitoring wells, MW-1 through MW-5, were installed at the Conical Tool site. Groundwater samples collected from these wells ranged from 12 feet bgs to 17.5 feet bgs. Additional delineation groundwater grab samples were collected from depths of approximately 17 to 19 feet bgs.

Concentrations of PCE and TCE in groundwater samples collected during ongoing groundwater monitoring activities from monitoring wells MW1-03 and MW2-03 of the Site, indicated that samples collected from near the water table, similar to those collected at the Conical Tool site, are at lower concentrations than in samples collected at greater depths. This is consistent with the hypothesis of an upgradient source located some distance from the Site.

Based on the review of available documentation, CRA provided the following conclusions:

- TCE was detected in soil, and TCE and PCE have been identified in groundwater on the Conical Tool property, located hydraulically upgradient of the Site. Insufficient information was available to determine whether PCE is present in soil at this property.
- The vertical extent of TCE and PCE in groundwater at the Conical Tool site was not determined.
- Insufficient information was available to determine the actual source of PCE upgradient of the Grand Rapids Metal Plant. However, the file review does confirm that PCE is present in groundwater located hydraulically upgradient of the Site at concentrations above the Part 201 GRCC.

5.43 2007 BULK UNLOAD AREA INVESTIGATION, CRA, OCTOBER 26, 2007

Based on the findings of the 2005 Bulk Unload Area investigation, additional investigation activities were conducted on July 10, 2007, which included eight soil borings, SB26-07 through SB32-07 (SB26 through SB32). A total of 44 soil samples were collected for laboratory analysis for PNAs and TAL metals, with results compared to Part 201 GRCC and GICC.

Antimony was detected above the Part 201 Residential and Industrial DWPC in the soil samples collected from SB26 (0 to 2 ft bgs and 2 to 4 ft bgs) and SB27 (at 0 to 2 ft bgs and 2 to 4 ft bgs).

Arsenic was detected at concentrations above the Part 201 Residential DWPC, DCC, and SDBL in the soil samples collected from SB26 (at 0 to 2 ft bgs, 2 to 4 ft bgs and 6 to 8 ft bgs), SB27 (at 0 to2 ft bgs, 2 to 4 ft bgs and 4 to 6 ft bgs), and SB28 (at 4 to 6 ft bgs). Arsenic was detected at concentrations above the Part 201 Industrial DWPC and SDBL in the soil samples collected from SB26 (at 0 to 2 ft bgs, 4 to 6 ft bgs and 6 to 8 ft bgs), SB27 (at 0 to 2 ft bgs, 2 to 4 ft bgs and 4 to 6 ft bgs), and SB28 (at 2 to 4 ft bgs). In addition, arsenic was detected at concentrations above Part 201 Industrial DCC in the soil sample collected from SB27 (at 4 to 6 ft bgs).

Barium was detected at concentrations above the Part 201 Residential and Industrial DWPC, SDBL and Residential and Industrial GSIC in the soil sample collected from SB26 (at 2 to 4 ft bgs) and above the Part 201 Residential and Industrial DWPC and the SDBL in the soil samples collected from SB27 (at 0 to 2 ft bgs and 2 to 4 ft bgs) and SB28 (at 4 to 6 ft bgs).

Cadmium was detected at concentrations above the Part 201 Residential GSIC and the SDBL in the soil samples collected from SB26 (at 0 to 2 ft bgs and 2 to 4 ft bgs) and SB27 (at 0 to 2 ft bgs and 2 to 4 ft bgs) and SB28 (at 4 to 6 ft bgs). Additionally, Cadmium was detected at concentrations above the Part 201 Residential and Industrial DWPC in the soil samples collected from SB26 (at 2 to 4 ft bgs), SB27 (at 2 to 4 ft bgs) and SB28 (at 4 to 6 ft bgs).

Total chromium was detected at concentrations above the Part 201 Residential and Industrial GSIC and SDBL in the soil samples collected from SB26 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB27 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB28 (at 4 to 6 ft bgs), SB29 (at 0 to 2 ft bgs), SB31 (at 8 to 10 ft bgs) and SB32 (at 0 to 2 ft bgs). Total chromium was detected above the Part 201 Residential and Industrial DWPC in the soil samples collected from SB26 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB27 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB28 (at 4 to 6 ft bgs), at SB29 (at 0 to 2 ft bgs), and SB31 (at 8 to 10 ft bgs). Total chromium was detected above the Part 201 Residential and Industrial Particulate Soil Inhalation Criteria (PSIC) in soil samples collected from SB26 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB27 (at 0 to 2 ft bgs and 2 to 4 ft bgs) and SB28 (at 4 to 6 ft bgs). Total chromium was detected above the Part 201 Residential DCC and the Industrial Direct Contact in the soil sample collected from SB27 (at 2 to 4 ft bgs).

Cobalt was detected at concentrations above the Part 201 Residential and Industrial DWPC and GSIC and the SDBL in the soil samples collected from SB26 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB27 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB28 (at 2 to 4 ft bgs and 4 to 6 ft bgs), SB29 (at 0 to 2 ft bgs) and SB31 (at 8 to 10 ft bgs).

Copper was detected at concentrations above the Part 201 Residential and Industrial GSIC and the SDBL in the soil samples collected from SB26 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB27 (at 0 to 2 ft bgs and 2 to 4 ft bgs) and SB28 (at 0 to 2 ft bgs and 4 to 6 ft bgs).

Lead was detected above the Part 201 Residential and Industrial DWPC, DCC and SDBL in the soil samples collected from SB26 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB27 (at 0 to 2 ft bgs and 2 to 4 ft bgs), and SB28 (at 4 to 6 ft bgs). Additionally, lead was detected above the Part 201 Residential GSIC with the concentrations at SB26 (at 4 to 6 ft bgs) and SB27 (at 2 to 4 ft bgs).

Manganese was detected above the Part 201 Residential and Industrial DWPC and GSIC and the SDBL in the soil samples collected from SB26 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB27 (at 0 to 2 ft bgs and 2 to 4 ft bgs) and SB28 (at 4 to 6 ft bgs), with the concentration in SB27 (at 2 to 4 ft bgs) also exceeding the Part 201 Residential PSIC and the concentrations in SB26 (at 2 to 4 ft bgs), SB27 (0 to 2 ft bgs and 2 to 4 ft bgs) and SB28 (at 4 to 6 ft bgs) also exceeding the Industrial PSIC.

Nickel was detected above the Part 201 Residential and Industrial DWPC and GSIC and the SDBL in the soil samples collected from SB26 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB27 (at 0 to 2 ft bgs and 2 to 4 ft bgs) and SB28 (at 4 to 6 ft bgs).

Selenium was detected above the Part 201 Residential and Industrial GSIC and SDBL in the soil samples collected from SB26 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB27 (at 0 to 2 ft bgs, 2 to 4 ft bgs, 4 to 6 ft bgs and 6 to 8 ft bgs) and SB28 (at 4 to 6 ft bgs).

Silver was detected above the Part 201 Residential and Industrial GSIC and SDBL in the soil samples collected from SB26 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB27 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB28 (at 4 to 6 ft bgs) and SB29 (at 0 to 2 ft bgs, 2 to 4 ft bgs, and 4 to 6 ft bgs). Additionally, silver was detected above the Part 201 Residential DWPC in the soil samples collected from SB26 (at 0 to 2 ft bgs and 2 to 4 ft bgs) and SB27 (at 0 to 2 ft bgs and 2 to 4 ft bgs), with the concentrations at SB26 (at 2 to 4 ft bgs) and SB27 (at 2 to 4 ft bgs) also exceeding the Part 201 Industrial DWPC.

Vanadium was detected above the Part 201 Residential DWPC in the soil samples collected from SB26 (at 2 to 4 ft bgs) and SB28 (at 4 to 6 ft bgs).

Zinc was detected above the Part 201 Residential and Industrial GSIC and the SDBL in the soil samples collected from SB26 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB27 (at 0 to 2 ft bgs and 2 to 4 ft bgs) and SB28 (at 4 to 6 ft bgs), with the concentrations in SB26 (2 to 4 ft bgs) and SB27 (2 to 4 ft bgs) also exceeding the Part 201 Residential and Industrial DWPC and the concentrations in SB26 (0 to 2 ft bgs) and SB27 (0 to 2 ft bgs) exceeding the Part 201 Residential DWPC.

Benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene were detected above the Part 201 Residential DCC in the soil sample collected from SB27 (at 0 to 2 ft bgs). Fluoranthene was also detected above the Part 201 Residential GSIC in the soil sample collected from SB27 (at 0 to 2 ft bgs).

Benzo (a) pyrene was detected above Part 201 Industrial DCC in the soil sample collected from SB27 (at 0 to 2 ft bgs). Fluoranthene was detected above Part 201 Industrial GSIC in the soil sample collected from SB27 (at 0 to 2 ft bgs).

Based on these findings, additional investigation was recommended to further delineate the horizontal and vertical extent of contamination in the bulk unload area. The 2008 Bulk Unload Area Work Plan was submitted to the DNRE and was subsequently approved via correspondence dated September 11, 2009. The Bulk Unload Area Work Plan was implemented in April 2010 (see below).

5.44 SUMMARY OF ADJACENT PROPERTY REVIEW–WEST SIDE OF COLE DRAIN, CRA, DECEMBER 5, 2007

A Summary of Adjacent Property Review was conducted for the properties on the west side of Cole Drain and summarized in a memorandum prepared by CRA and dated December 5, 2007. The purpose of the memorandum was to summarize the adjacent property review completed for the area along the west side of Cole Drain, along Clay Avenue between 32nd Street and 36th Street. These activities were completed in conjunction with the on-going groundwater investigation and remediation at the Site.

CRA completed a visual adjacent property review for the area along to the west side of Cole Drain, along Clay Avenue between 32nd Street and 36th Street on April 10, 2007. The adjacent property review included observing and recording the addresses and facility names of properties along 32nd Street, 36th Street and Clay Avenue, along the

west side of Cole Drain, to the north of the Site. The following facilities and corresponding addresses were observed to be present in this area during an area walkover:

Facility	***Address***
Price & Company	425 36th Street SW
Shoemaker Inc. Heating & Cooling Supply	5075 Clay Avenue
Good Metals Company	440 32nd Street SW
American Metal & Plastics, Inc.	450 32nd Street SW

Based on the results of the adjacent property visual identification, a written FOIA request was submitted to the DNRE on April 11, 2007. The FOIA request included the aforementioned properties.

Documentation that was received by CRA from the MDEQ Remediation and Redevelopment Division (RRD) for review on April 25, 2007 for the Wyoming Warehouse, Inc. (currently Price & Company) property located at 425 36th Street SW included:

- Clean – Up Report, prepared by Gillhespy – RV Seaman, Inc. for the Wyoming Warehouse Inc., dated December 26, 1989
- Hydrogeological and Soil Investigation at Wyoming Warehouse, Inc. prepared by Westshore Engineering & Surveying, Inc. (Westshore), dated April 28, 1992
- Hydrogeological and Soil Investigation at Wyoming Warehouse, Inc. prepared by Westshore, dated December 4, 1992
- LUST Closure Letter from MDNR dated November 17, 1993 and associated letters

Documentation that was received by CRA from the MDEQ Water Bureau for review on April 25, 2007 for the American Metals & Plastics Inc. (AMPI) located at 450 32nd Street SW included:

- A NPDES COC and associated documentation
- MDNR RCRA/Michigan Hazardous Waste Management Act inspection, dated June 9, 1994
- MDEQ Waste Management Division inspection documentation dated May 30, 2002.

Documentation that was received by CRA from the MDEQ Waste Management Division, for review on April 25, 2007 for Metal Source Company (currently Good Metals Company property) located at 440 32nd Street SW included:

- Letter from the Kent County Health Department regarding Improper Disposal of Cutting/Cooling Oil at 440 32nd Street SW dated October 6, 1986

5.44.1 PRICE & COMPANY (FORMERLY WYOMING WAREHOUSE, INC.)

5.44.1.1 CLEAN-UP REPORT, GILLHESPY – RV SEAMAN, INC., DECEMBER 26, 1989

A Clean-Up Report was prepared by Gillhespy – RV Seaman, Inc. and summarized in a letter dated December 26, 1989. The scope of work for the clean-up was to conduct a corrective action for Wyoming Warehouse for a release of petroleum products.

Based on information provided in the Clean-Up Report, a release of petroleum products (diesel fuel) was reported during removal of a diesel UST to the State Fire Marshal on December 26, 1989 indicating that a tank was removed from the Site. The UST was located to the south of the southeast corner of the Site building. On January 17, 1990 Gillhespy – RV Seaman, Inc. screened soils with an organic vapor meter (OVM) to confirm that excavated soils and backfill material were contaminated. Based on the OVM readings encountered, additional soils were excavated and screened with an OVM. A total of 42.28 tons of soil were removed on January 17, 1990, 46.61 tons of soils were removed on January 18, 1990 and 52.77 tons were removed on January 19, 1990. All soils were disposed at the Kent County Landfill. The degree of contamination was observed to be increasing with depth and width of the excavation. Based on review of the report, the excavation was approximately 25 feet long by 15 feet wide and 13 feet deep. A test hole was advanced with moist sand encountered at 11.5 feet bgs. A water sample was collected which showed free product and had an OVM reading of 155 ppm. The MDNR was contacted and a 12-inch PVC monitoring well was installed.

5.44.1.2 LETTER TO MR. DAVID LINDSAY OF THE MDNR, WESTSHORE, FEBRUARY 8, 1991

In a letter to Mr. David Lindsay of the MDNR, dated February 8, 1991, Westshore summarized activities performed to date at the Wyoming Warehouse Site. Based on review of the letter, static water levels were recorded on April 26, 1990, May 8, 1990 and

September 26, 1990, respectively. Groundwater levels were consistent on all three dates and it was determined that the groundwater flow direction was towards the northeast (towards Cole Drain). Free product recovery was determined to be complete by utilizing a portable electric pump in the 12-inch recovery well located in the center of the excavation area. Free product recovery ceased in December 1990 based on a lack of measurable free product. A total of nine 55-gallon drums of free-product were removed from the recovery well during the operation of the well.

Groundwater samples were collected from MW-2, located down-gradient of the excavation area, on May 4, 1990 and analyzed for BTEX, TPH and diesel fuel components. Analytical results indicated that the sample was below detection limits for all constituents.

The remainder of the letter detailed investigation activities to be conducted as part of a hydrological and soil investigation at the property.

5.44.1.3 HYDROLOGICAL AND SOIL INVESTIGATION AT WYOMING WAREHOUSE, INC., WESTSHORE, APRIL 28, 1992

A Hydrological and Soil Investigation was conducted by Westshore and summarized in a report dated April 28, 1992 for the Wyoming Warehouse, Inc. property.

The scope of work for the hydrological and soil investigation was determined based on correspondence between Westshore and the MDNR. Four soil borings were installed approximately 1 to 3 feet from the sides of the excavation to investigate the lateral extent of the contamination from the former diesel fuel tank by utilizing a 4 1/4 inch hollow stem auger (HSA). Split spoon samples were collected at five-foot intervals to the water table and screened with an Organic Vapor Analyzer (OVA) by head space methods. No readings were detected via field screening, therefore, samples were collected from just above the water table and submitted for laboratory analysis for BTEX and PNAs. One soil sample, collected from soil boring 3 (SB-3), contained toluene at a concentration of 15 µg/kg. All soil samples were collected from nine feet bgs based on groundwater levels encountered at approximately 9 to 11 feet bgs.

As compared to current regulations, toluene was detected below the Part 201 GRCC and Part 213 RBSL.

Groundwater samples were collected from monitoring wells MW-1, MW-2, MW-3 and MW-4 and analyzed for BTEX and PNAs. Based on analytical results, BTEX and PNA

compounds were determined to be present in MW-4, which replaced the 12-inch recovery well in the center of the former tank excavation. During groundwater sampling, hydrocarbon odors were noted by Westshore in MW-2 and MW-3.

Based on the results of the hydrological and soil investigation, Westshore recommended the following:

- Resampling of MW-2, MW-3 and MW-4 for TPH.
- Installation of a test boring with VAS at approximately 10 to 15 feet downgradient of the center of the excavation via HSA drilling methods. Collection of groundwater samples at 10-foot intervals beginning at the top of the water table and continuing until a lower impervious layer was encountered or two consecutive 10-foot samples tested clean utilizing a Carian 2400 Field Gas Chromatograph. The drilling to proceed 1 foot into the impervious layer with a split-spoon 2 feet into the impervious layer. Wells logs from the area indicated an impervious layer may exist at 20 to 30 feet bgs. Groundwater samples collected for laboratory analysis of BTEX and PNAs.
- Collection of two soil sample from immediately above the capillary fringe zone within the former boundaries of the UST excavation and analyzed for BTEX and PNAs.

5.44.1.4 HYDROLOGICAL AND SOIL INVESTIGATION AT WYOMING WAREHOUSE, INC., WESTSHORE, DECEMBER 4, 1992

A Hydrological and Soil Investigation was conducted by Westshore and summarized in a report dated December 4, 1992.

The scope of work for the hydrological and soil investigation was detailed in the previous hydrological and soil investigation report, dated April 28, 1992 and is summarized above. The scope of work consisted of collecting groundwater samples from MW-2, MW-3 and MW-4 for TPH analysis, conducting VAS at test borehole 1 (TB-1) located approximately 10 to 15 feet downgradient of the center of the former excavation area, the collection of two soil samples from immediately above the capillary fringe zone within the former boundaries of the UST excavation and the collection of one soil sample outward from the previous soil boring SB-3 for BTEX analysis.

Based on analytical results and OVA readings, no impacts to soil were observed by Westshore during the additional investigation. Analytical results for the groundwater

samples collected from MW-2, MW-3 and TB-1 were non-detect for BTEX and PNAs. Monitoring well MW-4 contained TPH at a concentration of 22 mg/L, fluorene at 5.3 µg/L, naphthalene at 35 µg/L, and phenanthrene at 8.6 µg/L. Based on analytical results, Westshore concluded that the vertical and horizontal extent of impacts were defined and recommended quarterly monitoring of MW-4, as it was the highest zone of contamination with historic concentrations of naphthalene at 30 µg/L and xylenes at 300 µg/L.

As compared to current regulations, fluorene is below the Part 201 Residential DWC and Part 213 RBSL. Phenanthrene and naphthalene are above the Part 201 GSIC and Part 213 RBSL.

5.44.1.5 LETTER TO MDNR FROM WESTSHORE, OCTOBER 18, 1993

According to the letter from Westshore to the MDNR, dated October 18, 1993, analytical results from sampling activities conducted at MW-4 on October 8, 1992 indicated that naphthalene was detected at a concentration of 21 µg/L and xylenes were detected at a concentration of 94 µg/L, which were both below Type B closure criteria and which Westshore attributed to the hydrocarbon odor detected in the well. These results were the second set of results in a row that were below the Type B closure criteria and therefore, Westshore requested no further remediation at the Site and Type B closure for soil and groundwater based on comments regarding closure summarized in a letter to Mr. Orrin Sunde from the MDNR dated December 29, 1992.

Naphthalene and xylenes were detected above the Part 201 GSIC and Part 213 RBSL.

5.44.1.6 LETTER TO MR. ORRIN SUNDE OF WYOMING WAREHOUSE FROM MDNR, NOVEMBER 17, 1993

The letter to Mr. Orrin Sunde of Wyoming Warehouse from Mr. Gerard J. Heyt of the MDNR, concurs with the letter from Westshore to the MDNR on October 18, 1993 that the interim response activities at the Site have reduced the contamination to concentrations acceptable for a Type B Closure. According to the letter, a total of 142 cubic yards of soil were excavated and removed from the Site and 750 gallons of contaminated groundwater were removed from a monitoring well (MW-4) located at the source of the contamination.

Xylenes were detected above the Part 201 GSIC and Part 213 RBSL. Naphthalene was detected above the Part 201 GSIC and Part 213 RBSL.

5.44.2 AMERICAN METALS AND PLASTICS, INC. (AMPI)

5.44.2.1 NPDES COC AND ASSOCIATED DOCUMENTATION

A NPDES COC for the AMPI site located at 450 32nd Street SW in Wyoming, Michigan was reviewed by CRA. According to the COC, AMPI is authorized to discharge an unspecified amount of stormwater, which meets the criteria established in General Permit No. MIS110000. The discharge is from the Site located at 450 32nd Street SW and the discharge is to Plaster Creek. It should be noted that the AMPI site first discharges to the Cole Drain, located directly to the east of the AMPI site and eventually into Plaster Creek. The COC was issued on May 11, 2006 and was effective immediately. The COC expires on April 1, 2011. Previous COCs were issued on April 1, 2001, March 13, 2000, and December 2, 1994 for the Site under the General NPDES Permit.

5.44.2.2 LETTER TO AMPI FROM MDEQ, AUGUST 10, 1998

A letter to AMPI from the MDEQ, dated August 10, 1998 was reviewed by CRA. The letter identified deficiencies in reporting compliance with particular requirements of the NPDES General Permit for the Site including:

- Part I B.2 of the General Permit which states that a certified stormwater operator will be in place within one year of the COC for the permit.
- Part I B.2.b. of the General Permit states that a Stormwater Pollution Prevention Plan (SWPPP) will be developed within 18 months of the effective date of the COC. According to the letter, the district supervisor had not received the SWPPP at the time of the letter.
- Part I B.2.b. of the General Permit also states that all non-stormwater discharges have been covered under a separate NPDES permit or eliminated or an application has been filed for coverage under a separate permit. According to the letter, the district supervisor had not received the information at the time of the letter.
- Part I B.2.c. of the General Permit states that implementation of the non-structural requirements of the permit will have been completed within two years of the effective date of the COC. According to the letter, the district supervisor had not received this certification at the time of the letter.

- Part I B2.d. of the General Permit states that the permittee will have completed the construction of and put into operation all structural stormwater pollution controls at the Site within 3 years of the effective date of the COC. According to the letter, the district supervisor had not received certification that the structural controls were implemented at the time of the letter.
- Part I B.4. of the General Permit states that failure to comply with schedules of the permit and certification requirements constitutes a violation of the permit.

5.44.2.3 LETTER TO AMPI FROM MDEQ, FEBRUARY 12, 2004

A letter to AMPI, dated February 12, 2004 was available for review by CRA. The letter summarizes the findings of a stormwater permit compliance inspection conducted on August 5, 2003 by the MDEQ. The following observations were made during the inspection:

- Finished and partially finished products, pallets, racks, and baskets and used equipment were observed to be stored outside and exposed to stormwater runoff. The AMPI site's SWPPP should contain control measures for all identified process materials or residuals associated with the process materials that are exposed to stormwater runoff to ensure that stormwater discharges are not negatively impacted by the presence of these materials.
- Catch basins located between the main building and the south annex of the building were plugged with a dark and thick substance. It was recommended that the substance be removed and the catch basins should be cleaned per acceptable housekeeping standards.
- The facility's SWPPP was found to be incomplete in that the AMPI site map did not fulfill all of the minimum requirements; the preventative measures and source controls were not implemented and developed as required; and the documentation of the applicable reviews of the SWPPP were not available for review by the MDEQ upon request.

5.44.2.4 LETTER TO MDEQ FROM AMPI, APRIL 15, 2004

A letter to Mr. Mike Worm of the MDEQ-WB, dated April 15, 2004, was available for review by CRA. The letter was written in response to comments presented in the letter

from the MDEQ to AMPI, dated February 12, 2004 regarding stormwater permit compliance. The responses to the comments are summarized as follows:

- AMPI contracted Fishbeck Thomson, Carr & Huber, Inc. (FTC&H) to update AMPI's SWPPP for the site and insure that control measures are in place to ensure that any item stored outside are free of particulate matter and residues that may impact stormwater.
- The dark substances observed on the catch basins were determined to be dust and sediment that had collected over time. The catch basins were cleaned and control measures were implemented to ensure that the area is swept and cleaned regularly.
- The SWPPP would be updated, including the site map, to ensure significant materials are prevented from contacting stormwater. FTC&H would serve as the site's certified stormwater operator and will conduct semi-annual stormwater inspection and provide an annual review of the SWPPP.

5.44.2.5 LETTER TO AMPI FROM MDEQ, NOVEMBER 9, 2006

A letter to AMPI, dated November 9, 2006, was available for review by CRA. The letter summarizes the findings of a stormwater permit compliance inspection conducted on November 2, 2006 by the MDEQ. The following observations and recommendations were made by the MDEQ during the inspection:

- The system of dikes to contain stormwater in the outside storage area and direct it to a catch basin inside an enclosure should be monitored during heavy rainfall events to assure it is functioning as intended.
- The flow from the catch basin located adjacent to the die storage rack outside the diked area should be inspected and confirmed to discharge to the catch basin in the enclosure. Periodic inspections of the catch basins should be included in the SWPPP.
- No contaminants were observed at the stormwater outfalls to the vegetated ditch along US 131.
- Additional information is required to complete the SWPPP.

5.44.2.6 LETTER TO MDEQ FROM AMPI, DECEMBER 8, 2006

A letter to Mr. Ryan Grant of the MDEQ, dated December 8, 2006, was available for review by CRA. The letter was written in response to comments presented in the letter

from the MDEQ to AMPI, dated November 9, 2006 regarding stormwater permit compliance. The responses to the comments are summarized as follows:

- AMPI agreed to monitor the catch basin collection system during heavy rainfall events and cut a large opening in the bottom of the enclosure to prevent stormwater from heavy rain events from backing up and overflowing the enclosure. Monthly inspections of the oil-water separator were added to the preventative maintenance program of the SWPPP.
- AMPI completed an inspection of the catch basin adjacent to the die storage rack, including securing drawings of the system design from MacDonald Plumbing. Based on review of the design drawings, the catch basin is not connected to the catch basin in the enclosure, but is connected to other catch basins located in the driveway to the east. Also, the oil-water separator discharges to the sanitary sewer system and not the stormwater sewer system.
- FTC&H is currently finalizing the SWPPP for AMPI, which should have been finalized by January 1, 2007 and submitted to the MDEQ.

5.44.3 440 32ND STREET SW

5.44.3.1 LETTER FROM THE KENT COUNTY HEALTH DEPARTMENT REGARDING IMPROPER DISPOSAL OF CUTTING/COOLING OIL AT 440 32ND STREET SW, OCTOBER 6, 1986

A letter to Mr. David Potts of Metal Source Company, located at 440 32nd Street SW in Wyoming, Michigan, from the Kent County Health Department (KCHD) was available for review by CRA. Based on review of the letter, the KCHD conducted an investigation of a report of the improper disposal of cutting/cooling oil at the site. The inspection confirmed that oil saturated soils were present at the southwest corner of the building as a result of oil and oil soaked metal cuttings bypassing the metal shaving recovery system, being deposited on the roof by recovery system exhaust fans, and flowing down the roof and side of the building to the soil below. Per discussions with the site, the situation would be corrected and following necessary repairs, the metal shaving recovery system would be changed to have a covered 55-gallon drum receive oil from a properly vented duct extension. Furthermore, the oil stained soil would have to be removed from the site and disposed of at a licensed Type II landfill.

Groundwater flow direction from both the Grand Rapids Metal Plant and the property located at 425 36th Street SW are in a northwest and northeast direction, respectively,

towards the Cole Drain. Based on groundwater flow data to date, the Cole Drain appears to be a gaining stream with groundwater flowing to the northwest and northeast towards the drain from the east and west sides of the drain respectively.

Based on the review of available information obtained from the FOIA request, it appears that there has been a former source of xylenes and naphthalene at the Price & Company Site (formerly Wyoming Warehouse Inc.). Xylenes, phenanthrene and naphthalene were identified in groundwater at concentrations above the current Michigan Act 451, Part 201 GSI Criteria. It should be noted that groundwater and soil samples were not analyzed for a full TCL VOC scan, which includes chlorinated VOCs. Selected excavation was conducted at the source area of the xylene, phenanthrene and naphthalene impacts as part of a UST removal.

Additionally, in 1986, oil-saturated soils were present at the property at 440 32nd Street SW. The oil was associated with cutting oils and coolants from a metals shavings recovery system. No further information regarding this release was available in the files reviewed.

Based on the review of available documentation, CRA provided the following conclusions:

- Xylenes and naphthalene were detected in groundwater on the Price & Company (formerly Wyoming Warehouse, Inc.) property, located hydraulically downgradient of the Site with groundwater flow direction towards the Cole Drain to the northeast.
- Oil-saturated soils were present at the property at 440 32nd Street SW in 1986. The oil was associated with cutting oils and coolants from a metals shavings recovery system and no further information was available regarding the nature of the impacted soil.

5.45 SEMI-ANNUAL GROUNDWATER MONITORING REPORT, CRA, JANUARY 5, 2010

A Semi-Annual Groundwater Monitoring Report was prepared by CRA and dated January 5, 2010. It should be noted that groundwater monitoring reports were prepared by various consultants and submitted to the MDNRE on a quarterly or semi-annual basis for the period from 1989 to 2009.

The current semi-annual groundwater monitoring program conducted at the Site includes: the collection and analysis of groundwater/water samples for TCL VOCs from existing monitoring wells and culvert locations; the collection and analysis of groundwater samples from monitoring wells 85-3, 85-5B, 85-6, and 86-1 for TCL SVOCs; the measurement of static groundwater levels in all monitoring wells; and the measurement of free product levels in select Site monitoring wells.

The semi-annual groundwater monitoring event was conducted at the Site in October 2009. At that time, a total of 46 groundwater samples were collected from monitoring wells MW1-03 through MW7-03, MW8-04 through MW10-04, MW11S-05, MW11D-04, MW13-04 through MW15-04, MW17-06, 85-1, 85-2, 85-3, 85-5B, 85-6, 85-7, 86-1, 86-3, 87-1, 87-2, 87-4, 87-5, 87-8, 87-9, 87-10, 87-11, 87-13, 88-2, 88-3, 88-4, purge well 86-2, and from culvert locations C-1, C-2, and C-3 between October 6, 2009 and October 8, 2009 for analysis of TCL VOCs. In addition, samples collected from monitoring wells 85-3, 85-5B, 85-6, and 86-1 were analyzed for TCL SVOCs.

Based on analytical data reviewed, TCE was detected above Part 201 GRCC in the groundwater samples collected from MW1-03, MW17-06, 86-2, 87-1, 87-2, 87-4, 87-10, and 87-11. TCE was also detected in the samples collected from 85-2, 85-3, 85-7, 86-3, 87-5, 87-9, 87-13, MW4-03, MW5-03, MW7-03, MW8-04, MW9-04, MW10-04, MW11D-04, MW14-04, MW11S-05, and MW15-04; however, the concentrations were below the Part 201 GRCC. PCE was detected above Part 201 GRCC in the groundwater samples collected from MW1-03, MW2-03, and MW17-06. PCE was also detected in the samples collected from 85-3, 85-6, 87-8, 87-10, MW3-03, MW4-03, MW5-03, MW9-04, and MW11D-04; however, the concentrations were below the Part 201 GRCC. Cis-1,2-DCE was detected in the samples collected from the following wells: 85-1, 85-3, 85-5B, 85-7, 86-3, 87-1, 87-2, 87-9, 87-10, 87-11, and MW17-06; however, the concentrations were below the Part 201 GRCC. Vinyl chloride was detected above the Part 201 GRCC in the groundwater samples collected from 87-1, 87-2, 87-5, and 87-11. VC was also detected in the groundwater sample collected from 85-1; however, the concentration was below the Part 201 GRCC.

1,1,1-TCA, 1,1-DCA, 1,1-DCE, acetone, 2-butanone, bromodichloromethane, carbon disulfide, chloroform, 1,3-dichlorobenzene, dibromochloromethane, ethylbenzene, isopropylbenzene, MTBE, trans-1,2-DCE, trichlorofluoromethane, and total xylenes were also detected in groundwater at the Site; however, the concentrations were below the Part 201 GRCC.

Prior to groundwater sample collection, static water levels and free product levels were measured to the top of each riser. No measurable free product was detected in monitoring wells 85-3, 85-5B, 85-6, or 86-1 during the October 2009 semi-annual sampling event. The groundwater flow direction for October 6, 2009 was to the north-northwest, toward Cole Drain and consistent with previous events.

5.46 PHASE I ENVIRONMENTAL SITE ASSESSMENT, CRA, AUGUST 5, 2010

CRA performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 of the former Grand Rapids Metal Plant property located at 300 36th Street SW, City of Wyoming, Kent County, Michigan.

The assessment identified the following potential findings regarding recognized environmental conditions (RECs), historic RECs, *de minimis* conditions, and business environmental risk associated with the Site:

- Adjacent Properties – East of Buchanan Avenue SW
- Adjacent Properties – Along Clay Avenue SW
- Adjacent Properties – West Side of Cole Drain
- Long-Term Industrial Operations
- Potential On-Site Fill Activities
- Release from Press HS-5
- LNAPL and SVOC-Impacted Groundwater
- Former Metal Finishing Operations
- Mineral Spirits and Mineral Seal Oil USTs
- Former Paint Booths
- WWTP
- Current Power House
- Former Power House
- Former AOF House
- Current Gasoline and Diesel USTs
- Former Heating Oil and Oil USTs
- Former 5,000-Gallon Gasoline UST
- Former 1,000-Gallon Gasoline USTs
- Former Cooling Tower Basin

- Former Cooling Water Spray Pond
- Former Sludge Bed
- Current Baler House Pits
- Former Baler House and Main Manufacturing Building Balers
- Former Heat Treat Operations
- Former Tool and Die Operations
- Former Coolant Recovery System
- Former Stamping Operations
- ASTs
- Historical Die Storage
- Substations
- Stormwater Retention Pond
- Wood Floor Block
- Former Tar House
- VOC-Impacted Soil and Groundwater Associated with Column T, Row 27 Former Degreaser
- Additional Historical Degreasing Operations
- Oil Stores Bulk Unload Area
- Additional Bulk Load and Unload Areas
- Former Incinerators
- Elevator Pits
- Scrap Metal Storage Pad
- Compactor
- Historical Residential and Commercial Properties
- Railroad Track Operations
- Battery Charging Areas
- Process Infrastructure
- Agricultural Chemicals
- Staining

5.47 DRAFT FACILITY ENVIRONMENTAL ASSESSMENT, CRA, OCTOBER, 2010

CRA was retained by Motors Liquidation Company (MLC) to conduct a Facility Environmental Assessment (FEA) of the Site. The objective of the FEA was to identify

areas of environmental interest associated with structures and building materials, facility support systems, and production equipment and systems. The FEA also serves to classify wastes and identify impacted building materials. This FEA Report (Report) was developed to summarize findings and identify potential environmentally sensitive items that may require addressing to ensure compliance with applicable environmental regulations, to help protect human health and safety, and to minimize impacts of facility disposition activities on the environment. The final disposition scenario (mothball, reuse, or demolition) for the Site has not been determined.

An initial investigation of the facility was performed by CRA from September 29 through October 2, 2009. This investigation included a Site inspection, interviews with Site personnel, and file reviews. Following the initial Site inspection, additional information was obtained through examination of key components and building systems associated with each structure, including support utilities, construction materials, material storage and handling areas, production and environmental control equipment, and waste management and disposal facilities. Based on this information, CRA developed a Sampling and Analysis Plan (SAP) to further investigate building components and surfaces for potential impacts. The SAP was approved by MLC, and implemented in July and August, 2010.

CRA collected 472 concrete core, floor block, surface wipe, oil, paint chip, window caulk, floor block mastic, rail line joint material, floor epoxy, railroad tie, solid, and sludge samples for analysis. Sample analytical results exceeding applicable screening criteria are summarized in the FEA Report.

Given that the final disposition plan for the facility had not yet been determined, this Report did not contain recommended decommissioning activities. Recommended decommissioning activities will vary between disposition options (mothball, reuse, and demolition), and depending upon the selected option, additional investigation may be prudent based on the results presented in the FEA Report.

5.48 2010 BULK UNLOAD AREA INVESTIGATION DATA REPORT, CRA, NOVEMBER, 2010

CRA was retained by MLC to conduct a Bulk Unload Area Investigation at the Site. The purpose of the investigation was to further evaluate and delineate impacts to soil above the Michigan Act 451, Part 201 GRCC and GICC identified in the vicinity of the bulk unload area during previous investigations conducted in December 2005 and July 2007, respectively.

Investigative activities included the advancement of seven soil borings, SB34-10 through SB40-10, and the collection and analysis of 41 soil samples. The borings were advanced north, west, and northwest of the 2007 boring locations. Additionally, one soil boring (SB39-10) was advanced east of the 2007 boring locations in the former Oil Stores area of the plant. One soil sample was collected for chemical analysis from each 2-foot interval above the water table, in addition to QA/QC samples for each boring. Samples were submitted for laboratory analysis of PNAs, PCBs, and TAL metals. Based on the initial results for chromium and lead, select samples were subsequently analyzed for trivalent and hexavalent chromium and the fine and course lead fractions. Laboratory analytical results demonstrated that chromium predominately exists in the trivalent form.

Analytical results identified that TAL metals and PNAs were detected in soil samples at concentrations above the Part 201 GRCC and/or GICC; however, no exceedances of the Part 201 GRCC and/or GICC were identified in the 8 to 10-foot interval with the exception of selenium in one location, and the majority of the impacted area appeared to be limited to the 2 to 6-foot interval. It was concluded that the horizontal extent of impacted soil had not been delineated to Part 201 GRCC and GICC. Further evaluation of the bulk unload area to delineate the horizontal extent of impacted soil was recommended.

6.0 SUMMARY OF PREVIOUS REMEDIAL ACTIONS

The following previous remedial actions were reported to have been implemented for the Site:

- Main Manufacturing Building Groundwater Foundation Drain System
- Miscellaneous Press Removals
- Miscellaneous Excavations
- 17-Bay Excavation
- 20-Bay Excavation
- Groundwater Extraction and Treatment System
- Soil Vapor Extraction and Treatment System
- Bulk Unload Trench Drain Installation and Excavation

6.1 FACILITY GROUNDWATER FOUNDATION DRAIN SYSTEM

A drain was installed at a depth of approximately 20 feet bgs to collect groundwater at the perimeter of the Main Manufacturing Building foundation. Collected groundwater is conveyed through the storm sewer system to the stormwater pond or to the Site WWTP prior to discharge to the City of Wyoming sanitary sewer system. The foundation drain system has the ability to intercept impacted groundwater at the water table and prevent migration. The majority of groundwater (present at depths greater than 20 ft bgs), is not collected by the foundation drainage system.

6.2 MISCELLANEOUS PRESS REMOVALS

4-Bay and 5-Bay Press Removal – 2002

Based on Site records, an unknown number of presses were removed from Bays 4 and 5 in 2002. Some of the presses were replaced or relocated elsewhere in the Main Manufacturing Building and others were sold or disposed off-Site. According to analytical data, various oil, floor block, wipe, concrete, and soil samples were collected in association with press removal and/or pit excavation between August and November 2002. Additional details are provided in Section 5.32.

6.3 MISCELLANEOUS EXCAVATIONS

A-15 Area Excavation – 1986

Based on available records, approximately 2,670 tons of potentially contaminated soil was removed in February 1986 from the A-15 area for off-Site disposal. It was estimated that 12,000 tons of soil still needed to be removed from the "Steel Stores" area.

17-Bay Excavation – 1998

Based on available records, soil and groundwater samples were collected in 1998 in the 17-Bay area of the Main Manufacturing Building and analyzed for characterization purposes preceding excavation activities planned in the area to set a foundation for new equipment. Soil sample results exceeded GM Inert Guideline Criteria and Michigan Act 451, Part 201 State Default Background Levels, but were below Michigan Act 451 Part 201 Criteria. TCE was detected in a groundwater sample above Part 201 Residential and Industrial DWC. The excavated soils were deemed suitable for disposal at another GM facility or in a Type II landfill; however, no disposal documentation of the quantity of materials removed was available. Additional details are provided in Section 5.25.

20-Bay Excavation – 1999

Based on available records, soil and groundwater samples were collected in the location of a press scrap conveyor trench in the 20-Bay area of the Main Manufacturing Building and analyzed for characterization purposes preceding excavation and dewatering activities planned in the area. TCE was detected in one groundwater sample above laboratory method detection limits, but below Part 201 Residential DWC. Groundwater was likely to meet City of Wyoming discharge standards and excavated soil was deemed suitable for disposal in a Type II landfill. No disposal documentation of the quantity of materials removed was available. Additional details are provided in Section 5.28.

6.4 GROUNDWATER COLLECTION AND TREATMENT SYSTEM

A Phase IV-B HI, discussed above in Section 5.18, was conducted at the Site in 1988 to determine the potential for removal of TCE from the groundwater and the control of impacted groundwater flow in the area of a former degreaser (source area) for migration control. Monitoring well 86-2 was identified as a sufficient purge well with sufficient yield to recover impacted groundwater and was converted to an extraction well. A

combination treatment system (i.e., groundwater pump and treat and SVE system) was installed in 1989 to remediate the chlorinated compounds plume at the Site. The remediation system consisted of a SVE system for removal of vapors from the vadose zone (discussed below) and groundwater purge wells for extraction of impacted groundwater (a second extraction well for groundwater [PW-DISCH] was installed in the north parking lot in 1993). Both systems discharged to two activated carbon treatment systems consisting of two carbon tanks per system. The treated groundwater was initially discharged to the City of Wyoming sanitary sewer system and in 1994, began discharging to the on-Site stormwater retention pond under a NPDES Permit and eventually to Cole Drain. The system was monitored periodically, and based on significant influent reductions, the system was determined to be ineffective and shutdown in February 2005, with MDNRE concurrence. At that time, TCE concentrations had decreased in 86-2 and PW-DISCH from 100,000 ug/L and 180 ug/L, respectively, to levels of 4.7 ug/L and 1.6 ug/L, respectively. The former extraction wells remain in place and are monitored as part of the semi-annual groundwater monitoring and reporting activities at the Site. The concentration of TCE in monitoring well 86-2 for the sample collected in October 2009 was 6.1 ug/L.

6.5 SOIL VAPOR EXTRACTION AND TREATMENT SYSTEM

A Soil Vapor Pilot Study, discussed above in Section 5.17, was conducted at the Site in 1988 to develop the required data to design a remediation system. Monitoring well 87-3 was utilized as a vapor recovery well. Following the pilot study, a flow rate of 100 cubic feet per minute (cfm) was determined to be adequate for removing TCE from soils. The SVE system was operated at approximately 100 cfm. The system was shut down in 2003 under approval of the MDEQ, when it was determined to no longer be effective at removing TCE mass. The exhaust was treated in the activated carbon systems discussed above. The treated air was discharged to the outdoors via a roof stack under an Air Permit.

Subsequent to the SVE system shutdown in 2003, subsurface investigation activities were conducted to assess VOC concentrations in the vadose, or unsaturated zone in July 2004, July 2005, and December 2005, respectively. A summary of these investigations was prepared and submitted to the MDNRE on September 8, 2006. TCE was detected in several locations above the Part 201 Residential and Industrial Drinking Water Protection Criteria, the Groundwater-Surface Water Interface Protection Criteria, and the Residential Soil Volatilization to Indoor Air Criteria. Additionally, TCE was detected above the Part 201 Generic Industrial Soil Volatilization to Indoor Air Criteria

in one location (SB8-05 from 0 to 2 feet bgs). Based on review of the report, it was concluded that additional investigation was required to delineate the extent of VOC contamination in soil at the Site to Part 201 GRCC, which was subject to Part 201.

6.6 BULK UNLOAD TRENCH DRAIN INSTALLATION AND EXCAVATION

In November 2004, Site personnel installed a trench drain in the bulk unload area near the northwest corner of the plant. The trench drain was approximately 70 feet long by one-foot wide and drained to a sump located adjacent to the bulk unload area.

Prior to disposal, Site personnel sampled excavated soils from the area for waste characterization. Analysis conducted for the waste characterization of the excavated soils included TCLP metals, oil and grease, and TPH as gasoline, diesel, and "other." TCLP analysis of the waste soil sample had detections of barium, cadmium, copper, lead, and zinc. Totals analysis was also preformed on lead, TPH diesel, and TPH "other" for which there were detections. The soils were disposed of as a hazardous waste due to the concentration of lead identified.

Additional information is presented in Section 5.33.

7.0 AREAS OF INTEREST

7.1 AOI 1: ADJACENT PROPERTIES – EAST OF BUCHANAN AVENUE SW

7.1.1 HISTORICAL OPERATIONS

Based on the review of historical information, the adjacent properties to the east of the Site, across Buchanan Avenue SW, have been operated as commercial/industrial properties since at least 1950, with a gas station operating on the properties associated with 3565 and/or 3636 Buchanan Avenue SW from between at least 1938 to 1975. Additional historical commercial/industrial occupation of properties noted on Sanborn maps and in city directories includes: a gas station at the intersection of 36th Street SW and Buchanan Avenue SW since at least 1966; a buried gas tank on the property located at 3700 Buchanan Avenue SW; a paint shop at 3818 Buchanan Avenue SW; auto repair facilities at 3826 Buchanan Avenue SW; heat treat operations at 3832 Buchanan Avenue SW; and a machine shop at 3890 Buchanan Avenue SW. In addition, the properties located adjacent to the east of the Site across Buchanan Avenue SW at 3890 Buchanan Avenue SW (Conical Tool Company), 3832 Buchanan Avenue SW (entity not listed), and 3840 Buchanan Avenue SW (Commercial Heat Treating Company) are listed in the Baseline Environmental Assessment (BEA) Database indicating exceedances of Part 201 GRCC are present on those properties.

7.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

FOIA reviews were previously conducted for the adjacent Conical Tapered Mills (formerly Conical Tool) property, located to the southeast of the Site. Chlorinated VOCs (cVOCs), including PCE, were identified on that property, which appear to be migrating onto the Site. A FOIA review was conducted in April 2003, to identify any potential upgradient sources of contamination, which may be migrating onto the Site. Based on the review of available information obtained from the FOIA request, the Conical Tool property, assumed to be located hydraulically upgradient from the Site, was identified as a potential source of TCE. TCE was identified in soil and groundwater at concentrations above the Part 201 GRCC. PCE was also detected in groundwater above the Part 201 GRCC from the Conical Tool site. However, it was not clear from the information reviewed whether all soil samples were analyzed for PCE. Insufficient information from the MDNRE files was present to determine a possible source location for PCE at the Conical Tool site. Additionally, the vertical extents of TCE and PCE in groundwater were not determined, based on the information reviewed. Based on environmental investigation reports reviewed, excavation was conducted in two areas at

the Conical Tool site. Neither of these excavations was conducted where the TCE was detected in soil above the Part 201 GRCC.

This property is upgradient to the southeastern portion of the Site, where PCE was identified in groundwater above the Part 201 GRCC in three locations, MW1-03, MW2-03, and MW11-04. PCE was identified at depths below the groundwater table migrating onto the Site, which was considered consistent with concentrations that would be present downgradient of a source area/release.

The time of release, specific up-gradient/source area concentrations, and fate of PCE migrating on to the Site had not been identified. PCE was migrating to the Site in the area of MW1-03 above the Part 201 GRCC. The screened interval for MW1-03 is from 30 to 35 feet bgs. Based on the review of analytical results obtained during the 2003 investigation conducted by CRA and summarized in a Data Report submitted to the MDNRE on March 2, 2004, vertical profiling results at the water table indicated a concentration of PCE at 7.0 µg/L (7.1 µg/L in a duplicate sample) in a groundwater sample collected at 24 feet bgs from HP1-03 in this area were below the GSI Criteria. This was noted as important because at that location and depth, and at that concentration, it was unlikely that PCE was being collected by the Site's groundwater foundation drain system, which was present at approximately 20 feet bgs and served to collect groundwater in the areas surrounding the building foundation. Groundwater was collected in the drain system and discharged to the on-Site retention pond, and then discharged to the Cole Drain, pursuant to an NPDES permit. The upgradient source PCE may also have commingled with the TCE release from the Site, and been similarly affected by the Site pump and treat system.

In addition, the property located at 3887 South Division Avenue SW (entity not listed) was listed in the SHWS Database, for impacts of PCE.

7.1.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the long-term historical operations conducted on these properties, the groundwater flow direction to the north-northwest in this area making these properties upgradient and cross-gradient of the Site, and the known impacts on those properties above the Part 201 GRCC that are likely or may be impacting the Site, the adjacent properties to the east are considered an AOI. Further investigation of this AOI is recommended.

7.2 AOI 2: ADJACENT PROPERTIES – ALONG CLAY AVENUE SW

7.2.1 HISTORICAL OPERATIONS

Based on the review of the environmental database search results, the Ryder Truck property located at 3663 Clay Avenue SW is listed in the LUST Database as having an open status. Additionally, the property located at 3940 Clay Avenue SW (entity not listed), to the south of the Clay Avenue Parking Lot portion of the Site, is listed in the BEA Database, indicating exceedances of Part 201 GRCC are present on that property.

7.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Based on limited groundwater flow direction known for the west side of Cole Drain, it appears that groundwater on the west side of the drain flows north-northeast.

7.2.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the open status of the LUST, the known impacts on the property in the BEA database above the Part 201 GRCC, and the potential for cross-gradient groundwater flow, the adjacent properties are considered an AOI. Further investigation of this AOI is not recommended at this time

7.3 AOI 3: ADJACENT PROPERTIES – WEST SIDE OF COLE DRAIN

7.3.1 HISTORICAL OPERATIONS

The area to the northwest of the Site has been developed for industrial use since at least 1960, based on aerial photographs. Based on the nature of the long-term historical operations conducted on these properties, the groundwater flow direction to the north-northeast in this area making these properties downgradient and cross-gradient of the Site, and the known impacts on those properties above the Part 201 GRCC that may be commingling with the plume from the Site.

7.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Based on investigations conducted to date, PCE is present in groundwater in a monitoring well on the west side of Cole Drain. The monitoring well is located to the north of 36th Street on property owned by Consumers. Based on analytical data collected to date for the well on the west side of Cole Drain and for the wells on the east side of Cole Drain, concentrations of PCE are higher on the west side of the drain than on the east side, suggesting the source of the PCE is to the west of Cole Drain. Groundwater flow direction in the area of Cole Drain appears to be to the north-northeast from the west side of the drain, and to the north-northwest on the east side of the drain, suggesting that Cole Drain is a gaining stream.

Additional monitoring wells located on the west side of Cole Drain on property owned by Consumers, to the north of the aforementioned monitoring well, were installed in 1988. PCE was not detected in these wells during the October 2009 semi-annual groundwater monitoring event.

7.3.3 CURRENT STATUS AND RECOMMENDATIONS

Based on concentrations of PCE from west of Cole Drain contributing to off-Site groundwater impacts from the on-Site plume, the adjacent properties are considered an AOI. Further investigation of this AOI is not recommended at this time

7.4 AOI 4: HISTORICAL SITE OPERATIONS

The majority of the Site was operated on a long-term basis as an industrial property dating back to 1936, including operations associated with stamping, machining, degreasing, metal finishing, and various other manufacturing operations and the associated industrial infrastructure (i.e. sewers, pits, etc.). Additionally, the properties to the north of 36th Street and to the west of Cole Drain that also comprise the Site were utilized for a mixture of agricultural, residential, and commercial uses. These activities typically utilize, store and dispose of a variety of chemicals and; therefore, are considered an AOI. Individually known operations are further discussed below.

7.4.1 AOI 4.1: LONG-TERM INDUSTRIAL OPERATIONS – MAIN PARCEL

7.4.1.1 HISTORICAL OPERATIONS

The majority of the Site was operated on a long-term basis as an industrial property dating back to 1936, including operations associated with stamping, machining, degreasing, metal finishing, and various other manufacturing operations and the associated industrial infrastructure (i.e. sewers, pits, etc.). No specific documentation was available regarding chemicals used, chemical storage locations, or historic disposal practices during the entire timeframe the property has been utilized for industrial purposes. Industrial facilities like the Site typically, either currently or historically, use significant quantities of chlorinated solvents, heavy metals, PCBs, and petroleum products.

7.4.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Numerous investigations have been completed to date for specific AOIs; however, a broad Site-wide investigation has not been conducted.

7.4.1.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the long-term industrial operations, the main parcel is identified as a general AOI. Further investigation of this AOI is recommended.

7.4.2 AOI 4.2: HISTORICAL OPERATIONS – WESTERN PARCEL

7.4.2.1 HISTORICAL OPERATIONS

The property to the west of the main manufacturing property along Clay Avenue SW was historically utilized for agricultural purposes and for water supply wells, a softener plant, and a chlorinator building. A 1957 drawing and 1960 aerial photograph identify the presence of small structures located on this property. The 1957 drawing identifies Well Nos. 11 to 16, a softener plant, and a chlorinator building on this property.

Based on the historic use of the western portion of the Site as cultivated farmland, agricultural chemicals such as pesticides, herbicides and fertilizer would have historically been used on the Site. Information regarding historic use, storage or

application rates was not available. If the chemicals were applied in accordance with manufacturer recommendations, residuals remaining in Site soils would be expected to be similar to other area properties. Application of agricultural chemicals for intended use is not considered a release.

7.4.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations have been conducted to evaluate the historical operations to date.

7.4.2.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the historical operations and potential releases therefrom, the western parcel is identified as a general AOI. Further investigation of this AOI is not recommended at this time due to lack of documented releases or visual evidence of impact during the site inspection.

7.4.3 AOI 4.3: HISTORICAL OPERATIONS – NORTHERN PARCEL

7.4.3.1 HISTORICAL OPERATIONS

The properties to the north of 36th Street SW were historically utilized for residential, agricultural, and commercial purposes, including printing and body shops.

Based on the review of historical aerial photographs, city directories, topographic maps, and Site drawings, portions of the Site were historic residential and commercial properties. No information was available regarding the type of heating, UST or AST use, or the presence of septic systems, cesspools or water wells.

Based on the historic use of the northern portion of the Site as cultivated farmland, agricultural chemicals such as pesticides, herbicides and fertilizer would have historically been used on the Site. Information regarding historic use, storage or application rates was not available. If the chemicals were applied in accordance with manufacturer recommendations, residuals remaining in Site soils would be expected to be similar to other area properties. Application of agricultural chemicals for intended use is not considered a release.

Based on the review of available city directories, the property at 333 36th Street SW was listed as Helmus Garage & Body Shop in the 1948, 1953, 1957, 1961, and 1966 city directories and the property at 229 36th Street SW was listed as Raenell Press (printers) in the 1971 and 1975 city directories. No specific documentation was available regarding chemicals used, chemical storage locations, or historic disposal practices during the timeframe this property was utilized for vehicle repair or printing activities. Facilities like these typically may have used chlorinated solvents, heavy metals, inks, and petroleum products.

7.4.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations have been conducted to evaluate the historical operations to date.

7.4.3.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the historical operations and potential releases therefrom, the northern parcel is identified as a general AOI. Further investigation of this AOI is recommended.

7.5 AOI 5: RELEASE FROM PRESS HS-5

7.5.1 HISTORICAL OPERATIONS

Contamination from a release of water-soluble oil from a press pit pan (HS-5 Press, which was identified to be near Press Z-1, in 15-Bay) was identified in soil and groundwater at the Site in 1981.

7.5.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

The release was investigated in 1981 and 1982, with soil and groundwater samples collected in this area. Black stained soil was observed during the sample collection. Soil and groundwater samples collected during the investigation were analyzed for grease and oil, TOC, and chlorinated paraffin. Based on analytical results from soil and groundwater samples collected in the vicinity of the release and a review of the MSDS for the oil, EDI concluded that no chemicals of concern were detected in the soil or groundwater samples above the applicable regulatory limits at the time the samples were collected. Analysis for PNAs, metals or PCBs was not conducted on the samples.

7.5.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the confirmed release in this area and lack of full PNA, metals, and PCB analysis during investigation activities, the release is considered an AOI. Further investigation of this AOI is recommended.

7.6 AOI 6: LNAPL AND SVOC-IMPACTED GROUNDWATER

7.6.1 HISTORICAL OPERATIONS

An area in the northeastern portion of the Site was excavated during plant modernization activities in June 1985. The excavation was approximately 20 feet in depth, and was located near Column A-15 of the plant. Soil was removed in particular areas to the water table, where a layer of free product was observed. The free product was believed to consist of mineral seal oil and/or mineral spirits, which were used in processes in this portion of the plant for approximately 50 years. According to Site records reviewed, a release was reported to the National Response Center and the MDNR on July 26, 1985.

7.6.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Based on the visual and olfactory presence of contamination in the excavation, a HI was undertaken by EDI to determine the extent of the oil contamination. A total of seven monitoring wells, were installed during the HI; four of the wells were installed around the excavation, in the northeastern portion of the plant, and three wells were installed outside the plant on the north, northwest, and west sides of the plant. LNAPL was identified in monitoring wells located in the northeast portion of the plant. Subsequent investigations continued to monitor on a regular basis for the presence of LNAPL in select monitoring wells and groundwater samples were analyzed for SVOCs, with exceedances of the Part 201 GRCC. LNAPL was observed on a periodic basis in monitoring wells 85-5B and 85-3. The 2008 Groundwater Investigation Work Plan was submitted to the MDNRE and included the abandonment of monitoring well 85-3 and installation of a new monitoring well adjacent to 85-3 due to the fact that the recorded static water levels in the well were above the top of the monitoring well screen. A fully submerged screen is not appropriate for monitoring the presence or thickness of LNAPL, which floats on top of the groundwater (i.e., above the top of the screen of

monitoring well 85-3). The 2008 Groundwater Investigation Work Plan was implemented in April 2010, with monitoring well 85-3 abandoned and a new monitoring well, MW18-10, installed adjacent to the former well. During the October 2010 groundwater monitoring activities, an oil/water interface probe was utilized to identify any potential LNAPL in MW18-10. No LNAPL was identified in MW18-10 at that time. Monitoring will continue on a regular basis for the potential presence of LNAPL in this well.

7.6.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the exceedances to the Part 201 GRCC and the historical (and potential current) presence of LNAPL in this area, the LNAPL and SVOC-impacted groundwater is considered an AOI. Further investigation of this AOI is recommended.

7.7 AOI 7: FORMER METAL FINISHING OPERATIONS

Based on the review of available information, metal finishing operations, including metal preparation, chromium plating, and various coating operations, were conducted at the Site.

7.7.1 AOI 7.1 - BONDERIZING OPERATIONS

7.7.1.1 HISTORICAL OPERATIONS

A bonderizing/prime system was identified on a 1951 drawing between Columns U and W, Rows 42 to 46. This system included an alkali rinse, hot rinse, bonderite, cold rinse, and chromic acid dip tanks, a blow off oven, a prime spray booth, a final spray booth, and a final oven. The drawing also identified floor drains and a sludge tank in this area.

7.7.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations have been conducted to evaluate the historical bonderizing operations to date.

7.7.1.3 CURRENT STATUS AND RECOMMENDATIONS

These operations utilize metals, petroleum products, and caustics. Based on the nature of the chemicals utilized and the operational timeframe, the former bonderizing operations are considered an AOI. Further investigation of this AOI is recommended.

7.7.2 AOI 7.2 - LACQUER AND CEMENT SPRAY

7.7.2.1 HISTORICAL OPERATIONS

Lacquer and cement spray booth operations were identified on a 1939 drawing to have been historically conducted on instrument panels from Columns O to Q, Row 39 to 42. Site personnel also indicated that this area was historically utilized for zinc prime operations in subsequent years. No further information regarding these operations was available.

7.7.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations have been conducted to evaluate the historical lacquer and cement spray operations to date.

7.7.2.3 CURRENT STATUS AND RECOMMENDATIONS

These operations utilize metals, petroleum products, and VOC-based products. Based on the nature of the chemicals utilized and the operational timeframe, the former lacquer and cement spray booth operations are considered an AOI. Further investigation of this AOI is recommended.

7.7.3 AOI 7.3 - ANTI-RUST SPRAY BOOTH NO. 1

7.7.3.1 HISTORICAL OPERATIONS

Anti-rust oil spray booth No. 1 operations, which included approximately 110-gallon oil tanks situated on the plant floor or in below-grade pits, were identified on a 1937 drawing to have been historically conducted at Columns U to X, Row 16. No further information regarding these operations was available.

7.7.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations have been conducted to evaluate the historical anti-rust spray booth operations to date.

7.7.3.3 CURRENT STATUS AND RECOMMENDATIONS

The anti-rust spray booth operations utilize petroleum products. Based on the nature of the chemicals utilized and the operational timeframe, the former anti-rust spray booth operations are considered an AOI. Further investigation of this AOI is recommended.

7.7.4 AOI 7.4 - ANTI-RUST SPRAY BOOTH NO. 2

7.7.4.1 HISTORICAL OPERATIONS

Anti-rust oil spray booth No. 2 operations, which included approximately 110-gallon oil tanks situated on the plant floor or in below-grade pits, were identified on a 1937 drawing to have been historically conducted at Columns O to R, Row 13. Site personnel also indicated that the general Booth #2 area was historically utilized for zinc prime operations in subsequent years. No further information regarding these operations was available.

7.7.4.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations have been conducted to evaluate the historical anti-rust spray booth operations to date.

7.7.4.3 CURRENT STATUS AND RECOMMENDATIONS

The anti-rust spray booth operations utilize petroleum products. Based on the nature of the chemicals utilized and the operational timeframe, the former anti-rust spray booth operations are considered an AOI. Further investigation of this AOI is recommended.

7.7.5 AOI 7.5 - ANTI-RUST SPRAY BOOTH NO. 3

7.7.5.1 HISTORICAL OPERATIONS

Anti-rust oil spray booth No. 3 operations, which included approximately 110-gallon oil tanks situated on the plant floor or in below-grade pits, were identified on a 1937 drawing to have been historically conducted at Columns U to X, Row 7. Site personnel also indicated that the general Booth #3 areas were historically utilized for zinc prime operations in subsequent years. No further information regarding these operations was available.

7.7.5.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations have been conducted to evaluate the historical anti-rust spray booth operations to date.

7.7.5.3 CURRENT STATUS AND RECOMMENDATIONS

The anti-rust spray booth operations utilize petroleum products. Based on the nature of the chemicals utilized and the operational timeframe, the former anti-rust spray booth operations are considered an AOI. Further investigation of this AOI is recommended.

7.7.6 AOI 7.6 - ANTI-RUST SPRAY BOOTH NO. 4

7.7.6.1 HISTORICAL OPERATIONS

Anti-rust oil spray booth No. 4 operations, which included approximately 110-gallon oil tanks situated on the plant floor or in below-grade pits, were identified on a 1937 drawing to have been historically conducted at Columns Q to T, Row 4. No further information regarding these operations was available.

7.7.6.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations have been conducted to evaluate the historical anti-rust spray booth operations to date.

7.7.6.3 CURRENT STATUS AND RECOMMENDATIONS

The anti-rust spray booth operations utilize petroleum products. Based on the nature of the chemicals utilized and the operational timeframe, the former anti-rust spray booth operations are considered an AOI. Further investigation of this AOI is recommended.

7.7.7 AOI 7.7 - FORMER WEST PAINT BOOTH

7.7.7.1 HISTORICAL OPERATIONS

A waterfall-type (i.e., wet) paint booth with below-grade water tanks and sump pits was historically located at the Site at Columns P to Q, Rows 24 to 25. The paint booth is identified as "gun carriage" on a drawing circa 1942. No further information was available regarding this paint booth. No information was identified regarding the duration this unit operated or a release from the system. Painting operations typically utilize solvent and metal-based chemicals.

7.7.7.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former paint booth.

7.7.7.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted associated with the paint booth, the types of chemicals typically utilized during these operations, and the presence of below-grade structures with the potential to impact the subsurface, the former paint booth is considered an AOI. Further investigation of this AOI is recommended.

7.7.8 AOI 7.8 - FORMER PAINT BOOTH (CURRENT STEAM CLEAN BOOTH)

7.7.8.1 HISTORICAL OPERATIONS

The current steam clean booth located at Column N, Row 47, was reportedly historically used as a wet paint booth. No information was identified regarding the duration this unit operated or a release from the system. Painting operations typically utilize solvent and metal-based chemicals.

7.7.8.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former paint booth.

7.7.8.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted associated with paint booths, the types of chemicals typically utilized during these operations, and the presence of below-grade structures with the potential to impact the subsurface, the former paint booths are considered an AOI. Further investigation of this AOI is recommended.

7.7.9 AOI 7.9 - FORMER EAST PAINT BOOTH

7.7.9.1 HISTORICAL OPERATIONS

A waterfall-type (i.e., wet) paint booth with below-grade water tanks and sump pits was reportedly historically located at the Site at Column O to N, Rows 26 to 28. No further information was available regarding this paint booth. No information was identified regarding the duration this unit operated or a release from the system. Painting operations typically utilize solvent and metal-based chemicals.

7.7.9.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former paint booth.

7.7.9.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted associated with the paint booth, the types of chemicals typically utilized during these operations, and the potential to impact the subsurface, the former paint booth is considered an AOI. Further investigation of this AOI is recommended.

7.8 AOI 8: UNDERGROUND STORAGE TANKS

According to Site personnel and based on the review of available information, numerous USTs have historically existed and currently exist at the Site. USTs present a potential for a release to the environment if the integrity of the USTs and/or associated piping was compromised while the USTs were/are in use. Each of the Site's former and current USTs are therefore considered an AOI. The USTs that relate to specific buildings or operations are discussed with the respective AOI. The remaining USTs are discussed below.

7.8.1 AOI 8.1: MINERAL SPIRITS AND MINERAL SEAL OIL USTs

7.8.1.1 HISTORICAL OPERATIONS

Based on the review of available documentation from 1981, the Site historically utilized mineral spirits to dilute mineral seal oil that was used in operations. The mineral spirits and mineral oil were stored in four USTs (one mineral spirits UST and three mineral seal oil USTs) located to the south of Row 51 between Columns R and S. Based on the review of an air emissions permit application for the mineral spirits UST, the capacity of the mineral spirits UST was approximately 7,800 gallons. The capacities of the mineral seal oil USTs were not identified; however, drawings of the tanks depict the three mineral seal oil USTs to be similar in size to the mineral spirits UST. According to review of the Environmental Impairment Liability Questionnaire dated October 13, 1982, mineral seal oil and mineral spirits were stored in USTs at that time.

Review of a MDNR Notification for USTs, dated April 24, 1986, identified four 8,000-gallon fiberglass USTs were present at the Site at that time, containing mineral seal oil, mineral spirits, machine oil, and hydraulic oil (Tank Nos. 1 through 4, respectively). The UST database identified four removed USTs (Tank Nos. 1 through 4) associated with the Site, including two 8,000-gallon hazardous substance USTs (Tank Nos. 1 and 2), one 8,000-gallon machine oil UST (Tank No. 3), and one 8,000-gallon hydraulic oil UST (Tank No. 4). Additionally, a drawing available from the City of Wyoming Fire Department depicted four 8,000-gallon fiberglass fuel oil USTs to the south of the Main Manufacturing Building (at that time), east of former Railroad Track No. 5, northeast of the Primary Switch House, and west of the cooling towers. These USTs appear to be in the same general location as the aforementioned USTs.

No further information regarding the 8,000-gallon mineral spirits/mineral seal oil USTs was available.

7.8.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Based on the review of the environmental database search results, four 8,000-gallon USTs were removed on January 1, 1986 (Tank Nos. 1, 2 and 4) and January 1, 1987 (Tank No. 3), which is inconsistent with the MDNR Notification for USTs form discussed above, which indicated that the four tanks were present on April 24, 1986.

No investigations or remedial actions beyond reported removal of the tanks have been conducted regarding the USTs.

7.8.1.3 CURRENT STATUS AND RECOMMENDATIONS

Based on a lack of information regarding the closure of the USTs, the nature of the materials stored in the USTs, and the age of the USTs, the USTs are considered an AOI. Further investigation of this AOI is recommended.

7.8.2 AOI 8.2: CURRENT GASOLINE AND DIESEL USTs

7.8.2.1 HISTORICAL OPERATIONS

One 3,000-gallon diesel and one 8,000-gasoline UST are present at the Site. The USTs were reportedly installed on April 24, 1985 and are made of cathodically protected double-walled steel, with fiberglass reinforced double-walled plastic piping. The USTs are equipped with automatic tank gauging and interstitial monitoring for leak detection. Based on leak detection readings, a potential leak from the 8,000-gallon gasoline UST was reported to the DNRE on April 27, 2006 (Incident No. S-0101-06). Information reviewed at the Site indicated that the leak detection reading resulted from a faulty sensor board that needed replacement. The Site was not listed in the LUST Database for this incident, as it was only a "suspected" release (i.e., S-XXXX-XX) and not a "confirmed" release (i.e., C-XXXX-XX).

7.8.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Testing of Gasoline and Diesel Fuel Underground Tanks forms completed on 12 occasions between 1991 and 1998 were available for review on Site. According to the information reviewed, the items tested during each event included monitor well N.E., monitor well N.W., monitor well S.E., monitor well S.W., gasoline containment vessel, diesel containment vessel, catch basin (reportedly 12 feet deep), and pollution alert electrical system. No significant issues associated with these items were identified during the inspections. According to on-Site records reviewed, the gasoline and diesel fuel USTs were equipped with leak detection equipment. Daily leak detection printouts dated between 1996 and 2001 were available for review and identified changes in fluid levels as "LD Failed", indicating the potential failure of the leak detection. CRA identified 32 potential leaks from the gasoline UST ranging from 0.10 and 4.61 gallons per hour (gal/hr) and eight possible leaks from the diesel UST ranging from 0.12 and 3.02 gal/hr from review of the leak detection printouts.

7.8.2.3 CURRENT STATUS AND RECOMMENDATIONS

Based on potential leaks, the gasoline and diesel USTs are considered an AOI. Further investigation of this AOI is recommended.

7.8.3 AOI 8.3: FORMER HEATING OIL AND OIL USTS

7.8.3.1 HISTORICAL OPERATIONS

Three 50,000-gallon fuel oil tanks for boiler backup for the current Power House were installed in 1970 to the north of the east cooling tower.

7.8.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

According to records reviewed, the three 50,000-gallon USTs were removed from the Site on August 21, 1985. The UST removal was overseen by the Fire Department and according to the inspection report, two of the USTs contained "oil" and one contained fuel oil. The USTs were reportedly cleaned by Great Lakes Tank Cleaning Company and removed and disposed off-Site by Hardman Construction Company. Photographs of the UST removal included in the Fire Department file for the Site were reviewed by CRA. None of the photographs available for review indicated a release from the USTs

and the USTs appeared to be in good condition at the time of removal. However, no verification soil samples were collected at the time of the tank removal.

7.8.3.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the types of chemicals stored in the tanks, the age of the tanks, the lack of confirmatory soil sample data and the potential to impact the subsurface, the former fuel oil and oil USTs are considered an AOI. Further investigation of this AOI is recommended.

7.8.4 AOI 8.4: FORMER 5,000-GALLON AND 8,000-GALLON GASOLINE USTs

7.8.4.1 HISTORICAL OPERATIONS

One 5,000-gallon gasoline UST was inspected by the Fire Department on September 19, 1985 during removal. Based on the review of available Fire Department records, the 5,000-gallon gasoline UST was located to the south of the plant, east of Railroad Track No. 5, and west of the cooling towers. No information was available regarding the age or construction of the former UST.

An 8,000-gallon gasoline UST and associated dispenser are identified in the same general area on a February 1985 drawing from the Site. It could not be confirmed if these were the same tanks, with an incorrect volume listed on the drawing or if one was a replacement for the other, from the available documentation.

7.8.4.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

According to the inspection report, the 5,000-gallon UST was removed by Bosch Mechanical and Riverside Gravel Co., cleaned, and disposed off-Site. Based on review of the inspection report, no evidence or indication of a release was observed at the time of removal. No verification soil samples were collected at the time of the tank removal.

7.8.4.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the type of chemical stored in the tank(s), the age of the tank(s), the lack of confirmatory soil sample data and the potential to impact the subsurface, the former

gasoline UST(s) is considered an AOI. Further investigation of this AOI is recommended.

7.8.5 AOI 8.5: FORMER 1,000 GALLON GASOLINE UST NO. 1

7.8.5.1 HISTORICAL OPERATIONS

Based on the review of a 1951 drawing, a 1,000-gallon gasoline UST (Tank No. 1) and pump were identified south of Row 35 (no Column available), and just south of the outside of the 1950 addition on the eastern side of the Main Manufacturing Building. On a 1955 drawing, a "gas tank and pump" (Tank No. 2) were identified as being relocated. There are no Columns or Rows identified on the drawing; however, the tank is shown to the north of the former Heat Treat Building and to the west of the former Baler House. No further details were identified on the drawing. It could not be confirmed that the 1,000-gallon UST identified on the 1951 drawing (after the 1950 addition) was relocated to the south after the 1954 addition in this area.

7.8.5.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former 1,000-gallon gasoline UST and pump island.

7.8.5.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the type of chemical stored in the tank, the age of the tank, the lack of UST removal information or confirmatory soil sample data and the potential to impact the subsurface, the former gasoline UST and pump island are considered an AOI. Further investigation of this AOI is recommended.

7.8.6 AOI 8.6: FORMER 1,000 GALLON GASOLINE UST NO. 2

7.8.6.1 HISTORICAL OPERATIONS

Based on the review of a 1951 drawing, a 1,000-gallon gasoline UST (Tank No. 1) and pump were identified south of Row 35 (no Column available), and just south of the outside of the 1950 addition on the eastern side of the Main Manufacturing Building. On

a 1955 drawing, a "gas tank and pump" (Tank No. 2) were identified as being relocated. There are no Columns or Rows identified on the drawing; however, the tank is shown to the north of the former Heat Treat Building and to the west of the former Baler House. No further details were identified on the drawing. It could not be confirmed that the 1,000-gallon UST identified on the 1951 drawing (after the 1950 addition) was relocated to the south after the 1954 addition in this area.

7.8.6.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former 1,000-gallon gasoline UST and pump island.

7.8.6.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the type of chemical stored in the tank, the age of the tank, the lack of UST removal information or confirmatory soil sample data and the potential to impact the subsurface, the former gasoline UST and pump island are considered an AOI. Further investigation of this AOI is recommended.

7.9 AOI 9: WASTEWATER TREATMENT PLANT (WWTP)

7.9.1 HISTORICAL OPERATIONS

The WWTP was constructed in 1970 for the pretreatment of process wastewater from the Site prior to discharge to the City of Wyoming municipal sanitary sewer system. The WWTP was constructed to pre-treat process wastewater discharged from the metal finishing, heat treat, battery charge, steam clean, press pit, and elevator pit areas, where chemicals such as petroleum products, solvents, and acids would have been utilized. The 100,000-gallon single-walled steel used oil AST located outside the WWTP to the east was noted on Site drawings to have been constructed on an oily sand cushion. Additional ASTs at the WWTP include: two 45,000-gallon steel oily wastewater batch tanks located outside the building; one 2,200-gallon single-walled steel oil/water separator AST inside the building; one 3,000-gallon single-walled steel scum holding AST inside the building; two 6,000-gallon single-walled steel used oil ASTs located outside the building between the batch tanks and the 100,000-gallon used oil AST; one 5,000-gallon single-walled steel oily WWTP sludge AST inside the building; and four

ASTs of unknown capacity containing wastewater treatment chemicals including caustic, flocculant, and coagulant.

7.9.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Significant staining was noted on the interior of the building and sumps inside the building, and adjacent to a sump near the 6,000-gallon used oil ASTs during the site inspection.

7.9.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted associated with the WWTP, the types of chemicals typically utilized during these operations, the observed staining, the presence of an oily sand cushion under the used oil AST, and the presence of below-grade structures with the potential to impact the subsurface, the WWTP is an AOI. Further investigation of this AOI is recommended.

7.10 AOI 10: POWER HOUSE OPERATIONS

7.10.1 AOI 10.1: CURRENT POWER HOUSE

7.10.1.1 HISTORICAL OPERATIONS

The current Power House was constructed at the Site in 1970 and is located to the south of the Main Manufacturing Building and adjacent to the east of the Baler House. The Power House provides building heat and steam to the Site. The Power House is a multiple story building with a basement and includes three natural gas-fired boilers, which have the ability to burn waste oil, No. 2 oil, or No. 6 oil. A below grade brine pit is present outside to the north of the Power House and to the south of the cooling water towers and pumps. No information was available regarding the construction details of the brine pit. A 500-gallon diesel AST is present within the Power House.

7.10.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Staining and sumps were noted in the basement of the current Power House. No evidence of a release associated with the current Power House operations was observed or identified in the documents reviewed.

7.10.1.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted associated with the current Power House, the types of chemicals typically utilized during these operations, the timeframe these operations occurred, and the potential to impact the subsurface, the current Power House is considered an AOI. Further investigation of this AOI is recommended.

7.10.2 AOI 10.2: FORMER POWERHOUSE

7.10.2.1 HISTORICAL OPERATIONS

A coal-fired Power House was constructed at the Site during the initial development of the property by GMC in 1936 and was operated until 1970/71 when the current Power House was brought online. The former Power House was located to the west of the Main Manufacturing Building, adjacent to Column ZZ, Rows 19 and 24, and included an ash silo, skip pit and coal hopper, and Power House Building. Coal was stored outside, adjacent to the south of the former Power House, between Rows 24 and 33, in an area approximately 220 feet by 350 feet in area. Demolition plans for the former Power House indicated that the structural components, with the exception of the western wall of the building, were to be removed to the basement (or lowest floor) slab, with the concrete cracked to allow for infiltration. The former Power House utilized a four-inch drain tile around the perimeter of the building, as well as numerous crocks, floor drains, sumps, and catch basins throughout the structure.

A below-grade tunnel, located between Columns ZZ to W, Rows 22 1/2 and 22, was also reportedly removed, with the exception of the concrete floor that was cracked, to the western edge of the Main Manufacturing Building. Demolition plan drawings did not indicate whether or not abandonment/demolition activities were proposed for the portion of the tunnel that was present beneath the Main Manufacturing Building. This area is currently beneath the Main Manufacturing Building.

7.10.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former Power House.

7.10.2.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted associated with the former Power House, the types of chemicals typically utilized during these operations, the timeframe these operations occurred, typical residual SVOCs associated with outdoor coal storage and the potential to impact the subsurface, the former Power House is considered an AOI. Further investigation of this AOI is recommended.

7.11 AOI 11: FORMER AOF HOUSE

7.11.1 HISTORICAL OPERATIONS

An Acetylene, Oxygen, and Ferrolene (AOF) House was historically present to the west of the Main Manufacturing Building at Column ZZ, Rows 18 to 15. The AOF House was constructed circa 1936 and was demolished circa 1970. Available drawings indicate that the AOF originally included use of a 12,000-gallon UST containing oleum spirits; however, notes on the drawings indicated that the tank was never installed. Additionally, a 420-gallon ferrolene UST was present to the south of the AOF House. The AOF House consisted of the ferrolene room (including cyanide and lead pots), a pump room, the oxygen manifold and storage room, the carbide storage room, the acetylene storage room, the acetylene generator room, a loading platform serviced by a railroad siding, and sludge pits. Additional information regarding the chemicals utilized during the operation of the AOF House was not available.

7.11.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former AOF House.

7.11.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the gas generation operations conducted associated with the AOF House, the types of chemicals utilized during these operations (i.e., lead and cyanide pots, etc.), the timeframe these operations occurred, and the potential to impact the subsurface, the former AOF House is considered an AOI. Further investigation of this AOI is recommended.

7.12 AOI 12: FORMER COOLING TOWER BASIN

7.12.1 HISTORICAL OPERATIONS

A cooling tower and cooling tower basin are identified on a 1971 drawing to the west of the former Power House, to the north of the 500,000-gallon fire suppression water AST and associated pump house, and to the south of the former 250,000-gallon elevated fire suppression water AST, in line with Rows 19 to 22 for the Main Manufacturing Building. No further information regarding the operation and construction of the cooling water tower and basin was available, including information regarding water treatment chemicals utilized, process associated with the generation point of water cooled or sludge removal practices. The majority of cooling water systems operated during this timeframe used chromium as a biocide. This area is currently paved with concrete and/or asphalt.

7.12.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former cooling tower basin.

7.12.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted associated with the former cooling water basin, the types of chemicals typically utilized during these operations, and the potential to impact the subsurface, the former cooling tower basin is considered an AOI. Further investigation of this AOI is recommended.

7.13 AOI 13: FORMER COOLING WATER SPRAY POND

7.13.1 HISTORICAL OPERATIONS

A cooling water spray pond was historically located to the west of the former Power House, between Rows 13 and 18 1/2. The cooling water spray pond received process wastewater from air compressor blowdown and welding machine cooling water and discharged cooled water via return lines to the plant and to the storm sewer. Historical documentation indicates that silver, lead, and copper were historically utilized during welding operations. No information was available regarding the potential use of algaecides/biocides was available, nor was information related to removal of sludges from the cooling water spray pond.

7.13.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former cooling water spray pond.

7.13.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations associated with the former cooling water spray pond, the types of chemicals typically utilized during these operations, and the potential to impact the subsurface, the former cooling water spray pond is considered an AOI. Further investigation of this AOI is recommended.

7.14 AOI 14: FORMER SLUDGE BED

7.14.1 HISTORICAL OPERATIONS

A "present sludge bed to be filled in" was identified on a 1954/1955 drawing of the Site. Based on the review of available aerial photographs, this sludge bed was located to the north of the former Power House, to the northwest of the former AOF Building, and to the east of the cooling water spray pond. The area was not observed to be utilized as a sludge bed in the 1938 or 1960 aerial photographs; however, an undated aerial obtained from the Site that appears to be from prior to 1954 (based on facility construction) shows this area. This area is currently under a portion of the Main Manufacturing Building.

No information was available regarding the nature of the sludges or whether they were deposited in this area.

7.14.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former sludge bed.

7.14.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the potential nature of the materials deposited in the sludge bed from facility operations and the potential for these materials to impact the subsurface, the former sludge bed is considered an AOI. Further investigation of this AOI is recommended.

7.15 AOI 15: BALER OPERATIONS

7.15.1 AOI 15.1: FORMER MAIN MANUFACTURING BUILDING BALERS

7.15.1.1 HISTORICAL OPERATIONS

An area with two balers is identified on 1936 and 1950 drawings between Columns Q to O, Rows 20 1/2 to 22. No further information was available regarding the timeframe that this area was operated for baling operations or the specific building structures used.

7.15.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former Main Manufacturing Building balers.

7.15.1.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted, the types of chemicals typically utilized during these operations, the potential use/presence of below grade pits, the timeframe these operations occurred, and the potential to impact the subsurface, the former Main Manufacturing Building balers are considered an AOI. Further investigation of this AOI is recommended.

7.15.2 AOI 15.2: FORMER BALER HOUSE

7.15.2.1 HISTORICAL OPERATIONS

A former Baler House was located between Columns C and H, Rows 42 to 44. Scrap metal was conveyed to the former Baler House via an underground conveyor system, which was located between Columns E and F. This Baler House was demolished during the 1964 expansion activities, with the current Baler House constructed in 1965.

7.15.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former Baler House.

7.15.2.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted, the types of chemicals typically utilized during these operations, the potential use/presence of below grade pits, the timeframe these operations occurred, and the potential to impact the subsurface, the former Baler House is considered an AOI. Further investigation of this AOI is recommended.

7.15.3 AOI 15.3: CURRENT BALER HOUSE

7.15.3.1 HISTORICAL OPERATIONS

A Baler House is located to the south of the Main Manufacturing Building, adjacent to the west of the Power House. The Baler House was constructed in 1965 and consisted of four balers for scrap metal processing, which were set in below grade concrete pits. Significant oil staining and scrap metal were observed in the visually accessible portions of the Baler House pits during the Site inspection. Additionally, a sump is located in the corner of this building, which discharges through below grade piping to the WWTP.

7.15.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the current Baler House.

7.15.3.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the age of the pits, the types of chemicals typically utilized during these operations, the timeframe these operations occurred, and the potential to impact the subsurface, the Baler House pits are considered an AOI. Further investigation of this AOI is recommended.

7.16 AOI 16: FORMER HEAT TREAT OPERATIONS

7.16.1 AOI 16.1: MAIN MANUFACTURING BUILDING – AREA NO. 1

7.16.1.1 HISTORICAL OPERATIONS

Heat treat operations were conducted in a variety of locations throughout the Site. A former Heat Treat Room was located near Column O, Row 4 on a 1936 drawing. This area was identified to consist of a "homo" furnace, oven furnaces, lead and cyanide pots, quenching tanks, a caustic tank, and a forge. Floor drains, a pit and a trench were identified in this area. No further information was available regarding the timeframe that heat treat operations were conducted in this area.

7.16.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former Heat Treat Operations in the Main Manufacturing Building.

7.16.1.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of heat treat operations, the types of chemicals typically utilized during these operations, the timeframe these operations occurred, and the potential to impact the subsurface, the former heat treat operations in the Main Manufacturing Building are considered an AOI. Further investigation of this AOI is recommended.

7.16.2 AOI 16.2: MAIN MANUFACTURING BUILDING – AREA NO. 2

7.16.2.1 HISTORICAL OPERATIONS

A former Heat Treat area was located between Columns U and W, Rows 26 and 27 on a 1944 drawing. This drawing identifies a large quench pit in this area, with four tanks shown in the pit and at least one 12,000-gallon oil tank.

7.16.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former Heat Treat Operations in the Main Manufacturing Building.

7.16.2.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of heat treat operations, the types of chemicals typically utilized during these operations, the timeframe these operations occurred, and the potential to impact the subsurface, the former heat treat operations in the Main Manufacturing Building are considered an AOI. Further investigation of this AOI is recommended.

7.16.3 AOI 16.3: FORMER HEAT TREAT BUILDING NO. 1

7.16.3.1 HISTORICAL OPERATIONS

A former Heat Treat Building was located between Columns J through M, Rows 29 to 30 1/2 on a 1945 drawing. This area was identified to consist of a sand blast room, gas crackers and furnaces and associated pits. No further information was available regarding the timeframe that heat treat operations were conducted in this area; however, this area is present beneath an addition to the Main Manufacturing Building.

7.16.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former Heat Treat Buildings.

7.16.3.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of heat treat operations, the types of chemicals typically utilized during these operations, the timeframe these operations occurred, and the potential to impact the subsurface, the former heat treat building operations are considered an AOI. Further investigation of this AOI is recommended.

7.16.4 AOI 16.4: FORMER HEAT TREAT BUILDING NO. 2

7.16.4.1 HISTORICAL OPERATIONS

A former Heat Treat Building was located to the south of the Main Manufacturing Building and the former Baler House in a 1955 drawing; however, no rows or columns were present on available drawings. It is estimated that this structure was located from approximately Columns H to 0, Rows 45 to 50. No further information was available regarding the timeframe that heat treat operations were conducted in this area. Based on the review of available historical aerial photographs, it is not present on the 1960 aerial photograph and it is currently beneath an addition to the Main Manufacturing Building that was built in 1986.

7.16.4.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former Heat Treat Buildings.

7.16.4.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of heat treat operations, the types of chemicals typically utilized during these operations, the timeframe these operations occurred, and the potential to impact the subsurface, the former heat treat building operations are considered an AOI. Further investigation of this AOI is recommended.

7.17 AOI 17: FORMER TOOL AND DIE OPERATIONS

7.17.1 AOI 17.1: MAIN MANUFACTURING BUILDING OPERATIONS

7.17.1.1 HISTORICAL OPERATIONS

Tool and Die Operations (TDO) were conducted between Columns AA and O, Rows 1 to 11. A below-grade grinding swarf and chip conveyor system is present in this area, running east-west, then turning southward until Column AA, Row 11-12, where the materials were brought aboveground and placed in a gondola. A small heat treat area was also present in this area (see Section 7.16.1). Historical operations in this area also included an electrical discharge machine (EDM) and milling operations. The swarf and conveyor system was not intended to transfer hazardous materials and there was no information or evidence indicating a release.

7.17.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No subsurface investigations or remedial actions have been conducted regarding the former Tool and Die Operations.

7.17.1.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted associated with the former tool and die operations and CRA's experience with similar below-grade conveyance systems, the potential to impact the subsurface, the former Tool and Die Operations are considered an AOI. Further investigation of this AOI is recommended.

7.17.2 AOI 17.2: HISTORICAL EXTERIOR DIE STORAGE

7.17.2.1 HISTORICAL OPERATIONS

Based on discussions with Site personnel, dies and scrap metal roll-offs were historically stored outside the facility, primarily on the southern portion. This area was not and is not entirely paved. The potential exists for oils on the dies to impact the underlying soils or stormwater during exterior storage. PCBs have been detected on stamping and TDO equipment utilized within the facility. There was no information or evidence of a release of materials associated with the storage.

7.16.2.1 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the historical die storage.

7.17.2.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the known presence of PCBs in oils utilized at the facility and fact that the ground was not paved during the storage activities with the potential to impact the subsurface, the historical die storage is considered an AOI. Further investigation of this AOI is recommended.

7.18 AOI 18: FORMER COOLANT RECOVERY SYSTEM

7.18.1 HISTORICAL OPERATIONS

Based on the review of a 1953 drawing, a coolant recovery and chip disposal system, including sterilizer, was present between Columns Y to W, Rows 49 to 50. No further information regarding the system was available. There was no information or evidence indicating a release from the coolant system.

7.18.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former coolant recovery system.

7.18.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the activities conducted associated with the coolant recovery operations, the types of chemicals typically utilized during these operations, the timeframe these operations occurred, and the potential to impact the subsurface, the former coolant recovery system operations are considered an AOI. Further investigation of this AOI is recommended.

7.19 AOI 19: FORMER STAMPING OPERATIONS

7.19.1 HISTORICAL OPERATIONS

Blanking and stamping press operations were conducted between Columns AA and O, Rows 12 to 55. A basement and metal scrap conveyor is located beneath this area, which leads to the current Baler House. Stamping operations utilize oils and may have utilized solvents during operations. Review of available drawings indicates the presence of numerous tanks, likely containing hydraulic oil for the presses, located in pits beneath the presses throughout the blanking area. The tanks were identified to primarily consist of 4-foot by 8-foot tanks on a concrete. These tanks are identified on a 1939 drawing of the area with Press Lines E, F, G, H, J and K, which are located between Columns C and K, Rows 13 to 22.

7.19.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Significant staining and pooled oil were noted on the ground surface in the basement near the stamping operations and in visually accessible below grade concrete press pits. Additionally, oil was observed to be present on the walls of the basement areas, from the stamping operations on the first floor of the facility.

7.19.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature and duration of the stamping operations, the age of pits with oil present, the types of chemicals typically utilized during these operations, the timeframe these operations occurred, and the potential to impact the subsurface, the former stamping operations are considered an AOI. Further investigation of this AOI is recommended.

7.20 AOI 20: ABOVEGROUND STORAGE TANKS (ASTs)

According to Site personnel and based on a review of available information, several non-regulated ASTs supported operations at the Site. ASTs present a potential for a release to the environment if the integrity of the AST is compromised causing a leak or, if a release occurs during periods of tank filling and/or dispensing. Each of the Site's registered and non-regulated ASTs is, therefore, considered an AOI as discussed below, with the exception of the ASTs associated with the WWTP, Power House, and

Stormwater Retention Pond, which are discussed in Sections 7.9, 7.10.1, and 7.22, respectively.

7.20.1 AOI 20.1: OIL STORES ASTS

7.20.1.1 HISTORICAL OPERATIONS

Five ASTs are present in the Oil Stores area, all of which are currently considered empty. The ASTs include the following: one 6,000-gallon single-walled fiberglass AST that formerly contained steam cleaner; two 9,700-gallon single-walled steel ASTs that formerly contained different weights of motor oil; one 6,000-gallon single-walled steel AST that formerly contained reclaimed oil; and one 6,000-gallon single-walled steel AST that formerly contained used oil. No significant staining was noted in the visibly accessible areas around the ASTs at the time of the Site inspection, and the concrete appeared to be in good condition.

7.20.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the Oil Stores ASTs.

7.20.1.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of chemicals stored in the Oil Stores ASTs, they are considered an AOI. Based on evidence that the concrete below the Oil Stores ASTs appears to be in good condition and there is no evidence of staining, no further investigation of this AOI is recommended.

7.20.2 AOI 20.2: CURRENT SOUTH PUMP HOUSE AST

7.20.2.1 HISTORICAL OPERATIONS

One 400-gallon steel diesel fuel AST is currently located in the South Pump House, as fuel for a back-up generator. No significant staining was noted in the visibly accessible areas around the AST at the time of the Site inspection, and the concrete appeared to be in good condition.

7.20.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the South Pump House AST.

7.20.2.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of chemicals stored in the South Pump House AST, it is considered an AOI. Based on evidence that the concrete below the South Pump House AST appears to be in good condition and there is no evidence of staining, no further investigation of this AOI is recommended.

7.20.3 AOI 20.3: FORMER NORTH PUMP HOUSE AST

7.20.3.1 HISTORICAL OPERATIONS

One 500-gallon steel diesel fuel AST was formerly located in the North Pump House, as fuel for a back-up generator. No significant staining was noted in the visibly accessible areas around the AST at the time of the Site inspection, and the concrete appeared to be in good condition.

7.20.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the North Pump House AST.

7.20.3.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of chemicals formerly stored in the North Pump House AST, it is considered an AOI. Based on evidence that the concrete below the North Pump House AST location appears to be in good condition and there is no evidence of staining, no further investigation of this AOI is recommended.

7.20.4 AOI 20.4: CURRENT COOLING TOWER PUMP HOUSE AST

7.20.4.1 HISTORICAL OPERATIONS

One 900-gallon steel diesel fuel AST is currently located in the Cooling Tower Pump House. No significant staining was noted in the visibly accessible areas around the AST at the time of the Site inspection, and the concrete appeared to be in good condition.

7.20.4.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the Cooling Tower Pump House AST.

7.20.4.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of chemicals stored in the Cooling Tower Pump House AST, it is considered an AOI. Based on evidence that the concrete below the Cooling Tower Pump House AST appears to be in good condition and there is no evidence of staining, no further investigation of this AOI is recommended.

7.20.5 AOI 20.5: FORMER BULK DEADENER AST

7.20.5.1 HISTORICAL OPERATIONS

According to MDNRE records reviewed, one 4,000-gallon AST containing bulk deadener was historically located in the "bulk deadener storage area" (P-51). The AST was identified in Permit to Install No. 20-78 issued February 28, 1978. No further information was available regarding the AST.

7.20.5.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former bulk deadener AST.

7.20.5.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of chemicals stored in the former bulk deadener AST, it is considered an AOI. Based on evidence that the concrete below the former bulk deadener AST appears to be in good condition and there is no evidence of staining, no further investigation of this AOI is recommended.

7.21 AOI 21: SUBSTATIONS

7.21.1 HISTORICAL OPERATIONS

Electricity is provided on Site by the following substations:

- Roof-Top Substations: Substations D, E, G, J, L, N, O, P, S, T, U, W, X, Y, and Z (Main Manufacturing Building) and Substations H and Q (Power House Substation)
- Basement Substations: Substations B, C, F, K, M and V (Main Manufacturing Building)
- Ground Floor Substations: Substation R (Baler House)

No information was available regarding the potential historical presence of Substations A or I on the Site. These substations may have been associated with a former Site structure (i.e., former Power House, etc.); however, that could not be confirmed.

Based on the above, each of the substations is identified as sub-AOIs, as listed below:

- AOI 21.1 – Substation B
- AOI 21.2 – Substation C
- AOI 21.3 – Substation D
- AOI 21.4 – Substation E
- AOI 21.5 – Substation F
- AOI 21.6 – Substation G
- AOI 21.7 – Substation H
- AOI 21.8 – Substation J
- AOI 21.9 – Substation K
- AOI 21.10 – Substation L
- AOI 21.11 – Substation M
- AOI 21.12 – Substation N
- AOI 21.13 – Substation O

- AOI 21.14 – Substation P
- AOI 21.15 – Substation Q
- AOI 21.16 – Substation R
- AOI 21.17 – Substation S
- AOI 21.18 – Substation T
- AOI 21.19 – Substation U
- AOI 21.20 – Substation V
- AOI 21.21 – Substation W
- AOI 21.22 – Substation X
- AOI 21.23 – Substation Y
- AOI 21.24 – Substation Z

Potential issues associated with the Roof-Top Substations (Substations D, E, G, H, J, L, N, O, P, Q, S, T, U, W, X, Y, and Z) are related to potential stormwater impacts and are addressed under AOIs 22 and 35; therefore, these Substations are not discussed in this section.

Based on the review of available documentation, three substations at the Site were confirmed to have utilized PCB electrical equipment; Substation K, Substation H and Substation Q. Releases are documented associated with Substation K, which was also historically utilized as a PCB storage area. Staining was noted on the concrete surface in these substations. It should be noted that the concrete floor in a number of the substations is painted. Currently, transformers in all of the Site substations are gas-filled; however, the manufacture dates indicated the potential for the current transformers to be replacement transformers. Labeled PCB large capacitors were observed in Substations B and E during the Site inspection. No specific information is available regarding the potential for additional PCB electrical equipment currently or historically present in the electrical equipment in the substations at the Site or releases there from.

7.21.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Substations were investigated as part of facility decommissioning evaluation activities; however, no investigations or remedial actions have been conducted regarding the soil or groundwater associated with the Substations.

7.21.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the presence and release of PCBs in at least one of the substations that has the potential to have reached the subsurface and the timeframe in which these substations were operated, the substations are considered an AOI. Further assessment of this AOI is recommended during future building decommissioning activities. If observations during the decommissioning activities indicate potential releases to the subsurface, additional investigation may be recommended at that time.

7.22 AOI 22: STORMWATER RETENTION POND

7.22.1 HISTORICAL OPERATIONS

Based on files reviewed at the facility, the stormwater retention basin was originally constructed in 1972 on property owned by Consumers, for which the Site secured an easement agreement. The basin was reported to be lined with a rubber liner and equipped with two containment booms that diverted floating oil to a skimmer installed in the basin outlet. Oil was pumped from the skimmer to a 4,000-gallon AST located adjacent to the west of basin, which is currently out of service. Significant sediment accumulation and vegetation growth were observed in the retention basin during an inspection in 2001, which resulted in upgrades to the pond in 2002/2003. Based on the review of available documentation, the stormwater retention pond currently receives discharges from portions of the Site roof and foundation drains, and historically also received discharges from non-contact cooling water and the groundwater treatment system. Roof drains were observed in proximity to several caged (i.e., no roofs or walls) substations, including Substations H and Q located on the roof of the Power House that historically were documented to include PCB transformers. No information was identified that the liner on the pond had failed prior to the upgrades or has failed subsequent to the upgrades.

Additionally, a stormwater lift station is located on the southwestern portion of the property, which discharges to the stormwater retention pond.

7.22.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Sediment samples were collected from the retention pond in September 2002, which indicated detections of several metals. Current conditions associated with groundwater and soil conditions beneath and in the vicinity of the pond are unknown.

7.22.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the PCBs and metals potentially discharged to the stormwater retention pond during Site operations, the timeframe these operations occurred, and the potential to impact the subsurface, the stormwater retention pond is considered an AOI. Further investigation of this AOI is not recommended at this time due to the fact that the pond is operational; however, based on observations during future decommissioning activities, further investigation may be recommended at that time for the underlying soil and/or groundwater.

7.23 AOI 23: WOOD FLOOR BLOCK

7.23.1 HISTORICAL OPERATIONS

Based on the review of available documentation and observations during the Site inspection, wood floor block is currently and was historically present throughout the facility. Operations that have been identified to have utilized oils containing PCBs were conducted at the Site.

7.23.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Analytical results for samples collected from wood floor block and associated mastic materials have indicated the presence of PCBs in the materials.

7.23.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the known spillage of oils to the flooring material at the Site, and detections and use of PCBs in oils utilized and wood flooring material removed from the Site in the past, the potential presence of PCBs in wood flooring material at the Site is considered an AOI. Further assessment of this AOI is recommended during future building decommissioning activities. If observations during the decommissioning activities indicate potential releases to the subsurface, additional investigation may be recommended at that time.

7.24 AOI 24: FORMER TAR HOUSE

7.24.1 HISTORICAL OPERATIONS

Based on the review of documentation from 1978, a "tar house", which was used to heat tar for floor block repairs, was located south of the Main Manufacturing Building near the Storm Water Building at that time. No further information regarding the tar house was available. No information was identified regarding operations in the Tar House or any evidence of releases there from.

7.24.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former tar house.

7.24.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the types of chemicals potentially used during these operations, the timeframe these operations occurred, and the potential to impact the subsurface, the former tar house is considered an AOI. Further investigation of this AOI is recommended.

7.25 AOI 25: FORMER MAINTENANCE DEGREASER

7.25.1 HISTORICAL OPERATIONS

A former degreaser was operated in the maintenance shop at Column T, Row 27 from 1953 to 1979. According to Site personnel, this degreaser was an open top metal tank situated in a concrete pit, where equipment was dipped using an overhead crane.

7.25.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

The Site is listed in the SHWS Database as General Motors – CPC Metals (Facility Identification No. 41000115) and a status of "interim response in progress." The listing is primarily associated with a release of TCE from the former degreaser. VOC-impacts to soil and groundwater in this area were identified in 1985 and investigations were conducted between 1985 and 1989 to evaluate the nature and extent of the impacts at the Site and the adjacent properties to the north of the Site. In 1989, a combination

groundwater extraction and SVE system was installed in the source area in the plant, with quarterly groundwater monitoring conducted. In 1993, a second groundwater purge well was installed at the northern property line. The SVE and groundwater extraction systems were run with quarterly groundwater monitoring occurring until 2004 and 2005, respectively, when it was identified that the systems had removed significant VOC mass and were no longer effective. Additional investigations to further evaluate the extent of the groundwater impacts to Part 201 GRCC were conducted between 2003 and 2010. Response actions associated with the VOC impacts have been conducted on a voluntary basis under Part 201. No Consent Order or Agreement has been issued by the MDNRE for the Site pursuant to Part 201 related to the SHWS Listing; however, a lien has been placed on the parcel associated with the main portion of the Site.

7.25.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the known exceedances of the Part 201 GRCC associated with the chlorinated VOC impacts to soil and groundwater at the Site, the VOC-impacted soil and groundwater associated with the former degreaser is considered an AOI. Further investigation of this AOI is recommended.

7.26 AOI 26: ADDITIONAL FORMER DEGREASING OPERATIONS

Degreasing operations were historically conducted in a variety of locations throughout the Site. No information was available regarding potential use of degreasers on steel coils during the blanking process.

7.26.1 AOI 26.1 – SHELL COOLER AFTER DEGREASER

7.26.1.1 HISTORICAL OPERATIONS

An area identified as "shell cooler after degreaser" was present on a 1944 drawing between Columns V and W, Row 34. No further information was available regarding the former degreaser.

7.26.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former degreasing operations with the exception of those discussed in Section 7.25.

7.26.1.3 CURRENT STATUS AND RECOMMENDATIONS

Based on CRA's experience with the nature of degreasing operations during this timeframe, the types of chemicals typically utilized during these operations, and the potential to impact the subsurface, the shell after cooler degreaser operations are considered an AOI. Further investigation of this AOI is recommended.

7.26.2 AOI 26.2 – FORMER DEGREASER (U-46)

7.26.2.1 HISTORICAL OPERATIONS

A degreaser is identified on a 1953 drawing at Column U, Row 46. No further information was available regarding the former degreaser.

7.26.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former degreasing operations with the exception of those discussed in Section 7.25.

7.26.2.3 CURRENT STATUS AND RECOMMENDATIONS

Based on CRA's experience with the nature of degreasing operations during this timeframe, the types of chemicals typically utilized during these operations, and the potential to impact the subsurface, the former degreaser operations are considered an AOI. Further investigation of this AOI is recommended.

7.26.3 AOI 26.3 – FORMER DEGREASER (RS-9)

7.26.3.1 HISTORICAL OPERATIONS

A degreaser was historically located at Columns R to S, Row 9. No further information was available regarding the former degreaser.

7.26.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former degreasing operations with the exception of those discussed in Section 7.25.

7.26.3.3 CURRENT STATUS AND RECOMMENDATIONS

Based on CRA's experience with the nature of degreasing operations during this timeframe, the types of chemicals typically utilized during these operations, and the potential to impact the subsurface, the former degreaser operations are considered an AOI. Further investigation of this AOI is recommended.

7.26.4 AOI 26.4 – FORMER DEGREASER (O-44)

7.26.4.1 HISTORICAL OPERATIONS

A degreaser was historically located at Column O, Row 44. No further information was available regarding the former degreaser.

7.26.4.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former degreasing operations with the exception of those discussed in Section 7.25.

7.26.4.3 CURRENT STATUS AND RECOMMENDATIONS

Based on CRA's experience with the nature of degreasing operations during this timeframe, the types of chemicals typically utilized during these operations, and the

potential to impact the subsurface, the degreaser operations are considered an AOI. Further investigation of this AOI is recommended.

7.27 AOI 27: OIL STORES BULK UNLOAD AREA

7.27.2 HISTORICAL OPERATIONS

The Site currently and formerly utilized the area to the west of Oil Stores for the bulk unloading of petroleum products. This area includes exterior load/unload fill ports and associated concrete pad, sump, and containment trench.

7.27.3 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

The containment trench in this area was installed in 2004. During the installation of the containment trench, excavated materials were identified to have exceeded the TCLP for lead. Subsequently, investigations were conducted in this area in 2005 and 2007 to evaluate the nature and extent of impacts. The investigations in the bulk unload area near the current Oil Stores area have identified the presence of metals and PNAs at concentrations above the Part 201 GRCC in soil. These impacts have not been delineated to date.

7.27.4 CURRENT STATUS AND RECOMMENDATIONS

Based on the exceedances of the Part 201 GRCC in the bulk unload area near oil stores and a lack of delineation, this area is considered an AOI. Further investigation of this AOI is recommended.

7.28 AOI 28: ADDITIONAL BULK LOAD AND UNLOAD AREAS

7.28.2 HISTORICAL OPERATIONS

The Site currently and formerly utilized several areas for bulk unloading and loading of petroleum products and waste and raw materials. These areas include exterior load/unload fill ports and associated concrete pads, as well as former train wells, some of which were unpaved. Some of these areas have been replaced in the recent past; however, others have been in place since the facility was developed. There is no

evidence of a release from other bulk load and unload areas at the Site to the environment.

7.28.3 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding other bulk load and unload areas.

7.28.4 CURRENT STATUS AND RECOMMENDATIONS

Based on the current and historic operation of bulk load and unload areas, they are considered an AOI. Further investigation of this AOI is recommended.

7.29 AOI 29: FORMER INCINERATORS

Based on the review of historical drawings, incinerators were formerly located on the Site, as discussed below.

7.29.1 AOI 29.1 – FORMER INCINERATOR AREA NO. 1

7.29.1.1 HISTORICAL OPERATIONS

Based on the review of available information, an incinerator was located to the south of the former Power House, to the east of the railroad tracks, and along the western property boundary in a 1954/1955 drawing in line with Row 42 of the Main Manufacturing Building. It could not be determined from available documentation if these were all the same incinerator; however, available drawings/aerials located them in the same approximate area. No information regarding the nature of the materials burned in the incinerator or construction, operation or demolition dates of the incinerator was available.

7.29.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former incinerator.

7.29.1.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the potential nature of the operations conducted at incinerator, the potential to impact the subsurface, the former incinerator is considered an AOI. Further investigation of this AOI is recommended.

7.29.2 AOI 29.2 – FORMER INCINERATOR AREA NO. 2

7.29.2.1 HISTORICAL OPERATIONS

Based on the review of available information, an incinerator was located to the southwest of the former Baler House between Columns H and J, south of Row 40 (numbering did not extend that far south on the drawing). No information regarding the nature of the materials burned in the incinerator or construction, operation or demolition dates of the incinerator was available.

7.29.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former incinerator.

7.29.2.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the potential nature of the operations conducted at incinerator, the potential to impact the subsurface, the former incinerator is considered an AOI. Further investigation of this AOI is recommended.

7.30 AOI 30: ELEVATOR PITS

Hydraulic elevators are currently present at the Site. Additionally, one former elevator location was identified by Site personnel. The pits and associated sumps, if present, were not visually evaluated during the Site inspection. Signage observed in one of the elevators indicated that mineral spirits were to be used for lubrication on the chains. No

information was available regarding historical releases to the subsurface from the elevator operations.

7.30.1 AOI 30.1 – PASSENGER ELEVATOR

7.30.1.1 HISTORICAL OPERATIONS

A passenger elevator is located in the former office area near Column ZB, Row 5. A visual inspection of the pit beneath the elevator could not be conducted during the Site inspection.

7.30.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the passenger elevator pit.

7.30.1.3 CURRENT STATUS AND RECOMMENDATIONS

Further assessment of this AOI is recommended during future building decommissioning activities. If observations during the decommissioning activities indicate potential releases to the subsurface, additional investigation may be recommended at that time.

7.30.2 AOI 30.2 – FREIGHT ELEVATOR NO. 1

7.30.2.1 HISTORICAL OPERATIONS

A freight elevator is located in plant area near Column O, Row 26. A visual inspection of the pit beneath the elevator could not be conducted during the Site inspection.

7.30.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the freight elevator pit.

7.30.2.3 CURRENT STATUS AND RECOMMENDATIONS

Further assessment of this AOI is recommended during future building decommissioning activities. If observations during the decommissioning activities indicate potential releases to the subsurface, additional investigation may be recommended at that time.

7.30.3 AOI 30.3 – FREIGHT ELEVATOR NO. 2

7.30.3.1 HISTORICAL OPERATIONS

A freight elevator is located in the plant area near Column N, Row 45. A visual inspection of the pit beneath the elevator could not be conducted during the Site inspection.

7.30.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the freight elevator pit.

7.30.3.3 CURRENT STATUS AND RECOMMENDATIONS

Further assessment of this AOI is recommended during future building decommissioning activities. If observations during the decommissioning activities indicate potential releases to the subsurface, additional investigation may be recommended at that time.

7.30.4 AOI 30.4 – FORMER FREIGHT ELEVATOR

7.30.4.1 HISTORICAL OPERATIONS

According to Site personnel, a former freight elevator was located in the plant area near Column S, Row 7. No further information was available.

7.30.4.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former freight elevator pit.

7.30.4.3 CURRENT STATUS AND RECOMMENDATIONS

Further assessment of this AOI is recommended during future building decommissioning activities. If observations during the decommissioning activities indicate potential releases to the subsurface, additional investigation may be recommended at that time.

7.31 AOI 31: SCRAP METAL STORAGE PAD

7.31.1 HISTORICAL OPERATIONS

The Site utilized a concrete paved area with a trench drain to store dumpsters of scrap metal, which may have contained residual cutting fluids. The trench drain discharges below grade to the WWTP. Significant staining was noted on the concrete surface of the pad; however, the concrete appeared to be in good condition with no significant cracks or deterioration observed. No documentation was available regarding releases in this area that reached the subsurface.

7.31.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the scrap metal storage pad.

7.31.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted at scrap metal storage pad and the potential to impact the subsurface, the scrap metal storage pad is considered an AOI. Further investigation of this AOI is recommended; however, Site cleaning activities may indicate that the concrete is in good condition and the observed staining was surficial in nature.

7.32 AOI 32: COMPACTOR

7.32.1 HISTORICAL OPERATIONS

The Site utilizes a hydraulic compactor for general refuse. Staining was observed in the general area surrounding the compactor during the Site inspection.

7.32.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the compactor.

7.32.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations associated with compactor and the potential to impact the subsurface, the compactor is considered an AOI. Further investigation of this AOI is recommended.

7.33 AOI 33: RAILROAD TRACK OPERATIONS

7.33.1 HISTORICAL OPERATIONS

Railroad tracks were historically located throughout the Site and were historically utilized for the delivery of raw materials and the shipment of finished products. Site personnel were unaware of the nature of historical delivery of chemicals via railcar, and no documented or known releases of chemicals from the rail shipment activities have occurred. Site personnel indicated that no known dust suppression activities have occurred along the railroad tracks at the Site. Additionally, several railroad tracks are present to the west of the main manufacturing portion of the Site, between this area and the Clay Avenue Parking Lot. Railcars currently and historically are parked in this area for extended periods of time. In addition, railroad tracks that historically entered the Main Manufacturing Building were not paved and were lower in elevation than the production floor, which have since been filled and capped to grade. No information regarding the nature of the fill materials was available. Waste railroad ties are currently stockpiled to the south of the Main Manufacturing Building, along the eastern property line, on bare ground.

7.33.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the railroad track operations.

7.33.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations associated with the railroad track operations, the types of chemicals potentially utilized during these operations, the lack of documentation regarding fill materials, and the potential to impact the subsurface, the railroad track operations is considered an AOI. Further investigation of this AOI is recommended.

7.34 AOI 34: BATTERY CHARGING AREAS

7.34.1 HISTORICAL OPERATIONS

Satellite battery charging areas are located throughout the facility. Areas of deteriorated concrete were observed beneath the battery charging areas; however, the deterioration was not observed to have penetrated the concrete to the subsurface in the visually accessible areas.

7.34.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the battery charging areas.

7.34.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted associated with the battery charging areas, the types of chemicals utilized during these operations and the potential to impact the subsurface, the battery charging areas are considered an AOI. Based on evidence that the concrete below the battery charging areas is intact and there is no evidence of impact to Site soils, no further investigation of this AOI is recommended.

7.35 AOI 35: PROCESS INFRASTRUCTURE

7.35.1 HISTORICAL OPERATIONS

Various additional pits, trenches, and sumps are present throughout the Site. These either discharge to the process wastewater sewer system or are blind. Petroleum, solvent, and acidic products were utilized throughout the facility and staining was noted around several of these areas, as well as deterioration. The integrity of these units could not be determined at the time of the Site inspection due to the below grade construction.

7.35.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the process infrastructure.

7.35.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted associated with discharges to the below grade process infrastructure, the types of chemicals typically utilized during these operations, and the presence of below grade structures with the potential to impact the subsurface, the process infrastructure is considered an AOI. Further investigation of this AOI is recommended.

7.36 AOI 36: POTENTIAL ON-SITE FILL ACTIVITIES

7.36.1 HISTORICAL OPERATIONS

Based on the review of a historical aerial photograph taken between 1950 and 1954, an area of potential fill activities was identified to the south of the Main Manufacturing Building. No further information was available regarding the potential on-Site fill activities.

7.36.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the potential on-Site fill activities.

7.36.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the potential nature of the operations conducted associated with potential fill activities to an unpaved surface with the potential to impact the subsurface, the potential fill activities is considered an AOI. Further investigation of this AOI is recommended.

7.37 AOI 37: HAZARDOUS WASTE STORAGE AREAS

Based on review of available records, the Site submitted an initial Notification of Hazardous Waste Activity with U.S. EPA Identification No. MID0060204083 to the U.S. EPA in August 1980. According to the notification, the facility generated and treated, stored or disposed hazardous wastes F010, F017, U238, and hazardous waste with toxic characteristics. The Site submitted a RCRA Hazardous Waste Part A Permit application to the U.S. EPA in November 1981. The facility reportedly operated various storage areas, as discussed below. It was reported that the treatment tanks and storage area contained only paint-related waste (F017). However, it was subsequently determined that F017 listed waste was temporarily suspended from regulation under RCRA. Furthermore, the paint-related waste was analyzed for hazardous waste characteristics and deemed non-hazardous. Therefore, in August 1982, GM filed a request for withdrawal of their Part A Permit. Withdrawal of the Part A Permit was approved by the U.S. EPA in a letter dated September 13, 1982 on the basis that wastes treated, stored or disposed at the facility were not defined as hazardous waste.

Hazardous waste was more recently stored for less than 90-days in a caged epoxy-sealed concrete area in the Main Manufacturing Building, near Zb-13.

7.37.1 AOI 37.1: FORMER HAZARDOUS WASTE STORAGE AREA – MAIN PLANT

7.37.1.1 HISTORICAL OPERATIONS

The facility reportedly operated two hazardous waste treatment tanks inside the main plant building. It was reported that the treatment tanks contained only paint-related waste (F017).

7.37.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former hazardous waste storage area in the Main Manufacturing Building.

7.37.1.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted associated with the hazardous waste generated at the Site, the types of chemicals typically utilized during these operations, the lack of information regarding the historical storage area, and the potential to impact the subsurface, the former hazardous waste storage area is considered an AOI. Further investigation of this AOI is recommended.

7.37.2 AOI 37.2: FORMER HAZARDOUS WASTE STORAGE AREA – SOUTH OF WWTP

7.37.2.1 HISTORICAL OPERATIONS

The facility reportedly operated a zinc-primer residue storage area located south of the plant. It was reported that the storage area was utilized for only paint-related waste (F017).

7.37.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former hazardous waste storage area to the south of the WWTP.

7.37.2.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted associated with the hazardous waste generated at the Site, the types of chemicals typically utilized during these operations, the lack of information regarding the historical storage area, and the potential to impact the subsurface, the former hazardous waste storage area is considered an AOI. Further investigation of this AOI is recommended.

7.37.3 AOI 37.3: FORMER HAZARDOUS WASTE STORAGE AREA – WESTERN PROPERTY BOUNDARY

7.37.3.1 HISTORICAL OPERATIONS

A drawing with the Part A Application indicated that drums of zinc primer were historically stored south of the Main Manufacturing Building, along the western property boundary. It was reported that the storage area was utilized for only paint-related waste (F017).

7.37.3.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former hazardous waste storage area along the western property boundary.

7.37.3.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted associated with the hazardous waste generated at the Site, the types of chemicals typically utilized during these operations, the lack of information regarding the historical storage area, and the potential to impact the subsurface, the former hazardous waste storage area is considered an AOI. Further investigation of this AOI is recommended.

7.37.4 AOI 37.4: CURRENT HAZARDOUS WASTE STORAGE AREA

7.37.4.1 HISTORICAL OPERATIONS

Hazardous waste was more recently stored for less than 90-days in a caged epoxy-sealed concrete area in the Main Manufacturing Building, near Zb-13. This area has two blind

containment sumps. No staining or deterioration was observed on the concrete in this area.

7.37.4.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the hazardous waste storage area in the Main Manufacturing Building.

7.37.4.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted associated with the hazardous waste generated at the Site, the types of chemicals typically utilized during these operations, the lack of information regarding the historical storage area, and the potential to impact the subsurface, the hazardous waste storage area is considered an AOI. Further investigation of this AOI is recommended.

7.38 AOI 38: SWITCH HOUSE OPERATIONS

The Site has operated two known switch houses throughout the operational timeframe of the facility, which may have historically utilized PCB-containing electrical equipment. These are further discussed below.

7.38.1 AOI 38.1: FORMER SWITCH HOUSE

7.38.1.1 HISTORICAL OPERATIONS

A former Switch House was identified on a 1936 drawing, between Rows 1 and 2 1/2, and is currently located under the Main Manufacturing Building. This structure is identified to have a 4-inch drain tile around the structure that discharged to the storm sewer. The basement of this building includes three floor drains, which discharged to a 3-foot by 3-foot by 4-foot sump that also discharged to the storm sewer. No information regarding any releases from electrical equipment previously operated in this area was available.

7.38.1.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the former Switch House.

7.38.1.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted associated with the former Switch House, the types of chemicals typically utilized during these operations, the lack of information regarding the exterior historical storage areas, and the potential to impact the subsurface, the former Switch House is considered an AOI. Further investigation of this AOI is recommended.

7.38.2 AOI 38.2: CURRENT SWITCH HOUSE

7.38.2.1 HISTORICAL OPERATIONS

Electricity for the Site is supplied by Consumers, who leases a portion of the Site for a substation and Switch House on the Site. The substation consists of a fenced gravel area with electrical equipment on concrete pads/footings, if appropriate. The electrical equipment in the substation was not observed to be labeled as to PCB content. Access to the Consumers portion of the Switch House, which is shared with the Site, was not available. Floor drains were observed in the Switch House. Staining was noted on the gravel surface beneath one of the transformers in the substation. The Switch House consists of an exterior switch yard, which is a fenced area with gravel paving. The majority of the equipment in the switch yard appeared to be labeled as non-PCB. No staining was observed in the switch yard area.

7.38.2.2 PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

No investigations or remedial actions have been conducted regarding the Switch House.

7.38.2.3 CURRENT STATUS AND RECOMMENDATIONS

Based on the nature of the operations conducted associated with the Switch House, the types of chemicals typically utilized during these operations, the lack of information

regarding the exterior historical storage areas, and the potential to impact the subsurface, the Switch House is considered an AOI. Further investigation of this AOI is recommended.

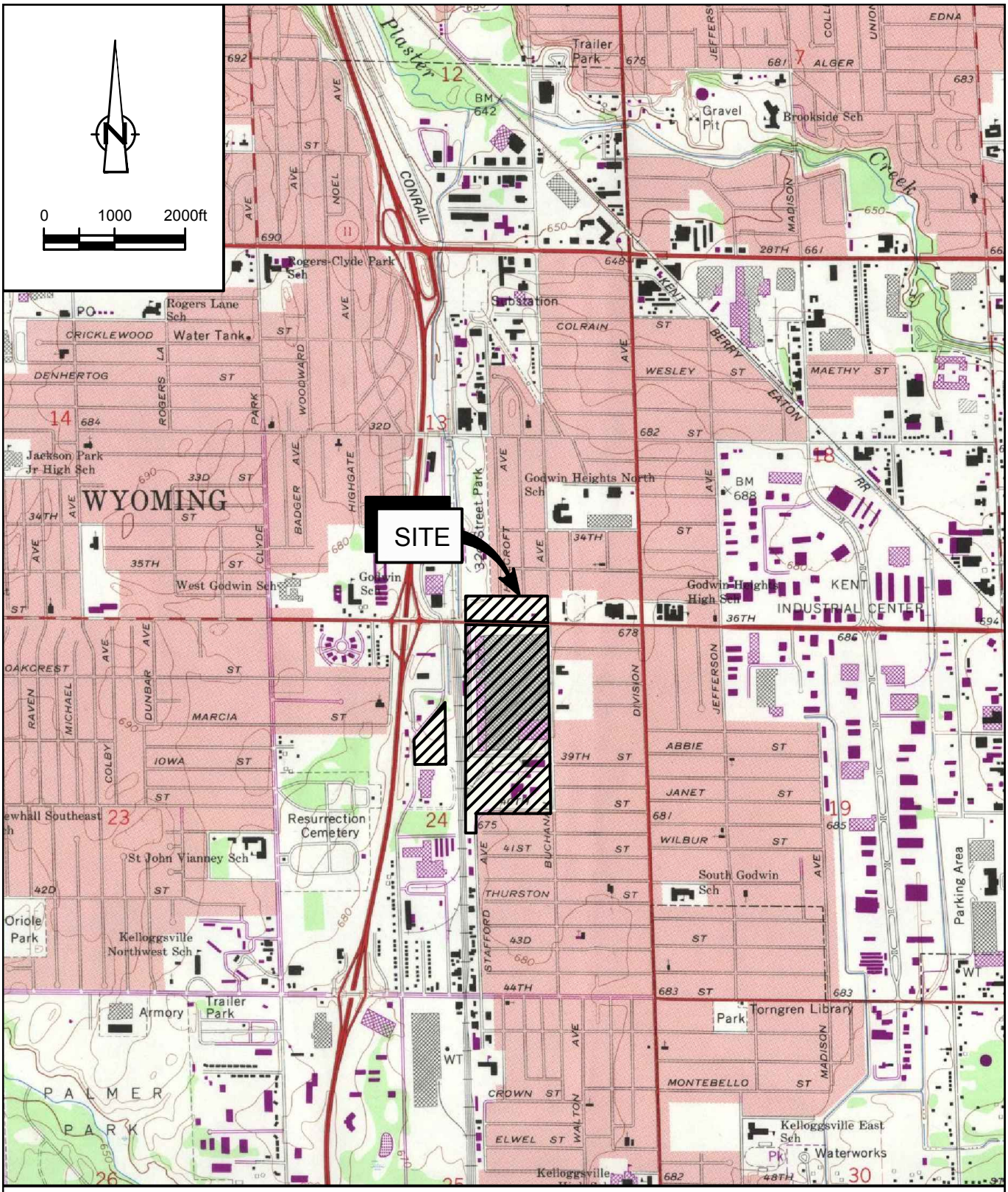
8.0 REFERENCES

- Report on Soils Investigation for Fisher Body Retention Basin prepared by Grand Rapids Testing Service and dated October 1972
- Industrial Environmental Performance Review (IEPR) prepared by General Motors Corporation and dated April 14, 1978
- IEPR prepared by General Motors Corporation and dated April 10, 1981
- Inter-Organization Memo – Flood Lube Leak at HS-5 Press prepared by General Motors Corporation and dated August 7, 1981
- Inter-Organization Memo – Groundwater Monitoring prepared by General Motors Corporation and dated August 25, 1981
- Hydrogeologic Evaluation (HE) of an Oil Leakage prepared by Environmental Data, Inc. (EDI) and dated December 1981
- Groundwater Sampling Results prepared by EDI and dated January 12, 1982
- Groundwater Sampling Results prepared by EDI and dated December 23, 1982
- IEPR prepared by General Motors Corporation and dated November 22, 1985
- Water Sampling and Analysis at the Plant Construction Area prepared by EDI and dated February 14, 1986
- Hydrogeologic Investigation (HI) prepared by EDI Engineering & Science (EDI) and dated March 1986
- Phase II HI prepared by EDI and dated June 1986
- Correspondence between GM and MDNR dated between October 2, 1986 and November 14, 1986
- Phase III-A HI prepared by EDI and dated March 1987
- Phase III-B HI prepared by EDI and dated July 1987
- Correspondence between GM and MDNR dated between June 15, 1987 and October 14, 1987
- Phase IV-A Soil Vapor Pilot Study (Pilot Study) prepared by EDI and dated August 1988
- Phase IV-B HI prepared by EDI and dated July 1988
- Phase IV-C HI prepared by EDI and dated July 1988
- TCE Remediation Monitoring Program (RMP) prepared by EDI and dated March 1989
- Available Information on 1,1,1-TCA prepared by EDI and dated September 6, 1989

- TCE Emission Testing (ET) Report prepared by EDI and dated September 21, 1989
- Off-Site Groundwater Purge Evaluation prepared by WW Engineering & Science and dated April 1993
- Addendum to the May 1993 Geotechnical Investigation Report for the Proposed Press Pit, 13-Bay Area - Soil Characterization Results prepared by WW Engineering & Science and dated June 17, 1993
- Abandonment of Monitoring Well X-10 prepared by GMC and dated February 23, 1998
- Results of Soil and Groundwater Sampling Performed in 17-Bay prepared by Earth Tech, Inc. (Earth Tech) and dated October 27, 1998
- Results of Soil and Groundwater Sampling Performed in 20-Bay prepared by Earth Tech and dated March 3, 1999
- Notice of Migration of Contamination prepared by GMC and dated June 9, 1999
- Documentation of Compliance with Section 20107a of Part 201 of Michigan Act 451 Pursuant to Administrative Rule 1003(4)(a) prepared by CRA and dated January 2002
- Evaluation of Groundwater and Soil Vapor Extraction Treatment Systems prepared by CRA and dated August 13, 2002
- Monitoring Well Network Evaluation prepared by CRA and dated August 13, 2002
- 4-Bay and 5-Bay Press Pit Excavation (Site records) dated August to November 2002
- Historical Documentation Review Summary prepared by CRA and dated December 23, 2002
- Additional Historical Documentation Review Summary prepared by CRA and dated January 21, 2003
- Notice of Migration of Contamination prepared by GMC and dated September 19, 2003
- Data Report, Activities from March to December 2003 prepared by CRA and dated February 2004
- 2004 Data Report prepared by CRA and dated December 2004;
- Results of Press Pit and Perforated Sump System Sampling prepared by CRA and dated January 6, 2006
- Summary of Soil Investigations – Former Soil Vapor Extraction System Area prepared by CRA and dated September 8, 2006
- 2005 Bulk Unload Area Investigation Summary prepared by CRA and dated September 8, 2006

- 2005-2006 Investigation Data Report prepared by CRA and dated April 2007
- Summary of Adjacent Property Review – Conical Tool Company prepared by CRA and dated September 12, 2007
- 2007 Bulk Unload Area Investigation Summary prepared by CRA and dated October 26, 2007
- Summary of Adjacent Property Review – West Side of Cole Drain prepared by CRA and dated December 5, 2007
- October 2009 Semi-Annual Groundwater Monitoring Report prepared by CRA and dated January 5, 2010
- Phase I Environmental Site Assessment prepared by CRA and dated August 9, 2010
- Draft Facility Environmental Assessment (FEA) prepared by CRA and dated October 2010
- 2010 Bulk Unload Area Investigation Data Report prepared by CRA and dated November 2010
- The EDR Aerial Photo Decade Package, 300 36th Street SW, Wyoming, Michigan 49548, April 26, 2010
- The EDR Radius Map with GeoCheck, 300 36th Street SW, Wyoming, Michigan 49548, April 21, 2010
- The EDR Sanborn Map Report, 300 36th Street SW, Wyoming, Michigan 49548, February 26, 2009
- The EDR Sanborn Map Report, 300 36th Street SW, Wyoming, Michigan 49548, April 21, 2010
- The EDR Sanborn Map Report, 300 36th Street SW, Wyoming, Michigan 49548, May 4, 2010
- The EDR Topographic Map Report, 300 36th Street SW, Wyoming, Michigan 49548, April 21, 2010
- The EDR City Directory Abstract, 300 36th Street SW, Wyoming, Michigan 49548, April 26, 2010
- The EDR City Directory Abstract, 3838 Clay Avenue SW, Wyoming, Michigan 49548, May 5, 2010
- United States Environmental Protection Agency, Region V (http://www.epa.gov/region5/answers/foia/index.htm)
- United States Department of Agriculture Natural Resources Conservation Service Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/)
- United States Department of Agriculture Natural Resources Conservation Service National Hydric Soils List by State (February 2010) (http://soils.usda.gov/use/hydric/lists/state.html)
- United States Fish and Wildlife Service Wetlands Online Mapper (http://wetlandsfws.er.usgs.gov/wtlnds/launch.html)

- City of Wyoming Assessor's Office Online Property and Land Search (http://www.ci.wyoming.mi.us/Assessor/assessor.asp)
- Kent County Online Property Information System (https://www.accesskent.com/Property/)
- April 2009 Aerial Photographs, Kent County Bureau of Equalization Property Description & Mapping Division
- Michigan Department of Natural Resources and Environment (http://www.michigan.gov/deq/0,1607,7-135--58024--,00.html)



SOURCE: USGS QUADRANGLE MAP
GRAND RAPIDS WEST, MICHIGAN

figure 1.1

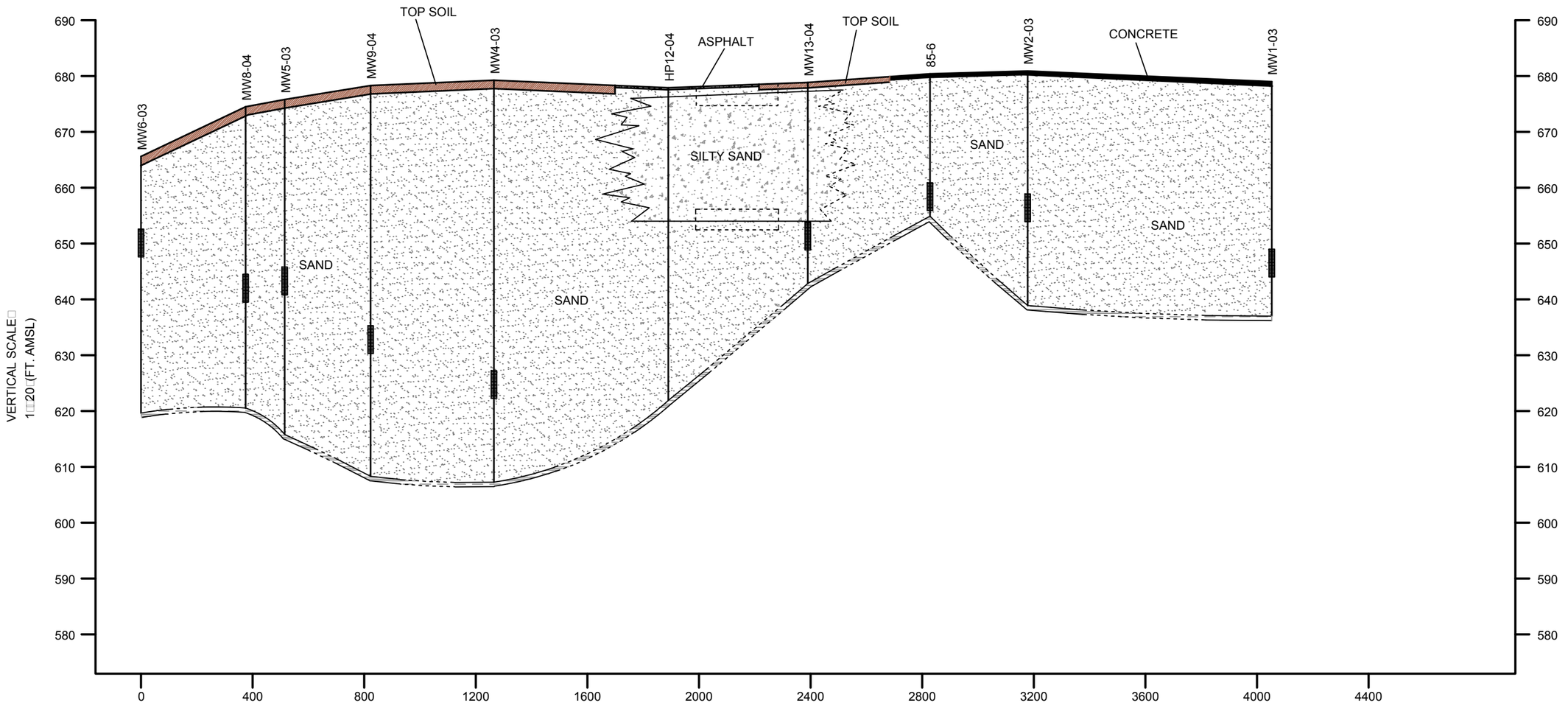
SITE LOCATION
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
Wyoming, Michigan

GRAND RAPIDS

CRA

A

A



VERTICAL SCALE
1 20 (FT. AMSL)

HORIZONTAL SCALE
1 400

LEGEND

- SCREENED INTERVAL
- INTERPRETIVE CONTACT
- KNOWN CONTACT
- SILTY SAND
- SAND
- CLAY

figure 3.1

CROSS-SECTION A-A

CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
Wyoming, Michigan

017360-T05(019)GN-DE008 OCT 28/2010

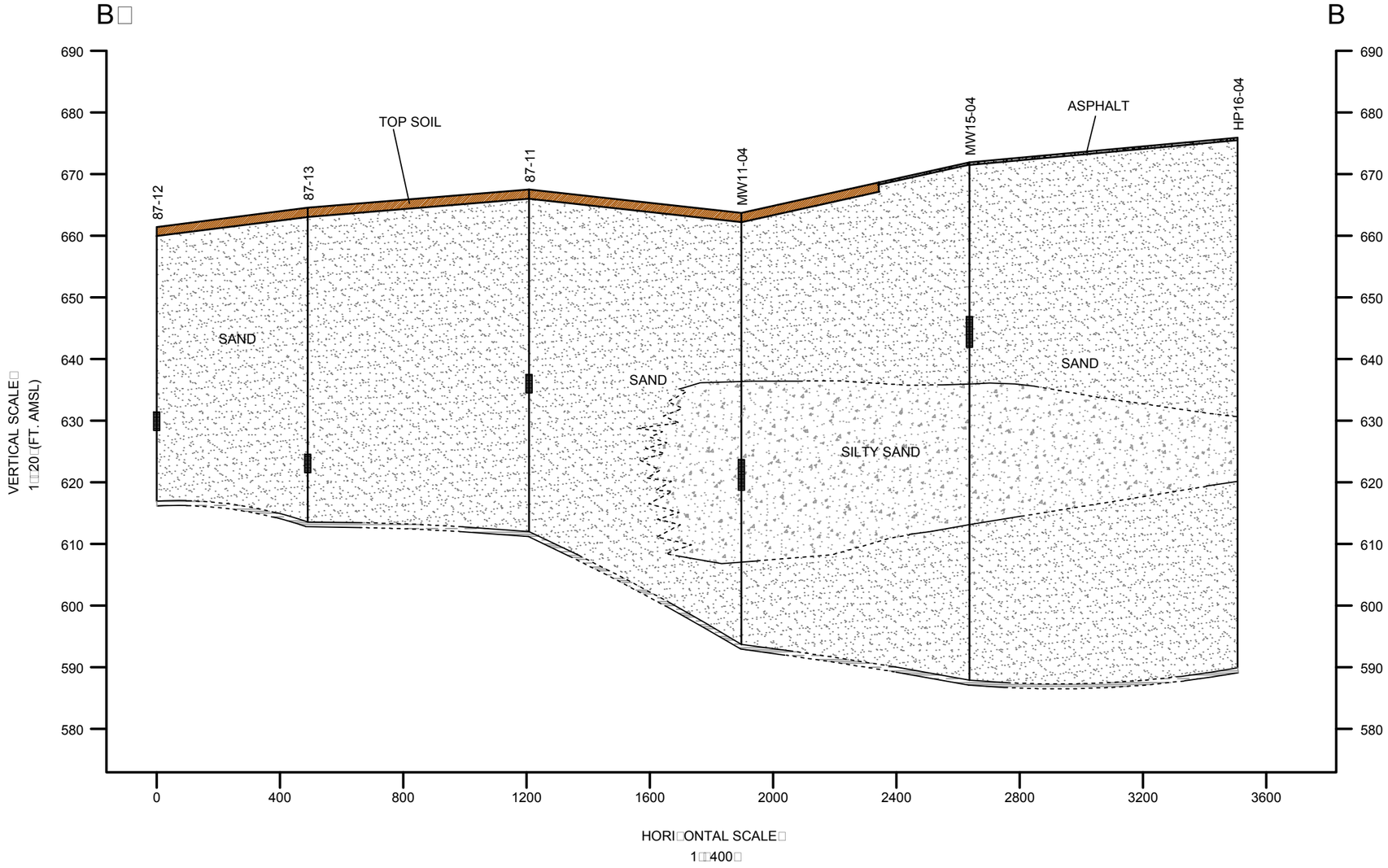
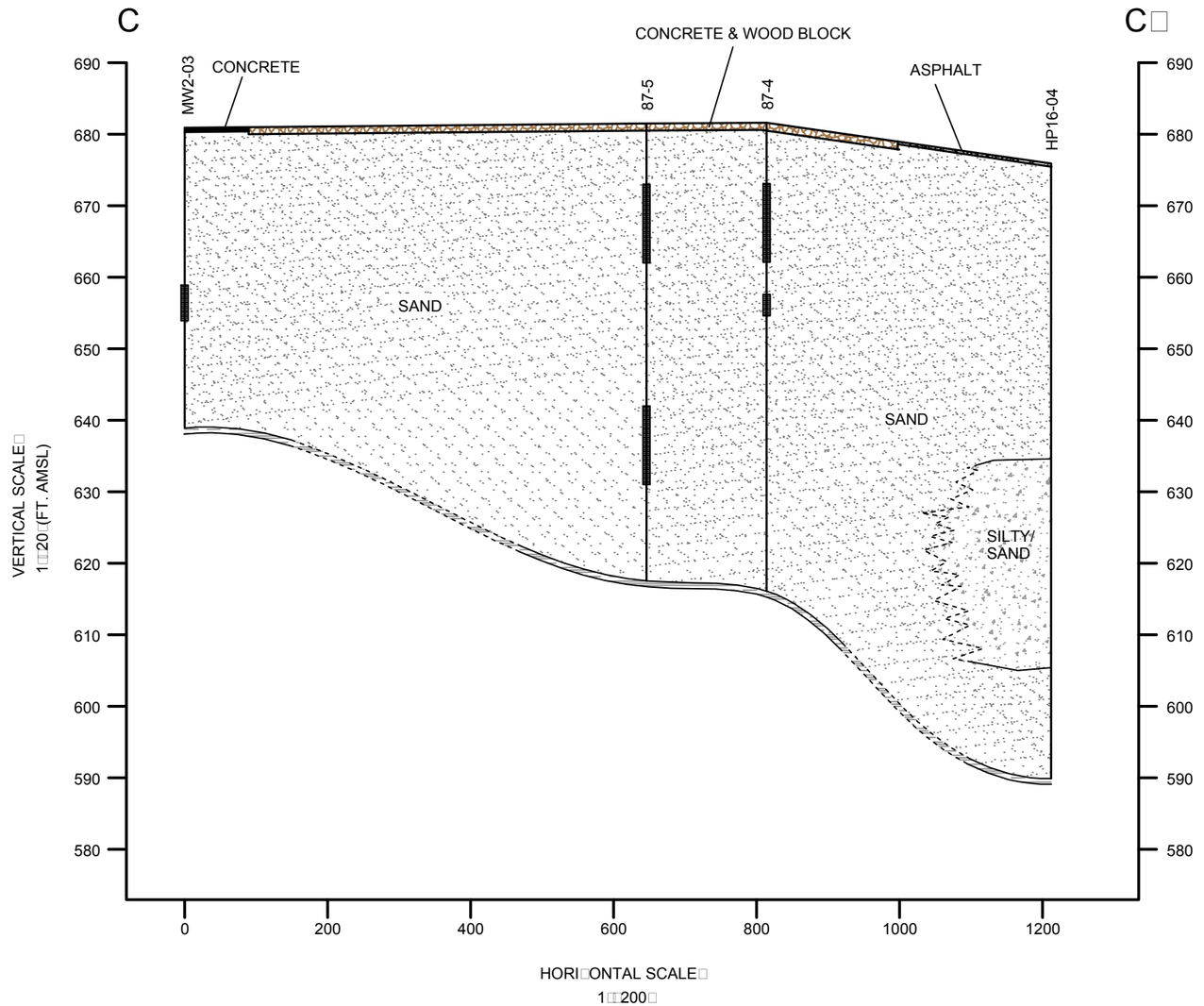


figure 3.2

CROSS-SECTION B-B
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
Wyoming, Michigan

017360-T05(019)GN-DE009 OCT 28/2010



LEGEND

- SCREENED INTERVAL
- INTERPRETIVE CONTACT
- KNOWN CONTACT
- SAND
- CLAY
- SILT

figure 3.3

CROSS-SECTION C-C
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
Wyoming, Michigan

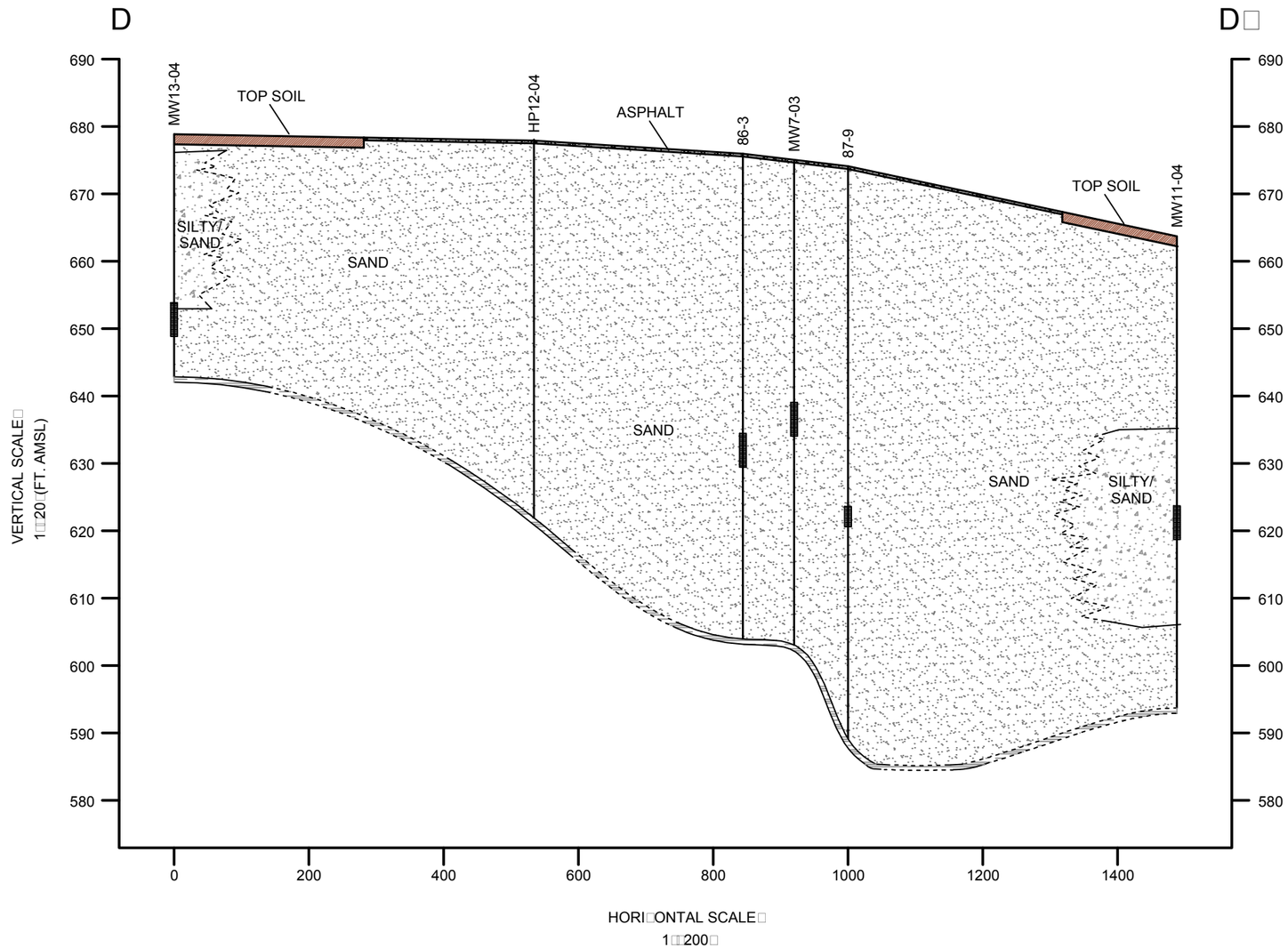
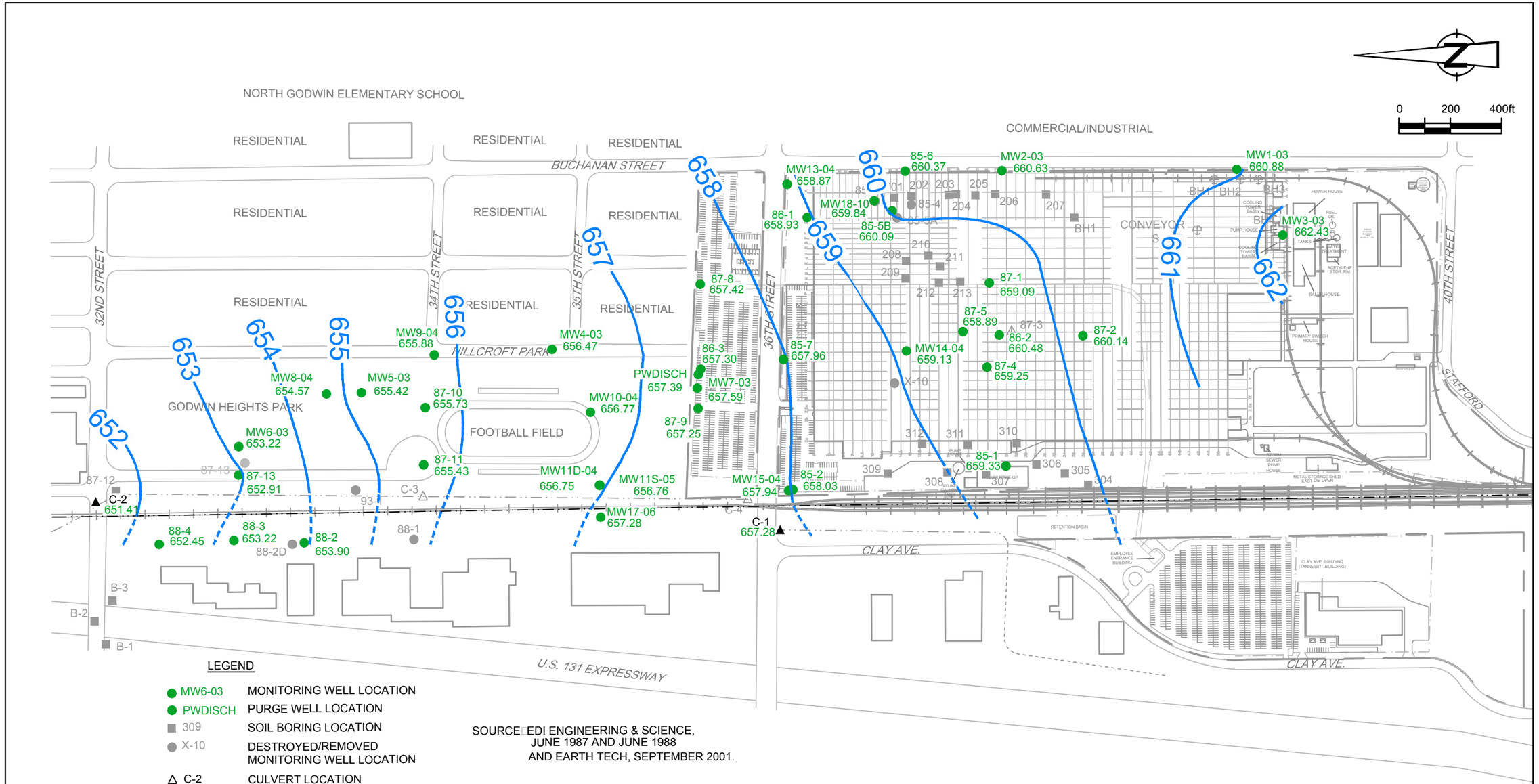


figure 3.4

CROSS-SECTION D-D□
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
Wyoming, Michigan



LEGEND

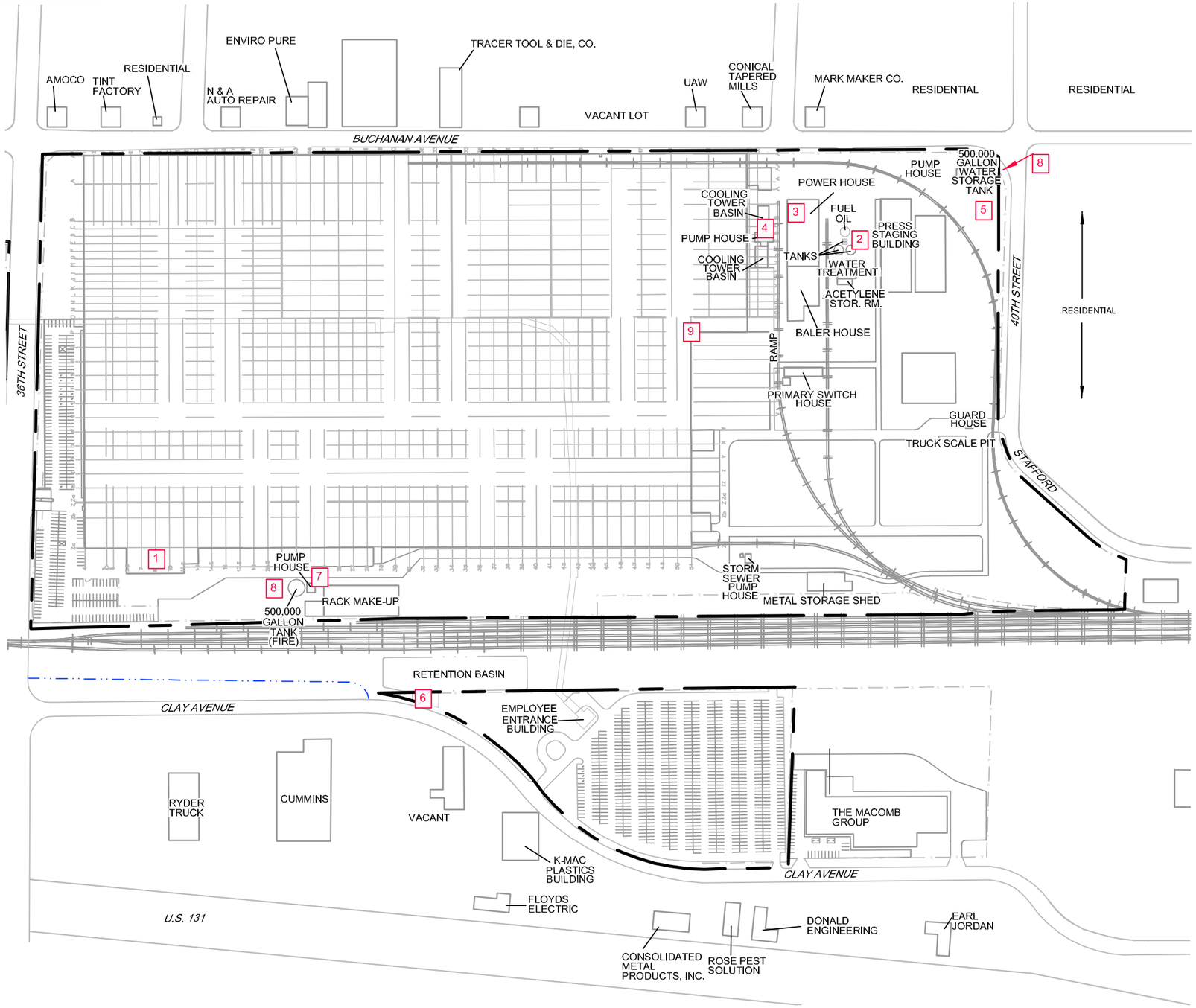
MW6-03	MONITORING WELL LOCATION
PWDISCH	PURGE WELL LOCATION
309	SOIL BORING LOCATION
X-10	DESTROYED/REMOVED MONITORING WELL LOCATION
C-2	CULVERT LOCATION
87-3	AIR PURGE WELL
BH1	APPROXIMATE LOCATION OF DEWATERING WELLS
	APPROXIMATE SITE BOUNDARY
	FENCE
	RAILROAD
	COLE DRAIN
652	GROUNDWATER ELEVATION CONTOUR
652	INFERRED ELEVATION CONTOUR
653.22	GROUNDWATER ELEVATION

SOURCE: EDI ENGINEERING & SCIENCE, JUNE 1987 AND JUNE 1988 AND EARTH TECH, SEPTEMBER 2001.

figure 3.5

OCTOBER 11, 2010
POTENTIOMETRIC SURFACE MAP
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
Wyoming, Michigan

017360-T05(019)GN-DE004 DEC 20/2010



0 100 300ft

LIST OF ASTs

1 OIL STORES ASTs
- (2) 9,700-GALLON MOTOR OIL ASTs (EMPTY)
--- 6,000-GALLON USED OIL AST (EMPTY)
--- 6,000-GALLON RECLAIM AST (EMPTY)
--- 6,000-GALLON CLEANER AST (EMPTY)

2 WWTP ASTs
- (2) 45,000 GALLON OILY WASTEWATER BATCH TANKS
--- 100,000-GALLON USED OIL AST
--- 2,200-GALLON OIL/WATER SEPARATOR AST
- (2) 6,000 GALLON USED OIL ASTs
--- 5,000-GALLON OILY SLUDGE
--- ?-GALLON CAUSTIC AST
--- 9,000-GALLON FLOCCULANT AST
--- ?-GALLON COAGULANT AST

3 --- 500-GALLON DIESEL FUEL AST

4 --- 900-GALLON DIESEL FUEL AST

5 --- 400-GALLON DIESEL FUEL AST

6 --- 4,000-GALLON USED OIL AST (EMPTY)

7 FORMER 500-GALLON DIESEL FUEL AST

8 100,000-GALLON FIRE SUPPRESSION WATER ASTs

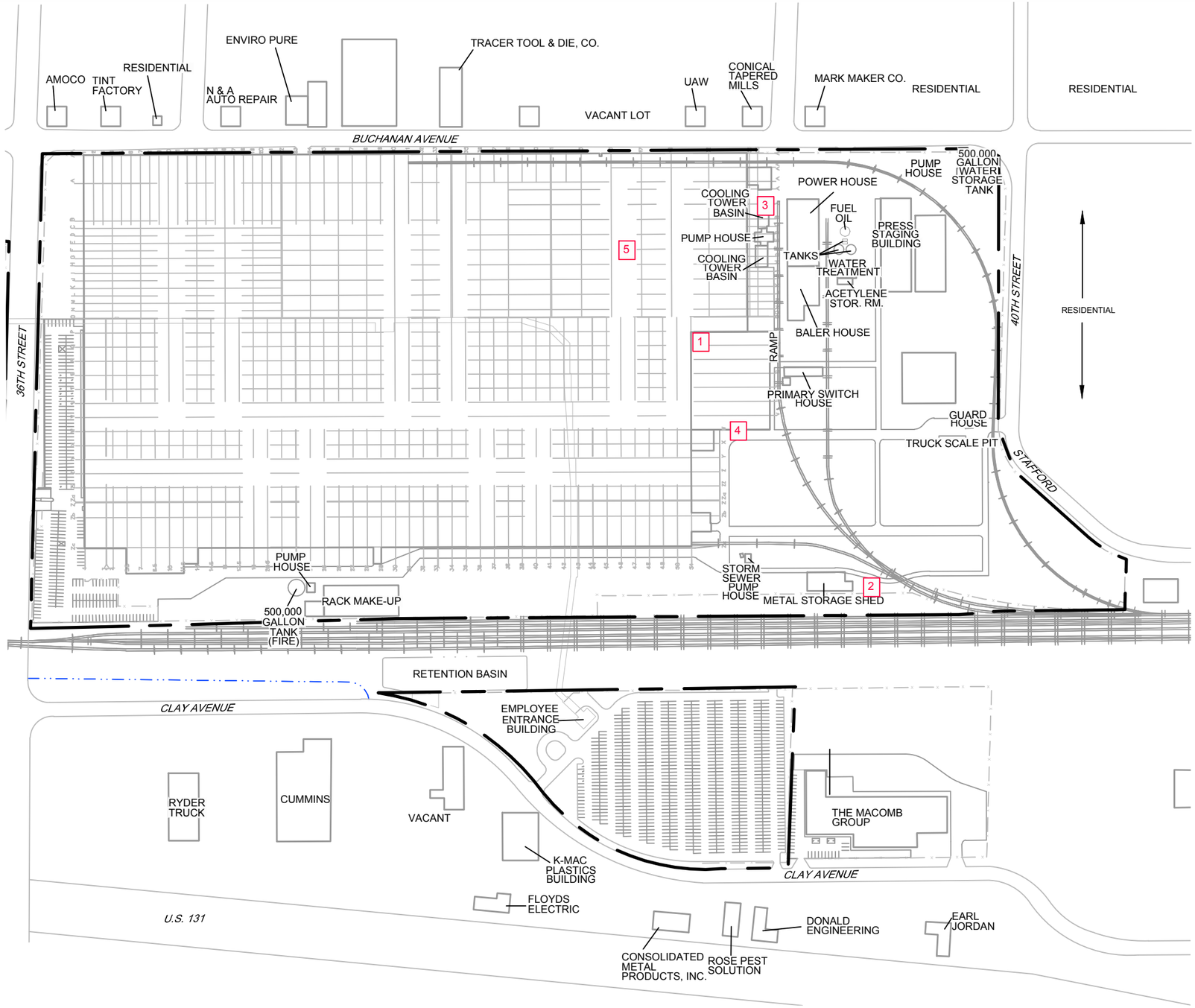
9 FORMER BULK DEADENER AST

LEGEND

APPROXIMATE PROPERTY BOUNDARY
FENCE
RAILROAD
COLE DRAIN

figure 4.1

AST LOCATIONS
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
Wyoming, Michigan



0 100 300ft

LIST OF USTs

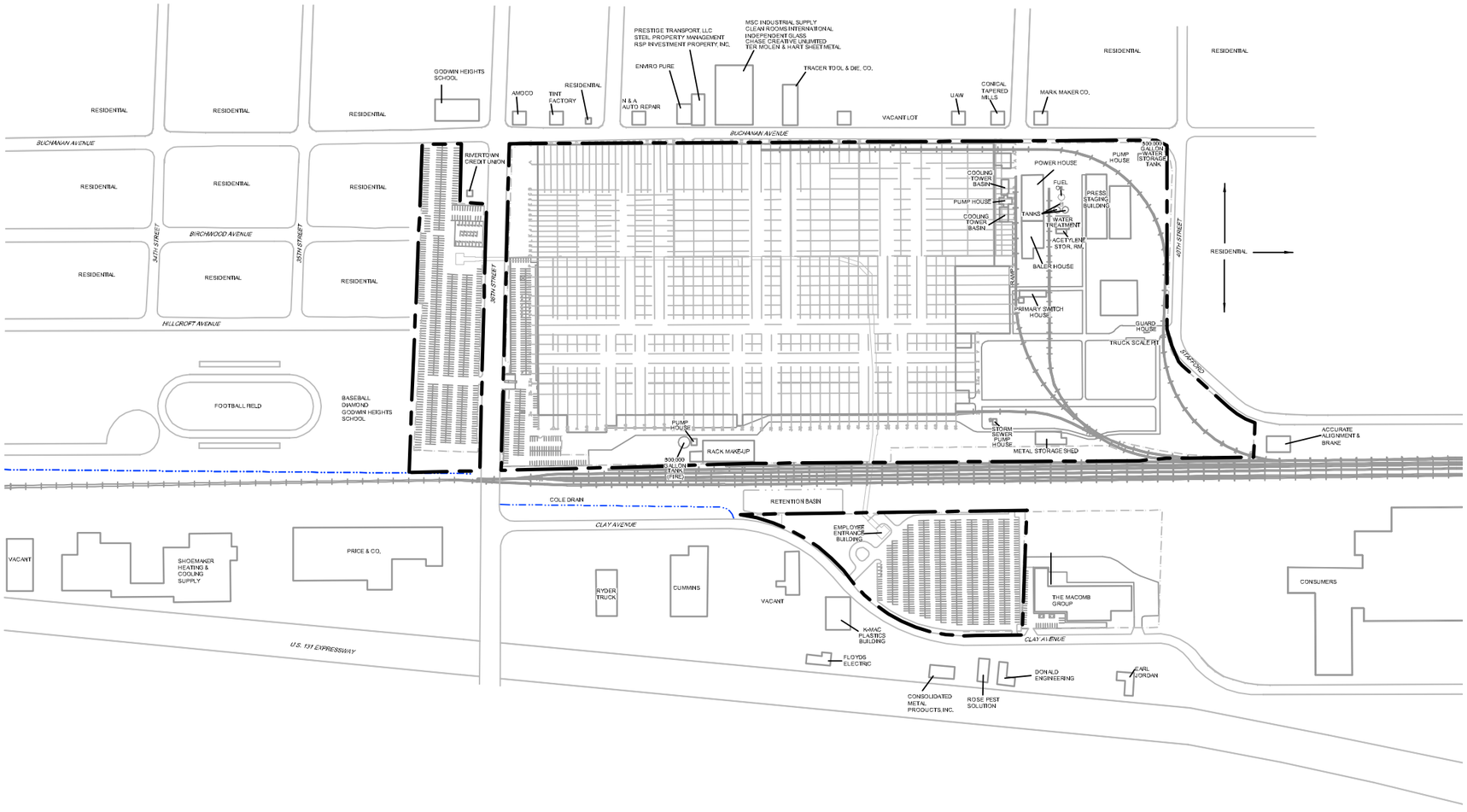
1. MINERAL SPIRITS AND MINERAL SEAL OIL USTs
2. CURRENT GASOLINE AND DIESEL USTs
3. FORMER HEATING OIL AND OIL USTs
4. FORMER 5,000-GALLON GASOLINE UST
5. FORMER 1,000-GALLON GASOLINE USTs

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- FENCE
- RAILROAD
- COLE DRAIN

figure 4.2

UST LOCATIONS
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
Wyoming, Michigan



No	Revision	Date	Initial

0 100 250ft

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- FENCE
- RAILROAD
- COLE DRAIN

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

SITE LAYOUT AND SURROUNDING PROPERTIES

CURRENT CONDITIONS REPORT

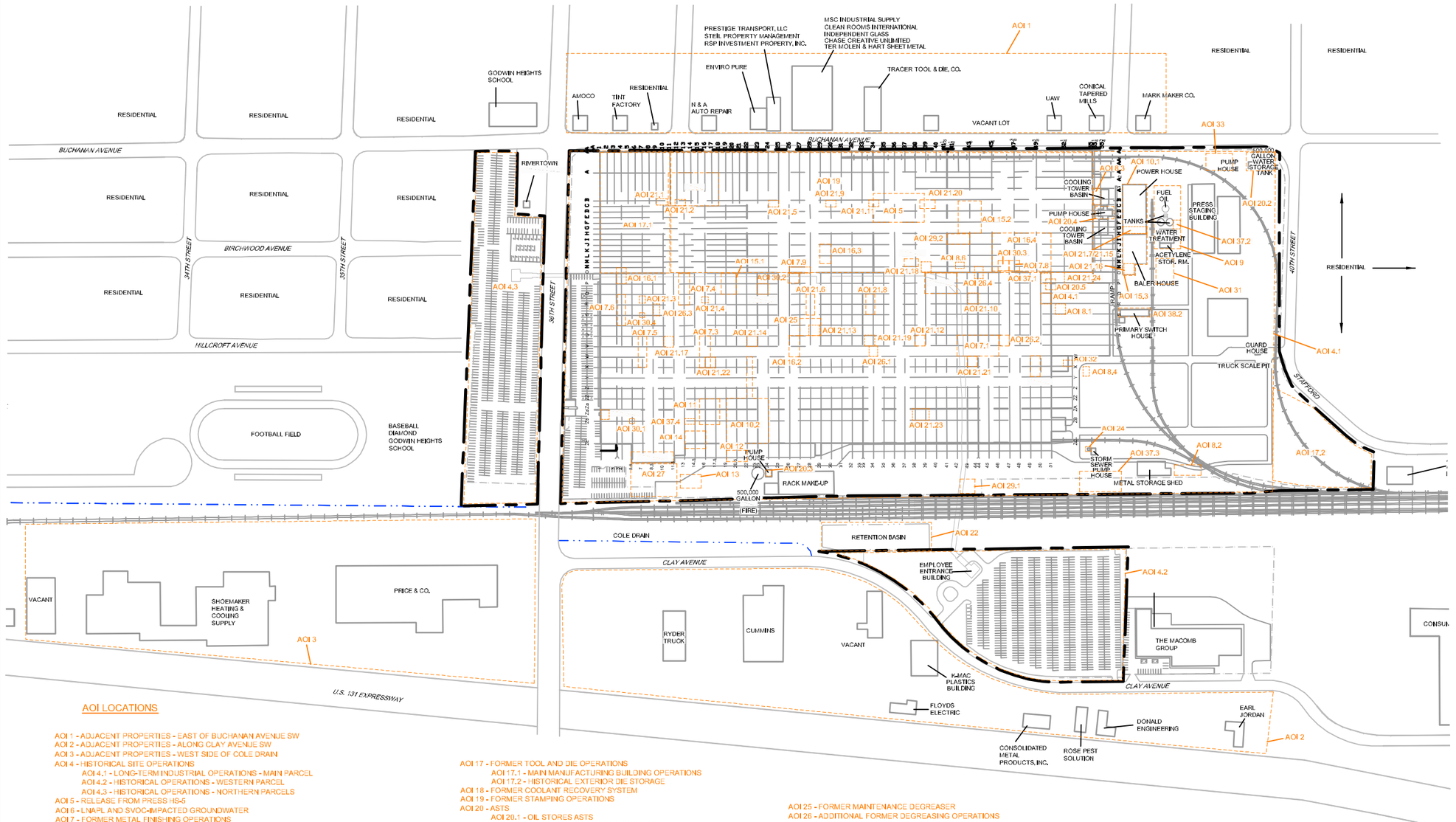
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager:	Reviewed By:	Date:	
J.Q.	C.M.	DECEMBER 2010	
Scale: 1:250	Project No.: 017360-T05	Report No.: 019	Drawing No.: PLAN 1

017360-T05(019)GN-DE002 DEC 21/2010



AOI LOCATIONS

AOI 1 - ADJACENT PROPERTIES - EAST OF BUCHANAN AVENUE SW
AOI 2 - ADJACENT PROPERTIES - ALONG CLAY AVENUE SW
AOI 3 - ADJACENT PROPERTIES - WEST SIDE OF COLE DRAIN
AOI 4 - HISTORICAL SITE OPERATIONS
- AOI 4.1 - LONG-TERM INDUSTRIAL OPERATIONS - MAIN PARCEL
- AOI 4.2 - HISTORICAL OPERATIONS - WESTERN PARCEL
- AOI 4.3 - HISTORICAL OPERATIONS - NORTHERN PARCELS

AOI 5 - RELEASE FROM PRESS HS-5
AOI 6 - LNAPL AND SVOC-IMPACTED GROUNDWATER
AOI 7 - FORMER METAL FINISHING OPERATIONS
- AOI 7.1 - BONDERIZING OPERATIONS
- AOI 7.2 - LACQUER AND CEMENT SPRAY
- AOI 7.3 - ANTI-RUST SPRAY BOOTH NO. 1
- AOI 7.4 - ANTI-RUST SPRAY BOOTH NO. 2
- AOI 7.5 - ANTI-RUST SPRAY BOOTH NO. 3
- AOI 7.6 - ANTI-RUST SPRAY BOOTH NO. 4
- AOI 7.7 - FORMER WEST PAINT BOOTH
- AOI 7.8 - FORMER PAINT BOOTH (CURRENT STEAM CLEAN BOOTH)
- AOI 7.9 - FORMER EAST PAINT BOOTH

AOI 8 - USTS
- AOI 8.1 - FORMER MINERAL SPIRITS AND MINERAL SEAL OIL USTS
- AOI 8.2 - CURRENT GASOLINE AND DIESEL USTS
- AOI 8.3 - FORMER HEATING OIL AND OIL USTS
- AOI 8.4 - FORMER 5,000-GALLON AND 8,000-GALLON GASOLINE USTS
- AOI 8.5 - FORMER 1,000-GALLON GASOLINE UST NO. 1
- AOI 8.6 - FORMER 1,000-GALLON GASOLINE UST NO. 2

AOI 9 - WWTP
AOI 10 - POWER HOUSE OPERATIONS
- AOI 10.1 - CURRENT POWER HOUSE
- AOI 10.2 - FORMER POWER HOUSE

AOI 11 - FORMER AOF HOUSE
AOI 12 - FORMER COOLING TOWER BASIN
AOI 13 - FORMER COOLING WATER SPRAY POND
AOI 14 - FORMER SLUDGE BED
AOI 15 - FORMER BALER OPERATIONS
- AOI 15.1 - FORMER MAIN MANUFACTURING BUILDING BALERS
- AOI 15.2 - FORMER BALER HOUSE
- AOI 15.3 - CURRENT BALER HOUSE

AOI 16 - FORMER HEAT TREAT OPERATIONS
- AOI 16.1 - MAIN MANUFACTURING BUILDING - AREA NO. 1
- AOI 16.2 - MAIN MANUFACTURING BUILDING - AREA NO. 2
- AOI 16.3 - FORMER HEAT TREAT BUILDING NO. 1
- AOI 16.4 - FORMER HEAT TREAT BUILDING NO. 2

AOI 17 - FORMER TOOL AND DIE OPERATIONS
- AOI 17.1 - MAIN MANUFACTURING BUILDING OPERATIONS
- AOI 17.2 - HISTORICAL EXTERIOR DIE STORAGE

AOI 18 - FORMER COOLANT RECOVERY SYSTEM
AOI 19 - FORMER STAMPING OPERATIONS
AOI 20 - ASTS
- AOI 20.1 - OIL STORES ASTS
- AOI 20.2 - CURRENT SOUTH PUMP HOUSE AST
- AOI 20.3 - FORMER PUMP HOUSE AST
- AOI 20.4 - CURRENT COOLING TOWER PUMP HOUSE AST
- AOI 20.5 - FORMER BULK DEADENER AST

AOI 21 - SUBSTATIONS
- AOI 21.1 - SUBSTATION B - BASEMENT
- AOI 21.2 - SUBSTATION C - BASEMENT
- AOI 21.3 - SUBSTATION D - ROOF
- AOI 21.4 - SUBSTATION E - ROOF
- AOI 21.5 - SUBSTATION F - BASEMENT
- AOI 21.6 - SUBSTATION G - ROOF
- AOI 21.7 - SUBSTATION H - ROOF
- AOI 21.8 - SUBSTATION J - ROOF
- AOI 21.9 - SUBSTATION K - BASEMENT
- AOI 21.10 - SUBSTATION L - ROOF
- AOI 21.11 - SUBSTATION M - BASEMENT
- AOI 21.12 - SUBSTATION N - ROOF
- AOI 21.13 - SUBSTATION O - ROOF
- AOI 21.14 - SUBSTATION P - ROOF
- AOI 21.15 - SUBSTATION Q - ROOF
- AOI 21.16 - SUBSTATION R - GROUND
- AOI 21.17 - SUBSTATION S - ROOF
- AOI 21.18 - SUBSTATION T - ROOF
- AOI 21.19 - SUBSTATION U - ROOF
- AOI 21.20 - SUBSTATION V - BASEMENT
- AOI 21.21 - SUBSTATION W - ROOF
- AOI 21.22 - SUBSTATION X - ROOF
- AOI 21.23 - SUBSTATION Y - ROOF
- AOI 21.24 - SUBSTATION Z - ROOF

AOI 22 - STORMWATER RETENTION POND
AOI 23 - WOOD FLOOR BLOCK (VARIES, NOT SHOWN)
AOI 24 - FORMER TAR HOUSE
AOI 25 - FORMER MAINTENANCE DEGREASER
AOI 26 - ADDITIONAL FORMER DEGREASING OPERATIONS
- AOI 26.1 - SHELL COOLER AFTER DEGREASER
- AOI 26.2 - FORMER DEGREASER
- AOI 26.3 - FORMER DEGREASER
- AOI 26.4 - SHELL COOLER AFTER DEGREASER

AOI 27 - OIL STORES BULK UNLOAD AREA
AOI 28 - ADDITIONAL BULK LOAD AND UNLOAD AREAS (VARIES, NOT SHOWN)
AOI 29 - FORMER INCINERATORS
- AOI 29.1 - FORMER INCINERATOR AREA NO. 1
- AOI 29.2 - FORMER INCINERATOR AREA NO. 2

AOI 30 - ELEVATOR PITS
- AOI 30.1 - PASSENGER ELEVATOR
- AOI 30.2 - FREIGHT ELEVATOR NO. 1
- AOI 30.3 - FREIGHT ELEVATOR NO. 2
- AOI 30.4 - FORMER FREIGHT ELEVATOR

AOI 31 - SCRAP METAL STORAGE PAD
AOI 32 - COMPACTOR
AOI 33 - RAILROAD TRACK OPERATIONS
AOI 34 - BATTERY CHARGING AREAS (VARIES, NOT SHOWN)
AOI 35 - PROCESS INFRASTRUCTURE (VARIES, NOT SHOWN)
AOI 36 - POTENTIAL ON-SITE FILL ACTIVITIES (NOT SHOWN)
AOI 37 - HAZARDOUS WASTE STORAGE AREAS
- AOI 37.1 - FORMER HAZ WASTE STORAGE AREA - MAIN PLANT
- AOI 37.2 - FORMER HAZ WASTE STORAGE AREA - SOUTH OF WWTP
- AOI 37.3 - FORMER HAZ WASTE STORAGE AREA - WESTERN PROPERTY BOUNDARY
- AOI 37.4 - CURRENT HAZ WASTE STORAGE AREA

AOI 38 - SWITCH HOUSE OPERATIONS
- AOI 38.1 - FORMER SWITCH HOUSE
- AOI 38.2 - CURRENT SWITCH HOUSE

No	Revision	Date	Initial

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

LOCATIONS OF AOIs

CURRENT CONDITIONS REPORT

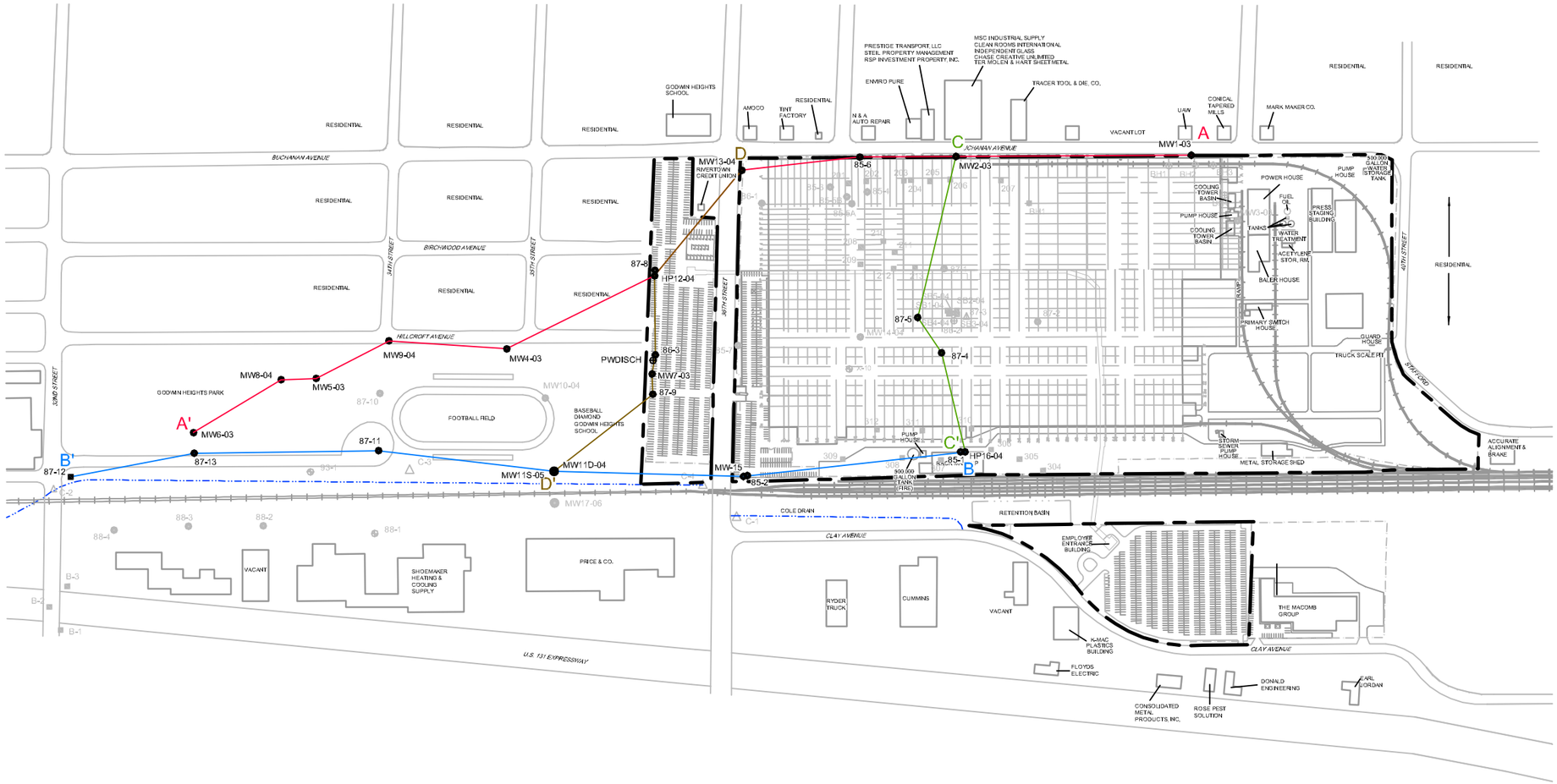
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager:	Reviewed By:	Date:	
J.Q.	C.M.	DECEMBER 2010	
Scale: 1:200	Project No: 017360-T05	Report No: 019	Drawing No: PLAN 2

017360-T05(019)GN-DE012 DEC 21/2010



No	Revision	Date	Initial

0 100 250ft

LEGEND

- 87-2 MONITORING WELL LOCATION
- PWDISCH PURGE WELL LOCATION
- 307 SOIL BORING LOCATION
- X-10 DESTROYED/REMOVED MONITORING WELL LOCATION
- C-2 CULVERT LOCATION
- 87-3 AIR PURGE WELL
- BH1 APPROXIMATE LOCATION OF DEWATERING WELLS
- APPROXIMATE PROPERTY BOUNDARY
- FENCE
- RAILROAD
- COLE DRAIN
- A — A' CROSS SECTION LOCATION

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

CROSS-SECTION LOCATIONS

CURRENT CONDITIONS REPORT

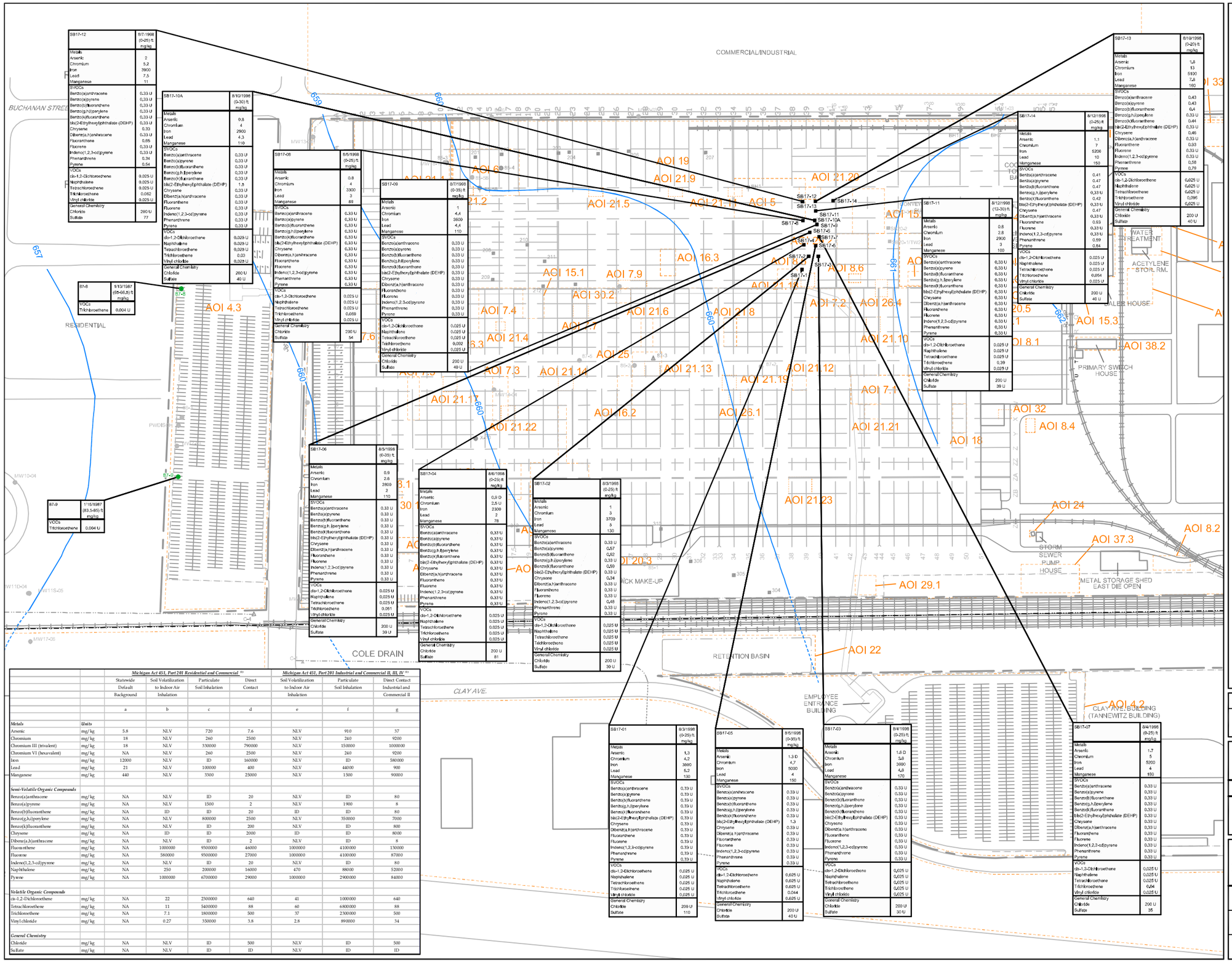
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager:	Reviewed By:	Date:	
J.Q.	C.M.	DECEMBER 2010	
Scale: 1:250	Project No.: 017360-T05	Report No.: 019	Drawing No.: PLAN 3

017360-T05(019)GN-DE007 DEC 21/2010



SB17-12	8/7/1998 (0-25) ft mg/kg
Metals	
Arsenic	2
Chromium	5.2
Iron	3900
Lead	7.5
Manganese	11
SVOCs	
Benzo(a)anthracene	0.33 U
Benzo(a)pyrene	0.33 U
Benzo(b)fluoranthene	0.33 U
Benzo(g,h,i)perylene	0.33 U
Benzo(k)fluoranthene	0.33 U
bis(2-Ethylhexyl)phthalate (DEHP)	0.33 U
Chrysene	0.33
Dibenz(a,h)anthracene	0.33 U
Fluoranthene	0.65
Fluorene	0.33 U
Indeno(1,2,3-cd)pyrene	0.33 U
Phenanthrene	0.34
Pyrene	0.54
VOCs	
cis-1,2-Dichloroethene	0.025 U
Naphthalene	0.025 U
Tetrachloroethene	0.025 U
Trichloroethene	0.052
Vinyl chloride	0.025 U
General Chemistry	
Chloride	200 U
Sulfate	77

SB17-10A	8/10/1998 (0-30) ft mg/kg
Metals	
Arsenic	0.8
Chromium	4
Iron	2900
Lead	4.3
Manganese	110
SVOCs	
Benzo(a)anthracene	0.33 U
Benzo(a)pyrene	0.33 U
Benzo(b)fluoranthene	0.33 U
Benzo(g,h,i)perylene	0.33 U
Benzo(k)fluoranthene	0.33 U
bis(2-Ethylhexyl)phthalate (DEHP)	1.5
Chrysene	0.33 U
Dibenz(a,h)anthracene	0.33 U
Fluoranthene	0.33 U
Fluorene	0.33 U
Indeno(1,2,3-cd)pyrene	0.33 U
Phenanthrene	0.33 U
Pyrene	0.33 U
VOCs	
cis-1,2-Dichloroethene	0.025 U
Naphthalene	0.025 U
Tetrachloroethene	0.028 U
Trichloroethene	0.03
Vinyl chloride	0.025 U
General Chemistry	
Chloride	200 U
Sulfate	40 U

SB17-08	8/5/1998 (0-25) ft mg/kg
Metals	
Arsenic	0.8
Chromium	4
Iron	3300
Lead	3
Manganese	89
SVOCs	
Benzo(a)anthracene	0.33 U
Benzo(a)pyrene	0.33 U
Benzo(b)fluoranthene	0.33 U
Benzo(g,h,i)perylene	0.33 U
Benzo(k)fluoranthene	0.33 U
bis(2-Ethylhexyl)phthalate (DEHP)	0.33 U
Chrysene	0.33 U
Dibenz(a,h)anthracene	0.33 U
Fluoranthene	0.33 U
Fluorene	0.33 U
Indeno(1,2,3-cd)pyrene	0.33 U
Phenanthrene	0.33 U
Pyrene	0.33 U
VOCs	
cis-1,2-Dichloroethene	0.025 U
Naphthalene	0.025 U
Tetrachloroethene	0.025 U
Trichloroethene	0.009
Vinyl chloride	0.025 U
General Chemistry	
Chloride	200 U
Sulfate	54

SB17-09	8/7/1998 (0-35) ft mg/kg
Metals	
Arsenic	1
Chromium	4.4
Iron	3600
Lead	4.4
Manganese	110
SVOCs	
Benzo(a)anthracene	0.33 U
Benzo(a)pyrene	0.33 U
Benzo(b)fluoranthene	0.33 U
Benzo(g,h,i)perylene	0.33 U
Benzo(k)fluoranthene	0.33 U
bis(2-Ethylhexyl)phthalate (DEHP)	0.33 U
Chrysene	0.33 U
Dibenz(a,h)anthracene	0.33 U
Fluoranthene	0.33 U
Fluorene	0.33 U
Indeno(1,2,3-cd)pyrene	0.33 U
Phenanthrene	0.33 U
Pyrene	0.33 U
VOCs	
cis-1,2-Dichloroethene	0.025 U
Naphthalene	0.025 U
Tetrachloroethene	0.025 U
Trichloroethene	0.002
Vinyl chloride	0.025 U
General Chemistry	
Chloride	200 U
Sulfate	49 U

SB17-11	8/12/1998 (12-30) ft mg/kg
Metals	
Arsenic	0.8
Chromium	2.8
Iron	2900
Lead	3
Manganese	100
SVOCs	
Benzo(a)anthracene	0.33 U
Benzo(a)pyrene	0.33 U
Benzo(b)fluoranthene	0.33 U
Benzo(g,h,i)perylene	0.33 U
Benzo(k)fluoranthene	0.33 U
bis(2-Ethylhexyl)phthalate (DEHP)	0.33 U
Chrysene	0.33 U
Dibenz(a,h)anthracene	0.33 U
Fluoranthene	0.33 U
Fluorene	0.33 U
Indeno(1,2,3-cd)pyrene	0.33 U
Phenanthrene	0.33 U
Pyrene	0.33 U
VOCs	
cis-1,2-Dichloroethene	0.025 U
Naphthalene	0.025 U
Tetrachloroethene	0.025 U
Trichloroethene	0.054
Vinyl chloride	0.025 U
General Chemistry	
Chloride	200 U
Sulfate	40 U

SB17-13	8/10/1998 (0-20) ft mg/kg
Metals	
Arsenic	1.8
Chromium	13
Iron	5100
Lead	7.8
Manganese	160
SVOCs	
Benzo(a)anthracene	0.43
Benzo(a)pyrene	0.43
Benzo(b)fluoranthene	0.4
Benzo(g,h,i)perylene	0.33 U
Benzo(k)fluoranthene	0.44
bis(2-Ethylhexyl)phthalate (DEHP)	0.33 U
Chrysene	0.46
Dibenz(a,h)anthracene	0.33 U
Fluoranthene	0.93
Fluorene	0.33 U
Indeno(1,2,3-cd)pyrene	0.33 U
Phenanthrene	0.58
Pyrene	0.79
VOCs	
cis-1,2-Dichloroethene	0.025 U
Naphthalene	0.025 U
Tetrachloroethene	0.025 U
Trichloroethene	0.096
Vinyl chloride	0.025 U
General Chemistry	
Chloride	200 U
Sulfate	40 U

SB17-14	8/12/1998 (0-25) ft mg/kg
Metals	
Arsenic	1.1
Chromium	7
Iron	5200
Lead	10
Manganese	150
SVOCs	
Benzo(a)anthracene	0.41
Benzo(a)pyrene	0.47
Benzo(b)fluoranthene	0.47
Benzo(g,h,i)perylene	0.33 U
Benzo(k)fluoranthene	0.42
bis(2-Ethylhexyl)phthalate (DEHP)	0.33 U
Chrysene	0.47
Dibenz(a,h)anthracene	0.33 U
Fluoranthene	0.63
Fluorene	0.33 U
Indeno(1,2,3-cd)pyrene	0.33 U
Phenanthrene	0.59
Pyrene	0.84
VOCs	
cis-1,2-Dichloroethene	0.025 U
Naphthalene	0.025 U
Tetrachloroethene	0.025 U
Trichloroethene	0.054
Vinyl chloride	0.025 U
General Chemistry	
Chloride	200 U
Sulfate	40 U

SB17-06	8/5/1998 (0-35) ft mg/kg
Metals	
Arsenic	0.9
Chromium	2.6
Iron	2800
Lead	2
Manganese	110
SVOCs	
Benzo(a)anthracene	0.33 U
Benzo(a)pyrene	0.33 U
Benzo(b)fluoranthene	0.33 U
Benzo(g,h,i)perylene	0.33 U
Benzo(k)fluoranthene	0.33 U
bis(2-Ethylhexyl)phthalate (DEHP)	0.33 U
Chrysene	0.33 U
Dibenz(a,h)anthracene	0.33 U
Fluoranthene	0.33 U
Fluorene	0.33 U
Indeno(1,2,3-cd)pyrene	0.33 U
Phenanthrene	0.33 U
Pyrene	0.33 U
VOCs	
cis-1,2-Dichloroethene	0.025 U
Naphthalene	0.025 U
Tetrachloroethene	0.051
Vinyl chloride	0.025 U
General Chemistry	
Chloride	200 U
Sulfate	39 U

SB17-04	8/6/1998 (0-25) ft mg/kg
Metals	
Arsenic	0.9 D
Chromium	2.5 U
Iron	2300
Lead	2
Manganese	78
SVOCs	
Benzo(a)anthracene	0.33 U
Benzo(a)pyrene	0.33 U
Benzo(b)fluoranthene	0.33 U
Benzo(g,h,i)perylene	0.33 U
Benzo(k)fluoranthene	0.33 U
bis(2-Ethylhexyl)phthalate (DEHP)	0.33 U
Chrysene	0.33 U
Dibenz(a,h)anthracene	0.33 U
Fluoranthene	0.33 U
Fluorene	0.33 U
Indeno(1,2,3-cd)pyrene	0.33 U
Phenanthrene	0.33 U
Pyrene	0.33 U
VOCs	
cis-1,2-Dichloroethene	0.025 U
Naphthalene	0.025 U
Tetrachloroethene	0.025 U
Trichloroethene	0.025 U
Vinyl chloride	0.025 U
General Chemistry	
Chloride	200 U
Sulfate	81

SB17-02	8/3/1998 (0-25) ft mg/kg
Metals	
Arsenic	1
Chromium	3
Iron	3700
Lead	5
Manganese	130
SVOCs	
Benzo(a)anthracene	0.33 U
Benzo(a)pyrene	0.57
Benzo(b)fluoranthene	0.62
Benzo(g,h,i)perylene	0.33 U
Benzo(k)fluoranthene	0.59
bis(2-Ethylhexyl)phthalate (DEHP)	0.33 U
Chrysene	0.54
Dibenz(a,h)anthracene	0.33 U
Fluoranthene	0.33 U
Fluorene	0.33 U
Indeno(1,2,3-cd)pyrene	0.48
Phenanthrene	0.33 U
Pyrene	0.33 U
VOCs	
cis-1,2-Dichloroethene	0.025 U
Naphthalene	0.025 U
Tetrachloroethene	0.025 U
Trichloroethene	0.025 U
Vinyl chloride	0.025 U
General Chemistry	
Chloride	200 U
Sulfate	39 U

SB17-01	8/3/1998 (0-25) ft mg/kg
Metals	
Arsenic	1.3
Chromium	4.2
Iron	3600
Lead	5.2
Manganese	130
SVOCs	
Benzo(a)anthracene	0.33 U
Benzo(a)pyrene	0.33 U
Benzo(b)fluoranthene	0.33 U
Benzo(g,h,i)perylene	0.33 U
Benzo(k)fluoranthene	0.33 U
bis(2-Ethylhexyl)phthalate (DEHP)	0.33 U
Chrysene	0.33 U
Dibenz(a,h)anthracene	0.33 U
Fluoranthene	0.33 U
Fluorene	0.33 U
Indeno(1,2,3-cd)pyrene	0.33 U
Phenanthrene	0.33 U
Pyrene	0.33 U
VOCs	
cis-1,2-Dichloroethene	0.025 U
Naphthalene	0.025 U
Tetrachloroethene	0.025 U
Trichloroethene	0.025 U
Vinyl chloride	0.025 U
General Chemistry	
Chloride	200 U
Sulfate	110

SB17-05	8/6/1998 (0-35) ft mg/kg
Metals	
Arsenic	1.3 D
Chromium	4.7
Iron	5000
Lead	4
Manganese	150
SVOCs	
Benzo(a)anthracene	0.33 U
Benzo(a)pyrene	0.33 U
Benzo(b)fluoranthene	0.33 U
Benzo(g,h,i)perylene	0.33 U
Benzo(k)fluoranthene	0.33 U
bis(2-Ethylhexyl)phthalate (DEHP)	1.3
Chrysene	0.33 U
Dibenz(a,h)anthracene	0.33 U
Fluoranthene	0.33 U
Fluorene	0.33 U
Indeno(1,2,3-cd)pyrene	0.33 U
Phenanthrene	0.33 U
Pyrene	0.33 U
VOCs	
cis-1,2-Dichloroethene	0.025 U
Naphthalene	0.025 U
Tetrachloroethene	0.025 U
Trichloroethene	0.044
Vinyl chloride	0.025 U
General Chemistry	
Chloride	200 U
Sulfate	40 U

SB17-03	8/4/1998 (0-25) ft mg/kg
Metals	
Arsenic	1.6 D
Chromium	3.8
Iron	3900
Lead	4.8
Manganese	170
SVOCs	
Benzo(a)anthracene	0.33 U
Benzo(a)pyrene	0.33 U
Benzo(b)fluoranthene	0.33 U
Benzo(g,h,i)perylene	0.33 U
Benzo(k)fluoranthene	0.33 U
bis(2-Ethylhexyl)phthalate (DEHP)	0.33 U
Chrysene	0.33 U
Dibenz(a,h)anthracene	0.33 U
Fluoranthene	0.33 U
Fluorene	0.33 U
Indeno(1,2,3-cd)pyrene	0.33 U
Phenanthrene	0.33 U
Pyrene	0.33 U
VOCs	
cis-1,2-Dichloroethene	0.025 U
Naphthalene	0.025 U
Tetrachloroethene	0.025 U
Trichloroethene	0.025 U
Vinyl chloride	0.025 U
General Chemistry	
Chloride	200 U
Sulfate	30 U

SB17-07	8/4/1998 (0-25) ft mg/kg
Metals	
Arsenic	1.7
Chromium	5
Iron	5200
Lead	4
Manganese	180
SVOCs	
Benzo(a)anthracene	0.33 U
Benzo(a)pyrene	0.33 U
Benzo(b)fluoranthene	0.33 U
Benzo(g,h,i)perylene	0.33 U
Benzo(k)fluoranthene	0.33 U
bis(2-Ethylhexyl)phthalate (DEHP)	0.33 U
Chrysene	0.33 U
Dibenz(a,h)anthracene	0.33 U
Fluoranthene	0.33 U
Fluorene	0.33 U
Indeno(1,2,3-cd)pyrene	0.33 U
Phenanthrene	0.33 U
Pyrene	0.33 U
VOCs	
cis-1,2-Dichloroethene	0.025 U
Naphthalene	0.025 U
Tetrachloroethene	0.025 U
Trichloroethene	0.054
Vinyl chloride	0.025 U
General Chemistry	
Chloride	200 U
Sulfate	35

87-8	1/13/1987 (65-66.5) ft mg/kg
VOCs	
Trichloroethene	0.004 U

87-9	1/15/1987 (83.5-85) ft mg/kg
VOCs	
Trichloroethene	0.004 U

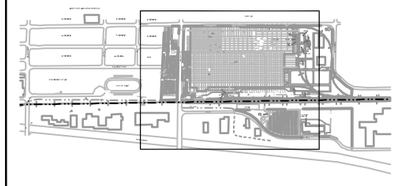
		Michigan Act 451, Part 201 Residential and Commercial (6)				Michigan Act 451, Part 201 Industrial and Commercial II, III, IV (6)		
		Statewide Default Background	Soil Volatilization to Indoor Air Inhalation	Particulate Soil Inhalation	Direct Contact	Soil Volatilization to Indoor Air Inhalation	Particulate Soil Inhalation	Direct Contact Industrial and Commercial II
		a	b	c	d	e	f	g
Metals	*Units*							
Arsenic	mg/kg	5.8	NLV	720	7.6	NLV	910	37
Chromium	mg/kg	18	NLV	260	2500	NLV	240	9200
Chromium III (trivalent)	mg/kg	18	NLV	330000	790000	NLV	150000	1000000
Chromium VI (hexavalent)	mg/kg	NA	NLV	260	2500	NLV	240	9200
Iron	mg/kg	12000	NLV	ID	160000	NLV	ID	580000
Lead	mg/kg	21	NLV	100000	400	NLV	44000	900
Manganese	mg/kg	440	NLV	3300	25000	NLV	1500	90000
Semi-Volatile Organic Compounds								
Benzo(a)anthracene	mg/kg	NA	NLV	ID	20	NLV	ID	80
Benzo(a)pyrene	mg/kg	NA	NLV	1500	2	NLV	1900	8
Benzo(b)fluoranthene	mg/kg	NA	NLV	ID	20	ID	ID	80
Benzo(g,h,i)perylene	mg/kg	NA	NLV	800000	2500	NLV	350000	7000
Benzo(k)fluoranthene	mg/kg	NA	NLV	ID	200	NLV	ID	800
Chrysene	mg/kg	NA	ID	ID	2000	ID	ID	8000
Dibenz(a,h)anthracene	mg/kg	NA	NLV	ID	2	NLV	ID	8
Fluoranthene	mg/kg	NA	1000000	9500000	46000	1000000	4100000	130000
Fluorene	mg/kg	NA	580000	9500000	27000	1000000	4100000	87000
Indeno(1,2,3-cd)pyrene	mg/kg	NA	NLV	ID	20	NLV	ID	80
Naphthalene	mg/kg	NA	250	200000	16000	470	88000	52000
Pyrene	mg/kg	NA	1000000	6700000	29000	1000000	2900000	84000
Volatile Organic Compounds								
cis-1,2-Dichloroethene	mg/kg	NA	22	2500000	640	41	1000000	640
Tetrachloroethene	mg/kg	NA	11	5400000	88	60	6800000	88
Trichloroethene	mg/kg	NA	7.1	1800000	500	37	2300000	500
Vinyl chloride	mg/kg	NA	0.27	350000	3.8	2.8	890000	34
General Chemistry								
Chloride	mg/kg	NA	NLV	ID	500	NLV	ID	500
Sulfate	mg/kg	NA	NLV	ID	ID	NLV	ID	ID

0 60 120ft

LEGEND

- SB17-12 SOIL BORING LOCATION
- MW6-03 MONITORING WELL LOCATION
- PWDISCH PURGE WELL LOCATION
- 309 SOIL BORING LOCATION
- X-10 DESTROYED/REMOVED MONITORING WELL LOCATION
- C-2 CULVERT LOCATION
- B7-3 AIR PURGE WELL
- BH1 APPROXIMATE LOCATION OF DEWATERING WELLS
- APPROXIMATE SITE BOUNDARY
- FENCE
- RAILROAD
- COLE DRAIN
- 652 GROUNDWATER ELEVATION CONTOUR
- 652 INFERRED ELEVATION CONTOUR
- APPROXIMATE AOI

NOTES:
J - THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED QUANTITY
U - THE MATERIAL WAS ANALYZED BUT WAS NOT DETECTED.
B - THE REPORTED ANALYTE WAS DETECTED IN THE ASSOCIATED METHOD BLANK AS WELL AS THE SAMPLE
R - THE DATA IS UNUSABLE. (NOTE: ANALYTE MAY OR MAY NOT BE PRESENT.)
-- PARAMETER NOT ANALYZED FROM SPECIFIED SAMPLE
COCs WHICH WERE NOT ANALYZED FROM A SAMPLE ARE NOT PRESENTED IN THE SPECIFIC DATABOX.



SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

ANALYTICAL RESULTS OF HISTORICAL SOIL SAMPLES - AOIs 4.1, 4.3, 5, 19, 25

CURRENT CONDITIONS REPORT

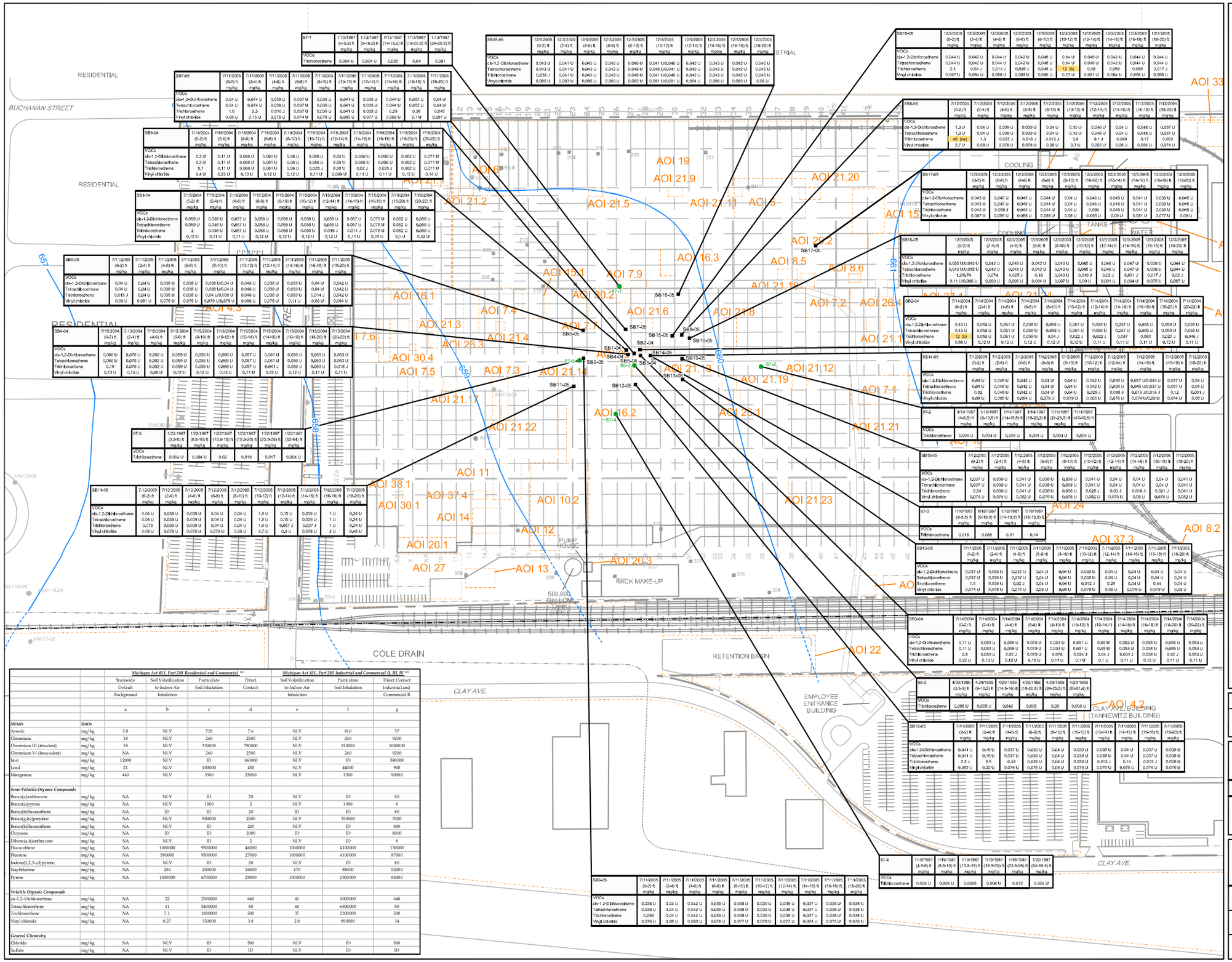
FORMER GRAND RAPIDS METAL PLANT WYOMING, MICHIGAN

CONESTOGA-ROVERS & ASSOCIATES

Source References

Project Manager:	Reviewed By:	Date:	
J.Q.	C.M.	DECEMBER 2010	
Scale: 1" = 120'	Project No.: 017360-T05	Report No.: 019	Drawing No.: PLAN 4

017360-T05(019)GN-DE013 DEC 21/2010



B7-1	1/13/1987 (4-5.5) ft mg/kg	1/13/1987 (9-10.5) ft mg/kg	1/13/1987 (14-15.5) ft mg/kg	1/13/1987 (19-20.5) ft mg/kg	1/13/1987 (24-25.5) ft mg/kg
VOCs					
Trichloroethene	0.004 U	0.004 U	0.025	0.04	0.081

SB18-05	12/3/2005 (0-2) ft mg/kg	12/3/2005 (2-4) ft mg/kg	12/3/2005 (4-6) ft mg/kg	12/3/2005 (6-8) ft mg/kg	12/3/2005 (8-10) ft mg/kg	12/3/2005 (10-12) ft mg/kg	12/3/2005 (12-14) ft mg/kg	12/3/2005 (14-16) ft mg/kg	12/3/2005 (16-18) ft mg/kg	12/3/2005 (18-20) ft mg/kg
VOCs										
cis-1,2-Dichloroethene	0.043 U	0.041 U	0.043 U	0.042 U	0.048 U	0.041 U/0.046 U	0.042 U	0.043 U	0.042 U	0.045 U
Tetrachloroethene	0.043 U	0.041 U	0.043 U	0.042 U	0.048 U	0.046 U/0.041 U	0.042 U	0.043 U	0.042 U	0.045 U
Trichloroethene	0.038 J	0.041 U	0.043 U	0.042 U	0.048 U	0.041 U/0.046 U	0.042 U	0.043 U	0.042 U	0.045 U
Vinyl chloride	0.085 U	0.083 U	0.086 U	0.083 U	0.092 U	0.091 U/0.081 U	0.084 U	0.086 U	0.085 U	0.09 U

SB15-05	12/3/2005 (0-2) ft mg/kg	12/3/2005 (2-4) ft mg/kg	12/3/2005 (4-6) ft mg/kg	12/3/2005 (6-8) ft mg/kg	12/3/2005 (8-10) ft mg/kg	12/3/2005 (10-12) ft mg/kg	12/3/2005 (12-14) ft mg/kg	12/3/2005 (14-16) ft mg/kg	12/3/2005 (16-18) ft mg/kg	12/3/2005 (18-20) ft mg/kg
VOCs										
cis-1,2-Dichloroethene	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U
Tetrachloroethene	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U
Trichloroethene	2.1	0.04 J	0.014 J	0.026 J	0.048 U	12 (b)	0.08	0.059	0.059	0.017 J
Vinyl chloride	0.087 U	0.084 U	0.088 U	0.085 U	0.096 U	0.27 U	0.091 U	0.084 U	0.088 U	0.088 U

SB8-05	7/12/2005 (0-2) ft mg/kg	7/12/2005 (2-4) ft mg/kg	7/12/2005 (4-6) ft mg/kg	7/12/2005 (6-8) ft mg/kg	7/12/2005 (8-10) ft mg/kg	7/12/2005 (10-12) ft mg/kg	7/12/2005 (12-14) ft mg/kg	7/12/2005 (14-16) ft mg/kg	7/12/2005 (16-18) ft mg/kg	7/12/2005 (18-20) ft mg/kg
VOCs										
cis-1,2-Dichloroethene	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U
Tetrachloroethene	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U
Trichloroethene	48 (be)	1.5	0.027 J	0.016 J	0.012 J	5.9	0.1 J	0.049	0.17	0.083
Vinyl chloride	2.7 U	0.08 U	0.078 U	0.078 U	0.08 U	0.3 U	0.092 U	0.08 U	0.095 U	0.074 U

SB17-05	12/3/2005 (0-2) ft mg/kg	12/3/2005 (2-4) ft mg/kg	12/3/2005 (4-6) ft mg/kg	12/3/2005 (6-8) ft mg/kg	12/3/2005 (8-10) ft mg/kg	12/3/2005 (10-12) ft mg/kg	12/3/2005 (12-14) ft mg/kg	12/3/2005 (14-16) ft mg/kg	12/3/2005 (16-18) ft mg/kg	12/3/2005 (18-20) ft mg/kg
VOCs										
cis-1,2-Dichloroethene	0.043 U	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.038 U	0.045 U
Tetrachloroethene	0.043 U	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.038 U	0.045 U
Trichloroethene	0.043 U	0.039 J	0.042 U	0.044 U	0.04 U	0.099	0.045 U	0.041 U	0.038 U	0.045 U
Vinyl chloride	0.087 U	0.085 U	0.085 U	0.088 U	0.08 U	0.093 U	0.09 U	0.081 U	0.077 U	0.09 U

SB16-05	12/3/2005 (0-2) ft mg/kg	12/3/2005 (2-4) ft mg/kg	12/3/2005 (4-6) ft mg/kg	12/3/2005 (6-8) ft mg/kg	12/3/2005 (8-10) ft mg/kg	12/3/2005 (10-12) ft mg/kg	12/3/2005 (12-14) ft mg/kg	12/3/2005 (14-16) ft mg/kg	12/3/2005 (16-18) ft mg/kg	12/3/2005 (18-20) ft mg/kg
VOCs										
cis-1,2-Dichloroethene	0.055 U/0.043 U	0.042 U	0.248 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U
Tetrachloroethene	0.043 U/0.055 U	0.042 U	0.248 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U
Trichloroethene	1.2/0.74	0.074	0.025 J	0.16	0.043 U	0.018 J	0.02 J	0.031 J	0.017 J	0.02 J
Vinyl chloride	0.11 U/0.086 U	0.083 U	0.296 U	0.294 U	0.087 U	0.09 U	0.091 U	0.084 U	0.075 U	0.087 U

SB2-04	7/14/2004 (0-2) ft mg/kg	7/14/2004 (2-4) ft mg/kg	7/14/2004 (4-6) ft mg/kg	7/14/2004 (6-8) ft mg/kg	7/14/2004 (8-10) ft mg/kg	7/14/2004 (10-12) ft mg/kg	7/14/2004 (12-14) ft mg/kg	7/14/2004 (14-16) ft mg/kg	7/14/2004 (16-18) ft mg/kg	7/14/2004 (18-20) ft mg/kg	7/14/2004 (20-22) ft mg/kg
VOCs											
cis-1,2-Dichloroethene	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U	0.055 U	0.059 U	0.055 U
Tetrachloroethene	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U	0.055 U	0.059 U	0.055 U
Trichloroethene	12 (b)	0.058 U	0.061 U	0.059 U	0.058 U	0.022 J	0.022 J	0.087	0.063	0.027 J	0.046 J
Vinyl chloride	0.86 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U

SB14-05	7/12/2005 (0-2) ft mg/kg	7/12/2005 (2-4) ft mg/kg	7/12/2005 (4-6) ft mg/kg	7/12/2005 (6-8) ft mg/kg	7/12/2005 (8-10) ft mg/kg	7/12/2005 (10-12) ft mg/kg	7/12/2005 (12-14) ft mg/kg	7/12/2005 (14-16) ft mg/kg	7/12/2005 (16-18) ft mg/kg	7/12/2005 (18-20) ft mg/kg
VOCs										
cis-1,2-Dichloroethene	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U/0.045 U	0.037 U	0.04 U
Tetrachloroethene	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.045 U/0.037 U	0.037 U	0.04 U
Trichloroethene	0.52	0.048 U	0.042 U	0.04 U	0.04 U	0.029 J	0.018 J	0.019 J/0.018 J	0.12	0.031 J
Vinyl chloride	0.08 U	0.095 U	0.084 U	0.079 U	0.079 U	0.085 U	0.076 U	0.074 U/0.09 U	0.074 U	0.08 U

B7-2	1/14/1987 (4-5.5) ft mg/kg	1/14/1987 (9-10.5) ft mg/kg	1/14/1987 (14-15.5) ft mg/kg	1/14/1987 (19-20.5) ft mg/kg	1/14/1987 (24-25.5) ft mg/kg	1/14/1987 (47-48.5) ft mg/kg
VOCs						
Trichloroethene	0.004 U	0.004 U	0.004 U	0.204 U	0.004 U	0.004 U

SB10-05	7/12/2005 (0-2) ft mg/kg	7/12/2005 (2-4) ft mg/kg	7/12/2005 (4-6) ft mg/kg	7/12/2005 (6-8) ft mg/kg	7/12/2005 (8-10) ft mg/kg	7/12/2005 (10-12) ft mg/kg	7/12/2005 (12-14) ft mg/kg	7/12/2005 (14-16) ft mg/kg	7/12/2005 (16-18) ft mg/kg	7/12/2005 (18-20) ft mg/kg
VOCs										
cis-1,2-Dichloroethene	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U	0.04 U	0.04 U	0.041 U
Tetrachloroethene	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U	0.04 U	0.04 U	0.041 U
Trichloroethene	0.54	0.038 U	0.041 U	0.038 U	0.038 U	0.029 J	0.03 J	0.016 J	0.021 J	0.041 U
Vinyl chloride	0.074 U	0.079 U	0.079 U	0.078 U	0.076 U	0.082 U	0.079 U	0.08 U	0.079 U	0.082 U

B7-3	1/16/1987 (4-5.5) ft mg/kg	1/16/1987 (9-10.5) ft mg/kg	1/16/1987 (14-15.5) ft mg/kg	1/16/1987 (18-19.5) ft mg/kg
VOCs				
Trichloroethene	0.018	0.065	0.11	0.14

SB13-05	7/11/2005 (0-2) ft mg/kg	7/11/2005 (2-4) ft mg/kg	7/11/2005 (4-6) ft mg/kg	7/11/2005 (6-8) ft mg/kg	7/11/2005 (8-10) ft mg/kg	7/11/2005 (10-12) ft mg/kg	7/11/2005 (12-14) ft mg/kg	7/11/2005 (14-16) ft mg/kg	7/11/2005 (16-18) ft mg/kg	7/11/2005 (18-20) ft mg/kg
VOCs										
cis-1,2-Dichloroethene	0.037 U	0.039 U	0.037 U	0.24 U	0.04 U	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U
Tetrachloroethene	0.037 U	0.039 U	0.037 U	0.24 U	0.04 U	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U
Trichloroethene	1.5	0.039 U	0.02 J	0.24 U	0.04 U	0.012 J	0.29	0.04 U	0.04 U	0.04 U
Vinyl chloride	0.074 U	0.078 U	0.074 U	0.28 U	0.08 U	0.078 U	0.08 U	0.079 U	0.079 U	0.08 U

SB3-04	7/14/2004 (0-2) ft mg/kg	7/14/2004 (2-4) ft mg/kg	7/14/2004 (4-6) ft mg/kg	7/14/2004 (6-8) ft mg/kg	7/14/2004 (8-10) ft mg/kg	7/14/2004 (10-12) ft mg/kg	7/14/2004 (12-14) ft mg/kg	7/14/2004 (14-16) ft mg/kg	7/14/2004 (16-18) ft mg/kg	7/14/2004 (18-20) ft mg/kg	7/14/2004 (20-22) ft mg/kg
VOCs											
cis-1,2-Dichloroethene	0.11 U	0.053 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
Tetrachloroethene	0.11 U	0.053 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
Trichloroethene	2.8	0.053 U	0.02 J	0.079 U	0.078	0.024 J	0.04 J	0.031 J	0.058 U	0.02 J	0.053 U
Vinyl chloride	0.22 U	0.13 U	0.12 U	0.16 U	0.11 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U

B8-2	4/29/1988 (3.5-5) ft mg/kg	4/29/1988 (9-10.5) ft mg/kg	4/29/1988 (14.5-16) ft mg/kg	4/29/1988 (19-20.5) ft mg/kg	4/29/1988 (24-25.5) ft mg/kg	4/29/1988 (30-31.5) ft mg/kg
VOCs						
Trichloroethene	0.005 U	0.005 U	0.042	0.005	0.26	0.005 U

SB12-05	7/11/2005 (0-2) ft mg/kg	7/11/2005 (2-4) ft mg/kg	7/11/2005 (4-6) ft mg/kg	7/11/2005 (6-8) ft mg/kg	7/11/2005 (8-10) ft mg/kg	7/11/2005 (10-12) ft mg/kg	7/11/2005 (12-14) ft mg/kg	7/11/2005 (14-16) ft mg/kg	7/11/2005 (15-18) ft mg/kg	7/11/2005 (18-20) ft mg/kg
VOCs										
cis-1,2-Dichloroethene	0.041 U	0.18 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U
Tetrachloroethene	0.041 U	0.18 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U
Trichloroethene	2.2 J	5.5	0.53	0.039 U	0.04 U	0.039 U	0.013 J	0.14	0.012 J	0.038 U
Vinyl chloride	0.082 U	0.32 U	0.074 U	0.078 U	0.08 U	0.078 U	0.076 U	0.078 U	0.074 U	0.076 U

B7-4	1/19/1987 (4.5-6) ft mg/kg	1/19/1987 (8.5-10) ft mg/kg	1/19/1987 (13.5-15) ft mg/kg	1/19/1987 (18.5-20) ft mg/kg	1/19/1987 (23.5-25) ft mg/kg	1/20/1987 (64-65.5) ft mg/kg
VOCs						
Trichloroethene	0.004 U	0.004 U	0.0085	0.004 U	0.012	0.004 U

SB9-05	7/11/2005 (0-2) ft mg/kg	7/11/2005 (2-4) ft mg/kg	7/11/2005 (4-6) ft mg/kg	7/11/2005 (6-8) ft mg/kg	7/11/2005 (8-10) ft mg/kg	7/11/2005 (10-12) ft mg/kg	7/11/2005 (12-14) ft mg/kg	7/11/2005 (14-16) ft mg/kg	7/11/2005 (16-18) ft mg/kg	7/11/2005 (18-20) ft mg/kg
VOCs										
cis-1,2-Dichloroethene	0.038 U	0.04 U	0.042 U	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U
Tetrachloroethene	0.038 U	0.04 U	0.042 U	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U
Trichloroethene	0.099	0.04 U	0.042 U	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U
Vinyl chloride	0.076 U	0.08 U	0.083 U	0.078 U	0.077 U	0.078 U	0.077 U	0.074 U	0.075 U	0.076 U

SB11-05	7/12/2005 (0-2) ft mg/kg	7/12/2005 (2-4) ft mg/kg	7/12/2005 (4-6) ft mg/kg	7/12/2005 (6-8) ft mg/kg	7/12/2005 (8-10) ft mg/kg	7/12/2005 (10-12) ft mg/kg	7/12/2005 (12-14) ft mg/kg	7/12/2005 (14-16) ft mg/kg	7/12/2005 (16-18) ft mg/kg	7/12/2005 (18-20) ft mg/kg
VOCs										
cis-1,2-Dichloroethene	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U
Tetrachloroethene	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U
Trichloroethene	0.076	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.057 J	0.027 J	1 U	0.24 U
Vinyl chloride	0.08 U	0.076 U	0.079 U	0.078 U	0.08 U	3.7 U	0.2 U	0.078 U	2 U	0.48 U

B7-5	1/22/1987 (3.5-5) ft mg/kg	1/22/1987 (8.5-10) ft mg/kg	1/22/1987 (13.5-15) ft mg/kg	1/22/1987 (18.5-20) ft mg/kg	1/22/1987 (23.5-25) ft mg/kg	1/22/1987 (62-64) ft mg/kg
VOCs						
Trichloroethene	0.004 U	0.004 U	0.02	0.019	0.017	0.004 U

SB4-04	7/15/2004 (0-2) ft mg/kg	7/15/2004 (2-4) ft mg/kg	7/15/2004 (4-6) ft mg/kg	7/15/2004 (6-8) ft mg/kg	7/15/2004 (8-10) ft mg/kg	7/15/2004 (10-12) ft mg/kg	7/15/2004 (12-14) ft mg/kg	7/15/2004 (14-16) ft mg/kg	7/15/2004 (16-18) ft mg/kg	7/15/2004 (18-20) ft mg/kg	7/15/2004 (20-22) ft mg/kg
VOCs											
cis-1,2-Dichloroethene	0.066 U	0.076 U	0.062 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.063 U	0.053 U
Tetrachloroethene	0.066 U	0.076 U	0.062 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.063 U	0.053 U
Trichloroethene	0.19	0.076 U	0.062 U	0.059 U	0.059 U	0.066 U	0.057 U	0.041 J	0.059 U	0.063 U	0.053 U
Vinyl chloride	0.13 U	0.15 U	0.16 U	0.12 U	0.12 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U

SB5-05	7/11/2005 (0-2) ft mg/kg	7/11/2005 (2-4) ft mg/kg	7/11/2005 (4-6) ft mg/kg	7/11/2005 (6-8) ft mg/kg	7/11/2005 (8-10) ft mg/kg	7/11/2005 (10-12) ft mg/kg	7/11/2005 (12-14) ft mg/kg	7/11/2005 (14-16) ft mg/kg	7/11/2005 (16-18) ft mg/kg	7/11/2005 (16-20) ft mg/kg
VOCs										
cis-1,2-Dichloroethene	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U/0.04 U	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U
Tetrachloroethene	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U/0.04 U	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U
Trichloroethene	0.015 J	0.04 U	0.038 U	0.038 U	0.04 U/0.038 U	0.048 U	0.038 U	0.053 U	0.014 J	0.042 U
Vinyl chloride	0.08 U	0.081 U	0.076 U	0.076 U	0.073 U/0.075 U	0.096 U	0.076 U	0.11 U	0.08 U	0.084 U

SB6-04	7/15/2004 (0-2) ft mg/kg	7/15/2004 (2-4) ft mg/kg	7/15/2004 (4-6) ft mg/kg	7/15/2004 (6-8) ft mg/kg	7/15/2004 (8-10) ft mg/kg	7/15/2004 (10-12) ft mg/kg	7/15/2004 (12-14) ft mg/kg	7/15/2004 (14-16) ft mg/kg	7/15/2004 (16-18) ft mg/kg	7/15/2004 (18-20) ft mg/kg	7/15/2004 (20-22) ft mg/kg
VOCs											
cis-1,2-Dichloroethene	0.059 U	0.036 U	0.057 U	0.058 U	0.059 U	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U
Tetrachloroethene	0.059 U	0.036 U	0.057 U	0.058 U	0.059 U	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U
Trichloroethene	2	0.036 U	0.057 U	0.058 U	0.059 U	0.058 U	0.018 J	0.014 J	0.075 U	0.052 U	0.059 U
Vinyl chloride	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.15 U	0.1 U	0.12 U

SB7-04	7/15/2004 (0-2) ft mg/kg	7/15/2004 (2-4) ft mg/kg	7/15/2004 (4-6) ft mg/kg	7/15/2004 (6-8) ft mg/kg	7/15/2004 (8-10) ft mg/kg	7/15/2004 (10-12) ft mg/kg	7/15/2004 (12-14) ft mg/kg	7/15/2004 (14-16) ft mg/kg	7/15/2004 (16-18) ft mg/kg	7/15/2004 (18-20) ft mg/kg	7/15/2004 (20-22) ft mg/kg
VOCs											
cis-1,2-Dichloroethene	0.2 U	0.11 U	0.068 U	0.061 U	0.06 U	0.066 U	0.06 U	0.058 U	0.095 U	0.062 U	0.071 U
Tetrachloroethene	0.2 U	0.11 U	0.068 U	0.061 U	0.06 U	0.066 U	0.06 U	0.058 U	0.095 U	0.062 U	0.071 U
Trichloroethene	5.7	0.11 U	0.068 U	0.061 U	0.06 U	0.029 J	0.06 U	0.022 J	0.095 U	0.062 U	0.071 U
Vinyl chloride	0.4 U	0.23 U	0.13 U	0.12 U	0.12 U	0.11 U	0.099 U	0.11 U	0.11 U	0.12 U	0.14 U

SB8-04	7/15/2004 (0-2) ft mg/kg	7/15/2004 (2-4) ft mg/kg	7/15/2004 (4-6) ft mg/kg	7/15/2004 (6-8) ft mg/kg	7/15/2004 (8-10) ft mg/kg	7/15/2004 (10-12) ft mg/kg	7/15/2004 (12-14) ft mg/kg	7/15/2004 (14-16) ft mg/kg	7/15/2004 (16-18) ft mg/kg	7/15/2004 (18-20) ft mg/kg	7/15/2004 (20-22) ft mg/kg
VOCs											
cis-1,2-Dichloroethene	0.059 U	0.036 U	0.057 U	0.058 U	0.059 U	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U
Tetrachloroethene	0.059 U	0.036 U	0.057 U	0.058 U	0.059 U	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U
Trichloroethene	2	0.036 U	0.057 U	0.058 U	0.059 U	0.029 J	0.12 U	0.014 J	0.075 U	0.052 U	0.059 U
Vinyl chloride	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.15 U	0.1 U	0.12 U

SB9-04	7/16/2004 (0-2) ft mg/kg	7/16/2004 (2-4) ft mg/kg	7/15/2004 (4-6) ft mg/kg	7/15/2004 (6-8) ft mg/kg	7/16/2004 (8-10) ft mg/kg	7/15/2004 (10-12) ft mg/kg	7/15/2004 (12-14) ft mg/kg	7/16/2004 (14-16) ft mg/kg	7/16/2004 (16-18) ft mg/kg	7/15/2004 (18-20) ft mg/kg	7/16/2004 (20-22) ft mg/kg
VOCs											
cis-1,2-Dichloroethene	0.2 U	0.11 U	0.068 U	0.061 U	0.06 U	0.066 U	0.06 U	0.058 U	0.095 U	0.062 U	0.071 U
Tetrachloroethene	0.2 U	0.11 U	0.068 U	0.061 U	0.06 U	0.066 U	0.06 U	0.058 U	0.095 U	0.062 U	0.071 U
Trichloroethene	5.7	0.11 U	0.068 U	0.061 U	0.06 U	0.029 J	0.06 U	0.022 J	0.095 U	0.062 U	0.071 U
Vinyl chloride	0.4 U	0.23 U	0.13 U	0.12 U	0.12 U	0.11 U	0.099 U	0.11 U	0.11 U	0.12 U	0.14 U

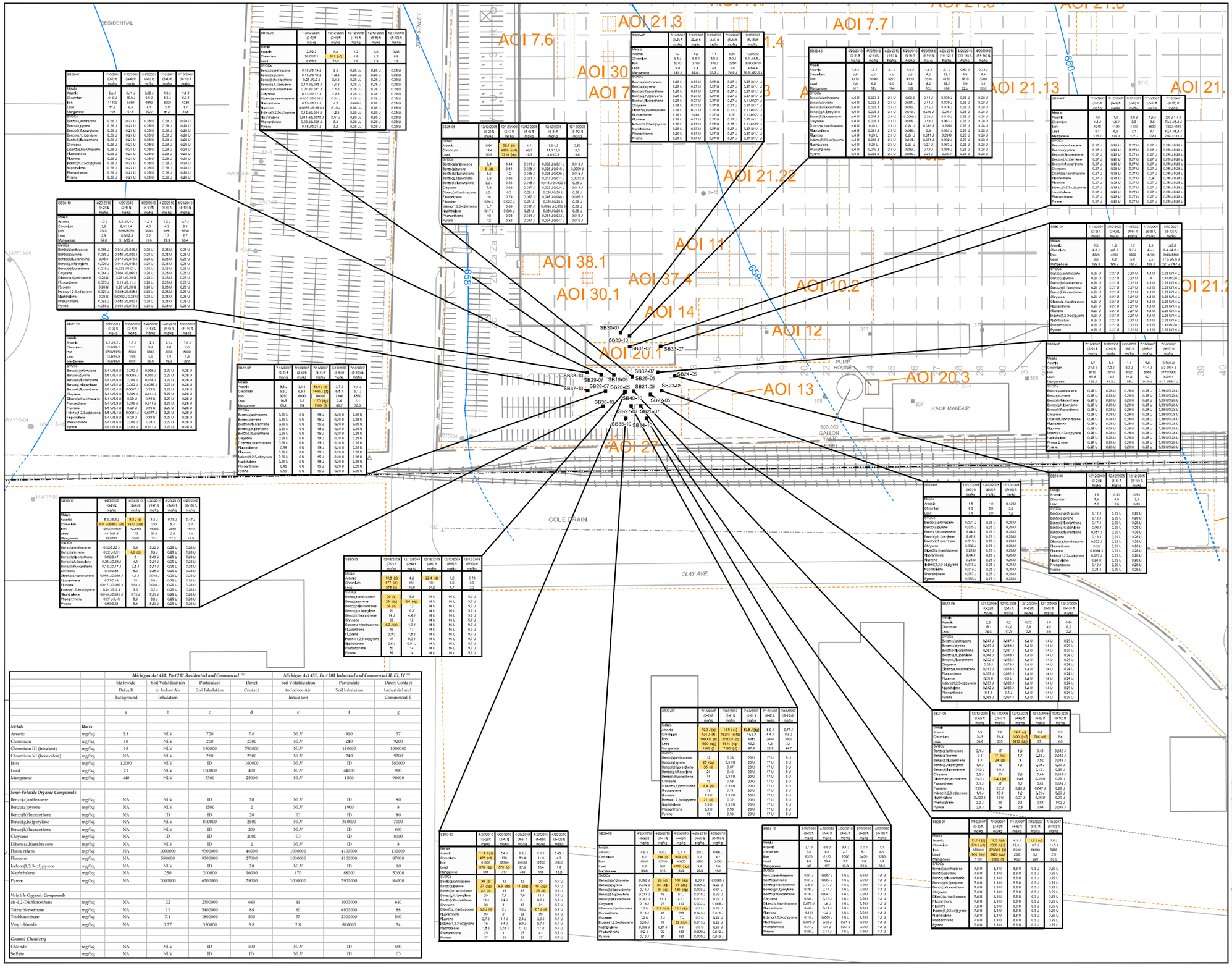
B7-5	1/22/1987 (3.5-5) ft mg/kg	1/22/1987 (8.5-10) ft mg/kg	1/22/1987 (13.5-15) ft mg/kg	1/22/1987 (18.5-20) ft mg/kg	1/22/1987 (23.5-25) ft mg/kg	1/22/1987 (62-64) ft mg/kg
VOCs						
Trichloroethene	0.004 U	0.004 U	0.02	0.019	0.017	0.004 U

SB11-05	7/12/2005 (0-2) ft mg/kg	7/12/2005 (2-4) ft mg/kg	7/12/2005 (4-6) ft mg/kg	7/12/2005 (6-8) ft mg/kg	7/12/2005 (8-10) ft mg/kg	7/12/2005 (10-12) ft mg/kg	7/12/2005 (12-14) ft mg/kg	7/12/2005 (14-16) ft mg/kg	7/12/2005 (16-18) ft mg/kg	7/12/2005 (18-20) ft mg/kg
VOCs										
cis-1,2-Dichloroethene	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U
Tetrachloroethene	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U
Trichloroethene	0.076	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.057 J	0.027 J	1 U	0.24 U
Vinyl chloride	0.08 U	0.076 U	0.079 U	0.078 U	0.08 U	3.7 U	0.2 U	0.078 U	2 U	0.48 U

SB12-04	7/15/2004 (0-2) ft mg/kg	7/15/2004 (2-4) ft mg/kg	7/15/2004 (4-6) ft mg/kg	7/15/2004 (6-8) ft mg/kg	7/15/2004 (8-10) ft mg/kg	7/15/2004 (10-12) ft mg/kg	7/15/2004 (12-14) ft mg/kg	7/15/2004 (14-16) ft mg/kg	7/15/2004 (16-18) ft mg/kg	7/15/2004 (18-20) ft mg/kg	7/15/2004 (20-22) ft mg/kg
VOCs											
cis-1,2-Dichloroethene	0.066 U	0.076 U	0.062 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.063 U	0.053 U
Tetrachloroethene	0.066 U	0.076 U	0.062 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.063 U	0.053 U
Trichloroethene	0.19	0.076 U	0.062 U	0.059 U	0.059 U	0.066 U	0.057 U	0.041 J	0.059 U	0.063 U	0.053 U
Vinyl chloride	0.13 U	0.15 U	0.16 U	0.12 U	0.12 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U

SB13-04	7/14/2004 (0-2) ft mg/kg	7/14/2004 (2-4) ft mg/kg	7/14/2004 (4-6) ft mg/kg	7/14/2004 (6-8) ft mg/kg	7/14/2004 (8-10) ft mg/kg	7/14/2004 (10-12) ft mg/kg	7/14/2004 (12-14) ft mg/kg	7/14/2004 (14-16) ft mg/kg	7/14/2004 (16-18) ft mg/kg	7/14/2004 (18-20) ft mg/kg	7/14/2004 (20-22) ft mg/kg
VOCs											
cis-1,2-Dichloroethene	0.11 U	0.053 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
Tetrachloroethene	0.11 U	0.053 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
Trichloroethene	2.8	0.053 U	0.02 J	0.079 U	0.078	0.024 J	0.04 J	0.031 J	0.058 U	0.02 J	0.053 U
Vinyl chloride	0.22 U	0.13 U	0.12 U	0.16 U	0.11 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U

| SB14-04 | 7/12/2005 (0-2



SB19-06	12/12/2005 (0-2) ft mg/kg	12/12/2005 (2-4) ft mg/kg	12/12/2005 (4-6) ft mg/kg	12/12/2005 (6-8) ft mg/kg	12/12/2005 (8-10) ft mg/kg
Metals					
Arsenic	2,3/3.2	5.4	1.2	1.3	0.68
Chromium	26,0/12.1	341 (us)	4.8	4.2	8.6
Lead	8,6/6.5	73.9	1.8	1.9	1.9
SVOCs					
Benzo(a)anthracene	0.15 J/0.19 J	2 J	0.28 U	0.26 U	0.29 U
Benzo(a)pyrene	0.13 J/0.16 J	1.8 J	0.28 U	0.26 U	0.29 U
Benzo(b)fluoranthene	0.23 J/0.2 J	2.4 J	0.28 U	0.26 U	0.29 U
Benzo(g,h,i)perylene	0.14 J/0.098 J	1.4 J	0.28 U	0.26 U	0.29 U
Benzo(k)fluoranthene	0.07 J/0.07 J	1.1 J	0.28 U	0.26 U	0.29 U
Chrysene	0.13 J/0.17 J	2.2 J	0.28 U	0.26 U	0.29 U
Dibenz(a,h)anthracene	0.037 J/0.029 J	0.39 J	0.28 U	0.26 U	0.29 U
Fluoranthene	0.25 J/0.21 J	4.2	0.009 J	0.26 U	0.29 U
Fluorene	0.0075 J/0.26 U	0.13 J	0.28 U	0.26 U	0.29 U
Indeno(1,2,3-cd)pyrene	0.12 J/0.084 J	1.2 J	0.28 U	0.26 U	0.29 U
Naphthalene	0.011 J/0.0075 J	0.1 J	0.28 U	0.26 U	0.29 U
Phenanthrene	0.09 J/0.068 J	1.1	0.28 U	0.26 U	0.29 U
Pyrene	0.18 J/0.21 J	3.2	0.28 U	0.26 U	0.29 U

SB26-07	7/10/2007 (0-2) ft mg/kg	7/10/2007 (2-4) ft mg/kg	7/10/2007 (4-6) ft mg/kg	7/10/2007 (6-8) ft mg/kg	7/10/2007 (8-10) ft mg/kg
Metals					
Arsenic	2.9 J	3.1 J	2.1 J (us)	1.7 J	1.4 J
Chromium	179	1460 J (us)	1760 (us)	46.7	30.0
Iron	6,480	6,660	7,140	7,590	4,570
Lead	16.5	3.5	1170 (us)	2.4	2.1
Manganese	694	714	740	114	118.5
SVOCs					
Benzo(a)anthracene	0.29 U	6 U	15 U	0.28 U	0.28 U
Benzo(a)pyrene	0.29 U	6 U	15 U	0.28 U	0.28 U
Benzo(b)fluoranthene	0.29 U	6 U	15 U	0.28 U	0.28 U
Benzo(g,h,i)perylene	0.29 U	6 U	15 U	0.28 U	0.28 U
Benzo(k)fluoranthene	0.29 U	6 U	15 U	0.28 U	0.28 U
Chrysene	0.29 U	6 U	15 U	0.28 U	0.28 U
Dibenz(a,h)anthracene	0.29 U	6 U	15 U	0.28 U	0.28 U
Fluoranthene	0.05 J	6 U	15 U	0.28 U	0.28 U
Fluorene	0.29 U	6 U	15 U	0.28 U	0.28 U
Indeno(1,2,3-cd)pyrene	0.29 U	6 U	15 U	0.28 U	0.28 U
Naphthalene	0.29 U	6 U	15 U	0.28 U	0.28 U
Phenanthrene	0.45 J	6 U	15 U	0.28 U	0.28 U
Pyrene	0.05 J	6 U	15 U	0.28 U	0.28 U

SB20-05	12/12/2005 (0-2) ft mg/kg	12/12/2005 (2-4) ft mg/kg	12/12/2005 (4-6) ft mg/kg	12/12/2005 (6-8) ft mg/kg	12/12/2005 (8-10) ft mg/kg
Metals					
Arsenic	19.5 (us)	4.3	22.4 (us)	1.2	0.73
Chromium	977 (us)	49.1	104	8.6	5.8
Lead	573 (us)	46.0	24.0	4.7	3.2
SVOCs					
Benzo(a)anthracene	29 (us)	6.8	14 U	16 U	5.7 U
Benzo(a)pyrene	28 (us)	6.4 (us)	14 U	16 U	5.7 U
Benzo(b)fluoranthene	38 (us)	12	14 U	16 U	5.7 U
Benzo(g,h,i)perylene	21	6.3	14 U	16 U	5.7 U
Benzo(k)fluoranthene	14 J	4.4 J	14 U	16 U	5.7 U
Chrysene	32	12	14 U	16 U	5.7 U
Dibenz(a,h)anthracene	5.2 J (us)	1.9 J	14 U	16 U	5.7 U
Fluoranthene	49	17	14 U	16 U	5.7 U
Fluorene	3.3 J	1.5 J	14 U	16 U	5.7 U
Indeno(1,2,3-cd)pyrene	17	5.2 J	14 U	16 U	5.7 U
Naphthalene	2.6 J	0.91 J	14 U	16 U	5.7 U
Phenanthrene	30	14	14 U	16 U	5.7 U
Pyrene	39	14	14 U	16 U	5.7 U

SB26-07	7/10/2007 (0-2) ft mg/kg	7/10/2007 (2-4) ft mg/kg	7/10/2007 (4-6) ft mg/kg	7/10/2007 (6-8) ft mg/kg	7/10/2007 (8-10) ft mg/kg
Metals					
Arsenic	2.9 J	3.1 J	2.1 J (us)	1.7 J	1.4 J
Chromium	179	1460 J (us)	1760 (us)	46.7	30.0
Iron	6,480	6,660	7,140	7,590	4,570
Lead	16.5	3.5	1170 (us)	2.4	2.1
Manganese	694	714	740	114	118.5
SVOCs					
Benzo(a)anthracene	0.29 U	6 U	15 U	0.28 U	0.28 U
Benzo(a)pyrene	0.29 U	6 U	15 U	0.28 U	0.28 U
Benzo(b)fluoranthene	0.29 U	6 U	15 U	0.28 U	0.28 U
Benzo(g,h,i)perylene	0.29 U	6 U	15 U	0.28 U	0.28 U
Benzo(k)fluoranthene	0.29 U	6 U	15 U	0.28 U	0.28 U
Chrysene	0.29 U	6 U	15 U	0.28 U	0.28 U
Dibenz(a,h)anthracene	0.29 U	6 U	15 U	0.28 U	0.28 U
Fluoranthene	0.05 J	6 U	15 U	0.28 U	0.28 U
Fluorene	0.29 U	6 U	15 U	0.28 U	0.28 U
Indeno(1,2,3-cd)pyrene	0.29 U	6 U	15 U	0.28 U	0.28 U
Naphthalene	0.29 U	6 U	15 U	0.28 U	0.28 U
Phenanthrene	0.45 J	6 U	15 U	0.28 U	0.28 U
Pyrene	0.05 J	6 U	15 U	0.28 U	0.28 U

SB25-05	2/12/2005 (0-2) ft mg/kg	12/12/2005 (2-4) ft mg/kg	12/12/2005 (4-6) ft mg/kg	12/12/2005 (6-8) ft mg/kg	12/12/2005 (8-10) ft mg/kg
Metals					
Arsenic	0.64	29.4 (us)	1.1	1.6 L2	0.60
Chromium	4.4	4970 (us)	46.3	11,1/13.3	9.3
Lead	50.5	3710 (us)	13.9	4.6/10.3	7.6
SVOCs					
Benzo(a)anthracene	0.9	0.44	0.031 J	0.032 J/0.021 J	0.0 U J
Benzo(a)pyrene	0.8 (us)	0.51	0.029 J	0.028 J/0.025 J	0.0099 J
Benzo(b)fluoranthene	0.6	1.2	0.045 J	0.038 J/0.029 J	0.0 U J
Benzo(g,h,i)perylene	3.5	0.66	0.021 J	0.017 J/0.011 J	0.0072 J
Benzo(k)fluoranthene	3.2 J	0.33	0.015 J	0.018 J/0.0092 J	0.28 U
Chrysene	7.5	0.69	0.047 J	0.033 J/0.024 J	0.0 U J
Dibenz(a,h)anthracene	1.2 J	0.3	0.28 U	0.26 U/0.28 U	0.28 U
Fluoranthene	16	0.79	0.067 J	0.046 J/0.048 J	0.026 J
Fluorene	0.94 J	0.022 J	0.28 U	0.26 U/0.28 U	0.28 U
Indeno(1,2,3-cd)pyrene	3.7	0.63	0.017 J	0.0059 J/0.016 J	0.28 U
Naphthalene	0.17 J	0.089 J	0.28 U	0.26 U/0.28 U	0.28 U
Phenanthrene	10	0.68	0.041 J	0.044 J/0.033 J	0.0 U J
Pyrene	12	0.53	0.047 J	0.034 J/0.047 J	0.0 U J

SB24-05	12/12/2005 (0-2) ft mg/kg	12/12/2005 (4-6) ft mg/kg	12/12/2005 (8-10) ft mg/kg
Metals			
Arsenic	1.8	0.90	0.83
Chromium	7.4	4.8	3.3
Lead	5.2	1.6	0.90
SVOCs			
Benzo(a)anthracene	0.12 J	0.29 U	0.28 U
Benzo(a)pyrene	0.12 J	0.29 U	0.28 U
Benzo(b)fluoranthene	0.17 J	0.29 U	0.28 U
Benzo(g,h,i)perylene	0.09 J	0.29 U	0.28 U
Benzo(k)fluoranthene	0.091 J	0.29 U	0.28 U
Chrysene	0.13 J	0.29 U	0.28 U
Dibenz(a,h)anthracene	0.022 J	0.29 U	0.28 U
Fluoranthene	0.28	0.29 U	0.28 U
Fluorene	0.0094 J	0.29 U	0.28 U
Indeno(1,2,3-cd)pyrene	0.077 J	0.29 U	0.28 U
Naphthalene	0.28 U	0.29 U	0.28 U
Phenanthrene	0.12 J	0.29 U	0.28 U
Pyrene	0.21 J	0.29 U	0.28 U

SB23-05	12/12/2005 (0-2) ft mg/kg	12/12/2005 (4-6) ft mg/kg	12/12/2005 (8-10) ft mg/kg
Metals			
Arsenic	1.5	.0	0.42 U
Chromium	6.3	5.6	3.0
Lead	7.6	2.2	1.2
SVOCs			
Benzo(a)anthracene	0.021 J	0.28 U	0.26 U
Benzo(a)pyrene	0.025 J	0.28 U	0.26 U
Benzo(b)fluoranthene	0.04 J	0.28 U	0.26 U
Benzo(g,h,i)perylene	0.02 J	0.28 U	0.26 U
Benzo(k)fluoranthene	0.015 J	0.28 U	0.26 U
Chrysene	0.036 J	0.28 U	0.26 U
Dibenz(a,h)anthracene	0.28 U	0.28 U	0.26 U
Fluoranthene	0.04 J	0.28 U	0.26 U
Fluorene	0.28 U	0.28 U	0.26 U
Indeno(1,2,3-cd)pyrene	0.015 J	0.28 U	0.26 U
Naphthalene	0.015 J	0.28 U	0.26 U
Phenanthrene	0.087 J	0.28 U	0.26 U
Pyrene	0.085 J	0.28 U	0.26 U

SB22-05	4/20/2010 (0-2) ft mg/kg	4/20/2010 (2-4) ft mg/kg	4/20/2010 (4-6) ft mg/kg	4/20/2010 (6-8) ft mg/kg	4/20/2010 (8-10) ft mg/kg	4/20/2010 (10-12) ft mg/kg	4/20/2010 (14-16) ft mg/kg
Metals							
Arsenic	1.8 J	1.8 J	2.1 J	1.3 J	1.6 J	2.1 J	0.82 J
Chromium	5.8	5.7	5.3	5.3	4.2	13.7	4.8
Iron	4110	3090	5210	4110	3510	4180	3610
Lead	7.0	6.9	6.0	6.4	4.9	18.2	5.9
Manganese	147	145	194	128	105	105	22.0
SVOCs							
Benzo(a)anthracene	0.40 U	0.023 J	0.27 U	0.02 J	0.11 J	0.038 J	0.28 U
Benzo(a)pyrene	0.40 U	0.025 J	0.27 U	0.021 J	0.11 J	0.036 J	0.28 U
Benzo(b)fluoranthene	0.40 U	0.04 J	0.27 U	0.032 J	0.15 J	0.05 J	0.28 U
Benzo(g,h,i)perylene	0.40 U	0.026 J	0.27 U	0.019 J	0.075 J	0.04 J	0.28 U
Benzo(k)fluoranthene	0.40 U	0.015 J	0.27 U	0.0066 J	0.35 J	0.018 J	0.28 U
Chrysene	0.40 U	0.028 J	0.27 U	0.026 J	0.13 J	0.063 J	0.28 U
Dibenz(a,h)anthracene	0.40 U	0.29 U	0.27 U	0.27 U	0.076 J	0.29 U	0.28 U
Fluoranthene	0.40 U	0.047 J	0.27 U	0.046 J	0.3	0.081 J	0.28 U
Fluorene	0.40 U	0.29 U	0.27 U	0.27 U	0.011 J	0.29 U	0.28 U
Indeno(1,2,3-cd)pyrene	0.40 U	0.018 J	0.27 U	0.014 J	0.061 J	0.032 J	0.28 U
Naphthalene	0.40 U	0.29 U	0.27 U	0.27 U	0.063 J	0.29 U	0.28 U
Phenanthrene	0.40 U	0.019 J	0.27 U	0.022 J	0.12 J	0.066 J	0.28 U
Pyrene	0.40 U	0.036 J	0.27 U	0.036 J	0.21 J	0.06 J	0.28 U

SB22-09	12/12/2005 (0-2) ft mg/kg	12/12/2005 (2-4) ft mg/kg	12/12/2005 (4-6) ft mg/kg	12/12/2005 (6-8) ft mg/kg	12/12/2005 (8-10) ft mg/kg
Metals					
Arsenic	3.9	3.2	0.72	1.6	0.84
Chromium	15.1	13.2	5.9	9.2	6.2
Lead	24.5	17.5	0.9	3.2	2.0
SVOCs					
Benzo(a)anthracene	0.047 J	0.047 J	1.4 U	1.4 U	0.29 U
Benzo(a)pyrene	0.041 J	0.049 J	1.4 U	1.4 U	0.29 U
Benzo(b)fluoranthene	0.057 J	0.06 J	1.4 U	1.4 U	0.29 U
Benzo(g,h,i)perylene	0.046 J	0.049 J	1.4 U	1.4 U	0.29 U
Benzo(k)fluoranthene	0.022 J	0.022 J	1.4 U	1.4 U	0.29 U
Chrysene	0.09 J	0.079 J	1.4 U	1.4 U	0.29 U
Dibenz(a,h)anthracene	0.013 J	0.013 J	1.4 U	1.4 U	0.29 U
Fluoranthene	0.079 J	0.082 J	1.4 U	1.4 U	0.29 U
Fluorene	0.29 U	0.3 U	1.4 U	1.4 U	0.29 U
Indeno(1,2,3-cd)pyrene	0.033 J	0.032 J	1.4 U	1.4 U	0.29 U
Naphthalene	0.042 J	0.036 J	1.4 U	1.4 U	0.29 U
Phenanthrene	0.1 J	0.1 J	1.4 U	1.4 U	0.29 U
Pyrene	0.069 J	0.067 J	1.4 U	1.4 U	0.29 U

SB21-05	12/12/2005 (0-2) ft mg/kg	12/12/2005 (2-4) ft mg/kg	12/12/2005 (4-6) ft mg/kg	12/12/2005 (6-8) ft mg/kg	12/12/2005 (8-10) ft mg/kg
Metals					
Arsenic	5.3	2.6	29.2 (us)	5.3	1.2
Chromium	24.3	21.4	2870 (us)	766 (us)	5.4
Lead	39.6	23.9	8410 (us)	371	4.0
SVOCs					
Benzo(a)anthracene	2.1 J	1.1	1.9	0.43	0.012 J
Benzo(a)pyrene	2 J	1.7 (us)	1.7	0.52 J	0.012 J
Benzo(b)fluoranthene	3 J	2.4 (us)	3	0.52	0.018 J
Benzo(g,h,i)perylene	1.3 J	1.2	1.3	0.29 J	0.29 U
Benzo(k)fluoranthene	0.82 J	0.9 J	1	0.12 J	0.29 U
Chrysene	2.6 J	2.1	2.6	0.49 J	0.018 J
Dibenz(a,h)anthracene	0.43 J	0.4 J (us)	0.49	0.29 U	0.29 U
Fluoranthene	3.1 J	3.7	3.2	0.81	0.024 J
Fluorene	0.29 J	0.2 J	0.29 J	0.047 J	0.29 U
Indeno(1,2,3-cd)pyrene	1.1 J	1.0 J	1.2	0.21 J	0.29 U
Naphthalene	0.29 U	11 U	0.27 U	0.28 U	0.29 U
Phenanthrene	2.2 J	2.1	2.4	0.63	0.02 J
Pyrene	2.8 J	2.5	2.9	0.64	0.018 J

SB20-07	7/10/2007 (0-2) ft mg/kg	7/10/2007 (2-4) ft mg/kg	7/10/2007 (4-6) ft mg/kg	7/10/2007 (6-8) ft mg/kg	7/10/2007 (8-10) ft mg/kg
Metals					
Arsenic	10.3 J (us)	14.3 J (us)	30.5 J (us)	2.2 J	0.77 J
Chromium	424 J (us)	13200 (us)	14.6 J	4.4 J	8.8 J
Iron	18600 J (us)	276000 (us)	4080	2480	3880
Lead	1630 (us)	5630 (us)	42.2	4.2	3.1
Manganese	3140 J	7180 (us)	97.5	22.5	34.7
SVOCs					
Benzo(a)anthracene	12	0.33	20 U	17 U	8 U
Benzo(a)pyrene	25 (us)	0.31 U	20 U	17 U	8 U
Benzo(b)fluoranthene	35 (us)	0.67	20 U	17 U	8 U
Benzo(g,h,i)perylene	24	0.46	20 U	17 U	8 U
Benzo(k)fluoranthene	14	0.31 U	20 U	17 U	8 U
Chrysene	15	0.58	20 U	17 U	8 U
Dibenz(a,h)anthracene	8.4 (us)	0.31 U	20 U	17 U	8 U
Fluoranthene	15	0.74	20 U	17 U	8 U
Fluorene	6.3 U	0.31 U	20 U	17 U	8 U
Indeno(1,2,3-cd)pyrene	21 (us)	0.32	20 U	17 U	8 U
Naphthalene	6.3 U	0.31 U	20 U	17 U	8 U
Phenanthrene	6.3 U	0.55	20 U	17 U	8 U
Pyrene	15	0.56	20 U	17 U	8 U

SB21-07	7/10/2007 (0-2) ft mg/kg	7/10/2007 (2-4) ft mg/kg	7/10/2007 (4-6) ft mg/kg	7/10/2007 (6-8) ft mg/kg	7/10/2007 (8-10) ft mg/kg
Metals					
Arsenic	1.3	1.6	1.2	2.3	1.3/0.8
Chromium	4.3 J	4.8 J	3.7 J	4.3 J	6.4 J/4.2 J
Iron	4220	4260	3820	4190	3540/4460
Lead	6.8	9.2	5.9	5.3	17.3 J/5.9 J
Manganese	127 J	129 J	152 J	118 J	92 J/74 J
SVOCs					
Benzo(a)anthracene	0.37 U	0.27 U	0.27 U	1.1 U	0.28 U/1.4 U
Benzo(a)pyrene	0.37 U	0.27 U	0.27 U	R	1.4 U/0.28 U
Benzo(b)fluoranthene	0.37 U	0.27 U	0.27 U	1.1 U	0.28 U/1.4 U
Benzo(g,h,i)perylene	0.37 U	0.27 U	0.27 U	1.1 U	0.28 U/1.4 U
Benzo(k)fluoranthene	0.37 U	0.27 U	0.27 U	1.1 U	0.28 U/1.4 U
Chrysene	0.37 U	0.27 U	0.27 U	1.1 U	0.28 U/1.4 U
Dibenz(a,h)anthracene	0.37 U	0.27 U	0.27 U	1.1 U	0.28 U/1.4 U
Fluoranthene	0.37 U	0.27 U	0.27 U	1.1 U	0.28 U/1.4 U
Fluorene	0.37 U	0.27 U	0.27 U	1.1 U	0.28 U/1.4 U
Indeno(1,2,3-cd)pyrene	0.37 U	0.27 U	0.27 U	1.1 U	0.28 U/1.4 U
Naphthalene	0.37 U	0.27 U	0.27 U	1.1 U	0.28 U/1.4 U
Phenanthrene	0.37 U	0.27 U	0.27 U	1.1 U	0.28 U/1.4 U
Pyrene	0.37 U	0.27 U	0.27 U	1.1 U	0.28 U/1.4 U

SB19-07	4/20/2010 (0-2) ft mg/kg	4/20/2010 (2-4) ft mg/kg	4/20/2010 (4-6) ft mg/kg	4/20/2010 (6-8) ft mg/kg	4/20/2010 (8-10) ft mg/kg
Metals					
Arsenic	1.2 J/1.2 J	1.7 J	1.2 J	1.1 J	1.4 J
Chromium	12.9/16.1	11.1	3.4	4.8	6.0
Iron	27,900/19,100	6060	3860	4090	5500
Lead	13.3/11.9	19.9	4.6	1.9	1.8
Manganese	445/689 J	60.5	28.9	16.3	32.8
SVOCs					
Benzo(a)anthracene	0.4 U/0.4 U	0.072 J	0.068 J	0.29 U	0.28 U
Benzo(a)pyrene	0.4 U/0.4 U	0.079 J	0.07 J	0.29 U	0.28 U
Benzo(b)fluoranthene	0.4 U/0.4 U	0.078 J	0.076 J	0.29 U	0.28 U
Benzo(g,h,i)perylene	0.4 U/0.4 U	0.067 J	0.053 J	0.29 U	0.28 U
Benzo(k)fluoranthene	0.4 U/0.4 U	0.067 J	0.053 J	0.29 U	0.28 U
Chrysene	0.4 U/0.4 U	0.09 J	0.08 J	0.29 U	0.28 U
Dibenz(a,h)anthracene	0.4 U/0.4 U	0.29 U	0.29 U	0.29 U	0.28 U
Fluoranthene	0.4 U/0.4 U	0.13 J	0.11 J	0.29 U	0.28 U
Fluorene	0.4 U/0.4 U	0.29 U	0.29 U	0.29 U	0.28 U
Indeno(1,2,3-cd)pyrene	0.4 U/0.4 U	0.062 J	0.051 J	0.29 U	0.28 U
Naphthalene	0.4 U/0.4 U	0.29 U	0.29 U	0.29 U	0.28 U
Phenanthrene	0.4 U/0.4 U	0.079 J	0.071 J	0.29 U	0.28 U
Pyrene	0.4 U/0.4 U	0.13 J	0.11 J	0.29 U	0.28 U

SB36-10	4/23/2010 (0-2) ft mg/kg	4/23/2010 (2-4) ft mg/kg	4/23/2010 (4-6) ft mg/kg	4/23/2010 (6-8) ft mg/kg	4/23/2010 (8-10) ft mg/kg
Metals					
Arsenic	5.2 J/5.8 J	8.3 J (us)	1.4 J	0.79 J	0.17 J
Chromium	62.4 J/58.2 J (us)	2840 (us)	233	5.4	5.7
Iron	12100/11800	122000	16200	2880	9870
Lead	44.1/43.5	73	37.6	2.8	1.4
Manganese	660/795	1040	221	22.3	14.8
SVOCs					
Benzo(a)anthracene	0.82/0.22 J	5.3	0.32 J	0.29 U	0.28 U
Benzo(a)pyrene	0.22 J/0.31	4.8 (us)	0.3 J	0.29 U	0.28 U
Benzo(b)fluoranthene	0.82/0.17 J	8	0.46 J	0.29 U	0.28 U
Benzo(g,h,i)perylene	0.23 J/0.28 J	4.1	0.24 J	0.29 U	0.28 U
Benzo(k)fluoranthene	0.12 J/0.17 J	2.8 J	0.21 J	0.29 U	0.28 U
Chrysene	0.45/0.31	5.9	0.35 J	0.29 U	0.28 U
Dibenz(a,h)anthracene	0.064 J/0.061 J	1.1 J	0.048 J	0.29 U	0.28 U
Fluoranthene	0.71/0.5	14	0.8 J	0.29 U	0.28 U
Fluorene	0.017 J/0.032 J	3.5 J	0.048 J	0.29 U	0.28 U
Indeno(1,2,3-cd)pyrene	0.24 J/0.2 J	3.8	0.2 J	0.29 U	0.28 U
Naphthalene	0.046 J/0.045 J	3.1 J	0.13 J	0.29 U	0.28 U
Phenanthrene	0.27 J/0.48	6.9	0.5 J	0.29 U	0.28 U
Pyrene	0.59/0.34	8.4	0.49 J	0.29 U	0.28 U

SB34-10	4/20/2010 (0-2) ft mg/kg	4/20/2010 (2-4) ft mg/kg	4/20/2010 (4-6) ft mg/kg	4/20/2010 (6-8) ft mg/kg	4/20/2010 (8-10) ft mg/kg
Metals					
Arsenic	4.9 J	5.5 J	3.2 J	2.0 J	0.86 J
Chromium	6.7	244 J	378 (us)	5.7	4.7
Iron	8240	12700	30800	3880	3100
Lead	9.8	380	4750 (us)	5.4	1.8
Manganese	353	315	813	25.8	15.5
SVOCs					
Benzo(a)anthracene	0.088 J	23 (us)	100 (us)	0.03 J	0.0088 J
Benzo(a)pyrene	0.077 J	25 (us)	91 (us)	0.025 J	0.29 U
Benzo(b)fluoranthene	0.1 J	34 (us)	130 (us)	0.038 J	0.01 J
Benzo(g,h,i)perylene	0.077 J	16	51 J	0.015 J	0.29 U
Benzo(k)fluoranthene	0.043 J	11 J	42 J	0.013 J	0.29 U
Chrysene	0.1 J	28	110	0.032 J	0.008 J
Dibenz(a,h)anthracene	0.29 U	5.2 J (us)	18 J (us)	0.29 U	0.29 U
Fluoranthene	0.1 J	41	280	0.043 J	0.015 J
Fluorene	0.29 U	2 J	17 J	0.29 U	0.29 U
Indeno(1,2,3-cd)pyrene	0.05 J	14	53 J (us)	0.013 J	0.29 U
Naphthalene	0.058 J	0.81 J	4 J	0.3 U	0.29 U
Phenanthrene	0.2 J	22	160	0.029 J	0.012 J
Pyrene	0.2 J	31	160	0.035 J	0.013 J

SB34-10	4/20/2010 (0-2) ft mg/kg	4/20/2010 (2-4) ft mg/kg	4/20/2010 (4-6) ft mg/kg	4/20/2010 (6-8) ft mg/kg	4/20/2010 (8-10) ft mg/kg
Metals					
Arsenic	3.7 J	5.9 J	3.4 J	2.2 J	1.3
Chromium	8.0	8.1	4.7	5.1	5.1
Iron	6370	6100	7090	3420	3290
Lead	9.8	16.4	3.3	1.8	2.5
Manganese	143	107	121	25.0	27.5
SVOCs					
Benzo(a)anthracene	0.81 J	0.087 J	1.6 U	3.9 U	1.1 U
Benzo(a)pyrene	0.81 J	0.084 J	1.6 U	3.9 U	1.1 U
Benzo(b)fluoranthene	0.8 J	0.14 J	1.6 U	3.9 U	1.1 U
Benzo(g,h,i)perylene	0.76 J	0.047 J	1.6 U	3.9 U	1.1 U
Chrysene	0.89 J	0.17 J	1.6 U	3.9 U	1.1 U
Dibenz(a,h)anthracene	0.073 J	1.4 U	1.6 U	3.9 U	1.1 U
Fluoranthene	0.46 J	0.13 J	1.6 U	3.9 U	1.1 U
Fluorene	1.1 U	1.4 U	1.6 U	3.9 U	1.1 U
Indeno(1,2,3-cd)pyrene	0.76 J	0.059 J	1.6 U	3.9 U	1.1 U
Naphthalene	0.076 J	0.03 J	0.21 J	3.9 U	1.1 U
Phenanthrene	0.27 J	0.4 J	0.17 J	3.9 U	1.1 U
Pyrene	0.48 J	0.11 J	1.6 U	3.9 U	1.1 U

SB37-07	7/10/2007 (0-2) ft mg/kg	7/10/2007 (2-4) ft mg/kg	7/10/2007 (4-6) ft mg/kg	7/10/2007 (6-8) ft mg/kg	7/10/2007 (8-10) ft mg/kg
Metals					
Arsenic	1.7	1.1	1.1	1.0	0.75 U
Chromium	21.0 J	7.3 J	9.2 J	9.1 J	8.2 J/6.4 J
Iron	8130	3870	8060	6780	37700/9000
Lead	85.6	12.3	11.8	6.2	9.3/6.4
Manganese	185 J	91.3 J	108 J	94.9 J	41.7 J/68.1 J
SVOCs					
Benzo(a)anthracene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U/0.28 U
Benzo(a)pyrene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U/0.28 U
Benzo(b)fluoranthene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U/0.28 U
Benzo(g,h,i)perylene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U/0.28 U
Benzo(k)fluoranthene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U/0.28 U
Chrysene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U/0.28 U
Dibenz(a,h)anthracene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U/0.28 U
Fluoranthene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U/0.28 U
Fluorene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U/0.28 U
Indeno(1,2,3-cd)pyr

AOI 1

AOI 33

AOI 10.1

AOI 8.3

AOI 20.2

AOI 15.2

AOI 20.4

AOI 16.4

AOI 20.3

AOI 21.15

AOI 21.24

AOI 20.5

AOI 4.1

AOI 8.1

AOI 15.3

AOI 31

AOI 38

AOI 7.6

AOI 37.1

AOI 7.2

AOI 26.4

AOI 21.10

AOI 7.1

AOI 26.2

AOI 22

AOI 8.4

AOI 18

AOI 21.23

AOI 37.3

AOI 22

AOI 19

AOI 21.9

AOI 21.2

AOI 6

AOI 21.1

AOI 21.2

AOI 17.1

AOI 21.11

AOI 16.3

AOI 8.5

AOI 8.6

AOI 15.1

AOI 7.9

AOI 30.2

AOI 16.1

AOI 7.4

AOI 21.6

AOI 21.8

AOI 21.18

AOI 7.7

AOI 21.3

AOI 21.4

AOI 28.3

AOI 30.4

AOI 7.5

AOI 7.3

AOI 21.14

AOI 25

AOI 21.13

AOI 21.12

AOI 21.19

AOI 21.17

AOI 16.2

AOI 25.1

AOI 21.22

AOI 11

AOI 38.1

AOI 37.4

AOI 30.1

AOI 14

AOI 10.2

AOI 20.1

AOI 27

AOI 20.3

AOI 21.20

AOI 21.7

AOI 21.16

AOI 21.5

AOI 21.11

AOI 20.2

AOI 15.4

AOI 21.12

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AOI 21.27

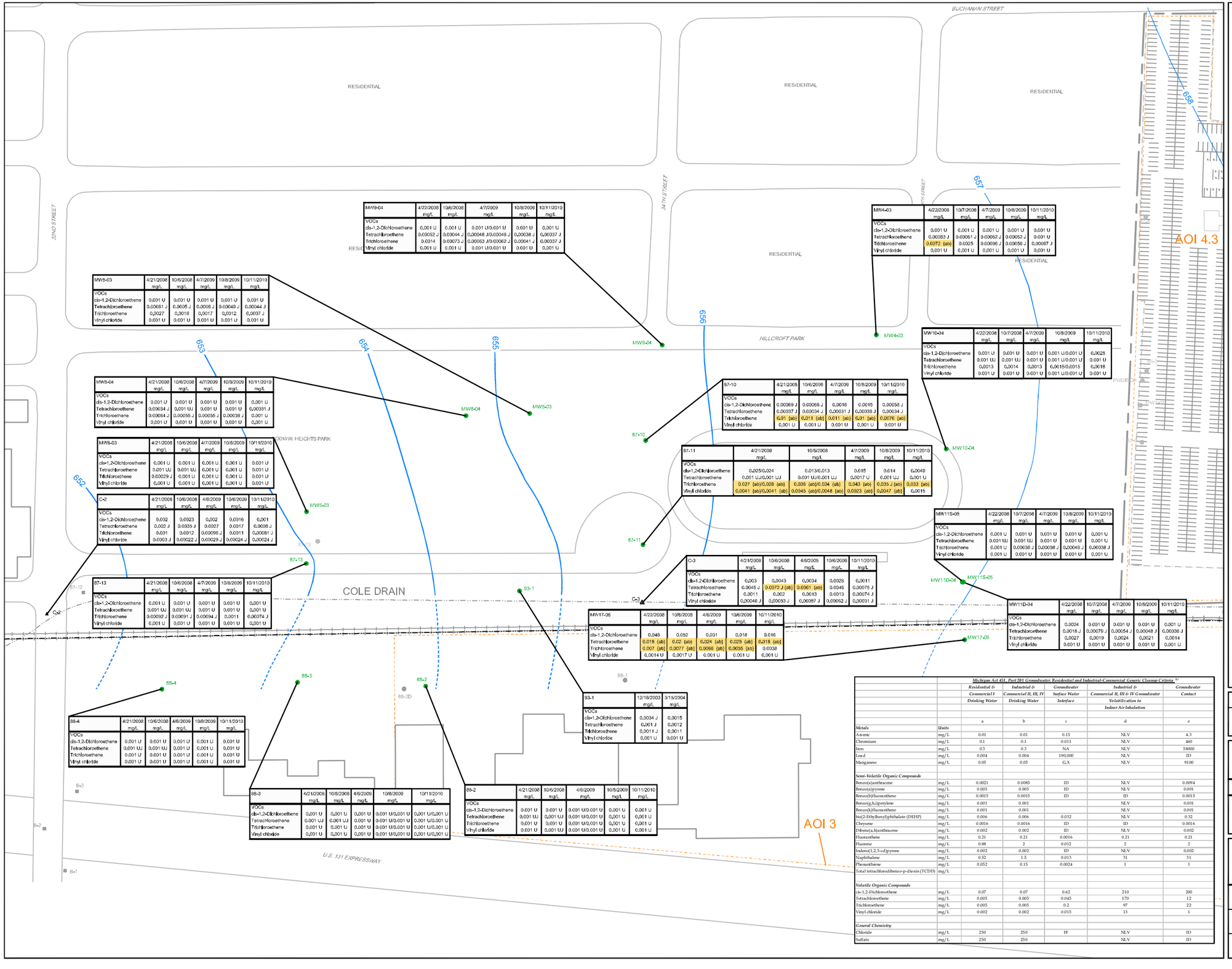
AOI 21.28

AOI 21.29

AOI 21.30

AOI 21.31

AOI



MW9-04	4/22/2008 mg/L	10/6/2008 mg/L	4/7/2009 mg/L	10/8/2009 mg/L	10/11/2010 mg/L
VOCs					
cis-1,2-Dichloroethene	0.001 U	0.001 U	0.001 U/0.001 U	0.001 U	0.001 U
Tetrachloroethene	0.00052 J	0.00044 J	0.00048 J/0.00046 J	0.00038 J	0.00037 J
Trichloroethene	0.0014	0.00073 J	0.00063 J/0.00062 J	0.00041 J	0.00037 J
Vinyl chloride	0.001 U	0.001 U	0.001 U/0.001 U	0.001 U	0.001 U

MW8-03	4/21/2008 mg/L	10/6/2008 mg/L	4/7/2009 mg/L	10/8/2009 mg/L	10/11/2010 mg/L
VOCs					
cis-1,2-Dichloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	0.00061 J	0.0035 J	0.0036 J	0.00049 J	0.00044 J
Trichloroethene	0.0027	0.0018	0.0017	0.0012	0.0007 J
Vinyl chloride	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U

MW4-03	4/22/2008 mg/L	10/7/2008 mg/L	4/7/2009 mg/L	10/8/2009 mg/L	10/11/2010 mg/L
VOCs					
cis-1,2-Dichloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	0.00083 J	0.00061 J	0.00052 J	0.00052 J	0.001 U
Trichloroethene	0.0072 (ab)	0.0025	0.00096 J	0.00056 J	0.00057 J
Vinyl chloride	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U

MW8-04	4/21/2008 mg/L	10/6/2008 mg/L	4/7/2009 mg/L	10/8/2009 mg/L	10/11/2010 mg/L
VOCs					
cis-1,2-Dichloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	0.00034 J	0.001 UJ	0.001 U	0.001 U	0.00031 J
Trichloroethene	0.00064 J	0.00055 J	0.00055 J	0.00039 J	0.001 U
Vinyl chloride	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U

MW10-04	4/22/2008 mg/L	10/7/2008 mg/L	4/7/2009 mg/L	10/8/2009 mg/L	10/11/2010 mg/L
VOCs					
cis-1,2-Dichloroethene	0.001 U	0.001 U	0.001 U	0.001 U/0.001 U	0.0025
Tetrachloroethene	0.001 UJ	0.001 UJ	0.001 U	0.001 U/0.001 U	0.001 U
Trichloroethene	0.0013	0.0014	0.0013	0.0015/0.0015	0.0018
Vinyl chloride	0.001 U	0.001 U	0.001 U	0.001 U/0.001 U	0.001 U

87-10	4/21/2008 mg/L	10/6/2008 mg/L	4/7/2009 mg/L	10/8/2009 mg/L	10/11/2010 mg/L
VOCs					
cis-1,2-Dichloroethene	0.00069 J	0.00066 J	0.0016	0.0015	0.00058 J
Tetrachloroethene	0.00037 J	0.00034 J	0.00031 J	0.00035 J	0.00034 J
Trichloroethene	0.01 (ab)	0.011 (ab)	0.011 (ab)	0.01 (ab)	0.0076 (ab)
Vinyl chloride	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U

87-11	4/21/2008 mg/L	10/6/2008 mg/L	4/7/2009 mg/L	10/8/2009 mg/L	10/11/2010 mg/L
VOCs					
cis-1,2-Dichloroethene	0.025/0.024	0.013/0.013	0.015	0.014	0.0049
Tetrachloroethene	0.001 UJ/0.001 UJ	0.001 UJ/0.001 UJ	0.0017 U	0.001 UJ	0.001 U
Trichloroethene	0.027 (ab)/0.028 (ab)	0.036 (ab)/0.034 (ab)	0.043 (ab)	0.035 J (ab)	0.033 (ab)
Vinyl chloride	0.0041 (ab)/0.0041 (ab)	0.0045 (ab)/0.0048 (ab)	0.0023 (ab)	0.0047 (ab)	0.0015

MW11S-05	4/22/2008 mg/L	10/7/2008 mg/L	4/7/2009 mg/L	10/8/2009 mg/L	10/11/2010 mg/L
VOCs					
cis-1,2-Dichloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U
Trichloroethene	0.001 U	0.00036 J	0.00038 J	0.00049 J	0.00038 J
Vinyl chloride	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U

C-2	4/21/2008 mg/L	10/6/2008 mg/L	4/6/2009 mg/L	10/6/2009 mg/L	10/11/2010 mg/L
VOCs					
cis-1,2-Dichloroethene	0.002	0.0023	0.002	0.0016	0.001
Tetrachloroethene	0.002 J	0.0035 J	0.0027	0.0017	0.0038 J
Trichloroethene	0.001	0.0012	0.00096 J	0.0011	0.00081 J
Vinyl chloride	0.0003 J	0.00022 J	0.00029 J	0.00024 J	0.00024 J

C-3	4/21/2008 mg/L	10/6/2008 mg/L	4/6/2009 mg/L	10/6/2009 mg/L	10/11/2010 mg/L
VOCs					
cis-1,2-Dichloroethene	0.003	0.0043	0.0034	0.0026	0.0011
Tetrachloroethene	0.0045 J	0.0072 J (ab)	0.0061 (ab)	0.0046	0.00075 J
Trichloroethene	0.001	0.002	0.0013	0.0013	0.00074 J
Vinyl chloride	0.00046 J	0.00033 J	0.00057 J	0.00052 J	0.00031 J

87-13	4/21/2008 mg/L	10/6/2008 mg/L	4/7/2009 mg/L	10/8/2009 mg/L	10/11/2010 mg/L
VOCs					
cis-1,2-Dichloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U
Trichloroethene	0.00092 J	0.00091 J	0.00094 J	0.0011	0.00074 J
Vinyl chloride	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U

MW17-06	4/22/2008 mg/L	10/6/2008 mg/L	4/6/2009 mg/L	10/6/2009 mg/L	10/11/2010 mg/L
VOCs					
cis-1,2-Dichloroethene	0.048	0.052	0.031	0.018	0.016
Tetrachloroethene	0.018 (ab)	0.02 (ab)	0.024 (ab)	0.025 (ab)	0.018 (ab)
Trichloroethene	0.007 (ab)	0.0077 (ab)	0.0066 (ab)	0.0055 (ab)	0.0038
Vinyl chloride	0.0014 U	0.0017 U	0.001 U	0.001 U	0.001 U

MW11D-04	4/22/2008 mg/L	10/7/2008 mg/L	4/7/2009 mg/L	10/8/2009 mg/L	10/11/2010 mg/L
VOCs					
cis-1,2-Dichloroethene	0.0024	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	0.0018 J	0.00079 J	0.00054 J	0.00048 J	0.00036 J
Trichloroethene	0.0027	0.0019	0.0024	0.0021	0.0014
Vinyl chloride	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U

93-1	12/18/2003 mg/L	3/15/2004 mg/L
VOCs		
cis-1,2-Dichloroethene	0.0034 J	0.0015
Tetrachloroethene	0.001 J	0.0012
Trichloroethene	0.0011 J	0.0011
Vinyl chloride	0.001 U	0.001 U

88-4	4/21/2008 mg/L	10/6/2008 mg/L	4/6/2009 mg/L	10/8/2009 mg/L	10/11/2010 mg/L
VOCs					
cis-1,2-Dichloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U

88-3	4/21/2008 mg/L	10/6/2008 mg/L	4/6/2009 mg/L	10/8/2009 mg/L	10/11/2010 mg/L
VOCs					
cis-1,2-Dichloroethene	0.001 U	0.001 U	0.001 U	0.001 U/0.001 U	0.001 U/0.001 U
Tetrachloroethene	0.001 UJ	0.001 UJ	0.001 U	0.001 U/0.001 U	0.001 U/0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U	0.001 U/0.001 U	0.001 U/0.001 U
Vinyl chloride	0.001 U	0.001 U	0.001 U	0.001 U/0.001 U	0.001 U/0.001 U

88-2	4/21/2008 mg/L	10/6/2008 mg/L	4/6/2009 mg/L	10/8/2009 mg/L	10/11/2010 mg/L
VOCs					
cis-1,2-Dichloroethene	0.001 U	0.001 U	0.001 U/0.001 U	0.001 U	0.001 U
Tetrachloroethene	0.001 UJ	0.001 UJ	0.001 U/0.001 U	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U/0.001 U	0.001 U	0.001 U
Vinyl chloride	0.001 U	0.001 UJ	0.001 U/0.001 U	0.001 U	0.001 U

Michigan Act 451, Part 201 Groundwater: Residential and Industrial-Commercial Generic Cleanup Criteria [a]

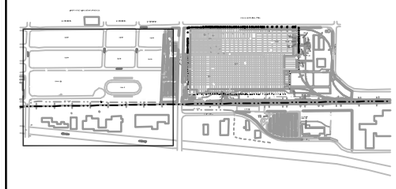
		Residential & Commercial I Drinking Water	Industrial & Commercial II, III, IV Drinking Water	Groundwater Surface Water Interface	Industrial & Groundwater Commercial II, III & IV Groundwater Volatilization to Indoor Air Inhalation	Groundwater Contact
		a	b	c	d	e
Metals	*Units*					
Arsenic	mg/L	0.01	0.01	0.15	NLV	4.3
Chromium	mg/L	0.1	0.1	0.011	NLV	460
Iron	mg/L	0.3	0.3	NA	NLV	58000
Lead	mg/L	0.004	0.004	190,000	NLV	ID
Manganese	mg/L	0.05	0.05	G,X	NLV	9100
Semi-Volatile Organic Compounds						
Benzo(a)anthracene	mg/L	0.0021	0.0085	ID	NLV	0.0094
Benzo(a)pyrene	mg/L	0.005	0.005	ID	NLV	0.001
Benzo(b)fluoranthene	mg/L	0.0015	0.0015	ID	ID	0.0015
Benzo(g,h,i)perylene	mg/L	0.001	0.001		NLV	0.001
Benzo(k)fluoranthene	mg/L	0.001	0.001		NLV	0.001
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	0.006	0.006	0.032	NLV	0.32
Chrysene	mg/L	0.0016	0.0016	ID	ID	0.0016
Dibenz(a,h)anthracene	mg/L	0.002	0.002	ID	NLV	0.002
Fluoranthene	mg/L	0.21	0.21	0.0016	0.21	0.21
Fluorene	mg/L	0.88	2	0.012	2	2
Indeno(1,2,3-cd)pyrene	mg/L	0.002	0.002	ID	NLV	0.002
Naphthalene	mg/L	0.52	1.5	0.013	31	31
Phenanthrene	mg/L	0.052	0.15	0.0024	1	1
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L					
Volatile Organic Compounds						
cis-1,2-Dichloroethene	mg/L	0.07	0.07	0.62	210	200
Tetrachloroethene	mg/L	0.005	0.005	0.045	170	12
Trichloroethene	mg/L	0.005	0.005	0.2	97	22
Vinyl chloride	mg/L	0.002	0.002	0.015	13	1
General Chemistry						
Chloride	mg/L	250	250	FF	NLV	ID
Sulfate	mg/L	250	250		NLV	ID

0 50 100ft

LEGEND

- MW8-03 MONITORING WELL LOCATION
- PWDISCH PURGE WELL LOCATION
- 309 SOIL BORING LOCATION
- X-10 DESTROYED/REMOVED MONITORING WELL LOCATION
- C-2 CULVERT LOCATION
- 87-3 AIR PURGE WELL
- BH1 APPROXIMATE LOCATION OF DEWATERING WELLS
- APPROXIMATE SITE BOUNDARY
- FENCE
- RAILROAD
- COLE DRAIN
- 652 GROUNDWATER ELEVATION CONTOUR
- 652 INFERRED ELEVATION CONTOUR
- APPROXIMATE AOI

NOTES:
J - THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED QUANTITY
U - THE MATERIAL WAS ANALYZED BUT WAS NOT DETECTED.
B - THE REPORTED ANALYTE WAS DETECTED IN THE ASSOCIATED METHOD BLANK AS WELL AS THE SAMPLE
R - THE DATA IS UNUSABLE. (NOTE: ANALYTE MAY OR MAY NOT BE PRESENT.)
-- PARAMETER NOT ANALYZED FROM SPECIFIED SAMPLE
COCs WHICH WERE NOT ANALYZED FROM A SAMPLE ARE NOT PRESENTED IN THE SPECIFIC DATABOX.



SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

ANALYTICAL RESULTS OF HISTORICAL GROUNDWATER SAMPLES - AOIs 3, 25

CURRENT CONDITIONS REPORT

FORMER GRAND RAPIDS METAL PLANT WYOMING, MICHIGAN

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager:	Reviewed By:	Date:	
J.Q.	C.M.	DECEMBER 2010	
Scale: 1" = 100'	Project No.: 017360-T05	Report No.: 019	Drawing No.: PLAN 8

017360-T05(019)GN-DE019 DEC 21/2010

TABLE 3.1

HISTORICAL GROUNDWATER ELEVATIONS
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Monitoring Well Identification	*Elevation of Top of Riser*	*12/21/1988 Groundwater Elevation*	*1/20/1989 Groundwater Elevation*	*2/18/1989 Groundwater Elevation*	*3/17/1989 Groundwater Elevation*	*4/20/1989 Groundwater Elevation*	*5/18/1989 Groundwater Elevation*	*6/19/1989 Groundwater Elevation*	*7/18/1989 Groundwater Elevation*	*8/22/1989 Groundwater Elevation*	*9/20/1989 Groundwater Elevation*	*10/13/1989 Groundwater Elevation*	*10/20/1989 Groundwater Elevation*	*11/17/1989 Groundwater Elevation*	*12/21/1989 Groundwater Elevation*	*1/12/1990 Groundwater Elevation*	*1/19/1990 Groundwater Elevation*	*2/16/1990 Groundwater Elevation*	*3/16/1990 Groundwater Elevation*	*4/12/1990 Groundwater Elevation*	*5/18/1990 Groundwater Elevation*
85-1	675.03	660.08	660.01	NA	659.85	659.8	659.76	659.93	659.86	NA	659.91	659.6	NA	659.66	659.53	659.42	NA	NA	659.65	NA	659.87
85-2	671.63	658.54	658.47	658.34	658.37	658.3	658.35	658.42	658.45	658.84	658.47	658.27	658.39	658.37	658.14	658.1	NA	658.17	658.29	658.27	658.54
85-3	680.91	661.23	661.06	660.58	660.43	660.68	660.55	660.78	660.74	660.63	660.58	660.11	660.11	659.55	659.92	659.33	659.76	659.86	660.21	660.17	660.78
85-5B	680.83	661.22	661.01	660.63	660.49	660.67	660.6	660.82	660.75	660.67	660.59	NA	NA	659.87	660.22	NA	659.78	660.06	660.32	NA	660.83
85-6	679.59	661.8	661.59	661.14	661.12	661.38	661.25	661.57	661.37	661.28	661.14	660.71	660.69	660.42	660.87	660.44	660.35	660.62	661	661.13	661.46
85-7	677.84	659.04	658.95	658.77	658.73	658.65	658.73	658.83	658.86	659.02	658.88	658.62	658.73	658.39	658.41	658.34	NA	658.42	658.55	658.57	658.84
86-1	679.92	NA	660.14	659.83	659.7	659.76	660.28	660.12	659.98	659.97	659.9	659.487	659.52	659.28	659.39	659.18	659.11	659.34	659.55	659.69	660.01
86-2	680.93	659.78	659.77	659.51	NA	NA	NA	658.1733	657.9233	NA	658.0067	658.2567	657.6733	657.7567	659.59	657.51	NA	657.59	657.76	NA	657.92
86-3	675.80	658.26	658.17	658	658	657.81	657.93	658.13	658.07	658.22	658.01	657.86	657.99	657.67	656.6	657.45	NA	657.52	657.63	657.65	657.92
87-1	680.74	659.74	659.66	659.43	659.4	659.43	659.43	659.51	659.5	659.53	659.43	659.2	659.3	659.1	659.17	658.97	NA	659.04	659.22	659.24	659.46
87-2	680.73	660.84	660.48	660.29	660.31	660.48	660.41	660.44	660.33	660.34	660.27	660.05	660.11	659.96	660.14	659.84	NA	659.88	660.17	660.06	660.27
87-4	680.91	659.68	659.66	659.42	659.4	659.37	659.38	659.47	659.46	659.51	659.43	659.19	659.29	659.17	659.11	658.98	NA	659.06	659.21	659.23	659.47
87-5	680.39	659.48	659.56	659.36	659.33	659.3	659.33	659.33	659.44	659.45	659.3	658.86	659.25	659.14	659.07	658.95	NA	659.01	659.16	659.21	659.46
87-8	676.78	658.42	658.33	661.65	658.1	657.92	658.07	658.24	658.24	658.31	658.3	658.99	658.1	658.9	657.75	657.66	NA	657.75	657.88	657.91	658.2
87-9	673.13	658.13	658.06	661.43	657.93	657.75	657.86	657.97	658	658.23	658	657.8	657.92	657.75	657.55	657.49	NA	657.56	657.75	657.69	657.95
87-10	667.76	656.65	656.51	657.75	656.19	656.03	656.32	656.56	656.51	656.88	656.63	656.45	656.63	656.41	656.11	656.07	NA	656.16	656.36	656.3	656.54
87-11	666.25	656.24	656.19	656.88	655.6	655.82	656.07	656.18	656.19	657.09	656.3	656.19	656.4	656.19	655.61	655.87	NA	655.95	656.12	656.03	656.94
87-13	663.57	654.07	654.02	653.95	653.99	653.8	653.85	654.25	654.26	656.1	654.79	654.85	654.89	654.04	653.81	653.78	NA	653.9	653.98	653.89	654.04
88-1	NA	658.31	NA	NA	NA	NA	656.03	656.26	656.38	656.97	656.54	656.41	656.64	656.52	656.1	656.08	NA	656.15	656.29	656.23	656.49
88-2	665.80	655.03	654.92	654.89	655.07	654.5	654.77	654.99	654.98	656.04	655.37	655.43	655.46	656.23	654.8	654.69	NA	654.67	654.83	654.9	655.12
88-3	664.36	654.29	654.23	654.16	654.27	653.94	654.08	654.45	654.42	655.64	654.97	655	655.24	654.54	653.27	654.01	NA	654.1	654.24	654.16	654.43
88-4	661.20	NA	653.19	653.14	653.27	653.01	653	653.54	653.54	654.85	654.04	654.06	654.28	653.63	652.69	652.63	NA	653.06	653.21	653.13	653.44
93-1	656.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-1	662.61	657.75	658.04	657.46	NA	657.64	657.66	657.66	657.87	657.65	NA	657.87	657.87	657.87	657.87	657.82	NA	657.91	657.83	657.81	657.85
C-2	658.81	655.38	654.58	650.84	649.79	651.38	651.37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-4	NA	NA	NA	656.92	NA	657.68	657.66	657.74	657.88	657.78	657.7	657.63	657.82	657.9	657.69	657.83	NA	657.9	657.8	657.82	657.84
MW1-03	678.68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW2-03	680.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW3-03	676.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW4-03	679.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW5-03	675.82	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW6-03	665.39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW7-03	674.79	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW8-04	674.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW9-04	678.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW10-04	666.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW11D-04	663.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW11S-05	663.58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW13-04	678.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW14-04	680.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW15-04	671.69	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW17-06	667.71	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW18-10	680.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PWDISCH	677.79	NA	NA	NA	NA	NA	NA	NA	NA	657.74	NA	657.36	657.49	653.84	653.05	652.79	NA	652.2	652	651.69	652.31
X-10	NA	NA	NA	NA	NA	NA	NA	659.11	659.03	659.17	659.08	658.75	658.88	658.73	658.64	658.54	NA	658.63	658.74	658.78	659.07

Notes:
NA - Not Available
All elevations are measured as Above Mean Sea Level (AMSL)

TABLE 3.1

HISTORICAL GROUNDWATER ELEVATIONS
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Monitoring Well Identification	*Elevation of Top of Riser*	*6/19/1990 Groundwater Elevation*	*7/13/1990 Groundwater Elevation*	*8/20/1990 Groundwater Elevation*	*9/14/1990 Groundwater Elevation*	*10/12/1990 Groundwater Elevation*	*11/15/1990 Groundwater Elevation*	*12/18/1990 Groundwater Elevation*	*1/15/1991 Groundwater Elevation*	*2/20/1991 Groundwater Elevation*	*3/12/1991 Groundwater Elevation*	*4/18/1991 Groundwater Elevation*	*5/16/1991 Groundwater Elevation*	*6/13/1991 Groundwater Elevation*	*7/19/1991 Groundwater Elevation*	*8/19/1991 Groundwater Elevation*	*9/12/1991 Groundwater Elevation*	*10/16/1991 Groundwater Elevation*	*11/15/1991 Groundwater Elevation*	*12/13/1991 Groundwater Elevation*	*1/17/1992 Groundwater Elevation*
85-1	675.03	659.81	NA	NA	NA	NA	660.13	660.15	NA	NA	659.75	NA	NA	659.9	NA	NA	659.89	NA	NA	660.02	NA
85-2	671.63	658.43	658.65	658.46	658.75	658.65	658.64	659.06	NA	NA	658.41	NA	NA	658.5	NA	NA	658.51	NA	NA	658.67	NA
85-3	680.91	660.85	660.63	660.61	660.45	660.71	661.45	661.46	661.44	660.76	660.6	661.26	661.35	661.01	660.4	660.72	659.81	659.83	660.09	661.11	660.91
85-5B	680.83	660.89	660.67	NA	NA	NA	661.45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	660.26	660.18	NA
85-6	679.59	661.55	661.3	661.4	661.27	661.55	662.1	662.03	NA	NA	661.11	NA	NA	661.55	NA	NA	660.8	NA	660.77	661.56	NA
85-7	677.84	658.76	658.66	658.85	658.71	658.91	659.07	659.07	NA	NA	658.71	NA	NA	658.88	NA	NA	658.78	NA	NA	659.07	NA
86-1	679.92	660.01	659.81	659.83	659.69	659.95	660.49	660.54	NA	NA	659.67	NA	NA	660	NA	NA	659.54	NA	659.46	660.27	NA
86-2	680.93	657.84	657.76	657.84	657.92	658.01	658.01	658.26	NA	NA	657.92	NA	NA	657.84	NA	NA	657.84	NA	NA	659.3	NA
86-3	675.80	657.83	657.73	657.83	657.73	658.01	658.11	658.11	NA	NA	657.84	NA	NA	657.99	NA	NA	657.91	NA	NA	658.22	NA
87-1	680.74	659.45	659.35	659.56	659.51	659.63	659.83	659.89	NA	NA	659.36	NA	NA	659.56	NA	NA	659.38	NA	NA	659.59	NA
87-2	680.73	660.27	660.2	660.56	660.49	660.65	660.77	660.9	NA	NA	660.24	NA	NA	660.51	NA	NA	660.31	NA	NA	660.48	NA
87-4	680.91	659.41	659.31	659.49	659.42	659.61	659.75	659.79	NA	NA	659.38	NA	NA	659.56	NA	NA	659.45	NA	NA	659.63	NA
87-5	680.39	659.38	659.3	659.42	659.35	659.54	659.74	659.77	NA	NA	659.34	NA	NA	659.51	NA	NA	659.37	NA	NA	659.61	NA
87-8	676.78	658.12	658	658.08	657.98	658.24	658.57	658.58	NA	NA	658.06	NA	NA	658.26	NA	NA	658.11	NA	NA	658.49	NA
87-9	673.13	657.85	657.75	657.85	657.02	658.05	658.1	658.11	NA	NA	657.84	NA	NA	657.98	NA	NA	657.93	NA	NA	658.19	NA
87-10	667.76	656.42	656.32	656.42	656.33	656.65	656.7	656.69	NA	NA	656.43	NA	NA	656.53	NA	NA	656.5	NA	NA	656.84	NA
87-11	666.25	656.11	656.04	656.14	656.06	656.33	656.31	656.29	NA	NA	656.12	NA	NA	656.17	NA	NA	656.21	NA	NA	656.38	NA
87-13	663.57	653.91	653.93	654	654.02	654.1	654.12	654.08	NA	NA	653.98	NA	NA	654.04	NA	NA	654.1	NA	NA	654.22	NA
88-1	NA	656.3	656.24	656.39	656.26	656.67	656.55	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
88-2	665.80	654.97	654.98	655.04	654.91	657.43	655.14	655.26	NA	NA	655	NA	NA	654.82	NA	NA	655.06	NA	NA	655.6	NA
88-3	664.36	654.18	654.17	654.39	654.24	654.8	654.45	654.36	NA	NA	654.25	NA	NA	654.29	NA	NA	654.52	NA	NA	654.62	NA
88-4	661.20	653.16	653.2	653.49	653.29	653.78	653.4	653.36	NA	NA	653.29	NA	NA	653.34	NA	NA	653.51	NA	NA	653.75	NA
93-1	656.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-1	662.61	657.88	657.86	657.83	657.8	657.83	657.83	657.84	NA	NA	657.85	NA	NA	657.78	NA	NA	657.72	NA	NA	657.99	NA
C-2	658.81	NA	NA	NA	NA	NA	NA	NA	NA	NA	652.31	NA	NA	651.4	NA	NA	651.62	NA	NA	651.54	NA
C-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-4	NA	657.89	657.85	657.8	657.83	657.82	657.84	657.85	NA	NA	657.83	NA	NA	657.76	NA	NA	657.71	NA	NA	657.95	NA
MW1-03	678.68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW2-03	680.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW3-03	676.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW4-03	679.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW5-03	675.82	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW6-03	665.39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW7-03	674.79	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW8-04	674.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW9-04	678.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW10-04	666.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW11D-04	663.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW11S-05	663.58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW13-04	678.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW14-04	680.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW15-04	671.69	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW17-06	667.71	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW18-10	680.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PWDISCH	677.79	651.47	651.24	650.88	650.5	651.03	650.67	650.12	NA	NA	649.06	NA	NA	648.24	NA	NA	647.27	NA	NA	647.39	NA
X-10	NA	658.98	658.87	659	658.92	659.13	659.28	659.31	NA	NA	658.92	NA	NA	659.1	NA	NA	659	NA	NA	659.24	NA

Notes:
NA - Not Available
All elevations are measured as Above M

TABLE 3.1

HISTORICAL GROUNDWATER ELEVATIONS
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Monitoring Well Identification	*Elevation of Top of Riser*	*2/14/1992 Groundwater Elevation*	*3/13/1992 Groundwater Elevation*	*4/21/1992 Groundwater Elevation*	*5/15/1992 Groundwater Elevation*	*6/12/1992 Groundwater Elevation*	*8/13/1992 Groundwater Elevation*	*9/11/1992 Groundwater Elevation*	*10/16/1992 Groundwater Elevation*	*11/12/1992 Groundwater Elevation*	*12/10/1992 Groundwater Elevation*	*1/15/1993 Groundwater Elevation*	*2/12/1993 Groundwater Elevation*	*3/11/1993 Groundwater Elevation*	*4/15/1993 Groundwater Elevation*	*5/13/1993 Groundwater Elevation*	*6/15/1993 Groundwater Elevation*	*7/16/1993 Groundwater Elevation*	*8/20/1993 Groundwater Elevation*	*9/15/1993 Groundwater Elevation*	*10/19/1993 Groundwater Elevation*
85-1	675.03	NA	659.6	NA	NA	659.77	NA	659.68	NA	NA	659.51	NA	NA	659.5	NA	NA	659.89	NA	NA	659.71	NA
85-2	671.63	NA	658.3	NA	NA	658.47	NA	658.37	NA	NA	658.22	NA	NA	658.22	NA	NA	658.64	NA	NA	658.47	NA
85-3	680.91	660.47	660.06	660.48	660.73	660.51	660.27	659.96	659.51	659.63	659.92	660.71	660.46	660.05	660.31	660.91	660.72	660.69	660.28	659.86	660.44
85-5B	680.83	NA	NA	NA	NA	NA	NA	NA	NA	NA	660.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
85-6	679.59	NA	660.79	NA	NA	661.08	NA	660.78	NA	NA	660.62	NA	NA	660.75	NA	NA	661.43	NA	NA	660.56	NA
85-7	677.84	NA	658.59	NA	NA	658.85	NA	658.64	NA	NA	658.48	NA	NA	658.47	NA	NA	658.81	NA	NA	658.65	NA
86-1	679.92	NA	659.41	NA	NA	659.72	NA	659.41	NA	NA	659.17	NA	NA	659.26	NA	NA	659.81	NA	NA	659.3	NA
86-2	680.93	NA	658.9	NA	NA	659.1	659.07	658.99	658.9	658.87	658.81	659.04	658.99	658.83	658.98	659.12	659.13	659.03	658.91	658.96	659.12
86-3	675.80	NA	657.74	NA	NA	660.12	NA	657.76	NA	NA	657.6	NA	NA	657.6	NA	NA	657.93	NA	NA	NA	658.26
87-1	680.74	NA	659.17	NA	NA	659.37	NA	659.26	NA	NA	659.16	NA	NA	659.13	NA	NA	659.45	NA	NA	659.11	NA
87-2	680.73	NA	660.1	NA	NA	660.21	NA	660.28	NA	NA	660.09	NA	NA	660.13	NA	NA	660.43	NA	NA	659.99	NA
87-4	680.91	NA	659.21	NA	NA	659.39	NA	659.28	NA	NA	659.14	NA	NA	659.12	NA	NA	659.43	NA	NA	659.23	NA
87-5	680.39	NA	659.17	NA	NA	659.37	NA	659.23	NA	NA	659.07	NA	NA	659.05	NA	NA	659.58	NA	NA	659.18	NA
87-8	676.78	NA	657.96	NA	NA	658.22	NA	657.98	NA	NA	657.82	NA	NA	657.81	NA	NA	658.15	NA	NA	658.04	NA
87-9	673.13	NA	657.75	NA	NA	658.02	NA	657.77	NA	NA	657.63	NA	NA	657.62	NA	NA	657.99	NA	NA	NA	658.08
87-10	667.76	NA	656.36	NA	NA	656.49	NA	656.35	NA	NA	656.21	NA	NA	656.24	NA	NA	656.55	NA	NA	656.48	NA
87-11	666.25	NA	656.06	NA	NA	656.17	NA	656.1	NA	NA	655.99	NA	NA	656.04	NA	NA	656.22	NA	NA	656.21	NA
87-13	663.57	NA	654.01	NA	NA	653.99	NA	653.95	NA	NA	653.88	NA	NA	653.94	NA	NA	654.05	NA	NA	653.99	NA
88-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
88-2	665.80	NA	655.26	NA	NA	655	NA	655.16	NA	NA	655.08	NA	NA	655.04	NA	NA	655.12	NA	NA	655.2	NA
88-3	664.36	NA	654.27	NA	NA	654.2	NA	654.31	NA	NA	654.11	NA	NA	654.12	NA	NA	654.47	NA	NA	654.54	NA
88-4	661.20	NA	653.45	NA	NA	653.21	NA	653.23	NA	NA	653.11	NA	NA	653.29	NA	NA	653.44	NA	NA	653.34	NA
93-1	656.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	655.15	655.28	NA
C-1	662.61	NA	657.9	NA	NA	657.81	NA	657.84	NA	NA	657.84	NA	NA	657.99	NA	NA	657.77	NA	NA	657.74	NA
C-2	658.81	NA	651.77	NA	NA	NA	NA	651.47	NA	NA	651.94	NA	NA	652.12	NA	NA	651.73	NA	NA	NA	NA
C-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-4	NA	NA	657.84	NA	NA	657.65	NA	657.83	NA	NA	657.85	NA	NA	657.87	NA	NA	657.7	NA	NA	657.73	NA
MW1-03	678.68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW2-03	680.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW3-03	676.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW4-03	679.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW5-03	675.82	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW6-03	665.39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW7-03	674.79	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW8-04	674.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW9-04	678.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW10-04	666.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW11D-04	663.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW11S-05	663.58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW13-04	678.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW14-04	680.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW15-04	671.69	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW17-06	667.71	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW18-10	680.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PWDISCH	677.79	NA	645.15	NA	NA	658.13	645.04	644.56	NA	NA	644.75	NA	NA	644.36	NA	NA	643.97	NA	NA	642.87	NA
X-10	NA	NA	658.79	NA	NA	659	NA	658.74	NA	NA	658.69	NA	NA	658.66	NA	NA	659.01	NA	NA	658.82	NA

Notes:
NA - Not Available
All elevations are measured as Above M

TABLE 3.1

HISTORICAL GROUNDWATER ELEVATIONS
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Monitoring Well Identification	*Elevation of Top of Riser*	*11/17/1993 Groundwater Elevation*	*12/17/1993 Groundwater Elevation*	*1/13/1994 Groundwater Elevation*	*2/15/1994 Groundwater Elevation*	*3/16/1994 Groundwater Elevation*	*4/13/1994 Groundwater Elevation*	*5/12/1994 Groundwater Elevation*	*6/14/1994 Groundwater Elevation*	*7/13/1994 Groundwater Elevation*	*8/12/1994 Groundwater Elevation*	*9/14/1994 Groundwater Elevation*	*10/18/1994 Groundwater Elevation*	*11/11/1994 Groundwater Elevation*	*12/16/1994 Groundwater Elevation*	*1/13/1995 Groundwater Elevation*	*2/14/1995 Groundwater Elevation*	*3/17/1995 Groundwater Elevation*	*4/13/1995 Groundwater Elevation*	*5/15/1995 Groundwater Elevation*	*6/20/1995 Groundwater Elevation*
85-1	675.03	NA	659.46	NA	NA	659.54	NA	NA	659.52	NA	NA	659.7	NA	NA	659.44	NA	NA	659.37	NA	NA	659.6
85-2	671.63	NA	658.16	NA	NA	658.24	NA	NA	658.24	663.59	NA	658.3	NA	NA	658.2	NA	NA	658.16	NA	NA	658.28
85-3	680.91	660.39	659.58	659.17	658.59	660.09	660.3	660.02	659.85	660.9	660.94	660.33	659.9	660.14	659.81	659.55	660.1	659.68	659.6	660.43	660.53
85-5B	680.83	NA	659.94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	659.95	NA	NA	NA	NA	NA	NA
85-6	679.59	NA	660.44	NA	NA	660.8	NA	NA	660.54	NA	NA	659.12	NA	NA	660.45	NA	NA	660.37	NA	NA	661.11
85-7	677.84	NA	658.48	NA	NA	658.49	NA	NA	658.46	659.96	NA	658.62	NA	NA	658.41	NA	NA	658.34	NA	NA	658.57
86-1	679.92	NA	659.11	NA	NA	659.37	NA	NA	659.16	NA	NA	661.34	NA	NA	659.09	NA	NA	658.98	NA	NA	659.52
86-2	680.93	658.99	658.71	658.65	658.61	658.91	658.95	658.88	658.89	NA	NA	659.35	NA	NA	658.89	NA	NA	658.76	NA	NA	659.14
86-3	675.80	NA	657.52	NA	NA	657.66	NA	NA	657.58	658.04	NA	657.69	NA	NA	657.57	NA	NA	657.43	NA	NA	657.69
87-1	680.74	NA	659.01	NA	NA	659.1	NA	NA	659.03	NA	NA	659.3	NA	NA	659.02	NA	NA	658.93	NA	NA	659.25
87-2	680.73	NA	659.96	NA	NA	660.01	NA	NA	660.01	NA	NA	660.27	NA	NA	659.96	NA	NA	659.93	NA	NA	660.25
87-4	680.91	NA	659.03	NA	NA	659.13	NA	NA	659.08	NA	NA	659.33	NA	NA	659.04	NA	NA	658.95	NA	NA	659.21
87-5	680.39	NA	658.98	NA	NA	659.12	NA	NA	659.05	NA	NA	659.27	NA	NA	658.99	NA	NA	658.9	NA	NA	659.17
87-8	676.78	NA	657.75	NA	NA	657.92	NA	NA	657.77	658.29	NA	657.95	NA	NA	657.74	NA	NA	657.62	NA	NA	657.92
87-9	673.13	NA	658.6	NA	NA	657.71	NA	NA	657.66	658.02	NA	657.71	NA	NA	657.59	NA	NA	657.48	NA	NA	657.7
87-10	667.76	NA	656.15	NA	NA	656.31	NA	NA	656.24	NA	NA	656.21	NA	NA	656.09	NA	NA	656.08	NA	NA	656.26
87-11	666.25	NA	655.93	NA	NA	656.04	NA	NA	656.04	NA	NA	655.97	NA	NA	655.92	NA	NA	655.87	NA	NA	656
87-13	663.57	NA	653.76	NA	NA	653.9	NA	NA	653.84	NA	NA	653.78	NA	NA	653.73	NA	NA	653.71	NA	NA	653.7
88-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
88-2	665.80	NA	654.66	NA	NA	654.86	NA	NA	654.82	NA	NA	654.66	NA	NA	654.59	NA	NA	654.57	NA	NA	654.61
88-3	664.36	NA	654	NA	NA	654.13	NA	NA	654.13	NA	NA	653.99	NA	NA	653.94	NA	NA	653.88	NA	NA	653.94
88-4	661.20	NA	652.98	NA	NA	653.21	NA	NA	653.03	NA	NA	652.89	NA	NA	652.87	NA	NA	652.88	NA	NA	652.89
93-1	656.62	NA	655.13	NA	NA	655.17	NA	NA	655.18	NA	NA	655.11	NA	NA	655.12	NA	NA	655.03	NA	NA	655.1
C-1	662.61	NA	657.81	NA	NA	657.88	NA	NA	657.84	NA	NA	657.79	NA	NA	657.92	NA	NA	657.74	NA	NA	NA
C-2	658.81	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	649.07	NA	NA	649.82	NA	NA	649.22	NA	NA	649.07
C-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-4	NA	NA	657.8	NA	NA	657.83	NA	NA	657.75	NA	NA	657.75	NA	NA	657.86	NA	NA	657.73	NA	NA	657.75
MW1-03	678.68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW2-03	680.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW3-03	676.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW4-03	679.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW5-03	675.82	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW6-03	665.39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW7-03	674.79	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW8-04	674.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW9-04	678.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW10-04	666.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW11D-04	663.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW11S-05	663.58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW13-04	678.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW14-04	680.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW15-04	671.69	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW17-06	667.71	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW18-10	680.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PWDISCH	677.79	NA	642.33	NA	NA	642.25	NA	NA	641.17	654.7	NA	655	NA	NA	655.19	NA	NA	654.43	NA	NA	654.57
X-10	NA	NA	658.6	NA	NA	658.72	NA	NA	658.67	NA	NA	658.82	NA	NA	658.62	NA	NA	658.52	NA	NA	658.69

Notes:
NA - Not Available
All elevations are measured as Above M

TABLE 3.1

HISTORICAL GROUNDWATER ELEVATIONS
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Monitoring Well Identification	*Elevation of Top of Riser*	*7/13/1995 Groundwater Elevation*	*8/11/1995 Groundwater Elevation*	*9/14/1995 Groundwater Elevation*	*10/17/1995 Groundwater Elevation*	*11/17/1995 Groundwater Elevation*	*12/18/1995 Groundwater Elevation*	*1/6/1996 Groundwater Elevation*	*2/19/1996 Groundwater Elevation*	*3/19/1996 Groundwater Elevation*	*4/12/1996 Groundwater Elevation*	*5/16/1996 Groundwater Elevation*	*6/13/1996 Groundwater Elevation*	*7/16/1996 Groundwater Elevation*	*8/16/1996 Groundwater Elevation*	*9/13/1996 Groundwater Elevation*	*10/17/1996 Groundwater Elevation*	*11/19/1996 Groundwater Elevation*	*12/13/1996 Groundwater Elevation*	*1/20/1997 Groundwater Elevation*	*2/14/1997 Groundwater Elevation*
85-1	675.03	NA	NA	659.48	NA	NA	659.38	NA	NA	659.15	NA	NA	659.67	NA	NA	659.38	NA	NA	659.18	NA	NA
85-2	671.63	NA	NA	658.16	NA	NA	658.12	NA	NA	657.99	NA	NA	658.39	NA	NA	658.13	NA	NA	657.96	NA	NA
85-3	680.91	660.31	659.92	659.65	658.88	659.66	659.9	659.27	658.83	658.61	658.74	659.86	660.9	660.96	660.37	660.17	659.44	659.26	658.78	659.19	659.86
85-5B	680.83	NA	NA	NA	NA	NA	659.92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	659.5	NA	NA
85-6	679.59	NA	NA	660.48	NA	NA	660.46	NA	NA	660.05	NA	NA	661.45	NA	NA	661.19	NA	NA	660.08	NA	NA
85-7	677.84	NA	NA	658.36	NA	NA	658.32	NA	NA	658.13	NA	NA	658.69	NA	NA	658.35	NA	NA	658.15	NA	NA
86-1	679.92	NA	NA	659.05	NA	NA	659.06	NA	NA	658.67	NA	NA	659.83	NA	NA	659.15	NA	NA	658.65	NA	NA
86-2	680.93	NA	NA	659.18	NA	NA	658.79	NA	NA	658.55	NA	NA	659.72	NA	NA	658.84	NA	NA	658.66	NA	NA
86-3	675.80	NA	NA	657.52	NA	NA	657.47	NA	NA	657.32	NA	NA	657.8	NA	NA	657.55	NA	NA	657.27	NA	NA
87-1	680.74	NA	NA	659.02	NA	NA	658.99	NA	NA	658.73	NA	NA	659.34	NA	NA	659	NA	NA	658.77	NA	NA
87-2	680.73	NA	NA	660.04	NA	NA	659.95	NA	NA	659.63	NA	NA	660.25	NA	NA	659.98	NA	NA	659.71	NA	NA
87-4	680.91	NA	NA	659.04	NA	NA	658.99	NA	NA	658.73	NA	NA	659.29	NA	NA	659.01	NA	NA	658.79	NA	NA
87-5	680.39	NA	NA	658.97	NA	NA	658.95	NA	NA	658.68	NA	NA	659.28	NA	NA	658.96	NA	NA	658.75	NA	NA
87-8	676.78	NA	NA	657.72	NA	NA	657.64	NA	NA	657.47	NA	NA	658.05	NA	NA	657.76	NA	NA	657.44	NA	NA
87-9	673.13	NA	NA	657.54	NA	NA	657.49	NA	NA	657.31	NA	NA	657.81	NA	NA	657.58	NA	NA	657.33	NA	NA
87-10	667.76	NA	NA	656.04	NA	NA	656.03	NA	NA	655.88	NA	NA	656.32	NA	NA	656	NA	NA	655.84	NA	NA
87-11	666.25	NA	NA	655.85	NA	NA	655.83	NA	NA	655.71	NA	NA	656.01	NA	NA	655.81	NA	NA	655.7	NA	NA
87-13	663.57	NA	NA	653.59	NA	NA	653.56	NA	NA	653.55	NA	NA	653.66	NA	NA	653.45	NA	NA	653.43	NA	NA
88-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
88-2	665.80	NA	NA	654.48	NA	NA	654.5	NA	NA	654.8	NA	NA	654.66	NA	NA	654.38	NA	NA	654.4	NA	NA
88-3	664.36	NA	NA	653.78	NA	NA	653.8	NA	NA	653.7	NA	NA	653.91	NA	NA	653.68	NA	NA	653.7	NA	NA
88-4	661.20	NA	NA	652.76	NA	NA	652.76	NA	NA	652.67	NA	NA	653.3	NA	NA	652.64	NA	NA	652.67	NA	NA
93-1	656.62	NA	NA	655.17	NA	NA	655.01	NA	NA	654.9	NA	NA	655.07	NA	NA	654.89	NA	NA	654.83	NA	NA
C-1	662.61	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	657.5	NA	NA	657.39	NA	NA
C-2	658.81	NA	NA	649.17	NA	NA	649.02	NA	NA	649.02	NA	NA	649.17	NA	NA	649.02	NA	NA	649.01	NA	NA
C-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-4	NA	NA	NA	657.65	NA	NA	657.58	NA	NA	657.63	NA	NA	657.77	NA	NA	657.43	NA	NA	657.37	NA	NA
MW1-03	678.68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW2-03	680.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW3-03	676.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW4-03	679.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW5-03	675.82	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW6-03	665.39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW7-03	674.79	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW8-04	674.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW9-04	678.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW10-04	666.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW11D-04	663.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW11S-05	663.58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW13-04	678.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW14-04	680.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW15-04	671.69	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW17-06	667.71	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW18-10	680.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PWDISCH	677.79	NA	NA	654.17	NA	NA	653.89	NA	NA	653.81	NA	NA	652.87	NA	NA	653.34	NA	NA	653.02	NA	NA
X-10	NA	NA	NA	658.57	NA	NA	658.55	NA	NA	658.33	NA	NA	658.92	NA	NA	658.61	NA	NA	658.37	NA	NA

Notes:
NA - Not Available
All elevations are measured as Above M

TABLE 3.1

HISTORICAL GROUNDWATER ELEVATIONS
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Monitoring Well Identification	*Elevation of Top of Riser*	*3/13/1997 Groundwater Elevation*	*4/18/1997 Groundwater Elevation*	*5/15/1997 Groundwater Elevation*	*6/19/1997 Groundwater Elevation*	*7/17/1997 Groundwater Elevation*	*8/14/1997 Groundwater Elevation*	*9/11/1997 Groundwater Elevation*	*10/17/1997 Groundwater Elevation*	*11/14/1997 Groundwater Elevation*	*12/16/1997 Groundwater Elevation*	*1/14/1998 Groundwater Elevation*	*2/16/1998 Groundwater Elevation*	*3/13/1998 Groundwater Elevation*	*4/22/1998 Groundwater Elevation*	*5/20/1998 Groundwater Elevation*	*6/16/1998 Groundwater Elevation*	*7/16/1998 Groundwater Elevation*	*8/19/1998 Groundwater Elevation*	*9/17/1998 Groundwater Elevation*	*12/16/1998 Groundwater Elevation*
85-1	675.03	659.64	NA	NA	659.45	NA	NA	659.33	NA	NA	659.06	NA	NA	NA	NA	NA	658.86	NA	NA	659.14	658.9
85-2	671.63	658.51	NA	NA	658.14	NA	NA	658.07	NA	NA	657.92	NA	NA	658.05	NA	NA	657.73	NA	NA	657.98	657.86
85-3	680.91	661.16	660.75	660.56	660.24	660.37	660.06	659.77	659.58	659.58	658.42	658.97	659.71	659.73	660.11	658.91	658.44	659.68	658.95	658.58	658.06
85-5B	680.83	NA	NA	NA	NA	NA	NA	NA	NA	NA	659.39	NA	NA	NA	NA	NA	NA	NA	NA	NA	659.02
85-6	679.59	661.66	NA	NA	660.79	NA	NA	660.44	NA	NA	659.94	NA	NA	660.29	NA	NA	659.73	NA	NA	659.93	659.46
85-7	677.84	658.72	NA	NA	658.39	NA	NA	658.27	NA	NA	658.06	NA	NA	658.23	NA	NA	657.65	NA	NA	658.12	658.09
86-1	679.92	660.01	NA	NA	659.29	NA	NA	658.96	NA	NA	658.53	NA	NA	658.91	NA	NA	658.11	NA	NA	658.6	658.26
86-2	680.93	659.21	NA	NA	658.97	NA	NA	658.86	NA	NA	658.61	NA	NA	658.76	NA	NA	658.03	NA	NA	658.63	659.4
86-3	675.80	657.93	NA	NA	657.58	NA	NA	657.4	NA	NA	657.21	NA	NA	657.4	NA	NA	656.91	NA	NA	657.29	657.13
87-1	680.74	659.45	NA	NA	659.08	NA	NA	658.93	NA	NA	658.67	NA	NA	658.82	NA	NA	657.55	NA	NA	658.43	658.32
87-2	680.73	660.26	NA	NA	660.07	NA	NA	659.91	NA	NA	659.56	NA	NA	659.68	NA	NA	659.39	NA	NA	659.62	659.08
87-4	680.91	659.35	NA	NA	659.07	NA	NA	658.93	NA	NA	658.69	NA	NA	658.83	NA	NA	658.16	NA	NA	658.74	658.5
87-5	680.39	659.31	NA	NA	659	NA	NA	658.89	NA	NA	659.63	NA	NA	658.81	NA	NA	657.91	NA	NA	658.69	658.45
87-8	676.78	658.21	NA	NA	657.78	NA	NA	657.56	NA	NA	657.35	NA	NA	657.55	NA	NA	657.15	NA	NA	657.43	657.25
87-9	673.13	657.84	NA	NA	657.6	NA	NA	657.43	NA	NA	657.26	NA	NA	657.45	NA	NA	657.1	NA	NA	657.35	657.22
87-10	667.76	656.52	NA	NA	656.08	NA	NA	655.9	NA	NA	655.76	NA	NA	655.96	NA	NA	655.9	NA	NA	655.85	655.72
87-11	666.25	656.15	NA	NA	655.76	NA	NA	655.72	NA	NA	655.62	NA	NA	655.76	NA	NA	655.71	NA	NA	655.69	655.6
87-13	663.57	653.73	NA	NA	653.49	NA	NA	653.42	NA	NA	653.42	NA	NA	653.52	NA	NA	653.47	NA	NA	653.41	653.3
88-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
88-2	665.80	654.67	NA	NA	654.45	NA	NA	654.46	NA	NA	654.31	NA	NA	654.5	NA	NA	654.44	NA	NA	654.38	654.25
88-3	664.36	653.98	NA	NA	653.72	NA	NA	653.7	NA	NA	NA	NA	NA	653.86	NA	NA	654.05	NA	NA	654	653.94
88-4	661.20	652.95	NA	NA	652.74	NA	NA	652.7	NA	NA	652.61	NA	NA	652.84	NA	NA	652.75	NA	NA	652.62	652.68
93-1	656.62	655.13	NA	NA	654.82	NA	NA	654.79	NA	NA	654.79	NA	NA	654.82	NA	NA	654.8	NA	NA	654.8	654.72
C-1	662.61	657.46	NA	NA	657.6	NA	NA	657.64	NA	NA	NA	NA	NA	657.65	NA	NA	657.58	NA	NA	657.64	657.57
C-2	658.81	649.39	NA	NA	649.1	NA	NA	NA	NA	NA	649.1	NA	NA	650.14	NA	NA	649.31	NA	NA	649.02	650.08
C-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-4	NA	657.44	NA	NA	657.61	NA	NA	657.61	NA	NA	657.69	NA	NA	657.61	NA	NA	657.57	NA	NA	657.55	657.55
MW1-03	678.68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW2-03	680.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW3-03	676.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW4-03	679.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW5-03	675.82	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW6-03	665.39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW7-03	674.79	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW8-04	674.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW9-04	678.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW10-04	666.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW11D-04	663.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW11S-05	663.58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW13-04	678.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW14-04	680.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW15-04	671.69	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW17-06	667.71	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW18-10	680.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PWDISCH	677.79	653.54	NA	NA	653.04	NA	NA	652.52	NA	NA	652.43	NA	NA	652.65	NA	NA	651.82	NA	NA	652.01	651.85
X-10	NA	659.94	NA	NA	658.6	NA	NA	660.49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
NA - Not Available
All elevations are measured as Above M

TABLE 3.1

HISTORICAL GROUNDWATER ELEVATIONS
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Monitoring Well Identification	*Elevation of Top of Riser*	*3/10/1999 Groundwater Elevation*	*6/15/1999 Groundwater Elevation*	*9/20/1999 Groundwater Elevation*	*12/16/1999 Groundwater Elevation*	*3/16/2000 Groundwater Elevation*	*6/13/2000 Groundwater Elevation*	*9/22/2000 Groundwater Elevation*	*12/20/2000 Groundwater Elevation*	*3/21/2001 Groundwater Elevation*	*6/13/2001 Groundwater Elevation*	*9/13/2001 Groundwater Elevation*	*12/19/2001 Groundwater Elevation*	*3/28/2002 Groundwater Elevation*	*6/26/2002 Groundwater Elevation*	*9/26/2002 Groundwater Elevation*	*12/9/2002 Groundwater Elevation*	*3/15/2003 Groundwater Elevation*	*3/20/2003 Groundwater Elevation*	*7/14/2003 Groundwater Elevation*	*9/29/2003 Groundwater Elevation*
85-1	675.03	659.2	659.46	659.3	659.01	658.79	659.7	659.4	659.38	659.74	659.91	659.83	659.76	660.17	660.1	659.99	659.96	659.17	659.28	658.87	658.63
85-2	671.63	658.19	658.32	658.04	657.99	657.93	658.62	658.22	658.2	658.54	658.61	658.48	658.44	658.83	658.8	658.66	658.49	658.24	657.35	657.75	657.57
85-3	680.91	659.5	660.47	659.26	658.61	658.6	660.71	659.78	659.99	660.48	661.17	660.45	660.54	661.15	660.92	660.8	660.07	660.31	658.91	659.31	659.37
85-5B	680.83	NA	NA	NA	659.11	NA	NA	NA	659.94	NA	NA	NA	660.57	661.08	660.85	660.71	660.71	660.18	NA	659.56	659.63
85-6	679.59	660.11	661.69	659.97	659.64	659.51	661.22	660.31	660.45	660.99	661.75	661.04	661.08	661.95	661.68	661.24	661.34	660.57	660.07	659.8	659.4
85-7	677.84	658.2	658.46	658.21	656.85	657.89	658.8	658.4	658.41	658.79	658.97	658.77	658.68	658.93	658.83	658.62	658.44	657.82	658.27	657.57	657.36
86-1	679.92	659.69	659.33	658.69	658.36	658.24	659.8	659.04	659.17	659.56	660.2	659.65	659.6	660.26	660.04	660.07	659.97	659.21	658.5	NA	658.1
86-2	680.93	658.83	659.24	658.67	658.25	658.1	658.18	658.24	658.28	657.88	658.5	658.7	658.88	659.14	659.21	659.29	659.03	658.31	658.6	658.45	658.18
86-3	675.80	657.37	657.58	657.32	657.23	657.09	657.9	657.55	657.55	657.93	658.06	657.87	657.8	658.33	658.18	658.3	657.97	657.01	NA	656.85	656.69
87-1	680.74	658.8	659	658.72	658.51	658.35	659.26	658.98	658.97	659.46	659.59	659.41	659.36	659.6	659.53	659.67	659.05	658.71	658.68	658.56	658.38
87-2	680.73	659.62	659.79	659.48	659.37	659.14	660.02	659.86	659.87	660.48	660.48	660.44	660.24	660.52	660.46	660.41	659.96	659.21	658.46	659.4	658.95
87-4	680.91	658.83	658.99	658.75	658.56	658.36	659.26	658.99	659.01	659.36	659.58	659.39	659.35	659.32	659.21	659.06	658.97	658.91	658.49	653.68	658.42
87-5	680.39	658.77	658.94	658.7	658.53	658.34	659.27	658.93	658.93	659.32	657.54	659.34	659.31	659.33	659.1	658.91	658.82	658.6	658.72	658.4	658.15
87-8	676.78	657.53	657.76	657.49	657.35	657.21	658.17	657.73	657.76	658.1	658.33	658.08	658.01	658.46	658.33	658.05	657.75	658.3	657.62	656.49	656.88
87-9	673.13	657.11	657.6	657.38	657.34	657.18	658.04	657.6	657.61	657.84	658.05	657.9	657.86	658.06	658	657.74	657.67	657.03	657.5	656.69	656.7
87-10	667.76	655.92	656.14	655.92	655.93	655.79	656.67	656.14	656.18	656.37	656.68	656.58	656.51	657.18	657.03	656.84	657.07	655.78	656.54	655.57	655.48
87-11	666.25	655.74	655.93	655.78	655.95	655.79	656.4	656.05	656.08	656.19	656.37	656.29	656.58	656.79	656.67	656.54	656.39	655.62	656.33	655.52	655.43
87-13	663.57	653.52	653.62	653.57	653.74	653.61	653.96	653.57	653.55	653.74	653.69	653.57	653.76	653.69	653.49	653.47	653.69	652.83	653.48	652.81	652.75
88-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
88-2	665.80	654.42	654.62	654.51	654.64	654.46	655.2	654.61	NA	654.66	654.8	654.74	654.69	655.07	654.93	654.77	654.74	653.99	654.54	NA	653.76
88-3	664.36	654.06	654.2	654.13	654.37	654.14	654.83	654.22	654.1	654.18	654.31	654.32	654.2	654.22	654.12	654.03	653.95	653.27	654.04	NA	653.04
88-4	661.20	652.79	652.91	652.94	653.17	652.93	653.6	652.93	652.9	652.85	653.01	652.96	652.87	652.93	652.88	652.72	652.61	652.55	652.72	NA	652.25
93-1	656.62	654.8	655.06	654.94	655.15	655.93	655.36	655.04	655.09	655.18	655.3	655.2	655.28	NA	NA	NA	NA	654.36	655.46	654.2	654.34
C-1	662.61	657.62	657.63	NA	657.76	657.7	NA	NA	NA	657.82	657.8	657.7	658.42	NA	NA	NA	NA	657.25	NA	657.26	657.42
C-2	658.81	650.32	NA	650.54	650.9	650.81	650.59	650.5	650.42	649.17	649.1	649.09	649.72	NA	NA	NA	NA	650.84	NA	650.46	650.55
C-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-4	NA	657.67	660.62	657.72	657.73	657.71	657.75	657.73	657.75	657.77	657.79	657.73	658.18	NA	NA	NA	NA	NA	NA	NA	NA
MW1-03	678.68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	660.29	NA	660.36	660.11
MW2-03	680.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	660.11	NA	660.04	659.72
MW3-03	676.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	661.15	NA	661.15	660.92
MW4-03	679.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	656.42	NA	656.17	656.11
MW5-03	675.82	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	655.52	NA	655.28	655.16
MW6-03	665.39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	653.26	NA	653.04	653.01
MW7-03	674.79	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	657.29	NA	657.1	656.93
MW8-04	674.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW9-04	678.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW10-04	666.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW11D-04	663.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW11S-05	663.58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW13-04	678.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW14-04	680.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW15-04	671.69	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW17-06	667.71	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW18-10	680.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PWDISCH	677.79	651.64	651.46	651.37	651.07	650.54	651.39	651.15	650.73	651.22	651.43	650.64	649.96	NA	NA	NA	NA	650	NA	649.67	649.18
X-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
NA - Not Available
All elevations are measured as Above M

TABLE 3.1

HISTORICAL GROUNDWATER ELEVATIONS
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Monitoring Well Identification	*Elevation of Top of Riser*	*12/17/2003 Groundwater Elevation*	*10/4/2004 Groundwater Elevation*	*11/30/2004 Groundwater Elevation*	*4/4/2005 Groundwater Elevation*	*6/27/2005 Groundwater Elevation*	*12/2/2005 Groundwater Elevation*	*9/1/2006 Groundwater Elevation*	*5/9/2007 Groundwater Elevation*	*10/15/2007 Groundwater Elevation*	*4/23/2008 Groundwater Elevation*	*10/8/2008 Groundwater Elevation*	*4/8/2009 Groundwater Elevation*	*10/9/2009 Groundwater Elevation*	*10/11/2010 Groundwater Elevation*
85-1	675.03	658.63	658.89	658.98	659.25	659.18	658.85	659.8088	660.03	659.15	659.57	659.67	659.66	659.32	659.3319
85-2	671.63	658.24	657.81	657.91	657.99	657.9	657.76	658.282	658.63	657.95	658.23	658.33	658.34	658.08	658.027
85-3	680.91	NA	659.11	659.26	660.21	660.1	NA	NA	NA	659.56	661.02	661	661.15	659.93	NA
85-5B	680.83	NA	659.33	659.45	660.26	660.1	659.21	660.4122	661.66	659.61	661	661.03	661.14	659.17	660.0946
85-6	679.59	659.94	659.73	659.97	660.67	660.66	659.64	661.0926	662.01	660	661.59	661.52	661.65	660.4	660.3675
85-7	677.84	657.72	657.5	657.67	658.02	657.93	657.63	658.3102	658.7	657.86	658.37	658.43	658.48	658.07	657.9619
86-1	679.92	NA	658.32	658.49	659.19	659.04	658.32	659.371	660.35	658.7	659.88	659.86	660.01	659.05	658.9265
86-2	680.93	658.35	658.47	658.54	NA	658.89	658.75	659.08	661.37	658.9	658.99	659.68	659	658.97	660.4849
86-3	675.80	657.46	657.32	656.97	657.42	657.3	657.09	657.977	658	657.29	657.72	658.08	657.9	657.49	657.302
87-1	680.74	659.62	658.57	658.71	659.06	659.02	658.64	659.6032	659.96	658.91	659.53	659.62	659.62	659.1	659.0884
87-2	680.73	659.28	659.43	659.43	659.92	659.88	659.41	660.4764	660.87	659.81	660.41	660.5	660.5	659.96	660.1385
87-4	680.91	658.68	658.71	658.71	659.05	658.94	658.56	659.2442	660.02	658.9	659.56	659.68	659.68	659.29	659.2541
87-5	680.39	658.53	658.37	658.37	658.87	658.78	658.49	659.6696	659.66	658.71	659.23	659.33	659.37	658.9	658.8881
87-8	676.78	657.76	656.96	656.96	657.68	657.54	657.28	658.048	658.16	657.53	657.88	657.96	658.05	657.56	657.42
87-9	673.13	657	656.81	656.81	657.3	657.9	657.03	657.877	657.8	657.16	657.64	657.81	657.73	657.36	657.25
87-10	667.76	655.66	655.53	655.78	656.02	659.02	655.54	656.262	656.25	655.68	656.37	656.25	656.25	655.88	655.734
87-11	666.25	655.52	655.39	655.71	655.77	655.53	655.4	656.247	655.83	655.54	655.87	656.2	655.35	655.65	655.427
87-13	663.57	652.79	652.68	653.37	653.7	652.85	652.41	653.574	653.08	652.83	653.12	653.53	653.19	652.96	652.906
88-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
88-2	665.80	654.7	653.72	654.54	654.4	653.87	653.87	654.436	654.1	653.85	654.15	654.4	654.26	654.05	653.902
88-3	664.36	653.12	652.99	654.12	653.96	653.16	653.27	653.882	653.38	653.13	653.43	653.65	653.49	653.33	653.221
88-4	661.20	652.25	652.21	653.06	653.34	652.38	652.57	653.049	652.63	652.35	652.6	652.84	652.82	652.58	652.45
93-1	656.62	654.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-1	662.61	657.55	657.21	657.26	657.16	657.09	656.99	NA	NA	657.11	657.19	658.06	657.41	657.26	657.283
C-2	658.81	650.67	650.98	NA	653.41	650.78	652.21	NA	650.83	650.79	651.01	652.12	650.96	650.86	651.41
C-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW1-03	678.68	660.38	660.4	661.7	660.76	662.16	660.58	662.8308	661.74	660.59	661.47	661.38	661.4	660.66	660.8797
MW2-03	680.60	660.09	660.07	660.47	660.72	661	659.88	661.6447	662.1	660.31	661.73	661.65	661.65	660.56	660.6335
MW3-03	676.74	661.24	661.34	661.71	661.78	662.13	661.26	662.4448	663.05	661.54	662.86	662.5	662.57	661.83	662.431
MW4-03	679.12	656.26	656.09	656.3	656.67	656.46	656.28	656.283	657.11	656.38	656.91	657.01	657.02	656.61	656.47
MW5-03	675.82	655.57	655.22	655.49	655.82	655.45	655.24	655.576	655.98	655.36	655.89	655.93	655.97	655.57	655.416
MW6-03	665.39	653.14	653.04	653.64	653.98	653.2	653.21	653.73	653.54	653.15	653.55	653.92	653.62	653.31	653.22
MW7-03	674.79	657.19	657.08	657.24	657.64	657.52	657.27	658.016	658.19	657.54	657.98	658.17	658.06	657.68	657.588
MW8-04	674.32	NA	NA	654.69	655.07	654.6	654.53	654.939	655.12	654.51	655.05	655.07	655.13	654.727	654.5714
MW9-04	678.00	NA	NA	655.85	656.18	655.89	655.65	656.2965	656.49	655.79	656.33	656.41	656.47	656.03	655.8785
MW10-04	666.29	NA	NA	656.64	656.88	656.83	656.59	657.3953	657.28	656.69	657.11	657.32	657.22	656.9	656.7731
MW11D-04	663.27	NA	NA	656.73	656.77	656.71	656.67	657.5792	657.05	656.72	657.02	657.45	657.1	656.9	656.7507
MW11S-05	663.58	NA	NA	NA	NA	NA	NA	NA	656.88	656.61	656.91	657.4	656.97	656.8	656.76
MW13-04	678.26	NA	NA	658.66	659.49	659.3	658.52	659.7494	660.53	659.08	660.17	660.19	660.35	659.47	658.8722
MW14-04	680.62	NA	NA	658.79	659.14	659.04	658.75	658.799	659.93	658.98	659.5	659.61	659.62	659.17	659.13
MW15-04	671.69	NA	NA	657.86	657.94	657.83	657.67	658.2086	658.72	657.87	658.19	658.34	658.28	658.01	657.9442
MW17-06	667.71	NA	NA	NA	NA	NA	NA	657.31	660.5	660.22	660.53	658.01	660.63	660.37	660.28
MW18-10	680.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	659.84
PWDISCH	677.79	649.99	NA	NA	657.47	657.35	NA	NA	658.04	657.31	657.79	657.95	657.93	657.54	657.394
X-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
NA - Not Available
All elevations are measured as Above M

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*Michigan Act 451, Part 201 Residential* [1]				*Michigan Act 451, Part 201 Industrial* [1]			*86-2*	*86-2*	*86-2*	*86-2*	*86-2*	*86-2*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		Statewide	Soil Volatilization	Particulate	Direct	Soil Volatilization	Particulate	Direct Contact	*86-2~3.5-5~042986*	*86-2~9-10.5~042986*	*86-2~14.5-16~042986*	*86-2~19-20.5~042986*	*86-2~24-25.5~042986*	*86-2~50-51.6~042986*	*87-1~4.0-5.5~1/13/1987*	*87-1~9.0-10.5~1/13/1987*	*87-1~14.0-15.5~1/13/1987*	*87-1~19.0-20.5~1/13/1987*
Sample Date		Default	to Indoor Air	Soil Inhalation	Contact	to Indoor Air	Soil Inhalation	Industrial and	*4/29/1986*	*4/29/1986*	*4/29/1986*	*4/29/1986*	*4/29/1986*	*4/29/1986*	*1/13/1987*	*1/13/1987*	*1/13/1987*	*1/13/1987*
Sample Depth		Background	Inhalation			Inhalation		Commercial II	*(3.5-5) ft*	*(9-10.5) ft*	*(14.5-16) ft*	*(19-20.5) ft*	*(24-25.5) ft*	*(50-51.6) ft*	*(4-5.5) ft*	*(9-10.5) ft*	*(14-15.5) ft*	*(19-20.5) ft*
Sample Type																		
AOI	***Units***	a	b	c	d	e	f	g	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Alcohols																		
2-Ethanoxyethanol	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	NA	8900	100000000	8900	8900	44000000	8900	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	NA	NLV	15000000	14000	NLV	6500000	47000	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	NA	3100	220000000	3100	3100	96000000	3100	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	NA	NLV	400000000	110000	NLV	180000000	110000	--	--	--	--	--	--	--	--	--	--
Metals																		
Aluminum	mg/kg	6900	NLV	ID	50000	NLV	ID	370000	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	NA	NLV	13000	180	NLV	5900	670	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	5.8	NLV	720	7.6	NLV	910	37	--	--	--	--	--	--	--	--	--	--
Barium	mg/kg	75	NLV	330000	37000	NLV	150000	130000	--	--	--	--	--	--	--	--	--	--
Beryllium	mg/kg	NA	NLV	1300	410	NLV	590	1600	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	NA	NLV	ID	48000	NLV	ID	350000	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	1.2	NLV	1700	550	NLV	2200	2100	--	--	--	--	--	--	--	--	--	--
Calcium	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	18	NLV	260	2500	NLV	240	9200	--	--	--	--	--	--	--	--	--	--
Chromium III (trivalent)	mg/kg	18	NLV	330000	790000	NLV	150000	1000000	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	NA	NLV	260	2500	NLV	240	9200	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	6.8	NLV	13000	2600	NLV	5900	9000	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	32	NLV	130000	20000	NLV	59000	73000	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	12000	NLV	ID	160000	NLV	ID	580000	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	21	NLV	100000	400	NLV	44000	900	--	--	--	--	--	--	--	--	--	--
Lead - coarse fraction	mg/kg	21	NLV	100000	400	NLV	44000	900	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	21	NLV	100000	400	NLV	44000	900	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	21	NLV	100000	400	NLV	44000	900	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	NA	NLV	6700000	1000000	NLV	2900000	1000000	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	440	NLV	3300	25000	NLV	1500	90000	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	0.13	48	20000	160	89	8800	580	--	--	--	--	--	--	--	--	--	--
Nickel	mg/kg	20	NLV	13000	40000	NLV	16000	150000	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	0.41	NLV	130000	2600	NLV	59000	9600	--	--	--	--	--	--	--	--	--	--
Silver	mg/kg	1	NLV	6700	2500	NLV	2900	9000	--	--	--	--	--	--	--	--	--	--
Sodium	mg/kg	NA	NLV	ID	1000000	NLV	ID	1000000	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	NA	NLV	ID	35	NLV	ID	130	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	NA	NLV	ID	750	NLV	ID	5500	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	47	NLV	ID	170000	NLV	ID	630000	--	--	--	--	--	--	--	--	--	--
PCBs																		
Aroclor-1016 (PCB-1016)	mg/kg	NA	3000	5200	4	16000	6500	16	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	NA	3000	5200	4	16000	6500	16	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	NA	3000	5200	4	16000	6500	16	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	NA	3000	5200	4	16000	6500	16	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	NA	3000	5200	4	16000	6500	16	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	NA	3000	5200	4	16000	6500	16	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	NA	3000	5200	4	16000	6500	16	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	NA	3000	5200	4	16000	6500	16	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	NA	3000	5200	4	16000	6500	16	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	NA	3000	5200	4	16000	6500	16	--	--	--	--	--	--	--	--	--	--
Pesticides																		
4,4'-DDD	mg/kg	NA	NLV	44000	95	NLV	56000	400	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	NA	NLV	32000	45	NLV	40000	190	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	NA	NLV	32000	57	NLV	40000	280	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	NA	1300	640	1	7100	800	4.3	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	NA	30	1700	2.6	160	2100	12	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	NA	NLV	5900	5.4	NLV	7400	25	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	NA	11000	31000	31	59000	21000	150	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	NA	140	680	1.1	720	850	4.7	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	NA	NLV	ID	65	NLV	ID	190	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	NA	ID	ID	8.3	ID	ID	42	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	NA	350	2400	5.6	1900	3000	23	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	NA	NLV	1200	3.1	NLV	1500	9.5	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	NA	ID	ID	1900	ID	ID	5600	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	NA	NLV	9700	20	NLV	12000	85	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*Michigan Act 451, Part 201 Residential* [1]				*Michigan Act 451, Part 201 Industrial* [1]			*86-2*	*86-2*	*86-2*	*86-2*	*86-2*	*86-2*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		Statewide	Soil Volatilization	Particulate	Direct	Soil Volatilization	Particulate	Direct Contact	*86-2~3.5-5~042986*	*86-2~9-10.5~042986*	*86-2~14.5-16~042986*	*86-2~19-20.5~042986*	*86-2~24-25.5~042986*	*86-2~50-51.6~042986*	*87-1~4.0-5.5~1/13/1987*	*87-1~9.0-10.5~1/13/1987*	*87-1~14.0-15.5~1/13/1987*	*87-1~19.0-20.5~1/13/1987*
Sample Date		Default	to Indoor Air	Soil Inhalation	Contact	to Indoor Air	Soil Inhalation	Industrial and	*4/29/1986*	*4/29/1986*	*4/29/1986*	*4/29/1986*	*4/29/1986*	*4/29/1986*	*1/13/1987*	*1/13/1987*	*1/13/1987*	*1/13/1987*
Sample Depth		Background	Inhalation			Inhalation		Commercial II	*(3.5-5) ft*	*(9-10.5) ft*	*(14.5-16) ft*	*(19-20.5) ft*	*(24-25.5) ft*	*(50-51.6) ft*	*(4-5.5) ft*	*(9-10.5) ft*	*(14-15.5) ft*	*(19-20.5) ft*
Sample Type																		
AOI	***Units***	a	b	c	d	e	f	g	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Semi-Volatile Organic Compounds																		
1,2,3,4-Tetrachlorobenzene	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	NA	ID	ID	77000	ID	ID	250000	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	NA	NLV	23000000	23000	NLV	10000000	73000	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	NA	NLV	1000000	710	NLV	1300000	3300	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	NA	NLV	5100000	660	NLV	2300000	1800	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	NA	NLV	4700000	11000	NLV	2100000	36000	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	NA	NLV	16000	48	NLV	20000	220	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	NA	ID	ID	56000	ID	ID	180000	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	NA	ID	ID	1400	ID	ID	4500	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	NA	ID	ID	8100	ID	ID	26000	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	NA	NLV	6700000	11000	NLV	2900000	36000	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	NA	NLV	ID	630	NLV	ID	2000	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	NA	NLV	6700000	11000	NLV	2900000	36000	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	NA	NLV	6500	6.6	NLV	8200	30	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	NA	NLV	ID	79	NLV	ID	260	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	NA	NLV	ID	4500	NLV	ID	15000	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	NA	190000	14000000	41000	350000	6200000	130000	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	NA	1600	2300000	1600	3000	1000000	5200	--	--	--	--	--	--	--	--	--	--
Aniline	mg/kg	NA	NLV	67000	330	NLV	29000	1500	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	NA	1000000	67000000	230000	1000000	29000000	730000	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	NA	NLV	ID	20	NLV	ID	80	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	NA	NLV	1500	2	NLV	1900	8	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	NA	ID	ID	20	ID	ID	80	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	NA	NLV	800000	2500	NLV	350000	7000	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	NA	NLV	ID	200	NLV	ID	800	--	--	--	--	--	--	--	--	--	--
Benzoic acid	mg/kg	NA	NLV	ID	990000	NLV	ID	1000000	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	NA	NLV	330000000	5800	NLV	150000000	5800	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	NA	8.3	9400	13	44	12000	58	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	NA	NLV	700000	2800	NLV	890000	10000	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	NA	NLV	47000000	310	NLV	21000000	310	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	NA	NLV	ID	530	NLV	ID	2400	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	NA	ID	ID	2000	ID	ID	8000	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	NA	NLV	ID	2	NLV	ID	8	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	NA	ID	ID	ID	ID	ID	ID	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	NA	NLV	3300000	740	NLV	1500000	740	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	NA	NLV	3300000	790	NLV	1500000	790	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	NA	NLV	3300000	760	NLV	1500000	760	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	NA	NLV	ID	6900	NLV	ID	20000	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	NA	1000000	9300000	46000	1000000	4100000	130000	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/kg	NA	580000	9300000	27000	1000000	4100000	87000	--	--	--	--	--	--	--	--	--	--
Hexabromobenzene	mg/kg	NA	ID	ID	1100	ID	ID	3100	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	NA	41	6800	8.9	220	8500	37	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	NA	30	13000	720	56	5900	720	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	NA	40	230000	230	79	100000	730	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	NA	NLV	ID	20	NLV	ID	80	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/kg	NA	NLV	12000000	2400	NLV	8200000	2400	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	NA	ID	ID	9.6	ID	ID	40	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	NA	250	200000	16000	470	88000	52000	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	NA	91	47000	100	170	21000	340	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	NA	NLV	1600	1.2	NLV	2000	5.4	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	NA	NLV	ID	1700	NLV	ID	7800	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	NA	ID	ID	190	ID	ID	190	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	NA	120	330000	1700	220	150000	5500	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	NA	NLV	100000	90	NLV	130000	320	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	NA	2800	6700	1600	5100	2900	5200	--	--	--	--	--	--	--	--	--	--
Phenol	mg/kg	NA	NLV	40000000	12000	NLV	18000000	12000	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	NA	NLV	ID	1.2	NLV	ID	4.8	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	NA	1000000	6700000	29000	1000000	2900000	84000	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*Michigan Act 451, Part 201 Residential* [1]				*Michigan Act 451, Part 201 Industrial* [1]			*86-2*	*86-2*	*86-2*	*86-2*	*86-2*	*86-2*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		Statewide	Soil Volatilization	Particulate	Direct	Soil Volatilization	Particulate	Direct Contact	*86-2~3.5-5~042986*	*86-2~9-10.5~042986*	*86-2~14.5-16~042986*	*86-2~19-20.5~042986*	*86-2~24-25.5~042986*	*86-2~50-51.6~042986*	*87-1~4.0-5.5~1/13/1987*	*87-1~9.0-10.5~1/13/1987*	*87-1~14.0-15.5~1/13/1987*	*87-1~19.0-20.5~1/13/1987*
Sample Date		Default	to Indoor Air	Soil Inhalation	Contact	to Indoor Air	Soil Inhalation	Industrial and	*4/29/1986*	*4/29/1986*	*4/29/1986*	*4/29/1986*	*4/29/1986*	*4/29/1986*	*1/13/1987*	*1/13/1987*	*1/13/1987*	*1/13/1987*
Sample Depth		Background	Inhalation			Inhalation		Commercial II	*(3.5-5) ft*	*(9-10.5) ft*	*(14.5-16) ft*	*(19-20.5) ft*	*(24-25.5) ft*	*(50-51.6) ft*	*(4-5.5) ft*	*(9-10.5) ft*	*(14-15.5) ft*	*(19-20.5) ft*
Sample Type																		
AOI	***Units***	a	b	c	d	e	f	g	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Volatile Organic Compounds																		
1,1,1,2-Tetrachloroethane	mg/kg	NA	6.2	420000	440	33	530000	440	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	NA	250	67000000	460	460	29000000	460	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	NA	4.3	54000	53	23	68000	240	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/kg	NA	4.6	190000	180	24	250000	840	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/kg	NA	230	33000000	890	430	15000000	890	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/kg	NA	0.062	62000	200	0.33	78000	570	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	NA	ID	ID	830	ID	ID	830	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	NA	1100	25000000	990	1100	11000000	1100	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/kg	NA	110	82000000	110	110	36000000	110	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	NA	1.2	13000	1.2	1.2	5900	1.2	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	NA	0.67	14000	0.092	3.6	18000	0.43	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	NA	210	100000000	210	210	44000000	210	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/kg	NA	2.1	120000	91	11	150000	420	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/kg	NA	4	270000	140	7.4	120000	550	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/kg	NA	94	82000000	94	94	36000000	94	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	NA	ID	ID	170	ID	ID	170	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	NA	1	780000	10	5.4	590000	240	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	NA	19	450000	400	100	570000	1900	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	NA	27000	67000000	27000	27000	29000000	27000	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/kg	NA	270	4700000	500	500	2100000	500	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	NA	990	2700000	2500	1800	1200000	2500	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/kg	NA	ID	ID	2500	ID	ID	8000	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	NA	2700	140000000	2700	2700	60000000	2700	--	--	--	--	--	--	--	--	--	--
Acetone	mg/kg	NA	110000	390000000	23000	110000	170000000	73000	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/kg	NA	6.6	46000	16	35	58000	74	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	NA	1.6	380000	180	8.4	470000	400	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/kg	NA	6.3	62000	48	33	78000	220	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	NA	310	530000	540	580	240000	760	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	NA	1.2	84000	110	6.4	110000	490	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/kg	NA	150	2800000	820	770	3600000	870	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/kg	NA	0.86	330000	320	1.6	150000	1000	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/kg	NA	76	47000000	280	140	21000000	280	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/kg	NA	0.19	130000	96	0.99	170000	390	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/kg	NA	120	4700000	260	220	2100000	260	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	NA	950	670000000	950	950	290000000	950	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	NA	7.2	1300000	1200	38	1600000	1500	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/kg	NA	2.3	4900000	1100	10	2600000	1100	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	NA	22	2300000	640	41	1000000	640	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/kg	NA	3.9	130000	110	21	160000	500	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/kg	NA	ID	ID	2000	ID	ID	2000	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	NA	900	3300000000	1000	1700	1500000000	1000	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/kg	NA	7400	800000000	7400	7400	350000000	7400	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	NA	87	10000000	140	140	13000000	140	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	NA	130	140000	100	350	180000	350	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	NA	44	13000000	44	44	5900000	44	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	NA	390	5800000	390	390	2600000	390	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/kg	NA	5900	200000000	1500	5900	88000000	5900	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/kg	NA	45	6600000	1300	240	8300000	2300	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	NA	250	200000	16000	470	88000	52000	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	NA	ID	ID	2500	ID	ID	8000	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	NA	ID	1300000	2500	ID	590000	8000	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	NA	150	2900000000	150	150	1300000000	150	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	NA	250	5500000	400	520	6900000	520	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/kg	NA	ID	ID	2500	ID	ID	8000	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	NA	11	5400000	88	60	6800000	88	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/kg	NA	1300	390000000	2900	2400	170000000	9500	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	NA	250	27000000	250	250	12000000	250	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/kg	NA	23	4700000	1400	43	2100000	1400	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/kg	NA	7.1	1800000	500	37	2300000	500	0.005 U	0.005 U	0.042	0.005	0.26	0.005 U	0.004 U	0.004 U	0.025	0.04
Trichlorofluoromethane (CFC-11)	mg/kg	NA	560	3800000000	560	560	1700000000	560	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/kg	NA	550	5100000000	550	550	2300000000	550	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/kg	NA	0.27	350000	3.8	2.8	890000	34	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/kg	NA	150	290000000	150	150	130000000	150	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*Michigan Act 451, Part 201 Residential* (1)				*Michigan Act 451, Part 201 Industrial* (1)			***86-2***	***86-2***	***86-2***	***86-2***	***86-2***	***86-2***	***87-1***	***87-1***	***87-1***	***87-1***
Sample Identification		Statewide	Soil Volatilization	Particulate	Direct	Soil Volatilization	Particulate	Direct Contact	***86-2~3.5-5~042986***	***86-2~9-10.5~042986***	***86-2~14.5-16~042986***	***86-2~19-20.5~042986***	***86-2~24-25.5~042986***	***86-2~50-51.6~042986***	***87-1~4.0-5.5~1/13/1987***	***87-1~9.0-10.5~1/13/1987***	***87-1~14.0-15.5~1/13/1987***	***87-1~19.0-20.5~1/13/1987***
Sample Date		Default	to Indoor Air	Soil Inhalation	Contact	to Indoor Air	Soil Inhalation	Industrial and	***4/29/1986***	***4/29/1986***	***4/29/1986***	***4/29/1986***	***4/29/1986***	***4/29/1986***	***1/13/1987***	***1/13/1987***	***1/13/1987***	***1/13/1987***
Sample Depth		Background	Inhalation			Inhalation		Commercial II	***(3.5-5) ft***	***(9-10.5) ft***	***(14.5-16) ft***	***(19-20.5) ft***	***(24-25.5) ft***	***(50-51.6) ft***	***(4-5.5) ft***	***(9-10.5) ft***	***(14-15.5) ft***	***(19-20.5) ft***
Sample Type																		
AOI	***Units***	a	b	c	d	e	f	g	***AOI 25, AOI 4.1***	***AOI 25, AOI 4.1***	***AOI 25, AOI 4.1***	***AOI 25, AOI 4.1***	***AOI 25, AOI 4.1***	***AOI 25, AOI 4.1***	***AOI 25, AOI 4.1***	***AOI 25, AOI 4.1***	***AOI 25, AOI 4.1***	***AOI 25, AOI 4.1***
General Chemistry																		
Chloride	mg/kg	NA	NLV	ID	500	NLV	ID	500	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	0.39	NLV	250	12	NLV	250	250	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	NA	NLV	ID	ID	NLV	ID	ID	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	NA	NLV	ID	ID	NLV	ID	ID	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	NA	NLV	ID	ID	NLV	ID	ID	--	--	--	--	--	--	--	--	--	--
Total solids	%	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
pH	none	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	NA	NC	NC	NC	NC	NC	NC	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-3*	*87-3*	*87-3*	*87-3*	*87-4*	*87-4*
Sample Identification		*87-1~24.0-25.5~1/13/1987*	*87-2~4.0-5.5~1/14/1987*	*87-2~9.0-10.5~1/14/1987*	*87-2~14.0-15.5~1/14/1987*	*87-2~19.0-20.5~1/14/1987*	*87-2~24.0-25.5~1/14/1987*	*87-2~47.0-49.5~1/14/1987*	*87-3~4.0-5.5~1/16/1987*	*87-3~9.0-10.5~1/16/1987*	*87-3~14.0-15.5~1/16/1987*	*87-3~18.0-19.5~1/16/1987*	*87-4~4.5-6.0~1/19/1987*	*87-4~8.5-10.0~1/19/1987*
Sample Date		*1/13/1987*	*1/14/1987*	*1/14/1987*	*1/14/1987*	*1/14/1987*	*1/14/1987*	*1/14/1987*	*1/16/1987*	*1/16/1987*	*1/16/1987*	*1/16/1987*	*1/19/1987*	*1/19/1987*
Sample Depth		*(24-25.5) ft*	*(4-5.5) ft*	*(9-10.5) ft*	*(14-15.5) ft*	*(19-20.5) ft*	*(24-25.5) ft*	*(47-49.5) ft*	*(4-5.5) ft*	*(9-10.5) ft*	*(14-15.5) ft*	*(18-19.5) ft*	*(4.5-6) ft*	*(8.5-10) ft*
Sample Type														
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Alcohols														
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals														
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs														
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides														
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-3*	*87-3*	*87-3*	*87-3*	*87-4*	*87-4*
Sample Identification		*87-1~24.0-25.5~1/13/1987*	*87-2~4.0-5.5~1/14/1987*	*87-2~9.0-10.5~1/14/1987*	*87-2~14.0-15.5~1/14/1987*	*87-2~19.0-20.5~1/14/1987*	*87-2~24.0-25.5~1/14/1987*	*87-2~47.0-49.5~1/14/1987*	*87-3~4.0-5.5~1/16/1987*	*87-3~9.0-10.5~1/16/1987*	*87-3~14.0-15.5~1/16/1987*	*87-3~18.0-19.5~1/16/1987*	*87-4~4.5-6.0~1/19/1987*	*87-4~8.5-10.0~1/19/1987*
Sample Date		*1/13/1987*	*1/14/1987*	*1/14/1987*	*1/14/1987*	*1/14/1987*	*1/14/1987*	*1/14/1987*	*1/16/1987*	*1/16/1987*	*1/16/1987*	*1/16/1987*	*1/19/1987*	*1/19/1987*
Sample Depth		*(24-25.5) ft*	*(4-5.5) ft*	*(9-10.5) ft*	*(14-15.5) ft*	*(19-20.5) ft*	*(24-25.5) ft*	*(47-49.5) ft*	*(4-5.5) ft*	*(9-10.5) ft*	*(14-15.5) ft*	*(18-19.5) ft*	*(4.5-6) ft*	*(8.5-10) ft*
Sample Type														
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Semi-Volatile Organic Compounds														
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-3*	*87-3*	*87-3*	*87-3*	*87-4*	*87-4*
Sample Identification		*87-1~24.0-25.5~1/13/1987*	*87-2~4.0-5.5~1/14/1987*	*87-2~9.0-10.5~1/14/1987*	*87-2~14.0-15.5~1/14/1987*	*87-2~19.0-20.5~1/14/1987*	*87-2~24.0-25.5~1/14/1987*	*87-2~47.0-49.5~1/14/1987*	*87-3~4.0-5.5~1/16/1987*	*87-3~9.0-10.5~1/16/1987*	*87-3~14.0-15.5~1/16/1987*	*87-3~18.0-19.5~1/16/1987*	*87-4~4.5-6.0~1/19/1987*	*87-4~8.5-10.0~1/19/1987*
Sample Date		*1/13/1987*	*1/14/1987*	*1/14/1987*	*1/14/1987*	*1/14/1987*	*1/14/1987*	*1/14/1987*	*1/16/1987*	*1/16/1987*	*1/16/1987*	*1/16/1987*	*1/19/1987*	*1/19/1987*
Sample Depth		*(24-25.5) ft*	*(4-5.5) ft*	*(9-10.5) ft*	*(14-15.5) ft*	*(19-20.5) ft*	*(24-25.5) ft*	*(47-49.5) ft*	*(4-5.5) ft*	*(9-10.5) ft*	*(14-15.5) ft*	*(18-19.5) ft*	*(4.5-6) ft*	*(8.5-10) ft*
Sample Type														
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Volatile Organic Compounds														
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/kg	0.081	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.016	0.065	0.11	0.14	0.004 U	0.004 U
Trichlorofluoromethane (CFC-11)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-3*	*87-3*	*87-3*	*87-3*	*87-4*	*87-4*
Sample Identification		*87-1~24.0-25.5~1/13/1987*	*87-2~4.0-5.5~1/14/1987*	*87-2~9.0-10.5~1/14/1987*	*87-2~14.0-15.5~1/14/1987*	*87-2~19.0-20.5~1/14/1987*	*87-2~24.0-25.5~1/14/1987*	*87-2~47.0-49.5~1/14/1987*	*87-3~4.0-5.5~1/16/1987*	*87-3~9.0-10.5~1/16/1987*	*87-3~14.0-15.5~1/16/1987*	*87-3~18.0-19.5~1/16/1987*	*87-4~4.5-6.0~1/19/1987*	*87-4~8.5-10.0~1/19/1987*
Sample Date		*1/13/1987*	*1/14/1987*	*1/14/1987*	*1/14/1987*	*1/14/1987*	*1/14/1987*	*1/14/1987*	*1/16/1987*	*1/16/1987*	*1/16/1987*	*1/16/1987*	*1/19/1987*	*1/19/1987*
Sample Depth		*(24-25.5) ft*	*(4-5.5) ft*	*(9-10.5) ft*	*(14-15.5) ft*	*(19-20.5) ft*	*(24-25.5) ft*	*(47-49.5) ft*	*(4-5.5) ft*	*(9-10.5) ft*	*(14-15.5) ft*	*(18-19.5) ft*	*(4.5-6) ft*	*(8.5-10) ft*
Sample Type														
AOI	***Units***	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
General Chemistry														
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-4*	*87-4*	*87-4*	*87-4*	*87-5*	*87-5*	*87-5*	*87-5*	*87-5*	*87-5*	*87-8*	*87-9*	*BH1*
Sample Identification		*87-4~13.5-15.0~1/19/1987*	*87-4~18.5-20.0~1/19/1987*	*87-4~23.5-25.0~1/19/1987*	*87-4~64.0-65.5~1/20/1987*	*87-5~3.5-5.0~1/22/1987*	*87-5~8.5-10.0~1/22/1987*	*87-5~13.5-15.0~1/22/1987*	*87-5~18.5-20.0~1/22/1987*	*87-5~23.5-25.0~1/22/1987*	*87-5~62.0-64.0~1/22/1987*	*87-8~65-66.5~011387*	*87-9~83.5-85~011587*	*BH1~0.7-2~10051981*
Sample Date		*1/19/1987*	*1/19/1987*	*1/19/1987*	*1/20/1987*	*1/22/1987*	*1/22/1987*	*1/22/1987*	*1/22/1987*	*1/22/1987*	*1/22/1987*	*1/13/1987*	*1/15/1987*	*10/5/1981*
Sample Depth		*(13.5-15) ft*	*(18.5-20) ft*	*(23.5-25) ft*	*(64-65.5) ft*	*(3.5-5) ft*	*(8.5-10) ft*	*(13.5-15) ft*	*(18.5-20) ft*	*(23.5-25) ft*	*(62-64) ft*	*(65-66.5) ft*	*(83.5-85) ft*	*(0.7-2) ft*
Sample Type														
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 5, AOI 19, AOI 4.1*
Alcohols														
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals														
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs														
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides														
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-4*	*87-4*	*87-4*	*87-4*	*87-5*	*87-5*	*87-5*	*87-5*	*87-5*	*87-5*	*87-8*	*87-9*	*BH1*
Sample Identification		*87-4~13.5-15.0~1/19/1987*	*87-4~18.5-20.0~1/19/1987*	*87-4~23.5-25.0~1/19/1987*	*87-4~64.0-65.5~1/20/1987*	*87-5~3.5-5.0~1/22/1987*	*87-5~8.5-10.0~1/22/1987*	*87-5~13.5-15.0~1/22/1987*	*87-5~18.5-20.0~1/22/1987*	*87-5~23.5-25.0~1/22/1987*	*87-5~62.0-64.0~1/22/1987*	*87-8~65-66.5~011387*	*87-9~83.5-85~011587*	*BH1~0.7-2~10051981*
Sample Date		*1/19/1987*	*1/19/1987*	*1/19/1987*	*1/20/1987*	*1/22/1987*	*1/22/1987*	*1/22/1987*	*1/22/1987*	*1/22/1987*	*1/22/1987*	*1/13/1987*	*1/15/1987*	*10/5/1981*
Sample Depth		*(13.5-15) ft*	*(18.5-20) ft*	*(23.5-25) ft*	*(64-65.5) ft*	*(3.5-5) ft*	*(8.5-10) ft*	*(13.5-15) ft*	*(18.5-20) ft*	*(23.5-25) ft*	*(62-64) ft*	*(65-66.5) ft*	*(83.5-85) ft*	*(0.7-2) ft*
Sample Type														
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 5, AOI 19, AOI 4.1*
Semi-Volatile Organic Compounds														
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-4*	*87-4*	*87-4*	*87-4*	*87-5*	*87-5*	*87-5*	*87-5*	*87-5*	*87-5*	*87-8*	*87-9*	*BH1*
Sample Identification		*87-4~13.5-15.0~1/19/1987*	*87-4~18.5-20.0~1/19/1987*	*87-4~23.5-25.0~1/19/1987*	*87-4~64.0-65.5~1/20/1987*	*87-5~3.5-5.0~1/22/1987*	*87-5~8.5-10.0~1/22/1987*	*87-5~13.5-15.0~1/22/1987*	*87-5~18.5-20.0~1/22/1987*	*87-5~23.5-25.0~1/22/1987*	*87-5~62.0-64.0~1/22/1987*	*87-8~65-66.5~011387*	*87-9~83.5-85~011587*	*BH1~0.7-2~10051981*
Sample Date		*1/19/1987*	*1/19/1987*	*1/19/1987*	*1/20/1987*	*1/22/1987*	*1/22/1987*	*1/22/1987*	*1/22/1987*	*1/22/1987*	*1/22/1987*	*1/13/1987*	*1/15/1987*	*10/5/1981*
Sample Depth		*(13.5-15) ft*	*(18.5-20) ft*	*(23.5-25) ft*	*(64-65.5) ft*	*(3.5-5) ft*	*(8.5-10) ft*	*(13.5-15) ft*	*(18.5-20) ft*	*(23.5-25) ft*	*(62-64) ft*	*(65-66.5) ft*	*(83.5-85) ft*	*(0.7-2) ft*
Sample Type														
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 5, AOI 19, AOI 4.1*
Volatile Organic Compounds														
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/kg	0.0055	0.004 U	0.012	0.004 U	0.004 U	0.004 U	0.02	0.019	0.017	0.004 U	0.004 U	0.004 U	--
Trichlorofluoromethane (CFC-11)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-4*	*87-4*	*87-4*	*87-4*	*87-5*	*87-5*	*87-5*	*87-5*	*87-5*	*87-5*	*87-8*	*87-9*	*BH1*
Sample Identification		*87-4~13.5-15.0~1/19/1987*	*87-4~18.5-20.0~1/19/1987*	*87-4~23.5-25.0~1/19/1987*	*87-4~64.0-65.5~1/20/1987*	*87-5~3.5-5.0~1/22/1987*	*87-5~8.5-10.0~1/22/1987*	*87-5~13.5-15.0~1/22/1987*	*87-5~18.5-20.0~1/22/1987*	*87-5~23.5-25.0~1/22/1987*	*87-5~62.0-64.0~1/22/1987*	*87-8~65-66.5~011387*	*87-9~83.5-85~011587*	*BH1~0.7-2~10051981*
Sample Date		*1/19/1987*	*1/19/1987*	*1/19/1987*	*1/20/1987*	*1/22/1987*	*1/22/1987*	*1/22/1987*	*1/22/1987*	*1/22/1987*	*1/22/1987*	*1/13/1987*	*1/15/1987*	*10/5/1981*
Sample Depth		*(13.5-15) ft*	*(18.5-20) ft*	*(23.5-25) ft*	*(64-65.5) ft*	*(3.5-5) ft*	*(8.5-10) ft*	*(13.5-15) ft*	*(18.5-20) ft*	*(23.5-25) ft*	*(62-64) ft*	*(65-66.5) ft*	*(83.5-85) ft*	*(0.7-2) ft*
Sample Type														
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 5, AOI 19, AOI 4.1*
General Chemistry														
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	5600
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	9900
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*
Sample Identification		*BH1~2-4~100581*	*BH1~4-6~100581*	*BH1~6-8~100581*	*BH1~8-10~100581*	*BH1~10-12~100581*	*BH1~12-14~100581*	*BH1~14-16~100581*	*BH1~16-18~100581*	*BH1~18-20~100581*	*BH1~20-22~100581*	*S-17360-071504-DCR-122*	*S-17360-071504-DCR-123*	*S-17360-071504-DCR-124*	*S-17360-071504-DCR-125*	*S-17360-071504-DCR-126*
Sample Date		*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type																
AOI	*Units*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Alcohols																
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals																
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides																
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*
Sample Identification		*BH1~2-4~100581*	*BH1~4-6~100581*	*BH1~6-8~100581*	*BH1~8-10~100581*	*BH1~10-12~100581*	*BH1~12-14~100581*	*BH1~14-16~100581*	*BH1~16-18~100581*	*BH1~18-20~100581*	*BH1~20-22~100581*	*S-17360-071504-DCR-122*	*S-17360-071504-DCR-123*	*S-17360-071504-DCR-124*	*S-17360-071504-DCR-125*	*S-17360-071504-DCR-126*
Sample Date		*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type																
AOI	*Units*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Semi-Volatile Organic Compounds																
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		BH1	BH1	BH1	BH1	BH1	BH1	BH1	BH1	BH1	BH1	SB1-04	SB1-04	SB1-04	SB1-04	SB1-04
Sample Identification		BH1~2-4~100581	BH1~4-6~100581	BH1~6-8~100581	BH1~8-10~100581	BH1~10-12~100581	BH1~12-14~100581	BH1~14-16~100581	BH1~16-18~100581	BH1~18-20~100581	BH1~20-22~100581	S-17360-071504-DCR-122	S-17360-071504-DCR-123	S-17360-071504-DCR-124	S-17360-071504-DCR-125	S-17360-071504-DCR-126
Sample Date		10/5/1981	10/5/1981	10/5/1981	10/5/1981	10/5/1981	10/5/1981	10/5/1981	10/5/1981	10/5/1981	10/5/1981	7/15/2004	7/15/2004	7/15/2004	7/15/2004	7/15/2004
Sample Depth		(2-4) ft	(4-6) ft	(6-8) ft	(8-10) ft	(10-12) ft	(12-14) ft	(14-16) ft	(16-18) ft	(18-20) ft	(20-22) ft	(0-2) ft	(2-4) ft	(4-6) ft	(6-8) ft	(8-10) ft
Sample Type																
AOI	Units	AOI 5, AOI 19, AOI 4.1	AOI 5, AOI 19, AOI 4.1	AOI 5, AOI 19, AOI 4.1	AOI 5, AOI 19, AOI 4.1	AOI 5, AOI 19, AOI 4.1	AOI 5, AOI 19, AOI 4.1	AOI 5, AOI 19, AOI 4.1	AOI 5, AOI 19, AOI 4.1	AOI 5, AOI 19, AOI 4.1	AOI 5, AOI 19, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
1,1,2,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U
1,1,2-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
1,1-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
1,1-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	0.29 U	0.28 U	0.28 U	0.29 U	0.03 J
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	--	--	--	--	--	--	--	--	--	--	0.29 U	0.28 U	0.28 U	0.29 U	0.3 U
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	0.29 U	0.28 U	0.28 U	0.29 U	0.3 U
1,2-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U
1,2-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
1,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	--	--	--	--	--	--	--	--	--	--	0.88 U	0.84 U	0.85 U	0.87 U	0.89 U
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	--	--	--	--	--	--	--	--	--	--	2.9 U	2.8 U	2.8 U	2.9 U	3 U
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	--	--	--	--	--	--	--	--	--	--	2.9 U	2.8 U	2.8 U	2.9 U	3 U
Acetone	mg/kg	--	--	--	--	--	--	--	--	--	--	0.88 U	0.84 U	0.85 U	0.87 U	0.89 U
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U
Bromoform	mg/kg	--	--	--	--	--	--	--	--	--	--	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U
Bromomethane (Methyl bromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	0.29 U	0.28 U	0.28 U	0.29 U	0.3 U
Carbon disulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	0.29 U	0.28 U	0.28 U	0.29 U	0.3 U
Carbon tetrachloride	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
Chlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	0.29 U	0.28 U	0.28 U	0.29 U	0.3 U
Chloroform (Trichloromethane)	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
Chloromethane (Methyl chloride)	mg/kg	--	--	--	--	--	--	--	--	--	--	0.29 U	0.28 U	0.28 U	0.29 U	0.3 U
cis-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
cis-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
Cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Dibromochloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	--	--	--	--	--	--	--	--	--	--	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	0.29 U	0.28 U	0.28 U	0.29 U	0.3 U
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	--	--	--	--	--	--	--	--	--	--	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Methyl cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	0.039 J	1.4 U	1.4 U	1.4 U	1.4 U
Methyl tert butyl ether (MTBE)	mg/kg	--	--	--	--	--	--	--	--	--	--	0.29 U	0.28 U	0.28 U	0.29 U	0.3 U
Methylene chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	0.29 U	0.28 U	0.28 U	0.29 U	0.3 U
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	0.021 J	0.11 U	0.11 U	0.12 U	0.12 U
trans-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
trans-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	0.059 U	0.056 U	0.057 U	0.058 U	0.059 U
Trichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	2	0.056 U	0.057 U	0.058 U	0.059 U
Trichlorofluoromethane (CFC-11)	mg/kg	--	--	--	--	--	--	--	--	--	--	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U
Trifluorotrichloroethane (Freon 113)	mg/kg	--	--	--	--	--	--	--	--	--	--	0.29 U	0.28 U	0.28 U	0.29 U	0.3 U
Vinyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U
Xylenes (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	0.038 J	0.17 U	0.17 U	0.17 U	0.18 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*BH1*	*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*
Sample Identification		*BH1~2-4~100581*	*BH1~4-6~100581*	*BH1~6-8~100581*	*BH1~8-10~100581*	*BH1~10-12~100581*	*BH1~12-14~100581*	*BH1~14-16~100581*	*BH1~16-18~100581*	*BH1~18-20~100581*	*BH1~20-22~100581*	*S-17360-071504-DCR-122*	*S-17360-071504-DCR-123*	*S-17360-071504-DCR-124*	*S-17360-071504-DCR-125*	*S-17360-071504-DCR-126*
Sample Date		*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*10/5/1981*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type																
AOI	*Units*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 5, AOI 19, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
General Chemistry																
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	6400	4300	790	140	6.0	5.5	28	33	4.4	4.1	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	21500	11500	2060	600	140	260	170	350	200	160	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	--	--	--	--	--	--	--	--	--	--	94.7	96.9	98.1	98.1	97.7
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*
Sample Identification		*S-17360-071504-DCR-127*	*S-17360-071504-DCR-128*	*S-17360-071504-DCR-129*	*S-17360-071504-DCR-130*	*S-17360-071504-DCR-131*	*S-17360-071504-DCR-132*	*S-17360-071404-DCR-089*	*S-17360-071404-DCR-090*	*S-17360-071404-DCR-091*	*S-17360-071404-DCR-092*	*S-17360-071404-DCR-093*	*S-17360-071404-DCR-094*	*S-17360-071404-DCR-095*	*S-17360-071404-DCR-096*
Sample Date		*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*
Sample Depth		*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*
Sample Identification		*S-17360-071504-DCR-127*	*S-17360-071504-DCR-128*	*S-17360-071504-DCR-129*	*S-17360-071504-DCR-130*	*S-17360-071504-DCR-131*	*S-17360-071504-DCR-132*	*S-17360-071404-DCR-089*	*S-17360-071404-DCR-090*	*S-17360-071404-DCR-091*	*S-17360-071404-DCR-092*	*S-17360-071404-DCR-093*	*S-17360-071404-DCR-094*	*S-17360-071404-DCR-095*	*S-17360-071404-DCR-096*
Sample Date		*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*
Sample Depth		*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*
Sample Identification		*S-17360-071504-DCR-127*	*S-17360-071504-DCR-128*	*S-17360-071504-DCR-129*	*S-17360-071504-DCR-130*	*S-17360-071504-DCR-131*	*S-17360-071504-DCR-132*	*S-17360-071404-DCR-089*	*S-17360-071404-DCR-090*	*S-17360-071404-DCR-091*	*S-17360-071404-DCR-092*	*S-17360-071404-DCR-093*	*S-17360-071404-DCR-094*	*S-17360-071404-DCR-095*	*S-17360-071404-DCR-096*
Sample Date		*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*
Sample Depth		*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
1,1,2,2-Tetrachloroethane	mg/kg	0.12 U	0.12 U	0.11 U	0.15 U	0.1 U	0.12 U	0.86 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.11 U
1,1,2-Trichloroethane	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
1,1-Dichloroethane	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
1,1-Dichloroethene	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	0.29 U	0.29 U	0.29 U	0.38 U	0.26 U	0.29 U	2.2 U	0.29 U	0.31 U	0.29 U	0.29 U	0.31 U	0.27 U	0.29 U
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	0.29 U	0.29 U	0.29 U	0.38 U	0.26 U	0.29 U	2.2 U	0.29 U	0.31 U	0.29 U	0.29 U	0.31 U	0.27 U	0.29 U
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	0.29 U	0.29 U	0.29 U	0.38 U	0.26 U	0.29 U	2.2 U	0.29 U	0.31 U	0.29 U	0.29 U	0.31 U	0.27 U	0.29 U
1,2-Dichlorobenzene	mg/kg	0.12 U	0.12 U	0.11 U	0.15 U	0.1 U	0.12 U	0.86 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.11 U
1,2-Dichloroethane	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
1,2-Dichloropropane	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	0.12 U	0.12 U	0.11 U	0.15 U	0.1 U	0.12 U	0.86 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.11 U
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	0.12 U	0.12 U	0.11 U	0.15 U	0.1 U	0.12 U	0.86 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.11 U
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	0.87 U	0.88 U	0.86 U	1.1 U	0.78 U	0.88 U	6.5 U	0.87 U	0.92 U	0.88 U	0.88 U	0.92 U	0.82 U	0.86 U
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	2.9 U	2.9 U	2.9 U	3.8 U	2.6 U	2.9 U	22 U	2.9 U	3.1 U	2.9 U	2.9 U	3.1 U	2.7 U	2.9 U
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	2.9 U	2.9 U	2.9 U	3.8 U	2.6 U	2.9 U	22 U	2.9 U	3.1 U	2.9 U	2.9 U	3.1 U	2.7 U	2.9 U
Acetone	mg/kg	0.87 U	0.88 U	0.86 U	1.1 U	0.78 U	0.88 U	6.5 U	0.87 U	0.92 U	0.88 U	0.88 U	0.92 U	0.82 U	0.86 U
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	0.12 U	0.12 U	0.11 U	0.15 U	0.1 U	0.12 U	0.86 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.11 U
Bromoform	mg/kg	0.12 U	0.12 U	0.11 U	0.15 U	0.1 U	0.12 U	0.86 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.11 U
Bromomethane (Methyl bromide)	mg/kg	0.29 U	0.29 U	0.29 U	0.38 U	0.26 U	0.29 U	2.2 U	0.29 U	0.31 U	0.29 U	0.29 U	0.31 U	0.27 U	0.29 U
Carbon disulfide	mg/kg	0.29 U	0.29 U	0.29 U	0.38 U	0.26 U	0.29 U	2.2 U	0.29 U	0.31 U	0.29 U	0.29 U	0.31 U	0.27 U	0.29 U
Carbon tetrachloride	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
Chlorobenzene	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	0.29 U	0.29 U	0.29 U	0.38 U	0.26 U	0.29 U	2.2 U	0.29 U	0.31 U	0.29 U	0.29 U	0.31 U	0.27 U	0.29 U
Chloroform (Trichloromethane)	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
Chloromethane (Methyl chloride)	mg/kg	0.29 U	0.29 U	0.29 U	0.38 U	0.26 U	0.29 U	2.2 U	0.29 U	0.31 U	0.29 U	0.29 U	0.31 U	0.27 U	0.29 U
cis-1,2-Dichloroethene	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
cis-1,3-Dichloropropene	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
Cyclohexane	mg/kg	1.4 U	1.4 U	1.4 U	1.8 U	1.2 U	1.4 U	10 U	1.4 U	1.5 U	1.4 U	1.4 U	1.5 U	1.3 U	1.4 U
Dibromochloromethane	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	0.12 U	0.12 U	0.11 U	0.15 U	0.1 U	0.12 U	0.86 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.11 U
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	0.29 U	0.29 U	0.29 U	0.38 U	0.26 U	0.29 U	2.2 U	0.29 U	0.31 U	0.29 U	0.29 U	0.31 U	0.27 U	0.29 U
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	1.4 U	1.4 U	1.4 U	1.8 U	1.2 U	1.4 U	10 U	1.4 U	1.5 U	1.4 U	1.4 U	1.5 U	1.3 U	1.4 U
Methyl cyclohexane	mg/kg	1.4 U	1.4 U	1.4 U	1.8 U	1.2 U	1.4 U	0.2 J	1.4 U	1.5 U	1.4 U	1.4 U	1.5 U	1.3 U	1.4 U
Methyl tert butyl ether (MTBE)	mg/kg	0.29 U	0.29 U	0.29 U	0.38 U	0.26 U	0.29 U	2.2 U	0.29 U	0.31 U	0.29 U	0.29 U	0.31 U	0.27 U	0.29 U
Methylene chloride	mg/kg	0.29 U	0.29 U	0.29 U	0.38 U	0.26 U	0.29 U	2.2 U	0.29 U	0.31 U	0.29 U	0.29 U	0.31 U	0.27 U	0.29 U
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	0.12 U	0.12 U	0.11 U	0.15 U	0.1 U	0.12 U	0.16 J	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.11 U
trans-1,2-Dichloroethene	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
trans-1,3-Dichloropropene	mg/kg	0.058 U	0.058 U	0.057 U	0.075 U	0.052 U	0.059 U	0.43 U	0.058 U	0.061 U	0.059 U	0.058 U	0.061 U	0.055 U	0.057 U
Trichloroethene	mg/kg	0.058 U	0.016 J	0.014 J	0.075 U	0.052 U	0.059 U	**12[a]**	0.058 U	0.061 U	0.059 U	0.04 J	0.022 J	0.022 J	0.087
Trichlorofluoromethane (CFC-11)	mg/kg	0.12 U	0.12 U	0.11 U	0.15 U	0.1 U	0.12 U	0.86 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.11 U
Trifluorotrichloroethane (Freon 113)	mg/kg	0.29 U	0.29 U	0.29 U	0.38 U	0.26 U	0.29 U	2.2 U	0.29 U	0.31 U	0.29 U	0.29 U	0.31 U	0.27 U	0.29 U
Vinyl chloride	mg/kg	0.12 U	0.12 U	0.11 U	0.15 U	0.1 U	0.12 U	0.86 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.11 U
Xylenes (total)	mg/kg	0.17 U	0.18 U	0.17 U	0.23 U	0.16 U	0.18 U	0.28 J	0.17 U	0.18 U	0.18 U	0.18 U	0.18 U	0.16 U	0.17 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*	*SB1-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*	*SB2-04*
Sample Identification		*S-17360-071504-DCR-127*	*S-17360-071504-DCR-128*	*S-17360-071504-DCR-129*	*S-17360-071504-DCR-130*	*S-17360-071504-DCR-131*	*S-17360-071504-DCR-132*	*S-17360-071404-DCR-089*	*S-17360-071404-DCR-090*	*S-17360-071404-DCR-091*	*S-17360-071404-DCR-092*	*S-17360-071404-DCR-093*	*S-17360-071404-DCR-094*	*S-17360-071404-DCR-095*	*S-17360-071404-DCR-096*
Sample Date		*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*
Sample Depth		*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	95.8	97.5	96.7	97.6	98.0	87.1	95.0	97.5	97.6	97.0	95.0	98.1	96.3	96.8
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB2-04*	*SB2-04*	*SB2-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*
Sample Identification		*S-17360-071404-DCR-097*	*S-17360-071404-DCR-098*	*S-17360-071404-DCR-099*	*S-17360-071404-DCR-078*	*S-17360-071404-DCR-079*	*S-17360-071404-DCR-080*	*S-17360-071404-DCR-081*	*S-17360-071404-DCR-082*	*S-17360-071404-DCR-083*	*S-17360-071404-DCR-084*	*S-17360-071404-DCR-085*	*S-17360-071404-DCR-086*	*S-17360-071404-DCR-087*	*S-17360-071404-DCR-088*
Sample Date		*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*
Sample Depth		*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB2-04*	*SB2-04*	*SB2-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*
Sample Identification		*S-17360-071404-DCR-097*	*S-17360-071404-DCR-098*	*S-17360-071404-DCR-099*	*S-17360-071404-DCR-078*	*S-17360-071404-DCR-079*	*S-17360-071404-DCR-080*	*S-17360-071404-DCR-081*	*S-17360-071404-DCR-082*	*S-17360-071404-DCR-083*	*S-17360-071404-DCR-084*	*S-17360-071404-DCR-085*	*S-17360-071404-DCR-086*	*S-17360-071404-DCR-087*	*S-17360-071404-DCR-088*
Sample Date		*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*
Sample Depth		*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB2-04*	*SB2-04*	*SB2-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*
Sample Identification		*S-17360-071404-DCR-097*	*S-17360-071404-DCR-098*	*S-17360-071404-DCR-099*	*S-17360-071404-DCR-078*	*S-17360-071404-DCR-079*	*S-17360-071404-DCR-080*	*S-17360-071404-DCR-081*	*S-17360-071404-DCR-082*	*S-17360-071404-DCR-083*	*S-17360-071404-DCR-084*	*S-17360-071404-DCR-085*	*S-17360-071404-DCR-086*	*S-17360-071404-DCR-087*	*S-17360-071404-DCR-088*
Sample Date		*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*
Sample Depth		*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
1,1,2,2-Tetrachloroethane	mg/kg	0.11 U	0.12 U	0.11 U	0.22 U	0.13 U	0.12 U	0.16 U	0.11 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U
1,1,2-Trichloroethane	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
1,1-Dichloroethane	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
1,1-Dichloroethene	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	0.28 U	0.3 U	0.28 U	0.54 U	0.32 U	0.3 U	0.4 U	0.27 U	0.26 U	0.25 U	0.26 U	0.29 U	0.27 U	0.26 U
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	0.28 U	0.3 U	0.28 U	0.54 U	0.32 U	0.3 U	0.4 U	0.27 U	0.26 U	0.25 U	0.26 U	0.29 U	0.27 U	0.26 U
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	0.28 U	0.3 U	0.28 U	0.54 U	0.32 U	0.3 U	0.4 U	0.27 U	0.26 U	0.25 U	0.26 U	0.29 U	0.27 U	0.26 U
1,2-Dichlorobenzene	mg/kg	0.11 U	0.12 U	0.11 U	0.22 U	0.13 U	0.12 U	0.16 U	0.11 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U
1,2-Dichloroethane	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
1,2-Dichloropropane	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	0.11 U	0.12 U	0.11 U	0.22 U	0.13 U	0.12 U	0.16 U	0.11 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	0.11 U	0.12 U	0.11 U	0.22 U	0.13 U	0.12 U	0.16 U	0.11 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	0.83 U	0.89 U	0.83 U	1.6 U	0.95 U	0.89 U	1.2 U	0.8 U	0.77 U	0.75 U	0.79 U	0.86 U	0.82 U	0.79 U
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	2.8 U	3 U	2.8 U	5.4 U	3.2 U	3 U	4 U	2.7 U	2.6 U	2.5 U	2.6 U	2.9 U	2.7 U	2.6 U
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	2.8 U	3 U	2.8 U	5.4 U	3.2 U	3 U	4 U	2.7 U	2.6 U	2.5 U	2.6 U	2.9 U	2.7 U	2.6 U
Acetone	mg/kg	0.83 U	0.89 U	0.83 U	1.6 U	0.95 U	0.89 U	1.2 U	0.8 U	0.77 U	0.75 U	0.79 U	0.86 U	0.82 U	0.79 U
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	0.11 U	0.12 U	0.11 U	0.22 U	0.13 U	0.12 U	0.16 U	0.11 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U
Bromoform	mg/kg	0.11 U	0.12 U	0.11 U	0.22 U	0.13 U	0.12 U	0.16 U	0.11 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U
Bromomethane (Methyl bromide)	mg/kg	0.28 U	0.3 U	0.28 U	0.54 U	0.32 U	0.3 U	0.4 U	0.27 U	0.26 U	0.25 U	0.26 U	0.29 U	0.27 U	0.26 U
Carbon disulfide	mg/kg	0.28 U	0.3 U	0.28 U	0.54 U	0.32 U	0.3 U	0.4 U	0.27 U	0.26 U	0.25 U	0.26 U	0.29 U	0.27 U	0.26 U
Carbon tetrachloride	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
Chlorobenzene	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	0.28 U	0.3 U	0.28 U	0.54 U	0.32 U	0.3 U	0.4 U	0.27 U	0.26 U	0.25 U	0.26 U	0.29 U	0.27 U	0.26 U
Chloroform (Trichloromethane)	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
Chloromethane (Methyl chloride)	mg/kg	0.28 U	0.3 U	0.28 U	0.54 U	0.32 U	0.3 U	0.4 U	0.27 U	0.26 U	0.25 U	0.26 U	0.29 U	0.27 U	0.26 U
cis-1,2-Dichloroethene	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
cis-1,3-Dichloropropene	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
Cyclohexane	mg/kg	1.3 U	1.4 U	1.3 U	0.018 J	1.5 U	1.4 U	1.9 U	1.3 U	1.2 U	1.2 U	1.3 U	1.4 U	1.3 U	1.3 U
Dibromochloromethane	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	0.11 U	0.12 U	0.11 U	0.22 U	0.13 U	0.12 U	0.16 U	0.11 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	0.28 U	0.3 U	0.28 U	0.54 U	0.32 U	0.3 U	0.4 U	0.27 U	0.26 U	0.25 U	0.26 U	0.29 U	0.27 U	0.26 U
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	1.3 U	1.4 U	1.3 U	2.6 U	1.5 U	1.4 U	1.9 U	1.3 U	1.2 U	1.2 U	1.3 U	1.4 U	1.3 U	1.3 U
Methyl cyclohexane	mg/kg	1.3 U	1.4 U	1.3 U	0.1 J	1.5 U	1.4 U	1.9 U	1.3 U	1.2 U	1.2 U	1.3 U	1.4 U	1.3 U	1.3 U
Methyl tert butyl ether (MTBE)	mg/kg	0.28 U	0.3 U	0.28 U	0.54 U	0.32 U	0.3 U	0.4 U	0.27 U	0.26 U	0.25 U	0.26 U	0.29 U	0.27 U	0.26 U
Methylene chloride	mg/kg	0.28 U	0.3 U	0.28 U	0.54 U	0.32 U	0.3 U	0.4 U	0.27 U	0.26 U	0.25 U	0.26 U	0.29 U	0.27 U	0.26 U
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	0.11 U	0.12 U	0.11 U	0.042 J	0.13 U	0.12 U	0.16 U	0.11 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U
trans-1,2-Dichloroethene	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
trans-1,3-Dichloropropene	mg/kg	0.055 U	0.059 U	0.055 U	0.11 U	0.063 U	0.059 U	0.079 U	0.053 U	0.051 U	0.05 U	0.053 U	0.058 U	0.055 U	0.053 U
Trichloroethene	mg/kg	0.063	0.027 J	0.046 J	2.8	0.063 U	0.02 J	0.079 U	0.078	0.024 J	0.04 J	0.031 J	0.058 U	0.02 J	0.053 U
Trichlorofluoromethane (CFC-11)	mg/kg	0.11 U	0.12 U	0.11 U	0.22 U	0.13 U	0.12 U	0.16 U	0.11 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U
Trifluorotrichloroethane (Freon 113)	mg/kg	0.28 U	0.3 U	0.28 U	0.54 U	0.32 U	0.3 U	0.4 U	0.27 U	0.26 U	0.25 U	0.26 U	0.29 U	0.27 U	0.26 U
Vinyl chloride	mg/kg	0.11 U	0.12 U	0.11 U	0.22 U	0.13 U	0.12 U	0.16 U	0.11 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U
Xylenes (total)	mg/kg	0.17 U	0.18 U	0.17 U	0.084 J	0.19 U	0.18 U	0.24 U	0.16 U	0.15 U	0.15 U	0.16 U	0.17 U	0.16 U	0.16 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB2-04*	*SB2-04*	*SB2-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*	*SB3-04*
Sample Identification		*S-17360-071404-DCR-097*	*S-17360-071404-DCR-098*	*S-17360-071404-DCR-099*	*S-17360-071404-DCR-078*	*S-17360-071404-DCR-079*	*S-17360-071404-DCR-080*	*S-17360-071404-DCR-081*	*S-17360-071404-DCR-082*	*S-17360-071404-DCR-083*	*S-17360-071404-DCR-084*	*S-17360-071404-DCR-085*	*S-17360-071404-DCR-086*	*S-17360-071404-DCR-087*	*S-17360-071404-DCR-088*
Sample Date		*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*	*7/14/2004*
Sample Depth		*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	98.1	97.0	97.5	95.8	98.2	98.2	95.9	98.1	97.7	97.9	98.0	98.0	96.3	96.7
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB5-04*	*SB5-04*	*SB5-04*
Sample Identification		*S-17360-071504-DCR-111*	*S-17360-071504-DCR-112*	*S-17360-071504-DCR-113*	*S-17360-071504-DCR-114*	*S-17360-071504-DCR-115*	*S-17360-071504-DCR-116*	*S-17360-071504-DCR-117*	*S-17360-071504-DCR-118*	*S-17360-071504-DCR-119*	*S-17360-071504-DCR-120*	*S-17360-071504-DCR-121*	*S-17360-071504-DCR-100*	*S-17360-071504-DCR-101*	*S-17360-071504-DCR-102*
Sample Date		*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*
Sample Depth		*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB5-04*	*SB5-04*	*SB5-04*
Sample Identification		*S-17360-071504-DCR-111*	*S-17360-071504-DCR-112*	*S-17360-071504-DCR-113*	*S-17360-071504-DCR-114*	*S-17360-071504-DCR-115*	*S-17360-071504-DCR-116*	*S-17360-071504-DCR-117*	*S-17360-071504-DCR-118*	*S-17360-071504-DCR-119*	*S-17360-071504-DCR-120*	*S-17360-071504-DCR-121*	*S-17360-071504-DCR-100*	*S-17360-071504-DCR-101*	*S-17360-071504-DCR-102*
Sample Date		*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*
Sample Depth		*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		SB4-04	SB4-04	SB4-04	SB4-04	SB4-04	SB4-04	SB4-04	SB4-04	SB4-04	SB4-04	SB4-04	SB5-04	SB5-04	SB5-04
Sample Identification		S-17360-071504-DCR-111	S-17360-071504-DCR-112	S-17360-071504-DCR-113	S-17360-071504-DCR-114	S-17360-071504-DCR-115	S-17360-071504-DCR-116	S-17360-071504-DCR-117	S-17360-071504-DCR-118	S-17360-071504-DCR-119	S-17360-071504-DCR-120	S-17360-071504-DCR-121	S-17360-071504-DCR-100	S-17360-071504-DCR-101	S-17360-071504-DCR-102
Sample Date		7/15/2004	7/15/2004	7/15/2004	7/15/2004	7/15/2004	7/15/2004	7/15/2004	7/15/2004	7/15/2004	7/15/2004	7/15/2004	7/15/2004	7/15/2004	7/15/2004
Sample Depth		(0-2) ft	(2-4) ft	(4-6) ft	(6-8) ft	(8-10) ft	(10-12) ft	(12-14) ft	(14-16) ft	(16-18) ft	(18-20) ft	(20-22) ft	(0-2) ft	(2-4) ft	(4-6) ft
Sample Type															
AOI	Units	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
1,1,2,2-Tetrachloroethane	mg/kg	0.13 U	0.15 U	0.16 U	0.12 U	0.12 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.4 U	0.23 U	0.13 U
1,1,2-Trichloroethane	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
1,1-Dichloroethane	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
1,1-Dichloroethene	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	0.33 U	0.38 U	0.41 U	0.3 U	0.29 U	0.33 U	0.28 U	0.31 U	0.29 U	0.27 U	0.27 U	1 U	0.57 U	0.33 U
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	0.33 U	0.38 U	0.41 U	0.3 U	0.29 U	0.33 U	0.28 U	0.31 U	0.29 U	0.27 U	0.27 U	1 U	0.57 U	0.33 U
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	0.33 U	0.38 U	0.41 U	0.3 U	0.29 U	0.33 U	0.28 U	0.31 U	0.29 U	0.27 U	0.27 U	1 U	0.57 U	0.33 U
1,2-Dichlorobenzene	mg/kg	0.13 U	0.15 U	0.16 U	0.12 U	0.12 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.4 U	0.23 U	0.13 U
1,2-Dichloroethane	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
1,2-Dichloropropane	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	0.13 U	0.15 U	0.16 U	0.12 U	0.12 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.4 U	0.23 U	0.13 U
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	0.13 U	0.15 U	0.16 U	0.12 U	0.12 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.4 U	0.23 U	0.13 U
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	0.99 U	1.1 U	1.2 U	0.89 U	0.88 U	0.98 U	0.85 U	0.92 U	0.88 U	0.8 U	0.8 U	3 U	1.7 U	0.99 U
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	3.3 U	3.8 U	4.1 U	3 U	2.9 U	3.3 U	2.8 U	3.1 U	2.9 U	2.7 U	2.7 U	10 U	5.7 U	3.3 U
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	3.3 U	3.8 U	4.1 U	3 U	2.9 U	3.3 U	2.8 U	3.1 U	2.9 U	2.7 U	2.7 U	10 U	5.7 U	3.3 U
Acetone	mg/kg	0.99 U	1.1 U	1.2 U	0.89 U	0.88 U	0.98 U	0.85 U	0.92 U	0.88 U	0.8 U	0.8 U	3 U	1.7 U	0.99 U
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.033 J	0.11 U	0.066 U
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	0.13 U	0.15 U	0.16 U	0.12 U	0.12 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.4 U	0.23 U	0.13 U
Bromoform	mg/kg	0.13 U	0.15 U	0.16 U	0.12 U	0.12 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.4 U	0.23 U	0.13 U
Bromomethane (Methyl bromide)	mg/kg	0.33 U	0.38 U	0.41 U	0.3 U	0.29 U	0.33 U	0.28 U	0.31 U	0.29 U	0.27 U	0.27 U	1 U	0.57 U	0.33 U
Carbon disulfide	mg/kg	0.33 U	0.38 U	0.41 U	0.3 U	0.29 U	0.33 U	0.28 U	0.31 U	0.29 U	0.27 U	0.27 U	1 U	0.57 U	0.33 U
Carbon tetrachloride	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
Chlorobenzene	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	0.33 U	0.38 U	0.41 U	0.3 U	0.29 U	0.33 U	0.28 U	0.31 U	0.29 U	0.27 U	0.27 U	1 U	0.57 U	0.33 U
Chloroform (Trichloromethane)	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
Chloromethane (Methyl chloride)	mg/kg	0.33 U	0.027 J	0.41 U	0.3 U	0.29 U	0.021 J	0.018 J	0.31 U	0.29 U	0.27 U	0.023 J	1 U	0.57 U	0.33 U
cis-1,2-Dichloroethene	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
cis-1,3-Dichloropropene	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
Cyclohexane	mg/kg	1.6 U	1.8 U	2 U	1.4 U	1.4 U	1.6 U	1.4 U	1.5 U	1.4 U	1.3 U	1.3 U	0.031 J	2.7 U	1.6 U
Dibromochloromethane	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	0.13 U	0.15 U	0.16 U	0.12 U	0.12 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.4 U	0.23 U	0.13 U
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	0.33 U	0.38 U	0.41 U	0.3 U	0.29 U	0.33 U	0.28 U	0.31 U	0.29 U	0.27 U	0.27 U	0.025 J	0.57 U	0.33 U
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	1.6 U	1.8 U	2 U	1.4 U	1.4 U	1.6 U	1.4 U	1.5 U	1.4 U	1.3 U	1.3 U	4.8 U	2.7 U	1.6 U
Methyl cyclohexane	mg/kg	1.6 U	1.8 U	2 U	1.4 U	1.4 U	1.6 U	1.4 U	1.5 U	1.4 U	1.3 U	1.3 U	0.2 J	2.7 U	1.6 U
Methyl tert butyl ether (MTBE)	mg/kg	0.33 U	0.38 U	0.41 U	0.3 U	0.29 U	0.33 U	0.28 U	0.31 U	0.29 U	0.27 U	0.27 U	1 U	0.57 U	0.33 U
Methylene chloride	mg/kg	0.33 U	0.38 U	0.41 U	0.3 U	0.29 U	0.33 U	0.28 U	0.31 U	0.29 U	0.27 U	0.27 U	1 U	0.57 U	0.33 U
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	0.13 U	0.15 U	0.16 U	0.12 U	0.12 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.14 J	0.23 U	0.13 U
trans-1,2-Dichloroethene	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
trans-1,3-Dichloropropene	mg/kg	0.066 U	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.061 U	0.059 U	0.053 U	0.053 U	0.2 U	0.11 U	0.066 U
Trichloroethene	mg/kg	0.19	0.076 U	0.082 U	0.059 U	0.059 U	0.066 U	0.057 U	0.041 J	0.059 U	0.053 U	0.018 J	5.7	0.11 U	0.066 U
Trichlorofluoromethane (CFC-11)	mg/kg	0.13 U	0.15 U	0.16 U	0.12 U	0.12 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.4 U	0.23 U	0.13 U
Trifluorotrichloroethane (Freon 113)	mg/kg	0.33 U	0.38 U	0.41 U	0.3 U	0.29 U	0.33 U	0.28 U	0.31 U	0.29 U	0.27 U	0.27 U	1 U	0.57 U	0.33 U
Vinyl chloride	mg/kg	0.13 U	0.15 U	0.16 U	0.12 U	0.12 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.4 U	0.23 U	0.13 U
Xylenes (total)	mg/kg	0.2 U	0.23 U	0.25 U	0.18 U	0.18 U	0.2 U	0.17 U	0.18 U	0.18 U	0.16 U	0.16 U	0.2 J	0.34 U	0.2 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB4-04*	*SB5-04*	*SB5-04*	*SB5-04*
Sample Identification		*S-17360-071504-DCR-111*	*S-17360-071504-DCR-112*	*S-17360-071504-DCR-113*	*S-17360-071504-DCR-114*	*S-17360-071504-DCR-115*	*S-17360-071504-DCR-116*	*S-17360-071504-DCR-117*	*S-17360-071504-DCR-118*	*S-17360-071504-DCR-119*	*S-17360-071504-DCR-120*	*S-17360-071504-DCR-121*	*S-17360-071504-DCR-100*	*S-17360-071504-DCR-101*	*S-17360-071504-DCR-102*
Sample Date		*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*
Sample Depth		*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	94.3	96.8	98.3	98.1	97.1	95.2	96.2	97.2	98.5	97.4	95.5	95.1	97.5	97.9
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB6-05*	*SB6-05*	*SB6-05*	*SB6-05*	*SB6-05*	*SB6-05*
Sample Identification		*S-17360-071504-DCR-103*	*S-17360-071504-DCR-104*	*S-17360-071504-DCR-105*	*S-17360-071504-DCR-106*	*S-17360-071504-DCR-107*	*S-17360-071504-DCR-108*	*S-17360-071504-DCR-109*	*S-17360-071504-DCR-110*	*SO-17360-071105-DCR-419*	*SO-17360-071105-DCR-420*	*SO-17360-071105-DCR-421*	*SO-17360-071105-DCR-422*	*SO-17360-071105-DCR-423*	*SO-17360-071105-DCR-429*
Sample Date		*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*
Sample Depth		*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(8-10) ft*
Sample Type															*Duplicate*
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB6-05*	*SB6-05*	*SB6-05*	*SB6-05*	*SB6-05*	*SB6-05*
Sample Identification		*S-17360-071504-DCR-103*	*S-17360-071504-DCR-104*	*S-17360-071504-DCR-105*	*S-17360-071504-DCR-106*	*S-17360-071504-DCR-107*	*S-17360-071504-DCR-108*	*S-17360-071504-DCR-109*	*S-17360-071504-DCR-110*	*SO-17360-071105-DCR-419*	*SO-17360-071105-DCR-420*	*SO-17360-071105-DCR-421*	*SO-17360-071105-DCR-422*	*SO-17360-071105-DCR-423*	*SO-17360-071105-DCR-429*
Sample Date		*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*
Sample Depth		*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(8-10) ft*
Sample Type															*Duplicate*
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB6-05*	*SB6-05*	*SB6-05*	*SB6-05*	*SB6-05*	*SB6-05*
Sample Identification		*S-17360-071504-DCR-103*	*S-17360-071504-DCR-104*	*S-17360-071504-DCR-105*	*S-17360-071504-DCR-106*	*S-17360-071504-DCR-107*	*S-17360-071504-DCR-108*	*S-17360-071504-DCR-109*	*S-17360-071504-DCR-110*	*SO-17360-071105-DCR-419*	*SO-17360-071105-DCR-420*	*SO-17360-071105-DCR-421*	*SO-17360-071105-DCR-422*	*SO-17360-071105-DCR-423*	*SO-17360-071105-DCR-429*
Sample Date		*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*
Sample Depth		*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(8-10) ft*
Sample Type															*Duplicate*
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
1,1,2,2-Tetrachloroethane	mg/kg	0.12 U	0.12 U	0.11 U	0.099 U	0.11 U	0.11 U	0.12 U	0.14 U	0.08 U	0.081 U	0.076 U	0.076 U	0.075 U	0.079 U
1,1,2-Trichloroethane	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
1,1-Dichloroethane	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
1,1-Dichloroethene	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	0.3 U	0.3 U	0.28 U	0.25 U	0.28 U	0.27 U	0.31 U	0.35 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	0.3 U	0.3 U	0.28 U	0.25 U	0.28 U	0.27 U	0.31 U	0.35 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	0.3 U	0.3 U	0.28 U	0.25 U	0.28 U	0.27 U	0.31 U	0.35 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U
1,2-Dichlorobenzene	mg/kg	0.12 U	0.12 U	0.11 U	0.099 U	0.11 U	0.11 U	0.12 U	0.14 U	0.08 U	0.081 U	0.076 U	0.076 U	0.075 U	0.079 U
1,2-Dichloroethane	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
1,2-Dichloropropane	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	0.12 U	0.12 U	0.11 U	0.099 U	0.11 U	0.11 U	0.12 U	0.14 U	0.08 U	0.081 U	0.076 U	0.076 U	0.075 U	0.079 U
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	0.12 U	0.12 U	0.11 U	0.099 U	0.11 U	0.11 U	0.12 U	0.14 U	0.08 U	0.081 U	0.076 U	0.076 U	0.075 U	0.079 U
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	0.059 J	0.9 U	0.83 U	0.75 U	0.84 U	0.82 U	0.93 U	1.1 U	0.6 U	0.61 U	0.57 U	0.57 U	0.56 U	0.59 U
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	3 U	3 U	2.8 U	2.5 U	2.8 U	2.7 U	3.1 U	3.5 U	2 U	2 U	1.9 U	1.9 U	1.9 U	2 U
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	3 U	3 U	2.8 U	2.5 U	2.8 U	2.7 U	3.1 U	3.5 U	2 U	2 U	1.9 U	1.9 U	1.9 U	2 U
Acetone	mg/kg	0.91 U	0.9 U	0.83 U	0.75 U	0.84 U	0.82 U	0.93 U	1.1 U	0.6 U	0.61 U	0.57 U	0.57 U	0.56 U	0.59 U
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	0.12 U	0.12 U	0.11 U	0.099 U	0.11 U	0.11 U	0.12 U	0.14 U	0.08 UJ	0.081 UJ	0.076 UJ	0.076 UJ	0.075 UJ	0.079 U
Bromoform	mg/kg	0.12 U	0.12 U	0.11 U	0.099 U	0.11 U	0.11 U	0.12 U	0.14 U	0.08 U	0.081 U	0.076 U	0.076 U	0.075 U	0.079 U
Bromomethane (Methyl bromide)	mg/kg	0.3 U	0.3 U	0.28 U	0.25 U	0.28 U	0.27 U	0.31 U	0.35 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U
Carbon disulfide	mg/kg	0.3 U	0.3 U	0.28 U	0.25 U	0.28 U	0.27 U	0.31 U	0.35 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U
Carbon tetrachloride	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
Chlorobenzene	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	0.3 U	0.3 U	0.28 U	0.25 U	0.28 U	0.27 U	0.31 U	0.35 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U
Chloroform (Trichloromethane)	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
Chloromethane (Methyl chloride)	mg/kg	0.3 U	0.3 U	0.28 U	0.25 U	0.28 U	0.27 U	0.31 U	0.35 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U
cis-1,2-Dichloroethene	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
cis-1,3-Dichloropropene	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
Cyclohexane	mg/kg	1.5 U	1.4 U	1.3 U	1.2 U	1.3 U	1.3 U	1.5 U	1.7 U	0.96 U	0.97 U	0.91 U	0.91 U	0.9 U	0.95 U
Dibromochloromethane	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	0.12 U	0.12 U	0.11 U	0.099 U	0.11 U	0.11 U	0.12 U	0.14 U	0.08 U	0.081 U	0.076 U	0.076 U	0.075 U	0.079 U
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	0.3 U	0.3 U	0.28 U	0.25 U	0.28 U	0.27 U	0.31 U	0.35 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	1.5 U	1.4 U	1.3 U	1.2 U	1.3 U	1.3 U	1.5 U	1.7 U	0.053 J	0.97 U	0.91 U	0.91 U	0.9 U	0.95 U
Methyl cyclohexane	mg/kg	1.5 U	1.4 U	1.3 U	1.2 U	1.3 U	1.3 U	1.5 U	1.7 U	0.96 U	0.97 U	0.91 U	0.91 U	0.9 U	0.95 U
Methyl tert butyl ether (MTBE)	mg/kg	0.3 U	0.3 U	0.28 U	0.25 U	0.28 U	0.27 U	0.31 U	0.35 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U
Methylene chloride	mg/kg	0.3 U	0.3 U	0.28 U	0.25 U	0.28 U	0.27 U	0.31 U	0.35 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	0.12 U	0.12 U	0.11 U	0.099 U	0.11 U	0.11 U	0.12 U	0.14 U	0.08 U	0.081 U	0.076 U	0.076 U	0.075 U	0.079 U
trans-1,2-Dichloroethene	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 U	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
trans-1,3-Dichloropropene	mg/kg	0.061 U	0.06 U	0.056 U	0.05 U	0.056 U	0.055 U	0.062 U	0.071 U	0.04 UJ	0.04 UJ	0.038 UJ	0.038 UJ	0.038 UJ	0.04 U
Trichloroethene	mg/kg	0.061 U	0.06 U	0.025 J	0.05 U	0.02 J	0.025 J	0.062 U	0.071 U	0.015 J	0.04 U	0.038 U	0.038 U	0.038 U	0.04 U
Trichlorofluoromethane (CFC-11)	mg/kg	0.12 U	0.12 U	0.11 U	0.099 U	0.11 U	0.11 U	0.12 U	0.14 U	0.08 U	0.081 U	0.076 U	0.076 U	0.075 U	0.079 U
Trifluorotrichloroethane (Freon 113)	mg/kg	0.3 U	0.3 U	0.28 U	0.25 U	0.28 U	0.27 U	0.31 U	0.35 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U
Vinyl chloride	mg/kg	0.12 U	0.12 U	0.11 U	0.099 U	0.11 U	0.11 U	0.12 U	0.14 U	0.08 U	0.081 U	0.076 U	0.076 U	0.075 U	0.079 U
Xylenes (total)	mg/kg	0.18 U	0.18 U	0.17 U	0.15 U	0.17 U	0.16 U	0.19 U	0.21 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.12 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB5-04*	*SB6-05*	*SB6-05*	*SB6-05*	*SB6-05*	*SB6-05*	*SB6-05*
Sample Identification		*S-17360-071504-DCR-103*	*S-17360-071504-DCR-104*	*S-17360-071504-DCR-105*	*S-17360-071504-DCR-106*	*S-17360-071504-DCR-107*	*S-17360-071504-DCR-108*	*S-17360-071504-DCR-109*	*S-17360-071504-DCR-110*	*SO-17360-071105-DCR-419*	*SO-17360-071105-DCR-420*	*SO-17360-071105-DCR-421*	*SO-17360-071105-DCR-422*	*SO-17360-071105-DCR-423*	*SO-17360-071105-DCR-429*
Sample Date		*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/15/2004*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*
Sample Depth		*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(20-22) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(8-10) ft*
Sample Type															*Duplicate*
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	97.5	97.2	98.0	96.6	97.7	97.4	97.0	93.0	96.8	96.8	98.0	98.6	97.5	97.5
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB6-05*	*SB6-05*	*SB6-05*	*SB6-05*	*SB6-05*	*SB7-05*	*SB7-05*	*SB7-05*	*SB7-05*	*SB7-05*	*SB7-05*	*SB7-05*	*SB7-05*	*SB7-05*
Sample Identification		*SO-17360-071105-DCR-424*	*SO-17360-071105-DCR-425*	*SO-17360-071105-DCR-426*	*SO-17360-071105-DCR-427*	*SO-17360-071105-DCR-428*	*SO-17360-071105-DCR-450*	*SO-17360-071105-DCR-451*	*SO-17360-071105-DCR-452*	*SO-17360-071105-DCR-453*	*SO-17360-071105-DCR-454*	*SO-17360-071105-DCR-455*	*SO-17360-071105-DCR-456*	*SO-17360-071105-DCR-457*	*SO-17360-071105-DCR-458*
Sample Date		*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*
Sample Depth		*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		SB6-05	SB6-05	SB6-05	SB6-05	SB6-05	SB7-05	SB7-05	SB7-05	SB7-05	SB7-05	SB7-05	SB7-05	SB7-05	SB7-05
Sample Identification		SO-17360-071105-DCR-424	SO-17360-071105-DCR-425	SO-17360-071105-DCR-426	SO-17360-071105-DCR-427	SO-17360-071105-DCR-428	SO-17360-071105-DCR-450	SO-17360-071105-DCR-451	SO-17360-071105-DCR-452	SO-17360-071105-DCR-453	SO-17360-071105-DCR-454	SO-17360-071105-DCR-455	SO-17360-071105-DCR-456	SO-17360-071105-DCR-457	SO-17360-071105-DCR-458
Sample Date		7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005
Sample Depth		(10-12) ft	(12-14) ft	(14-16) ft	(16-18) ft	(18-20) ft	(0-2) ft	(2-4) ft	(4-6) ft	(6-8) ft	(8-10) ft	(10-12) ft	(12-14) ft	(14-16) ft	(16-18) ft
Sample Type															
AOI	Units	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		SB6-05	SB6-05	SB6-05	SB6-05	SB6-05	SB7-05	SB7-05	SB7-05	SB7-05	SB7-05	SB7-05	SB7-05	SB7-05	SB7-05
Sample Identification		SO-17360-071105-DCR-424	SO-17360-071105-DCR-425	SO-17360-071105-DCR-426	SO-17360-071105-DCR-427	SO-17360-071105-DCR-428	SO-17360-071105-DCR-450	SO-17360-071105-DCR-451	SO-17360-071105-DCR-452	SO-17360-071105-DCR-453	SO-17360-071105-DCR-454	SO-17360-071105-DCR-455	SO-17360-071105-DCR-456	SO-17360-071105-DCR-457	SO-17360-071105-DCR-458
Sample Date		7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005
Sample Depth		(10-12) ft	(12-14) ft	(14-16) ft	(16-18) ft	(18-20) ft	(0-2) ft	(2-4) ft	(4-6) ft	(6-8) ft	(8-10) ft	(10-12) ft	(12-14) ft	(14-16) ft	(16-18) ft
Sample Type															
AOI	Units	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
1,1,2,2-Tetrachloroethane	mg/kg	0.096 U	0.076 U	0.11 U	0.08 U	0.084 U	0.08 U	0.15 U	0.078 U	0.074 U	0.078 U	0.082 U	0.077 U	0.089 U	0.1 U
1,1,2-Trichloroethane	mg/kg	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
1,1-Dichloroethane	mg/kg	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
1,1-Dichloroethene	mg/kg	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	0.24 U	0.19 U	0.26 U	0.2 U	0.21 U	0.2 U	0.37 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.22 U	0.26 U
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	0.24 U	0.19 U	0.26 U	0.2 U	0.21 U	0.2 U	0.37 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.22 U	0.26 U
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	0.24 U	0.19 U	0.26 U	0.2 U	0.21 U	0.2 U	0.37 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.22 U	0.26 U
1,2-Dichlorobenzene	mg/kg	0.096 U	0.076 U	0.11 U	0.08 U	0.084 U	0.08 U	0.15 U	0.078 U	0.074 U	0.078 U	0.082 U	0.077 U	0.089 U	0.1 U
1,2-Dichloroethane	mg/kg	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
1,2-Dichloropropane	mg/kg	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	0.096 U	0.076 U	0.11 U	0.08 U	0.084 U	0.08 U	0.15 U	0.078 U	0.074 U	0.078 U	0.082 U	0.077 U	0.089 U	0.1 U
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	0.096 U	0.076 U	0.11 U	0.08 U	0.084 U	0.08 U	0.15 U	0.078 U	0.074 U	0.078 U	0.082 U	0.077 U	0.089 U	0.1 U
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	0.72 U	0.57 U	0.79 U	0.6 U	0.63 U	0.6 U	1.1 U	0.58 U	0.55 U	0.58 U	0.61 U	0.58 U	0.67 U	0.78 U
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	2.4 U	1.9 U	2.6 U	2 U	2.1 U	2 U	3.7 U	1.9 U	1.8 U	1.9 U	2 U	1.9 U	2.2 U	2.6 U
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	2.4 U	1.9 U	2.6 U	2 U	2.1 U	2 U	3.7 U	1.9 U	1.8 U	1.9 U	2 U	1.9 U	2.2 U	2.6 U
Acetone	mg/kg	0.72 U	0.57 U	0.79 U	0.6 U	0.63 U	0.6 U	1.1 U	0.58 U	0.55 U	0.58 U	0.61 U	0.58 U	0.67 U	0.78 U
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	0.096 UJ	0.076 UJ	0.11 UJ	0.08 UJ	0.084 U	0.08 UJ	0.15 UJ	0.078 UJ	0.074 UJ	0.078 UJ	0.082 UJ	0.077 UJ	0.089 UJ	0.1 UJ
Bromoform	mg/kg	0.096 U	0.076 U	0.11 U	0.08 U	0.084 U	0.08 U	0.15 U	0.078 U	0.074 U	0.078 U	0.082 U	0.077 U	0.089 U	0.1 U
Bromomethane (Methyl bromide)	mg/kg	0.24 U	0.19 U	0.26 U	0.2 U	0.21 U	0.2 U	0.37 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.22 U	0.26 U
Carbon disulfide	mg/kg	0.24 U	0.19 U	0.26 U	0.2 U	0.21 U	0.2 U	0.37 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.22 U	0.26 U
Carbon tetrachloride	mg/kg	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
Chlorobenzene	mg/kg	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	0.24 U	0.19 U	0.26 U	0.2 U	0.21 U	0.2 U	0.37 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.22 U	0.26 U
Chloroform (Trichloromethane)	mg/kg	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
Chloromethane (Methyl chloride)	mg/kg	0.24 U	0.19 U	0.26 U	0.2 U	0.21 U	0.2 U	0.37 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.22 U	0.26 U
cis-1,2-Dichloroethene	mg/kg	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
cis-1,3-Dichloropropene	mg/kg	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
Cyclohexane	mg/kg	1.2 U	0.91 U	1.3 U	0.96 U	1 U	0.008 J	1.8 U	0.93 U	0.88 U	0.93 U	0.98 U	0.92 U	1.1 U	1.2 U
Dibromochloromethane	mg/kg	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	0.096 U	0.076 U	0.11 U	0.08 U	0.084 U	0.08 U	0.15 U	0.078 U	0.074 U	0.078 U	0.082 U	0.077 U	0.089 U	0.1 U
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	0.048 U	0.038 U	0.053 U	0.016 J	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	0.24 U	0.19 U	0.26 U	0.2 U	0.21 U	0.2 U	0.37 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.22 U	0.26 U
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	1.2 U	0.91 U	1.3 U	0.59 J	1 U	0.96 U	1.8 U	0.93 U	0.88 U	0.93 U	0.98 U	0.92 U	0.19 J	0.14 J
Methyl cyclohexane	mg/kg	1.2 U	0.91 U	1.3 U	0.96 U	1 U	0.026 J	0.032 J	0.93 U	0.88 U	0.93 U	0.98 U	0.92 U	1.1 U	1.2 U
Methyl tert butyl ether (MTBE)	mg/kg	0.24 U	0.19 U	0.26 U	0.2 U	0.21 U	0.2 U	0.37 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.22 U	0.26 U
Methylene chloride	mg/kg	0.24 U	0.19 U	0.26 U	0.2 U	0.21 U	0.2 U	0.37 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.22 U	0.26 U
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	0.096 U	0.076 U	0.11 U	0.08 U	0.084 U	0.08 U	0.15 U	0.078 U	0.074 U	0.078 U	0.082 U	0.077 U	0.089 U	0.1 U
trans-1,2-Dichloroethene	mg/kg	0.048 U	0.038 U	0.053 U	0.04 U	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
trans-1,3-Dichloropropene	mg/kg	0.048 UJ	0.038 UJ	0.053 UJ	0.04 UJ	0.042 U	0.04 U	0.074 U	0.039 U	0.037 U	0.039 U	0.041 U	0.038 U	0.044 U	0.052 U
Trichloroethene	mg/kg	0.048 U	0.038 U	0.053 U	0.014 J	0.042 U	1.6	2.5	0.016 J	0.037 U	0.039 U	0.041 U	0.038 U	0.29	0.38
Trichlorofluoromethane (CFC-11)	mg/kg	0.096 U	0.076 U	0.11 U	0.08 U	0.084 U	0.08 U	0.15 U	0.078 U	0.074 U	0.078 U	0.082 U	0.077 U	0.089 U	0.1 U
Trifluorotrichloroethane (Freon 113)	mg/kg	0.24 U	0.19 U	0.26 U	0.2 U	0.21 U	0.2 U	0.37 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.22 U	0.26 U
Vinyl chloride	mg/kg	0.096 U	0.076 U	0.11 U	0.08 U	0.084 U	0.08 U	0.15 U	0.078 U	0.074 U	0.078 U	0.082 U	0.077 U	0.089 U	0.1 U
Xylenes (total)	mg/kg	0.14 U	0.11 U	0.16 U	0.098 J	0.13 U	0.016 J	0.22 U	0.12 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U	0.16 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		SB6-05	SB6-05	SB6-05	SB6-05	SB6-05	SB7-05	SB7-05	SB7-05	SB7-05	SB7-05	SB7-05	SB7-05	SB7-05	SB7-05
Sample Identification		SO-17360-071105-DCR-424	SO-17360-071105-DCR-425	SO-17360-071105-DCR-426	SO-17360-071105-DCR-427	SO-17360-071105-DCR-428	SO-17360-071105-DCR-450	SO-17360-071105-DCR-451	SO-17360-071105-DCR-452	SO-17360-071105-DCR-453	SO-17360-071105-DCR-454	SO-17360-071105-DCR-455	SO-17360-071105-DCR-456	SO-17360-071105-DCR-457	SO-17360-071105-DCR-458
Sample Date		7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005
Sample Depth		(10-12) ft	(12-14) ft	(14-16) ft	(16-18) ft	(18-20) ft	(0-2) ft	(2-4) ft	(4-6) ft	(6-8) ft	(8-10) ft	(10-12) ft	(12-14) ft	(14-16) ft	(16-18) ft
Sample Type															
AOI	Units	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	97.7	95.7	91.0	96.5	97.4	97.3	97.8	96.0	98.1	98.1	97.4	97.9	96.7	97.2
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB7-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB9-05*	*SB9-05*	*SB9-05*
Sample Identification		*SO-17360-071105-DCR-459*	*SO-17360-071205-DCR-471*	*SO-17360-071205-DCR-472*	*SO-17360-071205-DCR-473*	*SO-17360-071205-DCR-474*	*SO-17360-071205-DCR-475*	*SO-17360-071205-DCR-476*	*SO-17360-071205-DCR-477*	*SO-17360-071205-DCR-478*	*SO-17360-071205-DCR-479*	*SO-17360-071205-DCR-480*	*SO-17360-071105-DCR-430*	*SO-17360-071105-DCR-431*	*SO-17360-071105-DCR-432*
Sample Date		*7/11/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*
Sample Depth		*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB7-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB9-05*	*SB9-05*	*SB9-05*
Sample Identification		*SO-17360-071105-DCR-459*	*SO-17360-071205-DCR-471*	*SO-17360-071205-DCR-472*	*SO-17360-071205-DCR-473*	*SO-17360-071205-DCR-474*	*SO-17360-071205-DCR-475*	*SO-17360-071205-DCR-476*	*SO-17360-071205-DCR-477*	*SO-17360-071205-DCR-478*	*SO-17360-071205-DCR-479*	*SO-17360-071205-DCR-480*	*SO-17360-071105-DCR-430*	*SO-17360-071105-DCR-431*	*SO-17360-071105-DCR-432*
Sample Date		*7/11/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*
Sample Depth		*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB7-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB9-05*	*SB9-05*	*SB9-05*
Sample Identification		*SO-17360-071105-DCR-459*	*SO-17360-071205-DCR-471*	*SO-17360-071205-DCR-472*	*SO-17360-071205-DCR-473*	*SO-17360-071205-DCR-474*	*SO-17360-071205-DCR-475*	*SO-17360-071205-DCR-476*	*SO-17360-071205-DCR-477*	*SO-17360-071205-DCR-478*	*SO-17360-071205-DCR-479*	*SO-17360-071205-DCR-480*	*SO-17360-071105-DCR-430*	*SO-17360-071105-DCR-431*	*SO-17360-071105-DCR-432*
Sample Date		*7/11/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*
Sample Depth		*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	0.04 U	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U	0.038 U	0.04 U	0.042 U
1,1,2,2-Tetrachloroethane	mg/kg	0.081 U	2.7 U	0.08 U	0.078 U	0.078 U	0.08 U	0.3 U	0.092 U	0.08 U	0.095 U	0.074 U	0.076 U	0.08 U	0.083 U
1,1,2-Trichloroethane	mg/kg	0.04 U	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U	0.038 U	0.04 U	0.042 U
1,1-Dichloroethane	mg/kg	0.04 U	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U	0.038 U	0.04 U	0.042 U
1,1-Dichloroethene	mg/kg	0.04 U	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U	0.038 U	0.04 U	0.042 U
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	0.2 U	6.7 U	0.2 U	0.2 U	0.19 U	0.2 U	0.75 U	0.23 U	0.2 U	0.24 U	0.18 U	0.19 U	0.2 U	0.21 U
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	0.2 U	6.7 U	0.2 U	0.2 U	0.19 U	0.2 U	0.75 U	0.23 U	0.2 U	0.24 U	0.18 U	0.19 U	0.2 U	0.21 U
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	0.2 U	6.7 U	0.2 U	0.2 U	0.19 U	0.2 U	0.75 U	0.23 U	0.2 U	0.24 U	0.18 U	0.19 U	0.2 U	0.21 U
1,2-Dichlorobenzene	mg/kg	0.081 U	2.7 U	0.08 U	0.078 U	0.078 U	0.08 U	0.3 U	0.092 U	0.08 U	0.095 U	0.074 U	0.076 U	0.08 U	0.083 U
1,2-Dichloroethane	mg/kg	0.04 U	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U	0.038 U	0.04 U	0.042 U
1,2-Dichloropropane	mg/kg	0.04 U	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U	0.038 U	0.04 U	0.042 U
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	0.081 U	2.7 U	0.08 U	0.078 U	0.078 U	0.08 U	0.3 U	0.092 U	0.08 U	0.095 U	0.074 U	0.076 U	0.08 U	0.083 U
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	0.081 U	2.7 U	0.08 U	0.078 U	0.078 U	0.08 U	0.3 U	0.092 U	0.08 U	0.095 U	0.074 U	0.076 U	0.08 U	0.083 U
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	0.61 U	20 U	0.6 U	0.59 U	0.58 U	0.6 U	2.2 U	0.69 U	0.6 U	0.71 U	0.55 U	0.57 U	0.6 U	0.62 U
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	2 U	67 U	2 U	2 U	1.9 U	2 U	7.5 U	2.3 U	2 U	2.4 U	1.8 U	1.9 U	2 U	2.1 U
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	2 U	67 U	2 U	2 U	1.9 U	2 U	7.5 U	2.3 U	2 U	2.4 U	1.8 U	1.9 U	2 U	2.1 U
Acetone	mg/kg	0.61 U	20 U	0.6 U	0.59 U	0.58 U	0.6 U	2.2 U	0.69 UJ	0.6 U	0.71 U	0.55 U	0.57 U	0.6 U	0.62 U
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	0.04 U	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U	0.038 U	0.04 U	0.042 U
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	0.081 UJ	2.7 UJ	0.08 UJ	0.078 UJ	0.078 UJ	0.08 UJ	0.3 UJ	0.092 UJ	0.08 UJ	0.095 UJ	0.074 UJ	0.076 U	0.08 U	0.083 U
Bromoform	mg/kg	0.081 U	2.7 U	0.08 U	0.078 U	0.078 U	0.08 U	0.3 U	0.092 U	0.08 U	0.095 U	0.074 U	0.076 U	0.08 U	0.083 U
Bromomethane (Methyl bromide)	mg/kg	0.2 U	6.7 U	0.2 U	0.2 U	0.19 U	0.2 U	0.75 U	0.23 U	0.2 U	0.24 U	0.18 U	0.19 U	0.2 U	0.21 U
Carbon disulfide	mg/kg	0.2 U	6.7 U	0.2 U	0.2 U	0.19 U	0.2 U	0.75 U	0.23 U	0.2 U	0.24 U	0.18 U	0.19 U	0.2 U	0.21 U
Carbon tetrachloride	mg/kg	0.04 U	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U	0.038 U	0.04 U	0.042 U
Chlorobenzene	mg/kg	0.04 U	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U	0.038 U	0.04 U	0.042 U
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	0.2 U	6.7 U	0.2 U	0.2 U	0.19 U	0.2 U	0.75 U	0.23 U	0.2 U	0.24 U	0.18 U	0.19 U	0.2 U	0.21 U
Chloroform (Trichloromethane)	mg/kg	0.04 U	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U	0.038 U	0.04 U	0.042 U
Chloromethane (Methyl chloride)	mg/kg	0.2 U	6.7 U	0.2 U	0.2 U	0.19 U	0.2 U	0.75 U	0.23 U	0.2 U	0.24 U	0.18 U	0.19 U	0.2 U	0.21 U
cis-1,2-Dichloroethene	mg/kg	0.04 U	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U	0.038 U	0.04 U	0.042 U
cis-1,3-Dichloropropene	mg/kg	0.04 U	1.3 UJ	0.04 UJ	0.039 UJ	0.039 UJ	0.04 UJ	0.15 UJ	0.046 UJ	0.04 UJ	0.048 UJ	0.037 UJ	0.038 U	0.04 U	0.042 U
Cyclohexane	mg/kg	0.97 U	32 U	0.96 U	0.94 U	0.93 U	0.96 U	3.6 U	1.1 U	0.96 U	1.1 U	0.88 U	0.91 U	0.96 U	1 U
Dibromochloromethane	mg/kg	0.04 U	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U	0.038 U	0.04 U	0.042 U
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	0.081 U	2.7 U	0.08 U	0.078 U	0.078 U	0.08 U	0.3 U	0.092 U	0.08 U	0.095 U	0.074 U	0.076 U	0.08 U	0.083 U
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	0.04 U	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U	0.038 U	0.04 U	0.042 U
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	0.2 U	6.7 U	0.2 U	0.2 U	0.19 U	0.2 U	0.75 U	0.23 U	0.2 U	0.24 U	0.18 U	0.19 U	0.2 U	0.21 U
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	0.97 U	32 U	0.96 U	0.94 U	0.93 U	0.96 U	0.4 J	1.1 U	0.96 U	1.1 U	0.88 U	0.91 U	0.96 U	1 U
Methyl cyclohexane	mg/kg	0.97 U	0.57 J	0.96 U	0.94 U	0.93 U	0.96 U	3.6 U	1.1 U	0.96 U	1.1 U	0.88 U	0.91 U	0.96 U	1 U
Methyl tert butyl ether (MTBE)	mg/kg	0.2 U	6.7 U	0.2 U	0.2 U	0.19 U	0.2 U	0.75 U	0.23 U	0.2 U	0.24 U	0.18 U	0.19 U	0.2 U	0.21 U
Methylene chloride	mg/kg	0.2 U	6.7 U	0.2 U	0.2 U	0.19 U	0.2 U	0.75 U	0.23 U	0.2 U	0.24 U	0.18 U	0.19 U	0.2 U	0.21 U
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	0.04 U	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U	0.038 U	0.04 U	0.042 U
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	0.04 U	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U	0.038 U	0.04 U	0.042 U
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	0.081 U	2.7 U	0.08 U	0.078 U	0.078 U	0.08 U	0.3 U	0.092 U	0.08 U	0.095 U	0.074 U	0.076 U	0.08 U	0.083 U
trans-1,2-Dichloroethene	mg/kg	0.04 U	1.3 U	0.04 U	0.039 U	0.039 U	0.04 U	0.15 U	0.046 U	0.04 U	0.048 U	0.037 U	0.038 U	0.04 U	0.042 U
trans-1,3-Dichloropropene	mg/kg	0.04 U	1.3 UJ	0.04 UJ	0.039 UJ	0.039 UJ	0.04 UJ	0.15 UJ	0.046 UJ	0.04 UJ	0.048 UJ	0.037 UJ	0.038 U	0.04 U	0.042 U
Trichloroethene	mg/kg	0.045	**46**[dp]	1.5	0.027 J	0.016 J	0.012 J	5.9	0.1 J	0.049	0.17	0.063	0.099	0.04 U	0.042 U
Trichlorofluoromethane (CFC-11)	mg/kg	0.081 U	2.7 U	0.08 U	0.078 U	0.078 U	0.08 U	0.3 U	0.092 U	0.08 U	0.095 U	0.074 U	0.076 U	0.08 U	0.083 U
Trifluorotrichloroethane (Freon 113)	mg/kg	0.2 U	6.7 U	0.2 U	0.2 U	0.19 U	0.2 U	0.75 U	0.23 U	0.2 U	0.24 U	0.18 U	0.19 U	0.2 U	0.21 U
Vinyl chloride	mg/kg	0.081 U	2.7 U	0.08 U	0.078 U	0.078 U	0.08 U	0.3 U	0.092 U	0.08 U	0.095 U	0.074 U	0.076 U	0.08 U	0.083 U
Xylenes (total)	mg/kg	0.12 U	4 U	0.12 U	0.12 U	0.12 U	0.12 U	0.45 U	0.14 U	0.12 U	0.14 U	0.11 U	0.11 U	0.12 U	0.12 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB7-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB8-05*	*SB9-05*	*SB9-05*	*SB9-05*
Sample Identification		*SO-17360-071105-DCR-459*	*SO-17360-071205-DCR-471*	*SO-17360-071205-DCR-472*	*SO-17360-071205-DCR-473*	*SO-17360-071205-DCR-474*	*SO-17360-071205-DCR-475*	*SO-17360-071205-DCR-476*	*SO-17360-071205-DCR-477*	*SO-17360-071205-DCR-478*	*SO-17360-071205-DCR-479*	*SO-17360-071205-DCR-480*	*SO-17360-071105-DCR-430*	*SO-17360-071105-DCR-431*	*SO-17360-071105-DCR-432*
Sample Date		*7/11/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*
Sample Depth		*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	98.2	94.9	96.0	97.8	98.1	96.2	97.0	97.0	97.5	96.4	95.7	97.8	98.6	98.9
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB9-05*	*SB9-05*	*SB9-05*	*SB9-05*	*SB9-05*	*SB9-05*	*SB9-05*	*SB10-05*	*SB10-05*	*SB10-05*	*SB10-05*	*SB10-05*	*SB10-05*	*SB10-05*
Sample Identification		*SO-17360-071105-DCR-433*	*SO-17360-071105-DCR-434*	*SO-17360-071105-DCR-435*	*SO-17360-071105-DCR-436*	*SO-17360-071105-DCR-437*	*SO-17360-071105-DCR-438*	*SO-17360-071105-DCR-439*	*SO-17360-071205-DCR-481*	*SO-17360-071205-DCR-482*	*SO-17360-071205-DCR-483*	*SO-17360-071205-DCR-484*	*SO-17360-071205-DCR-485*	*SO-17360-071205-DCR-486*	*SO-17360-071205-DCR-487*
Sample Date		*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*
Sample Depth		*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB9-05*	*SB9-05*	*SB9-05*	*SB9-05*	*SB9-05*	*SB9-05*	*SB9-05*	*SB10-05*	*SB10-05*	*SB10-05*	*SB10-05*	*SB10-05*	*SB10-05*	*SB10-05*
Sample Identification		*SO-17360-071105-DCR-433*	*SO-17360-071105-DCR-434*	*SO-17360-071105-DCR-435*	*SO-17360-071105-DCR-436*	*SO-17360-071105-DCR-437*	*SO-17360-071105-DCR-438*	*SO-17360-071105-DCR-439*	*SO-17360-071205-DCR-481*	*SO-17360-071205-DCR-482*	*SO-17360-071205-DCR-483*	*SO-17360-071205-DCR-484*	*SO-17360-071205-DCR-485*	*SO-17360-071205-DCR-486*	*SO-17360-071205-DCR-487*
Sample Date		*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*
Sample Depth		*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		SB9-05	SB9-05	SB9-05	SB9-05	SB9-05	SB9-05	SB9-05	SB10-05	SB10-05	SB10-05	SB10-05	SB10-05	SB10-05	SB10-05
Sample Identification		SO-17360-071105-DCR-433	SO-17360-071105-DCR-434	SO-17360-071105-DCR-435	SO-17360-071105-DCR-436	SO-17360-071105-DCR-437	SO-17360-071105-DCR-438	SO-17360-071105-DCR-439	SO-17360-071205-DCR-481	SO-17360-071205-DCR-482	SO-17360-071205-DCR-483	SO-17360-071205-DCR-484	SO-17360-071205-DCR-485	SO-17360-071205-DCR-486	SO-17360-071205-DCR-487
Sample Date		7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005
Sample Depth		(6-8) ft	(8-10) ft	(10-12) ft	(12-14) ft	(14-16) ft	(16-18) ft	(18-20) ft	(0-2) ft	(2-4) ft	(4-6) ft	(6-8) ft	(8-10) ft	(10-12) ft	(12-14) ft
Sample Type															
AOI	Units	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U
1,1,2,2-Tetrachloroethane	mg/kg	0.078 U	0.077 U	0.078 U	0.077 U	0.074 U	0.075 U	0.076 U	0.074 U	0.075 U	0.082 U	0.076 U	0.076 U	0.082 U	0.079 U
1,1,2-Trichloroethane	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U
1,1-Dichloroethane	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U
1,1-Dichloroethene	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	0.2 U	0.19 U	0.2 U	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.21 U	0.19 U	0.19 U	0.2 U	0.2 U
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	0.2 U	0.19 U	0.2 U	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.21 U	0.19 U	0.19 U	0.2 U	0.2 U
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	0.2 U	0.19 U	0.2 U	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.21 U	0.19 U	0.19 U	0.2 U	0.2 U
1,2-Dichlorobenzene	mg/kg	0.078 U	0.077 U	0.078 U	0.077 U	0.074 U	0.075 U	0.076 U	0.074 U	0.075 U	0.082 U	0.076 U	0.076 U	0.082 U	0.079 U
1,2-Dichloroethane	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U
1,2-Dichloropropane	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	0.078 U	0.077 U	0.078 U	0.077 U	0.074 U	0.075 U	0.076 U	0.074 U	0.075 U	0.082 U	0.076 U	0.076 U	0.082 U	0.079 U
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	0.078 U	0.077 U	0.078 U	0.077 U	0.074 U	0.075 U	0.076 U	0.074 U	0.075 U	0.082 U	0.076 U	0.076 U	0.082 U	0.079 U
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	0.59 U	0.58 U	0.59 U	0.58 U	0.55 U	0.56 U	0.57 U	0.55 U	0.56 U	0.62 U	0.57 U	0.57 U	0.61 U	0.59 U
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	2 U	1.9 U	2 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.9 U	2.1 U	1.9 U	1.9 U	2 U	2 U
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	2 U	1.9 U	2 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.9 U	2.1 U	1.9 U	1.9 U	2 U	2 U
Acetone	mg/kg	0.59 U	0.58 U	0.59 U	0.58 U	0.55 U	0.56 U	0.57 U	0.55 U	0.56 U	0.62 U	0.57 U	0.57 U	0.61 U	0.59 U
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	0.078 U	0.077 U	0.078 U	0.077 U	0.074 U	0.075 U	0.076 U	0.074 UJ	0.075 UJ	0.082 UJ	0.076 UJ	0.076 UJ	0.082 UJ	0.079 UJ
Bromoform	mg/kg	0.078 U	0.077 U	0.078 U	0.077 U	0.074 U	0.075 U	0.076 U	0.074 U	0.075 U	0.082 U	0.076 U	0.076 U	0.082 U	0.079 U
Bromomethane (Methyl bromide)	mg/kg	0.2 U	0.19 U	0.2 U	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.21 U	0.19 U	0.19 U	0.2 U	0.2 U
Carbon disulfide	mg/kg	0.2 U	0.19 U	0.2 U	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.21 U	0.19 U	0.19 U	0.2 U	0.2 U
Carbon tetrachloride	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U
Chlorobenzene	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	0.2 U	0.19 U	0.2 U	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.21 U	0.19 U	0.19 U	0.2 U	0.2 U
Chloroform (Trichloromethane)	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U
Chloromethane (Methyl chloride)	mg/kg	0.2 U	0.19 U	0.2 U	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.21 U	0.19 U	0.19 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U
cis-1,3-Dichloropropene	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 UJ	0.038 UJ	0.041 UJ	0.038 UJ	0.038 UJ	0.041 UJ	0.04 UJ
Cyclohexane	mg/kg	0.94 U	0.92 U	0.94 U	0.92 U	0.88 U	0.9 U	0.91 U	0.01 J	0.9 U	0.99 U	0.91 U	0.91 U	0.98 U	0.95 U
Dibromochloromethane	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	0.078 U	0.077 U	0.078 U	0.077 U	0.074 U	0.075 U	0.076 U	0.074 U	0.075 U	0.082 U	0.076 U	0.076 U	0.082 U	0.079 U
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	0.2 U	0.19 U	0.2 U	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.21 U	0.19 U	0.19 U	0.2 U	0.2 U
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	0.94 U	0.92 U	0.94 U	0.92 U	0.88 U	0.1 J	0.91 U	0.076 J	0.9 U	0.99 U	0.91 U	0.91 U	0.98 U	0.95 U
Methyl cyclohexane	mg/kg	0.94 U	0.92 U	0.94 U	0.92 U	0.88 U	0.9 U	0.91 U	0.031 J	0.9 U	0.99 U	0.91 U	0.91 U	0.98 U	0.95 U
Methyl tert butyl ether (MTBE)	mg/kg	0.2 U	0.19 U	0.2 U	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.21 U	0.19 U	0.19 U	0.2 U	0.2 U
Methylene chloride	mg/kg	0.2 U	0.19 U	0.2 U	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.21 U	0.19 U	0.19 U	0.2 U	0.2 U
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	0.078 U	0.077 U	0.078 U	0.077 U	0.074 U	0.075 U	0.076 U	0.012 J	0.075 U	0.082 U	0.076 U	0.076 U	0.082 U	0.079 U
trans-1,2-Dichloroethene	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.041 U	0.04 U
trans-1,3-Dichloropropene	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 UJ	0.038 UJ	0.041 UJ	0.038 UJ	0.038 UJ	0.041 UJ	0.04 U
Trichloroethene	mg/kg	0.039 U	0.038 U	0.039 U	0.038 U	0.037 U	0.038 U	0.038 U	0.54	0.038 U	0.041 U	0.038 U	0.038 U	0.029 J	0.03 J
Trichlorofluoromethane (CFC-11)	mg/kg	0.078 U	0.077 U	0.078 U	0.077 U	0.074 U	0.075 U	0.076 U	0.074 U	0.075 U	0.082 U	0.076 U	0.076 U	0.082 U	0.079 U
Trifluorotrichloroethane (Freon 113)	mg/kg	0.2 U	0.19 U	0.2 U	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.21 U	0.19 U	0.19 U	0.2 U	0.2 U
Vinyl chloride	mg/kg	0.078 U	0.077 U	0.078 U	0.077 U	0.074 U	0.075 U	0.076 U	0.074 U	0.075 U	0.082 U	0.076 U	0.076 U	0.082 U	0.079 U
Xylenes (total)	mg/kg	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.027 J	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB9-05*	*SB9-05*	*SB9-05*	*SB9-05*	*SB9-05*	*SB9-05*	*SB9-05*	*SB10-05*	*SB10-05*	*SB10-05*	*SB10-05*	*SB10-05*	*SB10-05*	*SB10-05*
Sample Identification		*SO-17360-071105-DCR-433*	*SO-17360-071105-DCR-434*	*SO-17360-071105-DCR-435*	*SO-17360-071105-DCR-436*	*SO-17360-071105-DCR-437*	*SO-17360-071105-DCR-438*	*SO-17360-071105-DCR-439*	*SO-17360-071205-DCR-481*	*SO-17360-071205-DCR-482*	*SO-17360-071205-DCR-483*	*SO-17360-071205-DCR-484*	*SO-17360-071205-DCR-485*	*SO-17360-071205-DCR-486*	*SO-17360-071205-DCR-487*
Sample Date		*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*
Sample Depth		*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	99.0	97.1	98.6	97.1	94.6	98.5	97.7	94.9	96.9	97.4	97.4	95.8	98.1	97.7
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB10-05*	*SB10-05*	*SB10-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB12-05*
Sample Identification		*SO-17360-071205-DCR-488*	*SO-17360-071205-DCR-489*	*SO-17360-071205-DCR-490*	*SO-17360-071205-DCR-491*	*SO-17360-071205-DCR-492*	*SO-17360-071205-DCR-493*	*SO-17360-071205-DCR-494*	*SO-17360-071205-DCR-495*	*SO-17360-071205-DCR-496*	*SO-17360-071205-DCR-497*	*SO-17360-071205-DCR-498*	*SO-17360-071205-DCR-499*	*SO-17360-071205-DCR-500*	*SO-17360-071105-DCR-440*
Sample Date		*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/11/2005*
Sample Depth		*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB10-05*	*SB10-05*	*SB10-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB12-05*
Sample Identification		*SO-17360-071205-DCR-488*	*SO-17360-071205-DCR-489*	*SO-17360-071205-DCR-490*	*SO-17360-071205-DCR-491*	*SO-17360-071205-DCR-492*	*SO-17360-071205-DCR-493*	*SO-17360-071205-DCR-494*	*SO-17360-071205-DCR-495*	*SO-17360-071205-DCR-496*	*SO-17360-071205-DCR-497*	*SO-17360-071205-DCR-498*	*SO-17360-071205-DCR-499*	*SO-17360-071205-DCR-500*	*SO-17360-071105-DCR-440*
Sample Date		*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/11/2005*
Sample Depth		*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB10-05*	*SB10-05*	*SB10-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB11-05*	*SB12-05*
Sample Identification		*SO-17360-071205-DCR-488*	*SO-17360-071205-DCR-489*	*SO-17360-071205-DCR-490*	*SO-17360-071205-DCR-491*	*SO-17360-071205-DCR-492*	*SO-17360-071205-DCR-493*	*SO-17360-071205-DCR-494*	*SO-17360-071205-DCR-495*	*SO-17360-071205-DCR-496*	*SO-17360-071205-DCR-497*	*SO-17360-071205-DCR-498*	*SO-17360-071205-DCR-499*	*SO-17360-071205-DCR-500*	*SO-17360-071105-DCR-440*
Sample Date		*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/11/2005*
Sample Depth		*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.041 U
1,1,2,2-Tetrachloroethane	mg/kg	0.08 U	0.079 U	0.082 U	0.08 U	0.076 U	0.078 U	0.079 U	0.08 U	3.7 U	0.3 U	0.078 U	2 U	0.48 U	0.082 U
1,1,2-Trichloroethane	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.041 U
1,1-Dichloroethane	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.041 U
1,1-Dichloroethene	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.041 U
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	0.2 U	0.2 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	9.3 U	0.75 U	0.2 U	5 U	1.2 U	0.21 U
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	0.2 U	0.2 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	9.3 U	0.75 U	0.2 U	5 U	1.2 U	0.21 U
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	0.2 U	0.2 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	9.3 U	0.75 U	0.2 U	5 U	1.2 U	0.21 U
1,2-Dichlorobenzene	mg/kg	0.08 U	0.079 U	0.082 U	0.08 U	0.076 U	0.078 U	0.079 U	0.08 U	3.7 U	0.3 U	0.078 U	2 U	0.48 U	0.082 U
1,2-Dichloroethane	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.041 U
1,2-Dichloropropane	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.041 U
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	0.08 U	0.079 U	0.082 U	0.08 U	0.076 U	0.078 U	0.079 U	0.08 U	3.7 U	0.3 U	0.078 U	2 U	0.48 U	0.082 U
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	0.08 U	0.079 U	0.082 U	0.08 U	0.076 U	0.078 U	0.079 U	0.08 U	3.7 U	0.3 U	0.078 U	2 U	0.48 U	0.082 U
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	0.6 U	0.59 U	0.62 U	0.6 U	0.57 U	0.58 U	0.59 U	0.6 U	28 U	2.2 U	0.59 U	15 U	3.6 U	0.62 U
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	2 U	2 U	2.1 U	2 U	1.9 U	1.9 U	2 U	2 U	93 U	7.5 U	2 U	50 U	12 U	2.1 U
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	2 U	2 U	2.1 U	2 U	1.9 U	1.9 U	2 U	2 U	93 U	7.5 U	2 U	50 U	12 U	2.1 U
Acetone	mg/kg	0.6 U	0.59 U	0.62 U	0.6 U	0.57 U	0.58 U	0.59 U	0.6 U	28 U	2.2 U	0.59 U	15 U	3.6 U	0.62 U
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.0087 J
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	0.08 UJ	0.079 UJ	0.082 UJ	0.08 UJ	0.076 UJ	0.078 UJ	0.079 UJ	0.08 UJ	3.7 UJ	0.3 UJ	0.078 UJ	2 UJ	0.48 UJ	0.082 U
Bromoform	mg/kg	0.08 U	0.079 U	0.082 U	0.08 U	0.076 U	0.078 U	0.079 U	0.08 U	3.7 U	0.3 U	0.078 U	2 U	0.48 U	0.082 U
Bromomethane (Methyl bromide)	mg/kg	0.2 U	0.2 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	9.3 U	0.75 U	0.2 U	5 U	1.2 U	0.21 U
Carbon disulfide	mg/kg	0.2 U	0.2 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	9.3 U	0.75 U	0.2 U	5 U	1.2 U	0.21 U
Carbon tetrachloride	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.041 U
Chlorobenzene	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.041 U
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	0.2 U	0.2 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	9.3 U	0.75 U	0.2 U	5 U	1.2 U	0.21 U
Chloroform (Trichloromethane)	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.041 U
Chloromethane (Methyl chloride)	mg/kg	0.2 U	0.2 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	9.3 U	0.75 U	0.2 U	5 U	1.2 U	0.21 U
cis-1,2-Dichloroethene	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.041 U
cis-1,3-Dichloropropene	mg/kg	0.04 UJ	0.04 UJ	0.041 UJ	0.04 UJ	0.038 UJ	0.039 UJ	0.04 UJ	0.04 UJ	1.9 UJ	0.15 UJ	0.039 UJ	1 UJ	0.24 UJ	0.041 U
Cyclohexane	mg/kg	0.96 U	0.95 U	0.99 U	0.96 U	0.91 U	0.93 U	0.95 U	0.96 U	45 U	3.6 U	0.94 U	24 U	5.8 U	0.061 J
Dibromochloromethane	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.041 UJ
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	0.08 U	0.079 U	0.082 U	0.08 U	0.076 U	0.078 U	0.079 U	0.08 U	3.7 U	0.3 U	0.078 U	2 U	0.48 U	0.082 U
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.022 J
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	0.2 U	0.2 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	9.3 U	0.75 U	0.2 U	5 U	1.2 U	0.025 J
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	0.96 U	0.95 U	0.99 U	0.96 U	0.91 U	0.93 U	0.95 U	0.96 U	100	12	3.6	49	25	0.99 U
Methyl cyclohexane	mg/kg	0.96 U	0.95 U	0.99 U	0.0063 J	0.91 U	0.93 U	0.95 U	0.96 U	45 U	3.6 U	0.94 U	24 U	5.8 U	0.22 J
Methyl tert butyl ether (MTBE)	mg/kg	0.2 U	0.2 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	9.3 U	0.75 U	0.2 U	5 U	1.2 U	0.21 U
Methylene chloride	mg/kg	0.2 U	0.2 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	9.3 U	0.75 U	0.2 U	5 U	1.2 U	0.21 U
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.041 U
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.041 U
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	0.08 U	0.079 U	0.082 U	0.08 U	0.076 U	0.078 U	0.079 U	0.08 U	3.7 U	0.3 U	0.078 U	2 U	0.48 U	0.076 J
trans-1,2-Dichloroethene	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.041 U
trans-1,3-Dichloropropene	mg/kg	0.04 U	0.04 U	0.041 U	0.04 U	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.15 U	0.039 U	1 U	0.24 U	0.041 U
Trichloroethene	mg/kg	0.016 J	0.021 J	0.041 U	0.076	0.038 U	0.039 U	0.04 U	0.04 U	1.9 U	0.057 J	0.027 J	1 U	0.24 U	2.2 J
Trichlorofluoromethane (CFC-11)	mg/kg	0.08 U	0.079 U	0.082 U	0.08 U	0.076 U	0.078 U	0.079 U	0.08 U	3.7 U	0.3 U	0.078 U	2 U	0.48 U	0.082 U
Trifluorotrichloroethane (Freon 113)	mg/kg	0.2 U	0.2 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	9.3 U	0.75 U	0.2 U	5 U	1.2 U	0.21 U
Vinyl chloride	mg/kg	0.08 U	0.079 U	0.082 U	0.08 U	0.076 U	0.078 U	0.079 U	0.08 U	3.7 U	0.3 U	0.078 U	2 U	0.48 U	0.082 U
Xylenes (total)	mg/kg	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U	0.12 U	5.6 U	0.45 U	0.12 U	3 U	0.73 U	0.19

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		SB10-05	SB10-05	SB10-05	SB11-05	SB11-05	SB11-05	SB11-05	SB11-05	SB11-05	SB11-05	SB11-05	SB11-05	SB11-05	SB12-05
Sample Identification		SO-17360-071205-DCR-488	SO-17360-071205-DCR-489	SO-17360-071205-DCR-490	SO-17360-071205-DCR-491	SO-17360-071205-DCR-492	SO-17360-071205-DCR-493	SO-17360-071205-DCR-494	SO-17360-071205-DCR-495	SO-17360-071205-DCR-496	SO-17360-071205-DCR-497	SO-17360-071205-DCR-498	SO-17360-071205-DCR-499	SO-17360-071205-DCR-500	SO-17360-071105-DCR-440
Sample Date		7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/11/2005
Sample Depth		(14-16) ft	(16-18) ft	(18-20) ft	(0-2) ft	(2-4) ft	(4-6) ft	(6-8) ft	(8-10) ft	(10-12) ft	(12-14) ft	(14-16) ft	(16-18) ft	(18-20) ft	(0-2) ft
Sample Type															
AOI	Units	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	91.1	97.5	98.1	96.5	98.2	98.9	97.5	98.5	98.0	98.7	95.0	96.8	96.2	98.8
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB13-05*	*SB13-05*	*SB13-05*	*SB13-05*	*SB13-05*
Sample Identification		*SO-17360-071105-DCR-441*	*SO-17360-071105-DCR-442*	*SO-17360-071105-DCR-443*	*SO-17360-071105-DCR-444*	*SO-17360-071105-DCR-445*	*SO-17360-071105-DCR-446*	*SO-17360-071105-DCR-447*	*SO-17360-071105-DCR-448*	*SO-17360-071105-DCR-449*	*SO-17360-071105-DCR-409*	*SO-17360-071105-DCR-410*	*SO-17360-071105-DCR-411*	*SO-17360-071105-DCR-412*	*SO-17360-071105-DCR-413*
Sample Date		*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB13-05*	*SB13-05*	*SB13-05*	*SB13-05*	*SB13-05*
Sample Identification		*SO-17360-071105-DCR-441*	*SO-17360-071105-DCR-442*	*SO-17360-071105-DCR-443*	*SO-17360-071105-DCR-444*	*SO-17360-071105-DCR-445*	*SO-17360-071105-DCR-446*	*SO-17360-071105-DCR-447*	*SO-17360-071105-DCR-448*	*SO-17360-071105-DCR-449*	*SO-17360-071105-DCR-409*	*SO-17360-071105-DCR-410*	*SO-17360-071105-DCR-411*	*SO-17360-071105-DCR-412*	*SO-17360-071105-DCR-413*
Sample Date		*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB13-05*	*SB13-05*	*SB13-05*	*SB13-05*	*SB13-05*
Sample Identification		*SO-17360-071105-DCR-441*	*SO-17360-071105-DCR-442*	*SO-17360-071105-DCR-443*	*SO-17360-071105-DCR-444*	*SO-17360-071105-DCR-445*	*SO-17360-071105-DCR-446*	*SO-17360-071105-DCR-447*	*SO-17360-071105-DCR-448*	*SO-17360-071105-DCR-449*	*SO-17360-071105-DCR-409*	*SO-17360-071105-DCR-410*	*SO-17360-071105-DCR-411*	*SO-17360-071105-DCR-412*	*SO-17360-071105-DCR-413*
Sample Date		*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	0.16 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 U	0.039 U	0.037 U	0.04 U	0.04 U
1,1,2,2-Tetrachloroethane	mg/kg	0.32 U	0.074 U	0.078 U	0.08 U	0.078 U	0.076 U	0.079 U	0.074 U	0.076 U	0.074 U	0.078 U	0.074 U	0.08 U	0.08 U
1,1,2-Trichloroethane	mg/kg	0.16 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 U	0.039 U	0.037 U	0.04 U	0.04 U
1,1-Dichloroethane	mg/kg	0.16 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 U	0.039 U	0.037 U	0.04 U	0.04 U
1,1-Dichloroethene	mg/kg	0.16 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 U	0.039 U	0.037 U	0.04 U	0.04 U
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	0.8 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.18 U	0.19 U	0.18 U	0.2 U	0.19 U	0.2 U	0.2 U
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	0.8 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.18 U	0.19 U	0.18 U	0.2 U	0.19 U	0.2 U	0.2 U
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	0.8 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.18 U	0.19 U	0.18 U	0.2 U	0.19 U	0.2 U	0.2 U
1,2-Dichlorobenzene	mg/kg	0.32 U	0.074 U	0.078 U	0.08 U	0.078 U	0.076 U	0.079 U	0.074 U	0.076 U	0.074 U	0.078 U	0.074 U	0.08 U	0.08 U
1,2-Dichloroethane	mg/kg	0.16 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 U	0.039 U	0.037 U	0.04 U	0.04 U
1,2-Dichloropropane	mg/kg	0.16 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 U	0.039 U	0.037 U	0.04 U	0.04 U
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	0.32 U	0.074 U	0.078 U	0.08 U	0.078 U	0.076 U	0.079 U	0.074 U	0.076 U	0.074 U	0.078 U	0.074 U	0.08 U	0.08 U
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	0.32 U	0.074 U	0.078 U	0.08 U	0.078 U	0.076 U	0.079 U	0.074 U	0.076 U	0.074 U	0.078 U	0.074 U	0.08 U	0.08 U
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	2.4 U	0.56 U	0.59 U	0.6 U	0.59 U	0.57 U	0.59 U	0.55 U	0.57 U	0.55 U	0.59 U	0.56 U	0.6 U	0.6 U
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	8 U	1.9 U	2 U	2 U	2 U	1.9 U	2 U	1.8 U	1.9 U	1.8 U	2 U	1.9 U	2 U	2 U
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	8 U	1.9 U	2 U	2 U	2 U	1.9 U	2 U	1.8 U	1.9 U	1.8 U	2 U	1.9 U	2 U	2 U
Acetone	mg/kg	2.4 U	0.56 U	0.59 U	0.6 U	0.59 U	0.57 U	0.59 U	0.55 U	0.57 U	0.55 U	0.59 U	0.56 U	0.6 U	0.6 U
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	0.073 J	0.006 J	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 U	0.039 U	0.037 U	0.04 U	0.04 U
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	0.32 UJ	0.074 U	0.078 U	0.08 U	0.078 U	0.076 U	0.079 U	0.074 UJ	0.076 UJ	0.074 UJ	0.078 UJ	0.074 UJ	0.08 UJ	0.08 UJ
Bromoform	mg/kg	0.32 U	0.074 U	0.078 U	0.08 U	0.078 U	0.076 U	0.079 U	0.074 U	0.076 U	0.074 U	0.078 U	0.074 U	0.08 U	0.08 U
Bromomethane (Methyl bromide)	mg/kg	0.8 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.18 U	0.19 U	0.18 U	0.2 U	0.19 U	0.2 U	0.2 U
Carbon disulfide	mg/kg	0.8 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.18 U	0.19 U	0.18 U	0.2 U	0.19 U	0.2 U	0.2 U
Carbon tetrachloride	mg/kg	0.16 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 U	0.039 U	0.037 U	0.04 U	0.04 U
Chlorobenzene	mg/kg	0.16 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 U	0.039 U	0.037 U	0.04 U	0.04 U
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	0.8 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.18 U	0.19 U	0.18 U	0.2 U	0.19 U	0.2 U	0.2 U
Chloroform (Trichloromethane)	mg/kg	0.16 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 U	0.039 U	0.037 U	0.04 U	0.04 U
Chloromethane (Methyl chloride)	mg/kg	0.8 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.18 U	0.19 U	0.18 U	0.2 U	0.19 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	mg/kg	0.16 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 U	0.039 U	0.037 U	0.04 U	0.04 U
cis-1,3-Dichloropropene	mg/kg	0.16 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 U	0.039 U	0.037 U	0.04 U	0.04 U
Cyclohexane	mg/kg	0.3 J	0.024 J	0.94 U	0.96 U	0.94 U	0.91 U	0.95 U	0.88 U	0.91 U	0.048 J	0.94 U	0.89 U	0.96 U	0.96 U
Dibromochloromethane	mg/kg	0.16 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 U	0.039 U	0.037 U	0.04 U	0.04 U
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	0.32 U	0.074 U	0.078 U	0.08 U	0.078 U	0.076 U	0.079 U	0.074 U	0.076 U	0.074 U	0.078 U	0.074 U	0.08 U	0.08 U
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	0.13 J	0.01 J	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.018 J	0.039 U	0.037 U	0.04 U	0.04 U
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	0.12 J	0.0094 J	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.18 U	0.19 U	0.019 J	0.2 U	0.19 U	0.2 U	0.2 U
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	3.8 U	0.89 U	0.94 U	0.96 U	0.94 U	0.91 U	0.36 J	0.88 U	0.91 U	0.88 U	0.94 U	0.073 J	0.96 U	0.96 U
Methyl cyclohexane	mg/kg	0.88 J	0.067 J	0.94 U	0.96 U	0.94 U	0.91 U	0.015 J	0.88 U	0.91 U	0.16 J	0.94 U	0.89 U	0.96 U	0.96 U
Methyl tert butyl ether (MTBE)	mg/kg	0.8 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.18 U	0.19 U	0.18 U	0.2 U	0.19 U	0.2 U	0.2 U
Methylene chloride	mg/kg	0.8 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.18 U	0.19 U	0.18 U	0.2 U	0.19 U	0.2 U	0.2 U
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	0.16 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 U	0.039 U	0.037 U	0.04 U	0.04 U
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	0.16 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 U	0.039 U	0.037 U	0.04 U	0.04 U
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	0.49	0.041 J	0.078 U	0.08 U	0.078 U	0.076 U	0.0098 J	0.074 U	0.076 U	0.04 J	0.078 U	0.074 U	0.08 U	0.08 U
trans-1,2-Dichloroethene	mg/kg	0.16 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 U	0.039 U	0.037 U	0.04 U	0.04 U
trans-1,3-Dichloropropene	mg/kg	0.16 U	0.037 U	0.039 U	0.04 U	0.039 U	0.038 U	0.04 U	0.037 U	0.038 U	0.037 UJ	0.039 UJ	0.037 UJ	0.04 UJ	0.04 UJ
Trichloroethene	mg/kg	5.5	0.53	0.039 U	0.04 U	0.039 U	0.013 J	0.14	0.012 J	0.038 U	1.5	0.039 U	0.02 J	0.04 U	0.04 U
Trichlorofluoromethane (CFC-11)	mg/kg	0.32 U	0.074 U	0.078 U	0.08 U	0.078 U	0.076 U	0.079 U	0.074 U	0.076 U	0.074 U	0.078 U	0.074 U	0.08 U	0.08 U
Trifluorotrichloroethane (Freon 113)	mg/kg	0.8 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.18 U	0.19 U	0.18 U	0.2 U	0.19 U	0.2 U	0.2 U
Vinyl chloride	mg/kg	0.32 U	0.074 U	0.078 U	0.08 U	0.078 U	0.076 U	0.079 U	0.074 U	0.076 U	0.074 U	0.078 U	0.074 U	0.08 U	0.08 U
Xylenes (total)	mg/kg	0.91	0.068 J	0.12 U	0.12 U	0.12 U	0.11 U	0.016 J	0.11 U	0.11 U	0.16	0.12 U	0.11 U	0.12 U	0.12 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB12-05*	*SB13-05*	*SB13-05*	*SB13-05*	*SB13-05*	*SB13-05*
Sample Identification		*SO-17360-071105-DCR-441*	*SO-17360-071105-DCR-442*	*SO-17360-071105-DCR-443*	*SO-17360-071105-DCR-444*	*SO-17360-071105-DCR-445*	*SO-17360-071105-DCR-446*	*SO-17360-071105-DCR-447*	*SO-17360-071105-DCR-448*	*SO-17360-071105-DCR-449*	*SO-17360-071105-DCR-409*	*SO-17360-071105-DCR-410*	*SO-17360-071105-DCR-411*	*SO-17360-071105-DCR-412*	*SO-17360-071105-DCR-413*
Sample Date		*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type															
AOI	***Units***	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	94.4	96.6	98.1	98.2	97.3	96.8	97.6	97.5	97.8	95.5	98.3	97.6	98.6	97.4
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB13-05*	*SB13-05*	*SB13-05*	*SB13-05*	*SB13-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*
Sample Identification		*SO-17360-071105-DCR-414*	*SO-17360-071105-DCR-415*	*SO-17360-071105-DCR-416*	*SO-17360-071105-DCR-417*	*SO-17360-071105-DCR-418*	*SO-17360-071205-DCR-460*	*SO-17360-071205-DCR-461*	*SO-17360-071205-DCR-462*	*SO-17360-071205-DCR-463*	*SO-17360-071205-DCR-464*	*SO-17360-071205-DCR-465*	*SO-17360-071205-DCR-466*	*SO-17360-071205-DCR-467*	*SO-17360-071205-DCR-468*
Sample Date		*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*
Sample Depth		*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(14-16) ft*
Sample Type															*Duplicate*
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB13-05*	*SB13-05*	*SB13-05*	*SB13-05*	*SB13-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*
Sample Identification		*SO-17360-071105-DCR-414*	*SO-17360-071105-DCR-415*	*SO-17360-071105-DCR-416*	*SO-17360-071105-DCR-417*	*SO-17360-071105-DCR-418*	*SO-17360-071205-DCR-460*	*SO-17360-071205-DCR-461*	*SO-17360-071205-DCR-462*	*SO-17360-071205-DCR-463*	*SO-17360-071205-DCR-464*	*SO-17360-071205-DCR-465*	*SO-17360-071205-DCR-466*	*SO-17360-071205-DCR-467*	*SO-17360-071205-DCR-468*
Sample Date		*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*
Sample Depth		*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(14-16) ft*
Sample Type															*Duplicate*
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		SB13-05	SB13-05	SB13-05	SB13-05	SB13-05	SB14-05	SB14-05	SB14-05	SB14-05	SB14-05	SB14-05	SB14-05	SB14-05	SB14-05
Sample Identification		SO-17360-071105-DCR-414	SO-17360-071105-DCR-415	SO-17360-071105-DCR-416	SO-17360-071105-DCR-417	SO-17360-071105-DCR-418	SO-17360-071205-DCR-460	SO-17360-071205-DCR-461	SO-17360-071205-DCR-462	SO-17360-071205-DCR-463	SO-17360-071205-DCR-464	SO-17360-071205-DCR-465	SO-17360-071205-DCR-466	SO-17360-071205-DCR-467	SO-17360-071205-DCR-468
Sample Date		7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/11/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005	7/12/2005
Sample Depth		(10-12) ft	(12-14) ft	(14-16) ft	(16-18) ft	(18-20) ft	(0-2) ft	(2-4) ft	(4-6) ft	(6-8) ft	(8-10) ft	(10-12) ft	(12-14) ft	(14-16) ft	(14-16) ft
Sample Type															Duplicate
AOI	Units	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U	0.045 U
1,1,2,2-Tetrachloroethane	mg/kg	0.078 U	0.08 U	0.079 U	0.079 U	0.08 U	0.08 U	0.095 U	0.084 U	0.079 U	0.079 U	0.085 U	0.076 U	0.074 U	0.09 U
1,1,2-Trichloroethane	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U	0.045 U
1,1-Dichloroethane	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U	0.045 U
1,1-Dichloroethene	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U	0.045 U
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.21 U	0.2 U	0.2 U	0.21 U	0.19 U	0.19 U	0.22 U
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.21 U	0.2 U	0.2 U	0.21 U	0.19 U	0.19 U	0.22 U
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.21 U	0.2 U	0.2 U	0.21 U	0.19 U	0.19 U	0.22 U
1,2-Dichlorobenzene	mg/kg	0.078 U	0.08 U	0.079 U	0.079 U	0.08 U	0.08 U	0.095 U	0.084 U	0.079 U	0.079 U	0.085 U	0.076 U	0.074 U	0.09 U
1,2-Dichloroethane	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U	0.045 U
1,2-Dichloropropane	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U	0.045 U
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	0.078 U	0.08 U	0.079 U	0.079 U	0.08 U	0.08 U	0.095 U	0.084 U	0.079 U	0.079 U	0.085 U	0.076 U	0.074 U	0.09 U
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	0.078 U	0.08 U	0.079 U	0.079 U	0.08 U	0.08 U	0.095 U	0.084 U	0.079 U	0.079 U	0.085 U	0.076 U	0.074 U	0.09 U
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	0.58 U	0.6 U	0.59 U	0.59 U	0.6 U	0.6 U	0.71 U	0.63 U	0.59 U	0.59 U	0.64 U	0.57 U	0.56 U	0.67 U
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	1.9 U	2 U	2 U	2 U	2 U	2 U	2.4 U	2.1 U	2 U	2 U	2.1 U	1.9 U	1.9 U	2.2 U
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	1.9 U	2 U	2 U	2 U	2 U	2 U	2.4 U	2.1 U	2 U	2 U	2.1 U	1.9 U	1.9 U	2.2 U
Acetone	mg/kg	0.58 U	0.6 U	0.59 U	0.59 U	0.6 U	0.6 U	0.71 U	0.63 U	0.59 U	0.59 U	0.64 U	0.57 U	0.56 U	0.67 U
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U	0.045 U
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	0.078 UJ	0.08 UJ	0.079 UJ	0.079 UJ	0.08 UJ	0.08 UJ	0.095 UJ	0.084 UJ	0.079 UJ	0.079 UJ	0.085 UJ	0.076 UJ	0.074 UJ	0.09 UJ
Bromoform	mg/kg	0.078 U	0.08 U	0.079 U	0.079 U	0.08 U	0.08 U	0.095 U	0.084 U	0.079 U	0.079 U	0.085 U	0.076 U	0.074 U	0.09 U
Bromomethane (Methyl bromide)	mg/kg	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.21 U	0.2 U	0.2 U	0.21 U	0.19 U	0.19 U	0.22 U
Carbon disulfide	mg/kg	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.21 U	0.2 U	0.2 U	0.21 U	0.19 U	0.19 U	0.22 U
Carbon tetrachloride	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U	0.045 U
Chlorobenzene	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U	0.045 U
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.21 U	0.2 U	0.2 U	0.21 U	0.19 U	0.19 U	0.22 U
Chloroform (Trichloromethane)	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U	0.045 U
Chloromethane (Methyl chloride)	mg/kg	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.21 U	0.2 U	0.2 U	0.21 U	0.19 U	0.19 U	0.22 U
cis-1,2-Dichloroethene	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U	0.045 U
cis-1,3-Dichloropropene	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 UJ	0.045 UJ
Cyclohexane	mg/kg	0.93 U	0.96 U	0.95 U	0.013 J	0.96 U	0.0079 J	1.1 U	1 U	0.95 U	0.95 U	1 U	0.91 U	0.89 U	1.1 U
Dibromochloromethane	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U	0.045 U
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	0.078 U	0.08 U	0.079 U	0.079 U	0.08 U	0.08 U	0.095 U	0.084 U	0.079 U	0.079 U	0.085 U	0.076 U	0.074 U	0.09 U
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U	0.045 U
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.21 U	0.2 U	0.2 U	0.21 U	0.19 U	0.19 U	0.22 U
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	0.071 J	0.38 J	0.95 U	0.44 J	0.96 U	0.96 U	1.1 U	1 U	0.95 U	0.95 U	1 U	0.91 U	0.89 U	1.1 U
Methyl cyclohexane	mg/kg	0.93 U	0.014 J	0.95 U	0.037 J	0.96 U	0.024 J	1.1 U	1 U	0.95 U	0.95 U	1 U	0.91 U	0.89 U	1.1 U
Methyl tert butyl ether (MTBE)	mg/kg	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.21 U	0.2 U	0.2 U	0.21 U	0.19 U	0.19 U	0.22 U
Methylene chloride	mg/kg	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.21 U	0.2 U	0.2 U	0.21 U	0.19 U	0.19 U	0.22 U
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U	0.045 U
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U	0.045 U
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	0.078 U	0.08 U	0.079 U	0.019 J	0.08 U	0.08 U	0.095 U	0.084 U	0.079 U	0.079 U	0.085 U	0.076 U	0.074 U	0.09 U
trans-1,2-Dichloroethene	mg/kg	0.039 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 U	0.045 U
trans-1,3-Dichloropropene	mg/kg	0.039 UJ	0.04 UJ	0.04 UJ	0.04 UJ	0.04 UJ	0.04 U	0.048 U	0.042 U	0.04 U	0.04 U	0.042 U	0.038 U	0.037 UJ	0.045 UJ
Trichloroethene	mg/kg	0.012 J	0.29	0.04 U	0.44	0.04 U	0.82	0.048 U	0.042 U	0.04 U	0.04 U	0.029 J	0.016 J	0.019 J	0.018 J
Trichlorofluoromethane (CFC-11)	mg/kg	0.078 U	0.08 U	0.079 U	0.079 U	0.08 U	0.08 U	0.095 U	0.084 U	0.079 U	0.079 U	0.085 U	0.076 U	0.074 U	0.09 U
Trifluorotrichloroethane (Freon 113)	mg/kg	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.21 U	0.2 U	0.2 U	0.21 U	0.19 U	0.19 U	0.22 U
Vinyl chloride	mg/kg	0.078 U	0.08 U	0.079 U	0.079 U	0.08 U	0.08 U	0.095 U	0.084 U	0.079 U	0.079 U	0.085 U	0.076 U	0.074 U	0.09 U
Xylenes (total)	mg/kg	0.12 U	0.015 J	0.12 U	0.036 J	0.12 U	0.021 J	0.14 U	0.13 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U	0.13 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB13-05*	*SB13-05*	*SB13-05*	*SB13-05*	*SB13-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*	*SB14-05*
Sample Identification		*SO-17360-071105-DCR-414*	*SO-17360-071105-DCR-415*	*SO-17360-071105-DCR-416*	*SO-17360-071105-DCR-417*	*SO-17360-071105-DCR-418*	*SO-17360-071205-DCR-460*	*SO-17360-071205-DCR-461*	*SO-17360-071205-DCR-462*	*SO-17360-071205-DCR-463*	*SO-17360-071205-DCR-464*	*SO-17360-071205-DCR-465*	*SO-17360-071205-DCR-466*	*SO-17360-071205-DCR-467*	*SO-17360-071205-DCR-468*
Sample Date		*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/11/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*	*7/12/2005*
Sample Depth		*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(14-16) ft*
Sample Type															*Duplicate*
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	98.7	98.8	97.0	97.5	97.7	95.2	97.6	98.4	98.3	96.1	96.8	96.4	96.1	96.7
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB14-05*	*SB14-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB16-05*	*SB16-05*
Sample Identification		*SO-17360-071205-DCR-469*	*SO-17360-071205-DCR-470*	*SO-17360-120305-DCR-540*	*SO-17360-120305-DCR-541*	*SO-17360-120305-DCR-542*	*SO-17360-120305-DCR-543*	*SO-17360-120305-DCR-544*	*SO-17360-120305-DCR-545*	*SO-17360-120305-DCR-546*	*SO-17360-120305-DCR-547*	*SO-17360-120305-DCR-548*	*SO-17360-120305-DCR-549*	*SO-17360-120305-DCR-508*	*SO-17360-120305-DCR-509*
Sample Date		*7/12/2005*	*7/12/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*
Sample Depth		*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(0-2) ft*
Sample Type															*Duplicate*
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB14-05*	*SB14-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB16-05*	*SB16-05*
Sample Identification		*SO-17360-071205-DCR-469*	*SO-17360-071205-DCR-470*	*SO-17360-120305-DCR-540*	*SO-17360-120305-DCR-541*	*SO-17360-120305-DCR-542*	*SO-17360-120305-DCR-543*	*SO-17360-120305-DCR-544*	*SO-17360-120305-DCR-545*	*SO-17360-120305-DCR-546*	*SO-17360-120305-DCR-547*	*SO-17360-120305-DCR-548*	*SO-17360-120305-DCR-549*	*SO-17360-120305-DCR-508*	*SO-17360-120305-DCR-509*
Sample Date		*7/12/2005*	*7/12/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*
Sample Depth		*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(0-2) ft*
Sample Type															*Duplicate*
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB14-05*	*SB14-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB16-05*	*SB16-05*
Sample Identification		*SO-17360-071205-DCR-469*	*SO-17360-071205-DCR-470*	*SO-17360-120305-DCR-540*	*SO-17360-120305-DCR-541*	*SO-17360-120305-DCR-542*	*SO-17360-120305-DCR-543*	*SO-17360-120305-DCR-544*	*SO-17360-120305-DCR-545*	*SO-17360-120305-DCR-546*	*SO-17360-120305-DCR-547*	*SO-17360-120305-DCR-548*	*SO-17360-120305-DCR-549*	*SO-17360-120305-DCR-508*	*SO-17360-120305-DCR-509*
Sample Date		*7/12/2005*	*7/12/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*
Sample Depth		*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(0-2) ft*
Sample Type															*Duplicate*
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	0.037 U	0.04 U	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
1,1,2,2-Tetrachloroethane	mg/kg	0.074 U	0.08 U	0.087 U	0.084 U	0.088 U	0.085 U	0.096 U	0.27 U	0.091 U	0.084 U	0.088 U	0.088 U	0.086 U	0.11 U
1,1,2-Trichloroethane	mg/kg	0.037 U	0.04 U	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
1,1-Dichloroethane	mg/kg	0.037 U	0.04 U	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
1,1-Dichloroethene	mg/kg	0.037 U	0.04 U	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	0.18 U	0.2 U	0.22 U	0.21 U	0.22 U	0.21 U	0.24 U	0.68 U	0.23 U	0.21 U	0.22 U	0.22 U	0.22 U	0.28 U
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	0.18 U	0.2 U	0.22 U	0.21 U	0.22 U	0.21 U	0.24 U	0.68 U	0.23 U	0.21 U	0.22 U	0.22 U	0.22 U	0.28 U
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	0.18 U	0.2 U	0.22 U	0.21 U	0.22 U	0.21 U	0.24 U	0.68 U	0.23 U	0.21 U	0.22 U	0.22 U	0.22 U	0.28 U
1,2-Dichlorobenzene	mg/kg	0.074 U	0.08 U	0.087 U	0.084 U	0.088 U	0.085 U	0.096 U	0.27 U	0.091 U	0.084 U	0.088 U	0.088 U	0.086 U	0.11 U
1,2-Dichloroethane	mg/kg	0.037 U	0.04 U	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
1,2-Dichloropropane	mg/kg	0.037 U	0.04 U	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	0.074 U	0.08 U	0.087 U	0.084 U	0.088 U	0.085 U	0.096 U	0.27 U	0.091 U	0.084 U	0.088 U	0.088 U	0.086 U	0.11 U
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	0.074 U	0.08 U	0.087 U	0.084 U	0.088 U	0.085 U	0.096 U	0.27 U	0.091 U	0.084 U	0.088 U	0.088 U	0.086 U	0.11 U
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	0.55 U	0.6 U	0.65 U	0.63 U	0.66 U	0.64 U	0.72 U	2 U	0.69 U	0.63 U	0.66 U	0.66 U	0.65 U	0.83 U
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	1.8 U	2 U	2.2 U	2.1 U	2.2 U	2.1 U	2.4 U	6.8 U	2.3 U	2.1 U	2.2 U	2.2 U	2.2 U	2.8 U
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	1.8 U	2 U	2.2 U	2.1 U	2.2 U	2.1 U	2.4 U	6.8 U	2.3 U	2.1 U	2.2 U	2.2 U	2.2 U	2.8 U
Acetone	mg/kg	0.55 U	0.6 U	0.65 UJ	0.63 UJ	0.66 UJ	0.64 UJ	0.72 UJ	2 UJ	0.69 UJ	0.63 UJ	0.66 U	0.66 U	0.65 U	0.83 U
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	0.037 U	0.04 U	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	0.074 UJ	0.08 UJ	0.087 U	0.084 U	0.088 U	0.085 U	0.096 U	0.27 U	0.091 U	0.084 U	0.088 U	0.088 U	0.086 U	0.11 U
Bromoform	mg/kg	0.074 U	0.08 U	0.087 U	0.084 U	0.088 U	0.085 U	0.096 U	0.27 U	0.091 U	0.084 U	0.088 U	0.088 U	0.086 U	0.11 U
Bromomethane (Methyl bromide)	mg/kg	0.18 U	0.2 U	0.22 U	0.21 U	0.22 U	0.21 U	0.24 U	0.68 U	0.23 U	0.21 U	0.22 U	0.22 U	0.22 U	0.28 U
Carbon disulfide	mg/kg	0.18 U	0.2 U	0.22 U	0.21 U	0.22 U	0.21 U	0.24 U	0.68 U	0.23 U	0.21 U	0.22 U	0.22 U	0.22 U	0.28 U
Carbon tetrachloride	mg/kg	0.037 U	0.04 U	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
Chlorobenzene	mg/kg	0.037 U	0.04 U	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	0.18 U	0.2 U	0.22 U	0.21 U	0.22 U	0.21 U	0.24 U	0.68 U	0.23 U	0.21 U	0.22 U	0.22 U	0.22 U	0.28 U
Chloroform (Trichloromethane)	mg/kg	0.037 U	0.04 U	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
Chloromethane (Methyl chloride)	mg/kg	0.18 U	0.2 U	0.22 U	0.21 U	0.22 U	0.21 U	0.24 U	0.68 U	0.23 U	0.21 U	0.22 U	0.22 U	0.22 U	0.28 U
cis-1,2-Dichloroethene	mg/kg	0.037 U	0.04 U	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
cis-1,3-Dichloropropene	mg/kg	0.037 UJ	0.04 UJ	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
Cyclohexane	mg/kg	0.88 U	0.96 U	1 U	1 U	1.1 U	1 U	1.1 U	3.3 U	1.1 U	1 U	1.1 U	1.1 U	1 U	1.3 U
Dibromochloromethane	mg/kg	0.037 U	0.04 U	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	0.074 U	0.08 U	0.087 U	0.084 U	0.088 U	0.085 U	0.096 U	0.27 U	0.091 U	0.084 U	0.088 U	0.088 U	0.086 U	0.11 U
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	0.037 U	0.04 U	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	0.18 U	0.2 U	0.22 U	0.21 U	0.22 U	0.21 U	0.24 U	0.68 U	0.23 U	0.21 U	0.22 U	0.22 U	0.22 U	0.28 U
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	0.88 U	0.96 U	1 U	1 U	1.1 U	1 U	1.1 U	0.8 J	1.1 U	1 U	1.1 U	1.1 U	1 U	1.3 U
Methyl cyclohexane	mg/kg	0.88 U	0.96 U	1 U	1 U	1.1 U	1 U	1.1 U	0.035 J	1.1 U	1 U	1.1 U	1.1 U	1 U	1.3 U
Methyl tert butyl ether (MTBE)	mg/kg	0.18 U	0.2 U	0.22 U	0.21 U	0.22 U	0.21 U	0.24 U	0.68 U	0.23 U	0.21 U	0.22 U	0.22 U	0.22 U	0.28 U
Methylene chloride	mg/kg	0.18 U	0.2 U	0.22 U	0.21 U	0.22 U	0.21 U	0.24 U	0.68 U	0.23 U	0.21 U	0.22 U	0.22 U	0.22 U	0.28 U
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	0.037 U	0.04 U	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	0.037 U	0.04 U	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	0.074 U	0.08 U	0.087 U	0.084 U	0.088 U	0.085 U	0.096 U	0.27 U	0.091 U	0.084 U	0.088 U	0.088 U	0.086 U	0.11 U
trans-1,2-Dichloroethene	mg/kg	0.037 U	0.04 U	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
trans-1,3-Dichloropropene	mg/kg	0.037 UJ	0.04 UJ	0.044 U	0.042 U	0.044 U	0.042 U	0.048 U	0.14 U	0.046 U	0.042 U	0.044 U	0.044 U	0.043 U	0.055 U
Trichloroethene	mg/kg	0.12	0.031 J	2.1	0.04 J	0.014 J	0.026 J	0.048 U	**12**[a]	0.08	0.059	0.059	0.017 J	1.2	0.74
Trichlorofluoromethane (CFC-11)	mg/kg	0.074 U	0.08 U	0.087 U	0.084 U	0.088 U	0.085 U	0.096 U	0.27 U	0.091 U	0.084 U	0.088 U	0.088 U	0.086 U	0.11 U
Trifluorotrichloroethane (Freon 113)	mg/kg	0.18 U	0.2 U	0.22 U	0.21 U	0.22 U	0.21 U	0.24 U	0.68 U	0.23 U	0.21 U	0.22 U	0.22 U	0.22 U	0.28 U
Vinyl chloride	mg/kg	0.074 U	0.08 U	0.087 U	0.084 U	0.088 U	0.085 U	0.096 U	0.27 U	0.091 U	0.084 U	0.088 U	0.088 U	0.086 U	0.11 U
Xylenes (total)	mg/kg	0.11 U	0.12 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.41 U	0.14 U	0.13 U	0.13 U	0.13 U	0.13 U	0.17 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB14-05*	*SB14-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB15-05*	*SB16-05*	*SB16-05*
Sample Identification		*SO-17360-071205-DCR-469*	*SO-17360-071205-DCR-470*	*SO-17360-120305-DCR-540*	*SO-17360-120305-DCR-541*	*SO-17360-120305-DCR-542*	*SO-17360-120305-DCR-543*	*SO-17360-120305-DCR-544*	*SO-17360-120305-DCR-545*	*SO-17360-120305-DCR-546*	*SO-17360-120305-DCR-547*	*SO-17360-120305-DCR-548*	*SO-17360-120305-DCR-549*	*SO-17360-120305-DCR-508*	*SO-17360-120305-DCR-509*
Sample Date		*7/12/2005*	*7/12/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*
Sample Depth		*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(0-2) ft*
Sample Type															*Duplicate*
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	96.8	97.1	97.3	97.8	98.9	98.2	98.6	98.2	96.2	98.1	98.6	98.6	96.5	96.3
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		SB16-05	SB16-05	SB16-05	SB16-05	SB16-05	SB16-05	SB16-05	SB16-05	SB16-05	SB17-01	SB17-02	SB17-03	SB17-04	SB17-05	SB17-05
Sample Identification		SO-17360-120305-DCR-510	SO-17360-120305-DCR-511	SO-17360-120305-DCR-512	SO-17360-120305-DCR-513	SO-17360-120305-DCR-514	SO-17360-120305-DCR-515	SO-17360-120305-DCR-516	SO-17360-120305-DCR-517	SO-17360-120305-DCR-518	83670-5907	83670-5914	83670-5920	83716-6301	83716-6294	SO-17360-120305-DCR-519
Sample Date		12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	8/3/1998	8/3/1998	8/4/1998	8/6/1998	8/6/1998	12/3/2005
Sample Depth		(2-4) ft	(4-6) ft	(6-8) ft	(8-10) ft	(10-12) ft	(12-14) ft	(14-16) ft	(16-18) ft	(18-20) ft	(0-25) ft	(0-25) ft	(0-25) ft	(0-25) ft	(0-35) ft	(0-2) ft
Sample Type																
AOI	Units	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 19, AOI 4.1	AOI 19, AOI 4.1	AOI 19, AOI 4.1	AOI 19, AOI 4.1	AOI 19, AOI 4.1	AOI 25, AOI 4.1
Alcohols																
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	10 U	10 U	10 U	10 U	10 U	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	10 U	10 U	10 U	10 U	10 U	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	10 U	10 U	10 U	10 U	10 U	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	10 U	10 U	10 U	10 U	10 U	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	10 U	10 U	10 U	10 U	10 U	--
Metals																
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	2100	1600	1200	820	2000	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	--
Arsenic	mg/kg	--	--	--	--	--	--	--	--	--	1.3	1	1.6 D	0.9 D	1.3 D	--
Barium	mg/kg	--	--	--	--	--	--	--	--	--	13	10	9.2	5	16	--
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	10 U	10 U	10 U	10 U	10 U	--
Cadmium	mg/kg	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	--
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	22000	21000	58000	19000	54000	--
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	4.2	3	3.8	2.5 U	4.7	--
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	1.7	1.8	1.6	1.1	2.4	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	6	6	6	3	6	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	3600	3700	3900	2300	5000	--
Lead	mg/kg	--	--	--	--	--	--	--	--	--	5.2	5	4.8	2	4	--
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	130	130	170	78	150	--
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	4.1	3	3.6	3	5	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	1.1	0.5 U	0.5 U	0.6	0.5 U	--
Silver	mg/kg	--	--	--	--	--	--	--	--	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	--
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	66	70	88	80	170	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	5	4	4	3	7	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	17	14	29	8	20	--
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides																
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.025 U	0.025 U	0.025 U	0.025 U	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB16-05*	*SB16-05*	*SB16-05*	*SB16-05*	*SB16-05*	*SB16-05*	*SB16-05*	*SB16-05*	*SB16-05*	*SB17-01*	*SB17-02*	*SB17-03*	*SB17-04*	*SB17-05*	*SB17-05*
Sample Identification		*SO-17360-120305-DCR-510*	*SO-17360-120305-DCR-511*	*SO-17360-120305-DCR-512*	*SO-17360-120305-DCR-513*	*SO-17360-120305-DCR-514*	*SO-17360-120305-DCR-515*	*SO-17360-120305-DCR-516*	*SO-17360-120305-DCR-517*	*SO-17360-120305-DCR-518*	*83670-5907*	*83670-5914*	*83670-5920*	*83716-6301*	*83716-6294*	*SO-17360-120305-DCR-519*
Sample Date		*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*8/3/1998*	*8/3/1998*	*8/4/1998*	*8/6/1998*	*8/6/1998*	*12/3/2005*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-25) ft*	*(0-25) ft*	*(0-25) ft*	*(0-25) ft*	*(0-35) ft*	*(0-2) ft*
Sample Type																
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 25, AOI 4.1*
Semi-Volatile Organic Compounds																
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
2-Methylnaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	2 U	2 U	2 U	2 U	2 U	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	--
Acenaphthene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Acenaphthylene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	--
Anthracene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Benzo(a)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Benzo(a)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.57	0.33 U	0.33 U	0.33 U	--
Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.92	0.33 U	0.33 U	0.33 U	--
Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.59	0.33 U	0.33 U	0.33 U	--
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	1.3	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Chrysene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.34	0.33 U	0.33 U	0.33 U	--
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Fluorene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.48	0.33 U	0.33 U	0.33 U	--
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	--
Phenanthrene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--
Pyrene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB16-05*	*SB16-05*	*SB16-05*	*SB16-05*	*SB16-05*	*SB16-05*	*SB16-05*	*SB16-05*	*SB16-05*	*SB17-01*	*SB17-02*	*SB17-03*	*SB17-04*	*SB17-05*	*SB17-05*
Sample Identification		*SO-17360-120305-DCR-510*	*SO-17360-120305-DCR-511*	*SO-17360-120305-DCR-512*	*SO-17360-120305-DCR-513*	*SO-17360-120305-DCR-514*	*SO-17360-120305-DCR-515*	*SO-17360-120305-DCR-516*	*SO-17360-120305-DCR-517*	*SO-17360-120305-DCR-518*	*83670-5907*	*83670-5914*	*83670-5920*	*83716-6301*	*83716-6294*	*SO-17360-120305-DCR-519*
Sample Date		*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*8/3/1998*	*8/3/1998*	*8/4/1998*	*8/6/1998*	*8/6/1998*	*12/3/2005*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-25) ft*	*(0-25) ft*	*(0-25) ft*	*(0-25) ft*	*(0-35) ft*	*(0-2) ft*
Sample Type																
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 25, AOI 4.1*
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
1,1,1-Trichloroethane	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.043 U
1,1,2,2-Tetrachloroethane	mg/kg	0.083 U	0.096 U	0.084 U	0.087 U	0.09 U	0.091 U	0.094 U	0.075 U	0.087 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.087 U
1,1,2-Trichloroethane	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.043 U
1,1-Dichloroethane	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.043 U
1,1-Dichloroethene	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.043 U
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
1,2,4-Trichlorobenzene	mg/kg	0.21 U	0.24 U	0.21 U	0.22 U	0.22 U	0.23 U	0.24 U	0.19 U	0.22 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.22 U
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	0.21 U	0.24 U	0.21 U	0.22 U	0.22 U	0.23 U	0.24 U	0.19 U	0.22 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.22 U
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	0.21 U	0.24 U	0.21 U	0.22 U	0.22 U	0.23 U	0.24 U	0.19 U	0.22 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.22 U
1,2-Dichlorobenzene	mg/kg	0.083 U	0.096 U	0.084 U	0.087 U	0.09 U	0.091 U	0.094 U	0.075 U	0.087 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.087 U
1,2-Dichloroethane	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.043 U
1,2-Dichloropropane	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.043 U
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
1,3-Dichlorobenzene	mg/kg	0.083 U	0.096 U	0.084 U	0.087 U	0.09 U	0.091 U	0.094 U	0.075 U	0.087 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.087 U
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.1 U	0.1 U	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	--
1,4-Dichlorobenzene	mg/kg	0.083 U	0.096 U	0.084 U	0.087 U	0.09 U	0.091 U	0.094 U	0.075 U	0.087 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.087 U
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	0.63 U	0.72 U	0.63 U	0.65 U	0.67 U	0.68 U	0.71 U	0.56 U	0.66 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.65 U
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
2-Hexanone	mg/kg	2.1 U	2.4 U	2.1 U	2.2 U	2.2 U	2.3 U	2.4 U	1.9 U	2.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.2 U
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	2.1 U	2.4 U	2.1 U	2.2 U	2.2 U	2.3 U	2.4 U	1.9 U	2.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.2 U
Acetone	mg/kg	0.63 U	0.72 U	0.63 U	0.65 U	0.67 U	0.68 U	0.71 U	0.56 U	0.66 U	0.1 U	0.1 U	0.1 U	0.19 B	0.13 B	0.65 U
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	--
Benzene	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.043 U
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
Bromodichloromethane	mg/kg	0.083 U	0.096 U	0.084 U	0.087 U	0.09 U	0.091 U	0.094 U	0.075 U	0.087 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.087 U
Bromoform	mg/kg	0.083 U	0.096 U	0.084 U	0.087 U	0.09 U	0.091 U	0.094 U	0.075 U	0.087 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.087 U
Bromomethane (Methyl bromide)	mg/kg	0.21 U	0.24 U	0.21 U	0.22 U	0.22 U	0.23 U	0.24 U	0.19 U	0.22 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.22 U
Carbon disulfide	mg/kg	0.21 U	0.24 U	0.21 U	0.22 U	0.22 U	0.23 U	0.24 U	0.19 U	0.22 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.22 U
Carbon tetrachloride	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.043 U
Chlorobenzene	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.043 U
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
Chloroethane	mg/kg	0.21 U	0.24 U	0.21 U	0.22 U	0.22 U	0.23 U	0.24 U	0.19 U	0.22 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.22 U
Chloroform (Trichloromethane)	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.043 U
Chloromethane (Methyl chloride)	mg/kg	0.21 U	0.24 U	0.21 U	0.22 U	0.22 U	0.23 U	0.24 U	0.19 U	0.22 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.22 U
cis-1,2-Dichloroethene	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.043 U
cis-1,3-Dichloropropene	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	--	--	--	--	--	0.043 U
Cyclohexane	mg/kg	1 U	1.1 U	1 U	1 U	1.1 U	1.1 U	1.1 U	0.9 U	1 U	--	--	--	--	--	1 U
Dibromochloromethane	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.043 U
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
Dichlorodifluoromethane (CFC-12)	mg/kg	0.083 U	0.096 U	0.084 U	0.087 U	0.09 U	0.091 U	0.094 U	0.075 U	0.087 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.087 U
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	--
Ethylbenzene	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.043 U
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	--
Isopropyl benzene	mg/kg	0.21 U	0.24 U	0.21 U	0.22 U	0.22 U	0.23 U	0.24 U	0.19 U	0.22 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.22 U
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	--
Methyl acetate	mg/kg	1 U	1.1 U	0.08 J	1 U	1.1 U	1.1 U	1.1 U	0.9 U	1 U	--	--	--	--	--	1 U
Methyl cyclohexane	mg/kg	1 U	1.1 U	1 U	1 U	1.1 U	1.1 U	1.1 U	0.9 U	1 U	--	--	--	--	--	1 U
Methyl tert butyl ether (MTBE)	mg/kg	0.21 U	0.24 U	0.21 U	0.22 U	0.22 U	0.23 U	0.24 U	0.19 U	0.22 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.22 U
Methylene chloride	mg/kg	0.21 U	0.24 U	0.21 U	0.22 U	0.22 U	0.23 U	0.24 U	0.19 U	0.22 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.22 U
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
Styrene	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.043 U
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
Tetrachloroethene	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.043 U
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	--
Toluene	mg/kg	0.083 U	0.096 U	0.084 U	0.087 U	0.09 U	0.091 U	0.094 U	0.075 U	0.087 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.087 U
trans-1,2-Dichloroethene	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.043 U
trans-1,3-Dichloropropene	mg/kg	0.042 U	0.048 U	0.042 U	0.043 U	0.045 U	0.046 U	0.047 U	0.038 U	0.044 U	--	--	--	--	--	0.043 U
Trichloroethene	mg/kg	0.074	0.025 J	0.16	0.043 U	0.016 J	0.02 J	0.031 J	0.017 J	0.02 J	0.025 U	0.025 U	0.025 U	0.025 U	0.044	0.043 U
Trichlorofluoromethane (CFC-11)	mg/kg	0.083 U	0.096 U	0.084 U	0.087 U	0.09 U	0.091 U	0.094 U	0.075 U	0.087 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.087 U
Trifluorotrichloroethane (Freon 113)	mg/kg	0.21 U	0.24 U	0.21 U	0.22 U	0.22 U	0.23 U	0.24 U	0.19 U	0.22 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.22 U
Vinyl chloride	mg/kg	0.083 U	0.096 U	0.084 U	0.087 U	0.09 U	0.091 U	0.094 U	0.075 U	0.087 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.087 U
Xylenes (total)	mg/kg	0.13 U	0.14 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U	0.11 U	0.13 U	--	--	--	--	--	0.13 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		SB16-05	SB16-05	SB16-05	SB16-05	SB16-05	SB16-05	SB16-05	SB16-05	SB16-05	SB17-01	SB17-02	SB17-03	SB17-04	SB17-05	SB17-05
Sample Identification		SO-17360-120305-DCR-510	SO-17360-120305-DCR-511	SO-17360-120305-DCR-512	SO-17360-120305-DCR-513	SO-17360-120305-DCR-514	SO-17360-120305-DCR-515	SO-17360-120305-DCR-516	SO-17360-120305-DCR-517	SO-17360-120305-DCR-518	83670-5907	83670-5914	83670-5920	83716-6301	83716-6294	SO-17360-120305-DCR-519
Sample Date		12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	8/3/1998	8/3/1998	8/4/1998	8/6/1998	8/6/1998	12/3/2005
Sample Depth		(2-4) ft	(4-6) ft	(6-8) ft	(8-10) ft	(10-12) ft	(12-14) ft	(14-16) ft	(16-18) ft	(18-20) ft	(0-25) ft	(0-25) ft	(0-25) ft	(0-25) ft	(0-35) ft	(0-2) ft
Sample Type																
AOI	Units	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 19, AOI 4.1	AOI 19, AOI 4.1	AOI 19, AOI 4.1	AOI 19, AOI 4.1	AOI 19, AOI 4.1	AOI 25, AOI 4.1
General Chemistry																
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	200 U	200 U	200 U	200 U	200 U	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	33	87	70	35	60	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	12	5.7	5	4.1	5.6	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	110	30 U	30 U	81	40 U	--
Total solids	%	97.8	98.7	98.7	97.6	98.0	96.6	92.5	98.0	97.1	--	--	--	--	--	96.8
pH	none	--	--	--	--	--	--	--	--	--	8.4	--	9.2	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	250 U	--	250 U	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	500 U	--	500 U	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-06*	*SB17-07*	*SB17-08*	*SB17-09*	*SB17-10A*
Sample Identification		*SO-17360-120305-DCR-520*	*SO-17360-120305-DCR-521*	*SO-17360-120305-DCR-522*	*SO-17360-120305-DCR-523*	*SO-17360-120305-DCR-524*	*SO-17360-120305-DCR-525*	*SO-17360-120305-DCR-526*	*SO-17360-120305-DCR-527*	*SO-17360-120305-DCR-528*	*83685-5970*	*83670-5927*	*83685-5964*	*83767-6458*	*83767-6452*
Sample Date		*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*8/5/1998*	*8/4/1998*	*8/5/1998*	*8/7/1998*	*8/10/1998*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-35) ft*	*(0-25) ft*	*(0-25) ft*	*(0-35) ft*	*(0-30) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	10 U	10 U	10 U	10 U	10 U
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	10 U	10 U	10 U	10 U	10 U
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	10 U	10 U	10 U	10 U	10 U
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	10 U	10 U	10 U	10 U	10 U
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	10 U	10 U	10 U	10 U	10 U
Metals															
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	1200	2200	1500	1500	1600
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Arsenic	mg/kg	--	--	--	--	--	--	--	--	--	0.9	1.7	0.8	1	0.8
Barium	mg/kg	--	--	--	--	--	--	--	--	--	7	10	8	7.8	9.8
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	10 U	10 U	10 U	10 U	10 U
Cadmium	mg/kg	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.1 U
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	51000	68000	26000	29000	24000
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	2.6	5	4	4.4	4
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	1.3	2.2	1.4	1.8	1.6
Copper	mg/kg	--	--	--	--	--	--	--	--	--	6	1.4	5	6.7	4.4
Iron	mg/kg	--	--	--	--	--	--	--	--	--	2800	5200	3300	3600	2900
Lead	mg/kg	--	--	--	--	--	--	--	--	--	2	4	3	4.4	4.3
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	110	180	89	110	110
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	3	5	3	4.6	3.2
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	0.5	1.1	0.5 U	0.9	0.5
Silver	mg/kg	--	--	--	--	--	--	--	--	--	0.5 U	0.5 U	0.5 U	0.26	0.5 U
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	150	150	120	73	76
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	4	8	5	5	2
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	13	17	12	15	14
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	0.05 U	0.05 U	0.05 U	0.02 U	0.05 U
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-06*	*SB17-07*	*SB17-08*	*SB17-09*	*SB17-10A*
Sample Identification		*SO-17360-120305-DCR-520*	*SO-17360-120305-DCR-521*	*SO-17360-120305-DCR-522*	*SO-17360-120305-DCR-523*	*SO-17360-120305-DCR-524*	*SO-17360-120305-DCR-525*	*SO-17360-120305-DCR-526*	*SO-17360-120305-DCR-527*	*SO-17360-120305-DCR-528*	*83685-5970*	*83670-5927*	*83685-5964*	*83767-6458*	*83767-6452*
Sample Date		*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*8/5/1998*	*8/4/1998*	*8/5/1998*	*8/7/1998*	*8/10/1998*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-35) ft*	*(0-25) ft*	*(0-25) ft*	*(0-35) ft*	*(0-30) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	0.33 U	0.33 U
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	1.3 U	1.3 U
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2-Methylnaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	1.3 U	1.3 U
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	2 U	2 U	2 U	1.3 U	1.3 U
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	1.3 U	1.3 U
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	1.3 U	1.3 U
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	1.3 U	1.3 U
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	1.3 U	1.3 U
Acenaphthene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Acenaphthylene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Anthracene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Benzo(a)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Benzo(a)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	1.5
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chrysene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.64	0.33 U	0.33 U
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Fluorene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	0.33 U	0.33 U
Phenanthrene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Pyrene	mg/kg	--	--	--	--	--	--	--	--	--	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-06*	*SB17-07*	*SB17-08*	*SB17-09*	*SB17-10A*
Sample Identification		*SO-17360-120305-DCR-520*	*SO-17360-120305-DCR-521*	*SO-17360-120305-DCR-522*	*SO-17360-120305-DCR-523*	*SO-17360-120305-DCR-524*	*SO-17360-120305-DCR-525*	*SO-17360-120305-DCR-526*	*SO-17360-120305-DCR-527*	*SO-17360-120305-DCR-528*	*83685-5970*	*83670-5927*	*83685-5964*	*83767-6458*	*83767-6452*
Sample Date		*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*8/5/1998*	*8/4/1998*	*8/5/1998*	*8/7/1998*	*8/10/1998*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-35) ft*	*(0-25) ft*	*(0-25) ft*	*(0-35) ft*	*(0-30) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,1,1-Trichloroethane	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,1,2,2-Tetrachloroethane	mg/kg	0.085 U	0.085 U	0.088 U	0.08 U	0.093 U	0.09 U	0.081 U	0.077 U	0.09 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,1,2-Trichloroethane	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,1-Dichloroethane	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,1-Dichloroethene	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,2,4-Trichlorobenzene	mg/kg	0.21 U	0.21 U	0.22 U	0.2 U	0.23 U	0.23 U	0.2 U	0.19 U	0.22 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	0.21 U	0.21 U	0.22 U	0.2 U	0.23 U	0.23 U	0.2 U	0.19 U	0.22 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	0.21 U	0.21 U	0.22 U	0.2 U	0.23 U	0.23 U	0.2 U	0.19 U	0.22 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,2-Dichlorobenzene	mg/kg	0.085 U	0.085 U	0.088 U	0.08 U	0.093 U	0.09 U	0.081 U	0.077 U	0.09 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,2-Dichloroethane	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,2-Dichloropropane	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,3-Dichlorobenzene	mg/kg	0.085 U	0.085 U	0.088 U	0.08 U	0.093 U	0.09 U	0.081 U	0.077 U	0.09 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.1 U	0.025 U
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.1 U	0.1 U	0.025 U
1,4-Dichlorobenzene	mg/kg	0.085 U	0.085 U	0.088 U	0.08 U	0.093 U	0.09 U	0.081 U	0.077 U	0.09 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	0.64 U	0.63 U	0.66 U	0.6 U	0.7 U	0.68 U	0.61 U	0.58 U	0.67 U	0.1 U	0.1 U	0.1 U	0.025 U	0.1 U
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
2-Hexanone	mg/kg	2.1 U	2.1 U	2.2 U	2 U	2.3 U	2.3 U	2 U	1.9 U	2.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	2.1 U	2.1 U	2.2 U	2 U	2.3 U	2.3 U	2 U	1.9 U	2.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetone	mg/kg	0.64 U	0.63 U	0.66 U	0.6 U	0.7 U	0.68 U	0.61 U	0.58 U	0.67 UJ	0.14 B	0.14 B	0.1 U	0.1 U	0.1 U
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.1 U	0.025 U	0.1 U
Benzene	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.1 U	0.025 U	0.025 U
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Bromodichloromethane	mg/kg	0.085 U	0.085 U	0.088 U	0.08 U	0.093 U	0.09 U	0.081 U	0.077 U	0.09 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Bromoform	mg/kg	0.085 U	0.085 U	0.088 U	0.08 U	0.093 U	0.09 U	0.081 U	0.077 U	0.09 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Bromomethane (Methyl bromide)	mg/kg	0.21 U	0.21 U	0.22 U	0.2 U	0.23 U	0.23 U	0.2 U	0.19 U	0.22 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Carbon disulfide	mg/kg	0.21 U	0.21 U	0.22 U	0.2 U	0.23 U	0.23 U	0.2 U	0.19 U	0.22 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Carbon tetrachloride	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Chlorobenzene	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Chloroethane	mg/kg	0.21 U	0.21 U	0.22 U	0.2 U	0.23 U	0.23 U	0.2 U	0.19 U	0.22 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Chloroform (Trichloromethane)	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Chloromethane (Methyl chloride)	mg/kg	0.21 U	0.21 U	0.22 U	0.2 U	0.23 U	0.23 U	0.2 U	0.19 U	0.22 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
cis-1,2-Dichloroethene	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
cis-1,3-Dichloropropene	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	--	--	--	--	--
Cyclohexane	mg/kg	1 U	1 U	1.1 U	0.96 U	1.1 U	1.1 U	0.98 U	0.93 U	1.1 U	--	--	--	--	--
Dibromochloromethane	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Dichlorodifluoromethane (CFC-12)	mg/kg	0.085 U	0.085 U	0.088 U	0.08 U	0.093 U	0.09 U	0.081 U	0.077 U	0.09 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.1 U	0.025 U	0.1 U
Ethylbenzene	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	0.025 U	0.025 U	0.025 U	0.025 U	0.028
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.1 U	--	0.1 U
Isopropyl benzene	mg/kg	0.21 U	0.21 U	0.22 U	0.2 U	0.23 U	0.23 U	0.2 U	0.19 U	0.22 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	0.05 U	0.05 U	0.05 U	0.05 U	0.051
Methyl acetate	mg/kg	1 U	1 U	1.1 U	0.96 U	1.6	1.1 U	0.98 U	0.93 U	1.1 U	--	--	--	--	--
Methyl cyclohexane	mg/kg	1 U	1 U	1.1 U	0.96 U	1.1 U	1.1 U	0.98 U	0.93 U	1.1 U	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/kg	0.21 U	0.21 U	0.22 U	0.2 U	0.23 U	0.23 U	0.2 U	0.19 U	0.22 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	mg/kg	0.21 U	0.21 U	0.22 U	0.2 U	0.23 U	0.23 U	0.2 U	0.19 U	0.22 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.046
Styrene	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Tetrachloroethene	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.1 U	0.025 U	0.1 U
Toluene	mg/kg	0.085 U	0.085 U	0.088 U	0.08 U	0.093 U	0.09 U	0.081 U	0.077 U	0.09 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
trans-1,2-Dichloroethene	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
trans-1,3-Dichloropropene	mg/kg	0.042 U	0.042 U	0.044 U	0.04 U	0.046 U	0.045 U	0.041 U	0.039 U	0.045 U	--	--	--	--	--
Trichloroethene	mg/kg	0.039 J	0.042 U	0.044 U	0.04 U	0.099	0.045 U	0.041 U	0.039 U	0.045 U	0.051	0.04	0.069	0.092	0.03
Trichlorofluoromethane (CFC-11)	mg/kg	0.085 U	0.085 U	0.088 U	0.08 U	0.093 U	0.09 U	0.081 U	0.077 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trifluorotrichloroethane (Freon 113)	mg/kg	0.21 U	0.21 U	0.22 U	0.2 U	0.23 U	0.23 U	0.2 U	0.19 U	0.22 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Vinyl chloride	mg/kg	0.085 U	0.085 U	0.088 U	0.08 U	0.093 U	0.09 U	0.081 U	0.077 U	0.09 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Xylenes (total)	mg/kg	0.13 U	0.13 U	0.13 U	0.12 U	0.14 U	0.14 U	0.12 U	0.12 U	0.13 U	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-05*	*SB17-06*	*SB17-07*	*SB17-08*	*SB17-09*	*SB17-10A*
Sample Identification		*SO-17360-120305-DCR-520*	*SO-17360-120305-DCR-521*	*SO-17360-120305-DCR-522*	*SO-17360-120305-DCR-523*	*SO-17360-120305-DCR-524*	*SO-17360-120305-DCR-525*	*SO-17360-120305-DCR-526*	*SO-17360-120305-DCR-527*	*SO-17360-120305-DCR-528*	*83685-5970*	*83670-5927*	*83685-5964*	*83767-6458*	*83767-6452*
Sample Date		*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*8/5/1998*	*8/4/1998*	*8/5/1998*	*8/7/1998*	*8/10/1998*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-35) ft*	*(0-25) ft*	*(0-25) ft*	*(0-35) ft*	*(0-30) ft*
Sample Type															
AOI	*Units*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	200 U	200 U	200 U	200 U	200 U
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	54	55	48	0.43	47
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	3.3	7.6	6.5	8	2.7
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	30 U	35	54	40 U	40 U
Total solids	%	94.3	97.5	97.8	96.0	95.5	95.9	97.3	96.4	97.8	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB17-11*	*SB17-12*	*SB17-13*	*SB17-14*
Sample Identification		*83816-6598*	*83767-6456*	*83767-6455*	*83767-6599*
Sample Date		*8/12/1998*	*8/7/1998*	*8/10/1998*	*8/12/1998*
Sample Depth		*(12-30) ft*	*(0-25) ft*	*(0-20) ft*	*(0-25) ft*
Sample Type					
AOI	*Units*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*
Alcohols					
2-Ethanoxyethanol	mg/kg	10 U	10 U	10 U	--
Isobutanol (isobutyl alcohol)	mg/kg	10 U	10 U	10 U	--
Isopropyl alcohol	mg/kg	10 U	10 U	10 U	--
Methanol	mg/kg	10 U	10 U	10 U	--
Propylene glycol	mg/kg	10 U	10 U	10 U	--
Metals					
Aluminum	mg/kg	1000	1600	2200	--
Antimony	mg/kg	0.5 U	0.5 U	0.5 U	--
Arsenic	mg/kg	0.8	2	1.8	--
Barium	mg/kg	6	8.7	12	--
Beryllium	mg/kg	--	--	--	--
Boron	mg/kg	10 U	10 U	10 U	--
Cadmium	mg/kg	0.2 U	0.1 U	0.1 U	--
Calcium	mg/kg	26000	27000	29000	--
Chromium	mg/kg	2.8	5.2	13	--
Chromium III (trivalent)	mg/kg	--	--	--	--
Chromium VI (hexavalent)	mg/kg	0.2 U	0.2 U	0.2 U	--
Cobalt	mg/kg	1.3	2.7	2.3	--
Copper	mg/kg	4	6.6	9.9	--
Iron	mg/kg	2900	3900	5100	--
Lead	mg/kg	3	7.5	7.8	--
Lead - coarse fraction	mg/kg	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--
Magnesium	mg/kg	--	--	--	--
Manganese	mg/kg	100	11	160	--
Mercury	mg/kg	0.02 U	0.02 U	0.02 U	--
Nickel	mg/kg	2	4.2	5.6	--
Potassium	mg/kg	--	--	--	--
Selenium	mg/kg	0.5 U	0.8	0.9	--
Silver	mg/kg	0.5 U	0.25	0.35	--
Sodium	mg/kg	290	91	87	--
Thallium	mg/kg	0.5 U	0.5 U	0.5 U	--
Vanadium	mg/kg	4	5	7	--
Zinc	mg/kg	7	16	18	--
PCBs					
Aroclor-1016 (PCB-1016)	mg/kg	0.33 U	0.33 U	0.33 U	--
Aroclor-1221 (PCB-1221)	mg/kg	0.33 U	0.33 U	0.33 U	--
Aroclor-1232 (PCB-1232)	mg/kg	0.33 U	0.33 U	0.33 U	--
Aroclor-1242 (PCB-1242)	mg/kg	0.33 U	0.33 U	0.33 U	--
Aroclor-1248 (PCB-1248)	mg/kg	0.33 U	0.33 U	0.33 U	--
Aroclor-1254 (PCB-1254)	mg/kg	0.33 U	0.33 U	0.33 U	--
Aroclor-1260 (PCB-1260)	mg/kg	0.33 U	0.33 U	0.33 U	--
Aroclor-1262 (PCB-1262)	mg/kg	0.33 U	0.33 U	0.33 U	--
Aroclor-1268 (PCB-1268)	mg/kg	0.33 U	0.33 U	0.33 U	--
Total PCBs	mg/kg	--	--	--	--
Pesticides					
4,4'-DDD	mg/kg	0.02 U	0.02 U	0.02 U	--
4,4'-DDE	mg/kg	0.02 U	0.02 U	0.02 U	--
4,4'-DDT	mg/kg	0.02 U	0.02 U	0.02 U	--
Aldrin	mg/kg	0.02 U	0.02 U	0.02 U	--
alpha-BHC	mg/kg	0.02 U	0.02 U	0.02 U	--
beta-BHC	mg/kg	0.02 U	0.02 U	0.02 U	--
Chlordane	mg/kg	0.025 U	0.025 U	0.025 U	--
delta-BHC	mg/kg	0.02 U	0.02 U	0.02 U	--
Dieldrin	mg/kg	0.02 U	0.02 U	0.02 U	--
Endosulfan I	mg/kg	0.02 U	0.02 U	0.02 U	--
Endosulfan II	mg/kg	0.02 U	0.02 U	0.02 U	--
Endosulfan sulfate	mg/kg	0.02 U	0.02 U	0.02 U	--
Endrin	mg/kg	0.02 U	0.02 U	0.02 U	--
Endrin aldehyde	mg/kg	0.02 U	0.02 U	0.02 U	--
gamma-BHC (lindane)	mg/kg	0.02 U	0.02 U	0.02 U	--
Heptachlor	mg/kg	0.02 U	0.02 U	0.02 U	--
Heptachlor epoxide	mg/kg	0.02 U	0.02 U	0.02 U	--
Methoxychlor	mg/kg	0.05 U	0.05 U	0.05 U	--
Toxaphene	mg/kg	0.17 U	0.17 U	0.17 U	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB17-11*	*SB17-12*	*SB17-13*	*SB17-14*
Sample Identification		*83816-6598*	*83767-6456*	*83767-6455*	*83767-6599*
Sample Date		*8/12/1998*	*8/7/1998*	*8/10/1998*	*8/12/1998*
Sample Depth		*(12-30) ft*	*(0-25) ft*	*(0-20) ft*	*(0-25) ft*
Sample Type					
AOI	*Units*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*
Semi-Volatile Organic Compounds					
1,2,3,4-Tetrachlorobenzene	mg/kg	0.33 U	0.33 U	0.33 U	--
1,2,4,5-Tetrachlorobenzene	mg/kg	0.33 U	0.33 U	0.33 U	--
1,3,5-Trichlorobenzene	mg/kg	0.33 U	0.33 U	0.33 U	--
2,2'-Oxybis(1-chloropropane)	mg/kg	0.33 U	0.33 U	0.33 U	--
2,4,5-Trichlorophenol	mg/kg	0.33 U	0.33 U	0.33 U	--
2,4,6-Trichlorophenol	mg/kg	0.33 U	0.33 U	0.33 U	--
2,4-Dichlorophenol	mg/kg	0.33 U	0.33 U	0.33 U	--
2,4-Dimethylphenol	mg/kg	0.33 U	0.33 U	0.33 U	--
2,4-Dinitrophenol	mg/kg	1.3 U	1.3 U	1.3 U	--
2,4-Dinitrotoluene	mg/kg	0.33 U	0.33 U	0.33 U	--
2,6-Dinitrotoluene	mg/kg	0.33 U	0.33 U	0.33 U	--
2-Chloronaphthalene	mg/kg	0.33 U	0.33 U	0.33 U	--
2-Chlorophenol	mg/kg	0.33 U	0.33 U	0.33 U	--
2-Methylnaphthalene	mg/kg	0.33 U	0.33 U	0.33 U	--
2-Methylphenol	mg/kg	0.33 U	0.33 U	0.33 U	--
2-Nitroaniline	mg/kg	1.3 U	1.3 U	1.3 U	--
2-Nitrophenol	mg/kg	0.33 U	0.33 U	0.33 U	--
3&4-Methylphenol	mg/kg	0.66 U	0.66 U	0.66 U	--
3,3'-Dichlorobenzidine	mg/kg	1.3 U	1.3 U	1.3 U	--
3-Nitroaniline	mg/kg	1.3 U	1.3 U	1.3 U	--
4,6-Dinitro-2-methylphenol	mg/kg	1.3 U	1.3 U	1.3 U	--
4-Bromophenyl phenyl ether	mg/kg	0.33 U	0.33 U	0.33 U	--
4-Chloro-3-methylphenol	mg/kg	0.33 U	0.33 U	0.33 U	--
4-Chloroaniline	mg/kg	1.3 U	1.3 U	1.3 U	--
4-Chlorophenyl phenyl ether	mg/kg	0.33 U	0.33 U	0.33 U	--
4-Nitroaniline	mg/kg	1.3 U	1.3 U	1.3 U	--
4-Nitrophenol	mg/kg	1.3 U	1.3 U	1.3 U	--
Acenaphthene	mg/kg	0.33 U	0.33 U	0.33 U	--
Acenaphthylene	mg/kg	0.33 U	0.33 U	0.33 U	--
Aniline	mg/kg	1.3 U	1.3 U	1.3 U	--
Anthracene	mg/kg	0.33 U	0.33 U	0.33 U	--
Benzo(a)anthracene	mg/kg	0.33 U	0.33 U	0.43	--
Benzo(a)pyrene	mg/kg	0.33 U	0.33 U	0.43	--
Benzo(b)fluoranthene	mg/kg	0.33 U	0.33 U	0.4	--
Benzo(g,h,i)perylene	mg/kg	0.33 U	0.33 U	0.33 U	--
Benzo(k)fluoranthene	mg/kg	0.33 U	0.33 U	0.44	--
Benzoic acid	mg/kg	3.3 U	3.3 U	3.3 U	--
Benzyl alcohol	mg/kg	1.3 U	1.3 U	1.3 U	--
bis(2-Chloroethoxy)methane	mg/kg	0.33 U	0.33 U	0.33 U	--
bis(2-Chloroethyl)ether	mg/kg	0.33 U	0.33 U	0.33 U	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	0.33 U	0.33 U	0.33 U	--
Butyl benzylphthalate (BBP)	mg/kg	0.33 U	0.33 U	0.33 U	--
Carbazole	mg/kg	0.33 U	0.33 U	0.33 U	--
Chrysene	mg/kg	0.33 U	0.33	0.46	--
Dibenz(a,h)anthracene	mg/kg	0.33 U	0.33 U	0.33 U	--
Dibenzofuran	mg/kg	0.33 U	0.33 U	0.33 U	--
Diethyl phthalate	mg/kg	0.33 U	0.33 U	0.33 U	--
Dimethyl phthalate	mg/kg	0.33 U	0.33 U	0.33 U	--
Di-n-butylphthalate (DBP)	mg/kg	0.33 U	0.33 U	0.33 U	--
Di-n-octyl phthalate (DnOP)	mg/kg	0.33 U	0.33 U	0.33 U	--
Fluoranthene	mg/kg	0.33 U	0.65	0.93	--
Fluorene	mg/kg	0.33 U	0.33 U	0.33 U	--
Hexabromobenzene	mg/kg	0.33 U	0.33 U	0.33 U	--
Hexachlorobenzene	mg/kg	0.33 U	0.33 U	0.33 U	--
Hexachlorocyclopentadiene	mg/kg	0.33 U	0.33 U	0.33 U	--
Hexachloroethane	mg/kg	0.33 U	0.33 U	0.33 U	--
Indeno(1,2,3-cd)pyrene	mg/kg	0.33 U	0.33 U	0.33 U	--
Isophorone	mg/kg	0.33 U	0.33 U	0.33 U	--
Mirex	mg/kg	0.33 U	0.33 U	0.33 U	--
Naphthalene	mg/kg	--	--	--	--
Nitrobenzene	mg/kg	0.33 U	0.33 U	0.33 U	--
N-Nitrosodi-n-propylamine	mg/kg	0.33 U	0.33 U	0.33 U	--
N-Nitrosodiphenylamine	mg/kg	0.33 U	0.33 U	0.33 U	--
Pentachlorobenzene	mg/kg	0.33 U	0.33 U	0.33 U	--
Pentachloronitrobenzene	mg/kg	0.33 U	0.33 U	0.33 U	--
Pentachlorophenol	mg/kg	0.33 U	0.33 U	0.33 U	--
Phenanthrene	mg/kg	0.33 U	0.34	0.58	--
Phenol	mg/kg	0.33 U	0.33 U	0.33 U	--
Polybrominated biphenyls	mg/kg	0.33 U	0.33 U	0.33 U	--
Pyrene	mg/kg	0.33 U	0.54	0.79	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB17-11*	*SB17-12*	*SB17-13*	*SB17-14*
Sample Identification		*83816-6598*	*83767-6456*	*83767-6455*	*83767-6599*
Sample Date		*8/12/1998*	*8/7/1998*	*8/10/1998*	*8/12/1998*
Sample Depth		*(12-30) ft*	*(0-25) ft*	*(0-20) ft*	*(0-25) ft*
Sample Type					
AOI	*Units*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*
Volatile Organic Compounds					
1,1,1,2-Tetrachloroethane	mg/kg	0.025 U	0.025 U	0.025 U	--
1,1,1-Trichloroethane	mg/kg	0.025 U	0.025 U	0.025 U	--
1,1,2,2-Tetrachloroethane	mg/kg	0.025 U	0.025 U	0.025 U	--
1,1,2-Trichloroethane	mg/kg	0.025 U	0.025 U	0.025 U	--
1,1-Dichloroethane	mg/kg	0.025 U	0.025 U	0.025 U	--
1,1-Dichloroethene	mg/kg	0.025 U	0.025 U	0.025 U	--
1,1-Dichloropropene	mg/kg	0.025 U	0.025 U	0.025 U	--
1,2,3-Trichlorobenzene	mg/kg	0.025 U	0.025 U	0.025 U	--
1,2,3-Trichloropropane	mg/kg	0.025 U	0.025 U	0.025 U	--
1,2,4-Trichlorobenzene	mg/kg	0.025 U	0.025 U	0.025 U	--
1,2,4-Trimethylbenzene	mg/kg	0.025 U	0.025 U	0.025 U	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	0.025 U	0.025 U	0.025 U	--
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	0.025 U	0.025 U	0.025 U	--
1,2-Dichlorobenzene	mg/kg	0.025 U	0.025 U	0.025 U	--
1,2-Dichloroethane	mg/kg	0.025 U	0.025 U	0.025 U	--
1,2-Dichloropropane	mg/kg	0.025 U	0.025 U	0.025 U	--
1,3,5-Trimethylbenzene	mg/kg	0.025 U	0.025 U	0.025 U	--
1,3-Dichlorobenzene	mg/kg	0.025 U	0.025 U	0.025 U	--
1,3-Dichloropropane	mg/kg	0.025 U	0.025 U	0.025 U	--
1,3-Dichloropropene	mg/kg	0.1 U	0.1 U	0.1 U	--
1,4-Dichlorobenzene	mg/kg	0.025 U	0.025 U	0.025 U	--
2,2-Dichloropropane	mg/kg	0.025 U	0.025 U	0.025 U	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	0.1 U	0.1 U	0.1 U	--
2-Chlorotoluene	mg/kg	0.025 U	0.025 U	0.025 U	--
2-Hexanone	mg/kg	0.1 U	0.1 U	0.1 U	--
2-Phenylbutane (sec-Butylbenzene)	mg/kg	0.025 U	0.025 U	0.025 U	--
4-Chlorotoluene	mg/kg	0.025 U	0.025 U	0.025 U	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	0.1 U	0.1 U	0.1 U	--
Acetone	mg/kg	0.1 U	0.1 U	0.1 U	--
Acrylonitrile	mg/kg	0.1 U	0.1 U	--	--
Benzene	mg/kg	0.025 U	0.025 U	0.025 U	--
Benzyl chloride	mg/kg	0.1 U	0.025 U	0.025 U	--
Bromobenzene	mg/kg	0.025 U	0.025 U	0.025 U	--
Bromodichloromethane	mg/kg	0.025 U	0.025 U	0.025 U	--
Bromoform	mg/kg	0.025 U	0.025 U	0.025 U	--
Bromomethane (Methyl bromide)	mg/kg	0.025 U	0.025 U	0.025 U	--
Carbon disulfide	mg/kg	0.1 U	0.1 U	0.1 U	--
Carbon tetrachloride	mg/kg	0.025 U	0.025 U	0.025 U	--
Chlorobenzene	mg/kg	0.025 U	0.025 U	0.025 U	--
Chlorobromomethane	mg/kg	0.025 U	0.025 U	0.025 U	--
Chloroethane	mg/kg	0.025 U	0.025 U	0.025 U	--
Chloroform (Trichloromethane)	mg/kg	0.025 U	0.025 U	0.025 U	--
Chloromethane (Methyl chloride)	mg/kg	0.025 U	0.025 U	0.025 U	--
cis-1,2-Dichloroethene	mg/kg	0.025 U	0.025 U	0.025 U	--
cis-1,3-Dichloropropene	mg/kg	--	--	--	--
Cyclohexane	mg/kg	--	--	--	--
Dibromochloromethane	mg/kg	0.025 U	0.025 U	0.025 U	--
Dibromomethane	mg/kg	0.025 U	0.025 U	0.025 U	--
Dichlorodifluoromethane (CFC-12)	mg/kg	0.025 U	0.025 U	0.025 U	--
Ethyl ether	mg/kg	0.1 U	0.1 U	0.025 U	--
Ethylbenzene	mg/kg	0.025 U	0.025 U	0.025 U	--
Hexachlorobutadiene	mg/kg	0.025 U	0.025 U	0.025 U	--
Hexane	mg/kg	0.1 U	0.1 U	0.1 U	--
Isopropyl benzene	mg/kg	0.025 U	0.025 U	0.025 U	--
Isopropyl toluene	mg/kg	0.025 U	0.025 U	0.025 U	--
m&p-Xylenes	mg/kg	0.05 U	0.05 U	0.05 U	--
Methyl acetate	mg/kg	--	--	--	--
Methyl cyclohexane	mg/kg	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/kg	0.1 U	0.025 U	0.025 U	--
Methylene chloride	mg/kg	0.25 U	0.25 U	0.25 U	--
Naphthalene	mg/kg	0.025 U	0.025 U	0.025 U	--
N-Butylbenzene	mg/kg	0.025 U	0.025 U	0.025 U	--
N-Propylbenzene	mg/kg	0.025 U	0.025 U	0.025 U	--
o-Xylene	mg/kg	0.025 U	0.025 U	0.025 U	--
Styrene	mg/kg	0.025 U	0.025 U	0.025 U	--
tert-Butylbenzene	mg/kg	0.025 U	0.025 U	0.025 U	--
Tetrachloroethene	mg/kg	0.025 U	0.025 U	0.025 U	--
Tetrahydrofuran	mg/kg	0.1 U	0.1 U	0.1 U	--
Toluene	mg/kg	0.025 U	0.025 U	0.025 U	--
trans-1,2-Dichloroethene	mg/kg	0.025 U	0.025 U	0.025 U	--
trans-1,3-Dichloropropene	mg/kg	--	--	--	--
Trichloroethene	mg/kg	0.39	0.062	0.096	--
Trichlorofluoromethane (CFC-11)	mg/kg	0.1 U	0.025 U	0.1 U	--
Trifluorotrichloroethane (Freon 113)	mg/kg	0.025 U	0.025 U	0.025 U	--
Vinyl chloride	mg/kg	0.025 U	0.025 U	0.025 U	--
Xylenes (total)	mg/kg	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB17-11*	*SB17-12*	*SB17-13*	*SB17-14*
Sample Identification		*83816-6598*	*83767-6456*	*83767-6455*	*83767-6599*
Sample Date		*8/12/1998*	*8/7/1998*	*8/10/1998*	*8/12/1998*
Sample Depth		*(12-30) ft*	*(0-25) ft*	*(0-20) ft*	*(0-25) ft*
Sample Type					
AOI	*Units*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*	*AOI 19, AOI 4.1*
General Chemistry					
Chloride	mg/kg	200 U	200 U	200 U	--
Chlorinated paraffin	mg/kg	--	--	--	--
Cyanide (total)	mg/kg	0.2 U	0.2 U	0.2 U	--
Fluoride	mg/kg	37	58	55	--
Nitrate (as N)	mg/kg	1.3	4.8	7	--
Nitrite (as N)	mg/kg	0.2 U	0.2	0.2	--
Oil and grease	mg/kg	--	--	--	--
Sulfate	mg/kg	39 U	77	40 U	--
Total solids	%	--	--	--	--
pH	none	--	10	--	9.1
Reactive cyanide	mg/kg	--	250 U	--	250 U
Reactive sulfide	mg/kg	--	500 U	--	500 U

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, up
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB17-14*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB19-05*	*SB19-05*
Sample Identification		*83816-6599*	*SO-17360-120305-DCR-529*	*SO-17360-120305-DCR-530*	*SO-17360-120305-DCR-531*	*SO-17360-120305-DCR-532*	*SO-17360-120305-DCR-533*	*SO-17360-120305-DCR-534*	*SO-17360-120305-DCR-535*	*SO-17360-120305-DCR-536*	*SO-17360-120305-DCR-537*	*SO-17360-120305-DCR-538*	*SO-17360-120305-DCR-539*	*SO-17360-121205-DCR-612*	*SO-17360-121205-DCR-613*
Sample Date		*8/12/1998*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/12/2005*	*12/12/2005*
Sample Depth		*(0-25) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(0-2) ft*
Sample Type									*Duplicate*						*Duplicate*
AOI	*Units*	*AOI 19, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	2300	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	0.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	1.1	--	--	--	--	--	--	--	--	--	--	--	2.3	2.2
Barium	mg/kg	13	--	--	--	--	--	--	--	--	--	--	--	17.8	13.7
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	0.2 U	--	--	--	--	--	--	--	--	--	--	--	0.21	0.16
Calcium	mg/kg	21000	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	7	--	--	--	--	--	--	--	--	--	--	--	26.0	12.1
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	2.3	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	19	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	5200	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	10	--	--	--	--	--	--	--	--	--	--	--	8.6	6.8
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	150	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	0.016 J	0.022 J
Nickel	mg/kg	5	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	0.5 U	--	--	--	--	--	--	--	--	--	--	--	0.43 U	0.43 U
Silver	mg/kg	0.6	--	--	--	--	--	--	--	--	--	--	--	0.43 U	0.43 U
Sodium	mg/kg	190	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	0.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	7	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	17	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB17-14*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB19-05*	*SB19-05*
Sample Identification		*83816-6599*	*SO-17360-120305-DCR-529*	*SO-17360-120305-DCR-530*	*SO-17360-120305-DCR-531*	*SO-17360-120305-DCR-532*	*SO-17360-120305-DCR-533*	*SO-17360-120305-DCR-534*	*SO-17360-120305-DCR-535*	*SO-17360-120305-DCR-536*	*SO-17360-120305-DCR-537*	*SO-17360-120305-DCR-538*	*SO-17360-120305-DCR-539*	*SO-17360-121205-DCR-612*	*SO-17360-121205-DCR-613*
Sample Date		*8/12/1998*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/12/2005*	*12/12/2005*
Sample Depth		*(0-25) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(0-2) ft*
Sample Type									*Duplicate*						*Duplicate*
AOI	*Units*	*AOI 19, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	1.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	0.011 J	0.013 J
2-Methylphenol	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	1.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	0.66 U	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	1.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	1.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	1.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	1.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	1.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	1.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	0.28 UJ	0.28 U
Acenaphthylene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	0.28 UJ	0.28 U
Aniline	mg/kg	1.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	0.023 J	0.023 J
Benzo(a)anthracene	mg/kg	0.41	--	--	--	--	--	--	--	--	--	--	--	0.16 J	0.13 J
Benzo(a)pyrene	mg/kg	0.47	--	--	--	--	--	--	--	--	--	--	--	0.18 J	0.13 J
Benzo(b)fluoranthene	mg/kg	0.47	--	--	--	--	--	--	--	--	--	--	--	0.23 J	0.2 J
Benzo(g,h,i)perylene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	0.14 J	0.095 J
Benzo(k)fluoranthene	mg/kg	0.42	--	--	--	--	--	--	--	--	--	--	--	0.07 J	0.071 J
Benzoic acid	mg/kg	3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	1.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	0.47	--	--	--	--	--	--	--	--	--	--	--	0.17 J	0.13 J
Dibenz(a,h)anthracene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	0.037 J	0.026 J
Dibenzofuran	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	0.93	--	--	--	--	--	--	--	--	--	--	--	0.25 J	0.21 J
Fluorene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	0.28 UJ	0.0073 J
Hexabromobenzene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	0.12 J	0.084 J
Isophorone	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	0.0075 J	0.011 J
Nitrobenzene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	0.59	--	--	--	--	--	--	--	--	--	--	--	0.098 J	0.09 J
Phenol	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	0.84	--	--	--	--	--	--	--	--	--	--	--	0.21 J	0.18 J

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		SB17-14	SB18-05	SB18-05	SB18-05	SB18-05	SB18-05	SB18-05	SB18-05	SB18-05	SB18-05	SB18-05	SB18-05	SB19-05	SB19-05
Sample Identification		83816-6599	SO-17360-120305-DCR-529	SO-17360-120305-DCR-530	SO-17360-120305-DCR-531	SO-17360-120305-DCR-532	SO-17360-120305-DCR-533	SO-17360-120305-DCR-534	SO-17360-120305-DCR-535	SO-17360-120305-DCR-536	SO-17360-120305-DCR-537	SO-17360-120305-DCR-538	SO-17360-120305-DCR-539	SO-17360-121205-DCR-612	SO-17360-121205-DCR-613
Sample Date		8/12/1998	12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/3/2005	12/12/2005	12/12/2005
Sample Depth		(0-25) ft	(0-2) ft	(2-4) ft	(4-6) ft	(6-8) ft	(8-10) ft	(10-12) ft	(10-12) ft	(12-14) ft	(14-16) ft	(16-18) ft	(18-20) ft	(0-2) ft	(0-2) ft
Sample Type									Duplicate						Duplicate
AOI	Units	AOI 19, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	0.025 U	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
1,1,2,2-Tetrachloroethane	mg/kg	0.025 U	0.086 U	0.083 U	0.086 U	0.085 U	0.092 U	0.081 U	0.091 U	0.084 U	0.086 U	0.085 U	0.09 U	--	--
1,1,2-Trichloroethane	mg/kg	0.025 U	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
1,1-Dichloroethane	mg/kg	0.025 U	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
1,1-Dichloroethene	mg/kg	0.025 U	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
1,1-Dichloropropene	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	0.025 U	0.21 U	0.21 U	0.21 U	0.21 U	0.23 U	0.2 U	0.23 U	0.21 U	0.21 U	0.21 U	0.22 U	--	--
1,2,4-Trimethylbenzene	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	0.025 U	0.21 U	0.21 U	0.21 U	0.21 U	0.23 U	0.2 U	0.23 U	0.21 U	0.21 U	0.21 U	0.22 U	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	0.025 U	0.21 U	0.21 U	0.21 U	0.21 U	0.23 U	0.2 U	0.23 U	0.21 U	0.21 U	0.21 U	0.22 U	--	--
1,2-Dichlorobenzene	mg/kg	0.025 U	0.086 U	0.083 U	0.086 U	0.085 U	0.092 U	0.081 U	0.091 U	0.084 U	0.086 U	0.085 U	0.09 U	--	--
1,2-Dichloroethane	mg/kg	0.025 U	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
1,2-Dichloropropane	mg/kg	0.025 U	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
1,3,5-Trimethylbenzene	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	0.025 U	0.086 U	0.083 U	0.086 U	0.085 U	0.092 U	0.081 U	0.091 U	0.084 U	0.086 U	0.085 U	0.09 U	--	--
1,3-Dichloropropane	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	0.025 U	0.086 U	0.083 U	0.086 U	0.085 U	0.092 U	0.081 U	0.091 U	0.084 U	0.086 U	0.085 U	0.09 U	--	--
2,2-Dichloropropane	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	0.1 U	0.64 U	0.62 U	0.64 U	0.63 U	0.69 U	0.61 U	0.69 U	0.63 U	0.64 U	0.64 U	0.67 U	--	--
2-Chlorotoluene	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	0.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.3 U	2 U	2.3 U	2.1 U	2.1 U	2.1 U	2.2 U	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MI	mg/kg	0.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.3 U	2 U	2.3 U	2.1 U	2.1 U	2.1 U	2.2 U	--	--
Acetone	mg/kg	0.1 U	0.64 UJ	0.62 UJ	0.64 UJ	0.63 UJ	0.69 UJ	0.61 UJ	0.69 UJ	0.63 UJ	0.64 UJ	0.64 UJ	0.67 UJ	--	--
Acrylonitrile	mg/kg	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	0.025 U	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
Benzyl chloride	mg/kg	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	0.025 U	0.086 U	0.083 U	0.086 U	0.085 U	0.092 U	0.081 U	0.091 U	0.084 U	0.086 U	0.085 U	0.09 U	--	--
Bromoform	mg/kg	0.025 U	0.086 U	0.083 U	0.086 U	0.085 U	0.092 U	0.081 U	0.091 U	0.084 U	0.086 U	0.085 U	0.09 U	--	--
Bromomethane (Methyl bromide)	mg/kg	0.025 U	0.21 U	0.21 U	0.21 U	0.21 U	0.23 U	0.2 U	0.23 U	0.21 U	0.21 U	0.21 U	0.22 U	--	--
Carbon disulfide	mg/kg	0.1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.23 U	0.2 U	0.23 U	0.21 U	0.21 U	0.21 U	0.22 U	--	--
Carbon tetrachloride	mg/kg	0.025 U	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
Chlorobenzene	mg/kg	0.025 U	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
Chlorobromomethane	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	0.025 U	0.21 U	0.21 U	0.21 U	0.21 U	0.23 U	0.2 U	0.23 U	0.21 U	0.21 U	0.21 U	0.22 U	--	--
Chloroform (Trichloromethane)	mg/kg	0.025 U	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
Chloromethane (Methyl chloride)	mg/kg	0.025 U	0.21 U	0.21 U	0.21 U	0.21 U	0.23 U	0.2 U	0.23 U	0.21 U	0.21 U	0.21 U	0.22 U	--	--
cis-1,2-Dichloroethene	mg/kg	0.025 U	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
cis-1,3-Dichloropropene	mg/kg	--	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
Cyclohexane	mg/kg	--	1 U	0.99 U	1 U	1 U	1.1 U	0.97 U	1.1 U	1 U	1 U	1 U	1.1 U	--	--
Dibromochloromethane	mg/kg	0.025 U	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
Dibromomethane	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	0.025 U	0.086 U	0.083 U	0.086 U	0.085 U	0.092 U	0.081 U	0.091 U	0.084 U	0.086 U	0.085 U	0.09 U	--	--
Ethyl ether	mg/kg	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	0.025 U	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
Hexachlorobutadiene	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	0.025 U	0.21 U	0.21 U	0.21 U	0.21 U	0.23 U	0.2 U	0.23 U	0.21 U	0.21 U	0.21 U	0.22 U	--	--
Isopropyl toluene	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	--	1 U	0.99 U	1 U	1 U	1.1 U	0.97 U	1.1 U	1 U	0.074 J	1 U	1.1 U	--	--
Methyl cyclohexane	mg/kg	--	1 U	0.99 U	1 U	1 U	1.1 U	0.97 U	1.1 U	1 U	1 U	1 U	1.1 U	--	--
Methyl tert butyl ether (MTBE)	mg/kg	0.025 U	0.21 U	0.21 U	0.21 U	0.21 U	0.23 U	0.2 U	0.23 U	0.21 U	0.21 U	0.21 U	0.22 U	--	--
Methylene chloride	mg/kg	0.25 U	0.21 U	0.21 U	0.21 U	0.21 U	0.23 U	0.2 U	0.23 U	0.21 U	0.21 U	0.21 U	0.22 U	--	--
Naphthalene	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	0.025 U	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
tert-Butylbenzene	mg/kg	0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	0.025 U	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
Tetrahydrofuran	mg/kg	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	0.033	0.086 U	0.083 U	0.086 U	0.085 U	0.092 U	0.081 U	0.091 U	0.084 U	0.086 U	0.085 U	0.09 U	--	--
trans-1,2-Dichloroethene	mg/kg	0.025 U	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
trans-1,3-Dichloropropene	mg/kg	--	0.043 U	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
Trichloroethene	mg/kg	0.054	0.038 J	0.041 U	0.043 U	0.042 U	0.046 U	0.041 U	0.046 U	0.042 U	0.043 U	0.042 U	0.045 U	--	--
Trichlorofluoromethane (CFC-11)	mg/kg	0.1 U	0.086 U	0.083 U	0.086 U	0.085 U	0.092 U	0.081 U	0.091 U	0.084 U	0.086 U	0.085 U	0.09 U	--	--
Trifluorotrichloroethane (Freon 113)	mg/kg	0.025 U	0.21 U	0.21 U	0.21 U	0.21 U	0.23 U	0.2 U	0.23 U	0.21 U	0.21 U	0.21 U	0.22 U	--	--
Vinyl chloride	mg/kg	0.025 U	0.086 U	0.083 U	0.086 U	0.085 U	0.092 U	0.081 U	0.091 U	0.084 U	0.086 U	0.085 U	0.09 U	--	--
Xylenes (total)	mg/kg	--	0.13 U	0.12 U	0.13 U	0.13 U	0.14 U	0.12 U	0.14 U	0.13 U	0.13 U	0.13 U	0.13 U	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB17-14*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB18-05*	*SB19-05*	*SB19-05*
Sample Identification		*83816-6599*	*SO-17360-120305-DCR-529*	*SO-17360-120305-DCR-530*	*SO-17360-120305-DCR-531*	*SO-17360-120305-DCR-532*	*SO-17360-120305-DCR-533*	*SO-17360-120305-DCR-534*	*SO-17360-120305-DCR-535*	*SO-17360-120305-DCR-536*	*SO-17360-120305-DCR-537*	*SO-17360-120305-DCR-538*	*SO-17360-120305-DCR-539*	*SO-17360-121205-DCR-612*	*SO-17360-121205-DCR-613*
Sample Date		*8/12/1998*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/3/2005*	*12/12/2005*	*12/12/2005*
Sample Depth		*(0-25) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(10-12) ft*	*(12-14) ft*	*(14-16) ft*	*(16-18) ft*	*(18-20) ft*	*(0-2) ft*	*(0-2) ft*
Sample Type									*Duplicate*						*Duplicate*
AOI	*Units*	*AOI 19, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
General Chemistry															
Chloride	mg/kg	200 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	35	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	6.5	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	40 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	--	96.9	97.6	96.9	96.5	90.7	94.8	92.8	91.5	98.1	98.0	98.0	94.0	94.0
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB19-05*	*SB19-05*	*SB19-05*	*SB19-05*	*SB20-05*	*SB20-05*	*SB20-05*	*SB20-05*	*SB20-05*	*SB21-05*	*SB21-05*	*SB21-05*	*SB21-05*	*SB21-05*
Sample Identification		*SO-17360-121205-DCR-614*	*SO-17360-121205-DCR-615*	*SO-17360-121205-DCR-616*	*SO-17360-121205-DCR-617*	*SO-17360-121205-DCR-607*	*SO-17360-121205-DCR-608*	*SO-17360-121205-DCR-609*	*SO-17360-121205-DCR-610*	*SO-17360-121205-DCR-611*	*SO-17360-121205-DCR-602*	*SO-17360-121205-DCR-603*	*SO-17360-121205-DCR-604*	*SO-17360-121205-DCR-605*	*SO-17360-121205-DCR-606*
Sample Date		*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type															
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	5.4	1.2	1.0	0.68	**18.5**[a]	4.3	**22.4**[a]	1.2	0.73	5.3	2.6	**23.7**[a]	5.8	1.2
Barium	mg/kg	91.1	7.4	3.7	5.0	608	287	21.6	13.4	4.7	66.4	81.3	472	175	14.5
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	2.3	0.086 U	0.085 U	0.034 J	4.5	0.39	0.77 J	0.058 J	0.086 U	0.56	0.41	7.8	2.5	0.087 U
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	**341**[a]	4.8	4.2	3.8	**577**[a]	49.1	184	8.6	5.9	24.5	21.4	**2800**[a][a]	**768**[a]	8.4
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	75.2	1.8	1.9	1.9	**575**[a]	46.0	24.0	4.7	3.2	39.6	235	**5410**[a][6]	371	4.0
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	0.017 J	0.043 U	0.042 U	0.024 J	0.18	0.044	0.044 U	0.047 U	0.043 U	0.033 J	0.028 J	0.015 J	0.024 J	0.043 U
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	0.60	0.43 U	0.42 U	0.45 U	1.7	0.36 J	4.4 U	0.47 U	0.43 U	0.48	0.43 U	4.5 U	0.77	0.43 U
Silver	mg/kg	3.0	0.43 U	0.42 U	0.45 U	1.5	0.43 U	4.4 U	0.47 U	0.43 U	0.43 U	0.43 U	15.3	5.2	0.43 U
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB19-05*	*SB19-05*	*SB19-05*	*SB19-05*	*SB20-05*	*SB20-05*	*SB20-05*	*SB20-05*	*SB20-05*	*SB21-05*	*SB21-05*	*SB21-05*	*SB21-05*	*SB21-05*
Sample Identification		*SO-17360-121205-DCR-614*	*SO-17360-121205-DCR-615*	*SO-17360-121205-DCR-616*	*SO-17360-121205-DCR-617*	*SO-17360-121205-DCR-607*	*SO-17360-121205-DCR-608*	*SO-17360-121205-DCR-609*	*SO-17360-121205-DCR-610*	*SO-17360-121205-DCR-611*	*SO-17360-121205-DCR-602*	*SO-17360-121205-DCR-603*	*SO-17360-121205-DCR-604*	*SO-17360-121205-DCR-605*	*SO-17360-121205-DCR-606*
Sample Date		*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type															
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	0.47 J	0.28 UJ	0.28 U	0.29 U	1.5 J	0.71 J	14 U	16 U	5.7 U	0.13 J	11 U	0.078 J	0.35 U	0.29 U
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	0.37 J	0.28 UJ	0.28 U	0.29 U	2.3 J	1.3 J	14 U	16 U	5.7 U	0.18 J	1.9 J	0.18 J	0.043 J	0.29 U
Acenaphthylene	mg/kg	2.9 U	0.28 UJ	0.28 U	0.29 U	2.1 J	5.7 U	14 U	16 U	5.7 U	0.026 J	11 U	0.017 J	0.35 U	0.29 U
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	0.75 J	0.28 UJ	0.28 U	0.29 U	9 J	2.9 J	14 U	16 U	5.7 U	0.57 J	5.2 J	0.54	0.12 J	0.29 U
Benzo(a)anthracene	mg/kg	2 J	0.28 UJ	0.28 U	0.29 U	**29[a]**	8.8	14 U	16 U	5.7 U	2.1 J	17	1.9	0.43	0.012 J
Benzo(a)pyrene	mg/kg	1.9 J	0.28 UJ	0.28 U	0.29 U	**28[a][g]**	**8.4[g]**	14 U	16 U	5.7 U	2 J	**17[a][g]**	1.7	0.32 J	0.012 J
Benzo(b)fluoranthene	mg/kg	2.4 J	0.28 UJ	0.28 U	0.29 U	**38[a]**	12	14 U	16 U	5.7 U	3 J	**24[a]**	3	0.52	0.015 J
Benzo(g,h,i)perylene	mg/kg	1.4 J	0.28 UJ	0.28 U	0.29 U	21	6.3	14 U	16 U	5.7 U	1.3 J	12	1.3	0.25 J	0.29 U
Benzo(k)fluoranthene	mg/kg	1.1 J	0.28 UJ	0.28 U	0.29 U	14 J	4.4 J	14 U	16 U	5.7 U	0.82 J	8.9 J	1	0.12 J	0.29 U
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	2.2 J	0.28 UJ	0.28 U	0.29 U	32	12	14 U	16 U	5.7 U	2.6 J	21	2.6	0.49	0.013 J
Dibenz(a,h)anthracene	mg/kg	0.34 J	0.28 UJ	0.28 U	0.29 U	**6.2 J[a]**	1.9 J	14 U	16 U	5.7 U	0.43 J	**3.4 J[a]**	0.49	0.35 U	0.29 U
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	4.2	0.009 J	0.28 U	0.29 U	49	17	14 U	16 U	5.7 U	3.1 J	37	3.2	0.81	0.024 J
Fluorene	mg/kg	0.43 J	0.28 UJ	0.28 U	0.29 U	3.5 J	1.5 J	14 U	16 U	5.7 U	0.26 J	2.2 J	0.23 J	0.047 J	0.29 U
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	1.2 J	0.28 UJ	0.28 U	0.29 U	17	5.2 J	14 U	16 U	5.7 U	1.1 J	10 J	1.2	0.21 J	0.29 U
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	0.51 J	0.28 UJ	0.28 U	0.29 U	2.6 J	0.91 J	14 U	16 U	5.7 U	0.092 J	11 U	0.27 J	0.35 U	0.29 U
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	3.1	0.28 UJ	0.28 U	0.29 U	30	14	14 U	16 U	5.7 U	2.2 J	23	2.4	0.63	0.02 J
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	3.2	0.28 UJ	0.28 U	0.29 U	39	14	14 U	16 U	5.7 U	2.6 J	29	2.5	0.64	0.019 J

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB19-05*	*SB19-05*	*SB19-05*	*SB19-05*	*SB20-05*	*SB20-05*	*SB20-05*	*SB20-05*	*SB20-05*	*SB21-05*	*SB21-05*	*SB21-05*	*SB21-05*	*SB21-05*
Sample Identification		*SO-17360-121205-DCR-614*	*SO-17360-121205-DCR-615*	*SO-17360-121205-DCR-616*	*SO-17360-121205-DCR-617*	*SO-17360-121205-DCR-607*	*SO-17360-121205-DCR-608*	*SO-17360-121205-DCR-609*	*SO-17360-121205-DCR-610*	*SO-17360-121205-DCR-611*	*SO-17360-121205-DCR-602*	*SO-17360-121205-DCR-603*	*SO-17360-121205-DCR-604*	*SO-17360-121205-DCR-605*	*SO-17360-121205-DCR-606*
Sample Date		*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type															
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MI	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichlorofluoromethane (CFC-11)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB19-05*	*SB19-05*	*SB19-05*	*SB19-05*	*SB20-05*	*SB20-05*	*SB20-05*	*SB20-05*	*SB20-05*	*SB21-05*	*SB21-05*	*SB21-05*	*SB21-05*	*SB21-05*
Sample Identification		*SO-17360-121205-DCR-614*	*SO-17360-121205-DCR-615*	*SO-17360-121205-DCR-616*	*SO-17360-121205-DCR-617*	*SO-17360-121205-DCR-607*	*SO-17360-121205-DCR-608*	*SO-17360-121205-DCR-609*	*SO-17360-121205-DCR-610*	*SO-17360-121205-DCR-611*	*SO-17360-121205-DCR-602*	*SO-17360-121205-DCR-603*	*SO-17360-121205-DCR-604*	*SO-17360-121205-DCR-605*	*SO-17360-121205-DCR-606*
Sample Date		*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type															
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	90.2	93.3	94.7	89.8	85.3	92.4	91.5	85.2	93.2	93.3	93.3	89.1	74.9	92.2
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB22-05*	*SB22-05*	*SB22-05*	*SB22-05*	*SB22-05*	*SB23-05*	*SB23-05*	*SB23-05*	*SB24-05*	*SB24-05*	*SB24-05*	*SB25-05*	*SB25-05*	*SB25-05*
Sample Identification		*SO-17360-121205-DCR-597*	*SO-17360-121205-DCR-598*	*SO-17360-121205-DCR-599*	*SO-17360-121205-DCR-600*	*SO-17360-121205-DCR-601*	*SO-17360-121205-DCR-594*	*SO-17360-121205-DCR-595*	*SO-17360-121205-DCR-596*	*SO-17360-121205-DCR-591*	*SO-17360-121205-DCR-592*	*SO-17360-121205-DCR-593*	*SO-17360-121205-DCR-585*	*SO-17360-121205-DCR-586*	*SO-17360-121205-DCR-587*
Sample Date		*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*
Sample Depth		*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(4-6) ft*	*(8-10) ft*	*(0-2) ft*	*(4-6) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*
Sample Type															
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	mg/kg	2.9	3.2	0.72	1.8	0.84	1.5	1.0	0.42 U	1.9	0.90	0.53	0.64	**29.4[a]**	1.1
Barium	mg/kg	88.0	64.8	8.1	9.4	7.5	33.6	5.7	3.2	13.7	6.5	4.6	19.7	559	14.8
Beryllium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	0.58	0.37	0.086 U	0.087 U	0.037 J	0.13	0.085 U	0.084 U	0.069 J	0.086 U	0.085 U	0.051 J	38.1	0.10
Calcium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	mg/kg	15.1	13.2	3.9	9.2	6.2	6.3	5.8	3.0	7.4	4.8	3.3	14.4	**4970[a]**	46.3
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	24.8	17.5	2.9	3.0	2.6	7.6	2.0	1.2	5.2	1.6	0.99	50.9	**3710[a]**	18.5
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	mg/kg	0.043 U	0.046 U	0.043 U	0.044 U	0.044 U	0.042 U	0.042 U	0.042 U	0.042 U	0.043 U	0.043 U	0.041 U	0.045 U	0.043 U
Nickel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	mg/kg	0.43 U	0.46 U	0.43 U	0.44 U	0.44 U	0.42 U	0.42 U	0.42 U	0.42 U	0.43 U	0.43 U	0.41 U	9.1 U	0.43 U
Silver	mg/kg	0.43 U	0.46 U	0.43 U	0.44 U	0.44 U	0.42 U	0.42 U	0.42 U	0.42 U	0.43 U	0.43 U	0.41 U	31.1	0.43 U
Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB22-05*	*SB22-05*	*SB22-05*	*SB22-05*	*SB22-05*	*SB23-05*	*SB23-05*	*SB23-05*	*SB24-05*	*SB24-05*	*SB24-05*	*SB25-05*	*SB25-05*	*SB25-05*
Sample Identification		*SO-17360-121205-DCR-597*	*SO-17360-121205-DCR-598*	*SO-17360-121205-DCR-599*	*SO-17360-121205-DCR-600*	*SO-17360-121205-DCR-601*	*SO-17360-121205-DCR-594*	*SO-17360-121205-DCR-595*	*SO-17360-121205-DCR-596*	*SO-17360-121205-DCR-591*	*SO-17360-121205-DCR-592*	*SO-17360-121205-DCR-593*	*SO-17360-121205-DCR-585*	*SO-17360-121205-DCR-586*	*SO-17360-121205-DCR-587*
Sample Date		*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*
Sample Depth		*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(4-6) ft*	*(8-10) ft*	*(0-2) ft*	*(4-6) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*
Sample Type															
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	0.086 J	0.079 J	1.4 U	1.4 U	0.29 U	0.025 J	0.28 U	0.28 U	0.0082 J	0.29 U	0.28 U	0.09 J	0.035 J	0.28 U
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	0.28 U	0.3 U	1.4 U	1.4 U	0.29 U	0.28 U	0.28 U	0.28 U	0.012 J	0.29 U	0.28 U	1.1 J	0.3 U	0.28 U
Acenaphthylene	mg/kg	0.01 J	0.3 U	1.4 U	1.4 U	0.29 U	0.28 U	0.28 U	0.28 U	0.28 U	0.29 U	0.28 U	3.4 U	0.3 U	0.28 U
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	0.0099 J	0.0098 J	1.4 U	1.4 U	0.29 U	0.28 U	0.28 U	0.28 U	0.035 J	0.29 U	0.28 U	2.5 J	0.052 J	0.0082 J
Benzo(a)anthracene	mg/kg	0.047 J	0.047 J	1.4 U	1.4 U	0.29 U	0.021 J	0.28 U	0.28 U	0.12 J	0.29 U	0.28 U	6.5	0.44	0.031 J
Benzo(a)pyrene	mg/kg	0.049 J	0.045 J	1.4 U	1.4 U	0.29 U	0.025 J	0.28 U	0.28 U	0.12 J	0.29 U	0.28 U	**6[a]**	0.51	0.025 J
Benzo(b)fluoranthene	mg/kg	0.087 J	0.081 J	1.4 U	1.4 U	0.29 U	0.04 J	0.28 U	0.28 U	0.17 J	0.29 U	0.28 U	8.6	1.2	0.045 J
Benzo(g,h,i)perylene	mg/kg	0.046 J	0.045 J	1.4 U	1.4 U	0.29 U	0.02 J	0.28 U	0.28 U	0.09 J	0.29 U	0.28 U	3.9	0.86	0.021 J
Benzo(k)fluoranthene	mg/kg	0.022 J	0.022 J	1.4 U	1.4 U	0.29 U	0.015 J	0.28 U	0.28 U	0.051 J	0.29 U	0.28 U	3.2 J	0.33	0.015 J
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	0.08 J	0.079 J	1.4 U	1.4 U	0.29 U	0.036 J	0.28 U	0.28 U	0.13 J	0.29 U	0.28 U	7.5	0.69	0.037 J
Dibenz(a,h)anthracene	mg/kg	0.013 J	0.013 J	1.4 U	1.4 U	0.29 U	0.28 U	0.28 U	0.28 U	0.022 J	0.29 U	0.28 U	1.2 J	0.3	0.28 U
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	0.078 J	0.082 J	1.4 U	1.4 U	0.29 U	0.04 J	0.28 U	0.28 U	0.28	0.29 U	0.28 U	16	0.79	0.067 J
Fluorene	mg/kg	0.28 U	0.3 U	1.4 U	1.4 U	0.29 U	0.28 U	0.28 U	0.28 U	0.0094 J	0.29 U	0.28 U	0.94 J	0.022 J	0.28 U
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	0.033 J	0.032 J	1.4 U	1.4 U	0.29 U	0.015 J	0.28 U	0.28 U	0.077 J	0.29 U	0.28 U	3.7	0.63	0.017 J
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	0.042 J	0.036 J	1.4 U	1.4 U	0.29 U	0.013 J	0.28 U	0.28 U	0.28 U	0.29 U	0.28 U	0.17 J	0.089 J	0.28 U
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	0.1 J	0.1 J	1.4 U	1.4 U	0.29 U	0.037 J	0.28 U	0.28 U	0.12 J	0.29 U	0.28 U	10	0.68	0.041 J
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	0.065 J	0.067 J	1.4 U	1.4 U	0.29 U	0.035 J	0.28 U	0.28 U	0.21 J	0.29 U	0.28 U	12	0.53	0.047 J

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB22-05*	*SB22-05*	*SB22-05*	*SB22-05*	*SB22-05*	*SB23-05*	*SB23-05*	*SB23-05*	*SB24-05*	*SB24-05*	*SB24-05*	*SB25-05*	*SB25-05*	*SB25-05*
Sample Identification		*SO-17360-121205-DCR-597*	*SO-17360-121205-DCR-598*	*SO-17360-121205-DCR-599*	*SO-17360-121205-DCR-600*	*SO-17360-121205-DCR-601*	*SO-17360-121205-DCR-594*	*SO-17360-121205-DCR-595*	*SO-17360-121205-DCR-596*	*SO-17360-121205-DCR-591*	*SO-17360-121205-DCR-592*	*SO-17360-121205-DCR-593*	*SO-17360-121205-DCR-585*	*SO-17360-121205-DCR-586*	*SO-17360-121205-DCR-587*
Sample Date		*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*
Sample Depth		*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(4-6) ft*	*(8-10) ft*	*(0-2) ft*	*(4-6) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*
Sample Type															
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MI	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichlorofluoromethane (CFC-11)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB22-05*	*SB22-05*	*SB22-05*	*SB22-05*	*SB22-05*	*SB23-05*	*SB23-05*	*SB23-05*	*SB24-05*	*SB24-05*	*SB24-05*	*SB25-05*	*SB25-05*	*SB25-05*
Sample Identification		*SO-17360-121205-DCR-597*	*SO-17360-121205-DCR-598*	*SO-17360-121205-DCR-599*	*SO-17360-121205-DCR-600*	*SO-17360-121205-DCR-601*	*SO-17360-121205-DCR-594*	*SO-17360-121205-DCR-595*	*SO-17360-121205-DCR-596*	*SO-17360-121205-DCR-591*	*SO-17360-121205-DCR-592*	*SO-17360-121205-DCR-593*	*SO-17360-121205-DCR-585*	*SO-17360-121205-DCR-586*	*SO-17360-121205-DCR-587*
Sample Date		*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*	*12/12/2005*
Sample Depth		*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(4-6) ft*	*(8-10) ft*	*(0-2) ft*	*(4-6) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*
Sample Type															
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	93.0	87.6	93.1	91.6	91.6	94.4	94.3	95.5	96.0	92.5	93.8	98.5	88.1	93.3
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		SB25-05	SB25-05	SB25-05	SB26-07	SB26-07	SB26-07	SB26-07	SB26-07	SB27-07	SB27-07	SB27-07	SB27-07	SB27-07	SB28-07
Sample Identification		SO-17360-121205-DCR-588	SO-17360-121205-DCR-589	SO-17360-121205-DCR-590	SO-17360-071007-BW-618	SO-17360-071007-BW-619	SO-17360-071007-BW-620	SO-17360-071007-BW-621	SO-17360-071007-BW-622	SO-17360-071007-BW-623	SO-17360-071007-BW-624	SO-17360-071007-BW-625	SO-17360-071007-BW-626	SO-17360-071007-BW-627	SO-17360-071007-BW-628
Sample Date		12/12/2005	12/12/2005	12/12/2005	7/10/2007	7/10/2007	7/10/2007	7/10/2007	7/10/2007	7/10/2007	7/10/2007	7/10/2007	7/10/2007	7/10/2007	7/10/2007
Sample Depth		(6-8) ft	(6-8) ft	(8-10) ft	(0-2) ft	(2-4) ft	(4-6) ft	(6-8) ft	(8-10) ft	(0-2) ft	(2-4) ft	(4-6) ft	(6-8) ft	(8-10) ft	(0-2) ft
Sample Type			Duplicate												
AOI	Units	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	--	--	--	2670	9260	3690	2570	2550	3150	4060	2920	2720	2780	4220
Antimony	mg/kg	--	--	--	17.4 J	34.8 J	R	R	R	4.7 J	29.6 J	R	R	R	R
Arsenic	mg/kg	1.6	1.2	0.80	**13.1 J[a]**	**18.2 J[a]**	4.1 J	**11.9 J[a]**	1.8 J	**10.3 J[a]**	**14.5 J[a]**	**50.3 J[a,6]**	3.0 J	0.77 J	3.5 J
Barium	mg/kg	6.4	4.3	6.6	414 J	2230 J	27.4 J	23.7 J	10.4 J	745 J	1050 J	89.8 J	21.7 J	7.6 J	48.4 J
Beryllium	mg/kg	--	--	--	0.18 U	0.20 U	0.21 U	0.18 U	0.17 U	0.19 U	0.19 U	0.44	0.21 U	0.19 U	0.59
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	0.057 J	0.084 U	0.037 J	4.9 J	54.0 J	0.48 J	R	R	5.8 J	28.3 J	0.28 J	R	R	R
Calcium	mg/kg	--	--	--	6910 J	16000 J	3960 J	669 J	709 J	18500 J	36200 J	18100 J	3920 J	943 J	3690 J
Chromium	mg/kg	12.0	11.1	9.3	**270 J[a]**	**2380 J[a]**	12.3 J	8.5 J	11.5 J	**424 J[a]**	**13200[a,6]**	14.6 J	4.4 J	8.6 J	6.8 J
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	--	--	--	27.6 J	118 J	2.2 J	2.4 J	2.6 J	47.2 J	146 J	4.8 J	0.64 J	2.6 J	4.5 J
Copper	mg/kg	--	--	--	985	4410	21.2	4.1	6.0	1790	2480	34.4	3.1	2.8	118
Iron	mg/kg	--	--	--	109000	**276000[a]**	6580	14600	5460	**186000[a]**	**278000[a]**	4950	2480	3800	3280
Lead	mg/kg	10.3	4.6	5.6	**904[a,6]**	**3420[a,6]**	25.8	3.7	2.5	**1630[a,6]**	**5830[a,6]**	42.2	4.2	3.1	16.5
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	--	--	--	2870 J	4330 J	657 J	767 J	928 J	5010 J	3090 J	3630 J	404 J	1210 J	234 J
Manganese	mg/kg	--	--	--	1120	**3280[a]**	96.2	220	36.6	**3140[a]**	**7180[a]**	97.5	22.5	34.7	63.1
Mercury	mg/kg	0.042 U	0.017 J	0.020 J	0.046 U	0.050 U	0.052 U	0.045 U	0.043 U	0.048 U	0.047 U	0.060 U	0.051 U	0.049 U	0.044 U
Nickel	mg/kg	--	--	--	255 J	1780 J	26.6 J	5.6 J	6.3 J	449 J	6710	29.1 J	2.7 J	6.0 J	8.3 J
Potassium	mg/kg	--	--	--	458 U	1260	523 U	450 U	434 U	477 U	666	599 U	515 U	486 U	445 U
Selenium	mg/kg	0.42 U	0.42 U	0.43 U	0.52 J	0.97 J	0.40 J	0.18 UJ	0.17 UJ	0.44 J	0.78 J	3.5 J	0.82 J	0.33 J	0.23 J
Silver	mg/kg	0.42 U	0.42 U	0.43 U	7.0 J	14.3 J	0.17 J	0.090 UJ	0.087 UJ	5.5 J	13.5 J	0.14 J	0.10 UJ	0.097 UJ	0.32 J
Sodium	mg/kg	--	--	--	524	2160	1260	383	414	2450	2220	1770	1620	448	755
Thallium	mg/kg	--	--	--	0.092 U	0.12	0.10 U	0.090 U	0.087 U	0.11	0.14	0.61	0.10 U	0.097 U	0.089 U
Vanadium	mg/kg	--	--	--	26.2 J	94.6 J	9.5 J	13.3 J	8.4 J	22.0 J	55.7 J	11.4 J	8.4 J	10.2 J	7.6 J
Zinc	mg/kg	--	--	--	4090	5040	112	6.6	10.3	2990	7520	82.1	4.2	8.6	38.6
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB25-05*	*SB25-05*	*SB25-05*	*SB26-07*	*SB26-07*	*SB26-07*	*SB26-07*	*SB26-07*	*SB27-07*	*SB27-07*	*SB27-07*	*SB27-07*	*SB27-07*	*SB28-07*
Sample Identification		*SO-17360-121205-DCR-588*	*SO-17360-121205-DCR-589*	*SO-17360-121205-DCR-590*	*SO-17360-071007-BW-618*	*SO-17360-071007-BW-619*	*SO-17360-071007-BW-620*	*SO-17360-071007-BW-621*	*SO-17360-071007-BW-622*	*SO-17360-071007-BW-623*	*SO-17360-071007-BW-624*	*SO-17360-071007-BW-625*	*SO-17360-071007-BW-626*	*SO-17360-071007-BW-627*	*SO-17360-071007-BW-628*
Sample Date		*12/12/2005*	*12/12/2005*	*12/12/2005*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*
Sample Depth		*(6-8) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*
Sample Type			*Duplicate*												
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	0.28 U	0.28 U	0.28 U	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	6.3 U	0.31 U	20 U	17 U	8 U	0.29 U
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	0.28 U	0.28 U	0.28 U	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	6.3 U	0.31 U	20 U	17 U	8 U	0.29 U
Acenaphthylene	mg/kg	0.28 U	0.28 U	0.28 U	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	6.3 U	0.31 U	20 U	17 U	8 U	0.29 U
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	0.28 U	0.0076 J	0.28 U	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	6.3 U	0.31 U	20 U	17 U	8 U	0.29 U
Benzo(a)anthracene	mg/kg	0.021 J	0.032 J	0.013 J	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	12	0.33	20 U	17 U	8 U	0.29 U
Benzo(a)pyrene	mg/kg	0.015 J	0.026 J	0.0099 J	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	**25**[qg]	0.31 U	20 U	17 U	8 U	0.29 U
Benzo(b)fluoranthene	mg/kg	0.026 J	0.038 J	0.015 J	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	**35**[q]	0.67	20 U	17 U	8 U	0.29 U
Benzo(g,h,i)perylene	mg/kg	0.011 J	0.017 J	0.0072 J	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	24	0.46	20 U	17 U	8 U	0.29 U
Benzo(k)fluoranthene	mg/kg	0.0092 J	0.018 J	0.28 U	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	14	0.31 U	20 U	17 U	8 U	0.29 U
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	0.024 J	0.033 J	0.014 J	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	15	0.58	20 U	17 U	8 U	0.29 U
Dibenz(a,h)anthracene	mg/kg	0.28 U	0.28 U	0.28 U	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	**6.4**[q]	0.31 U	20 U	17 U	8 U	0.29 U
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	0.046 J	0.068 J	0.026 J	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	13	0.74	20 U	17 U	8 U	0.55
Fluorene	mg/kg	0.28 U	0.28 U	0.28 U	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	6.3 U	0.31 U	20 U	17 U	8 U	0.29 U
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	0.0095 J	0.016 J	0.28 U	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	**21**[q]	0.32	20 U	17 U	8 U	0.29 U
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	0.28 U	0.28 U	0.28 U	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	6.3 U	0.31 U	20 U	17 U	8 U	0.29 U
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	0.033 J	0.044 J	0.016 J	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	6.3 U	0.58	20 U	17 U	8 U	0.45
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	0.034 J	0.047 J	0.019 J	7.6 U	8.3 U	8.6 U	0.3 U	0.29 U	13	0.36	20 U	17 U	8 U	0.35

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		SB25-05	SB25-05	SB25-05	SB26-07	SB26-07	SB26-07	SB26-07	SB26-07	SB27-07	SB27-07	SB27-07	SB27-07	SB27-07	SB28-07
Sample Identification		SO-17360-121205-DCR-588	SO-17360-121205-DCR-589	SO-17360-121205-DCR-590	SO-17360-071007-BW-618	SO-17360-071007-BW-619	SO-17360-071007-BW-620	SO-17360-071007-BW-621	SO-17360-071007-BW-622	SO-17360-071007-BW-623	SO-17360-071007-BW-624	SO-17360-071007-BW-625	SO-17360-071007-BW-626	SO-17360-071007-BW-627	SO-17360-071007-BW-628
Sample Date		12/12/2005	12/12/2005	12/12/2005	7/10/2007	7/10/2007	7/10/2007	7/10/2007	7/10/2007	7/10/2007	7/10/2007	7/10/2007	7/10/2007	7/10/2007	7/10/2007
Sample Depth		(6-8) ft	(6-8) ft	(8-10) ft	(0-2) ft	(2-4) ft	(4-6) ft	(6-8) ft	(8-10) ft	(0-2) ft	(2-4) ft	(4-6) ft	(6-8) ft	(8-10) ft	(0-2) ft
Sample Type			Duplicate												
AOI	Units	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1	AOI 27, AOI 4.1
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MI	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichlorofluoromethane (CFC-11)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB25-05*	*SB25-05*	*SB25-05*	*SB26-07*	*SB26-07*	*SB26-07*	*SB26-07*	*SB26-07*	*SB27-07*	*SB27-07*	*SB27-07*	*SB27-07*	*SB27-07*	*SB28-07*
Sample Identification		*SO-17360-121205-DCR-588*	*SO-17360-121205-DCR-589*	*SO-17360-121205-DCR-590*	*SO-17360-071007-BW-618*	*SO-17360-071007-BW-619*	*SO-17360-071007-BW-620*	*SO-17360-071007-BW-621*	*SO-17360-071007-BW-622*	*SO-17360-071007-BW-623*	*SO-17360-071007-BW-624*	*SO-17360-071007-BW-625*	*SO-17360-071007-BW-626*	*SO-17360-071007-BW-627*	*SO-17360-071007-BW-628*
Sample Date		*12/12/2005*	*12/12/2005*	*12/12/2005*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*
Sample Depth		*(6-8) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*
Sample Type			*Duplicate*												
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	94.5	95.4	93.6	87.3	79.4	76.4	88.9	92.1	83.8	84.5	66.8	77.7	82.4	89.9
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB28-07*	*SB28-07*	*SB28-07*	*SB28-07*	*SB29-07*	*SB29-07*	*SB29-07*	*SB29-07*	*SB29-07*	*SB30-07*	*SB30-07*	*SB30-07*	*SB30-07*	*SB30-07*
Sample Identification		*SO-17360-071007-BW-629*	*SO-17360-071007-BW-630*	*SO-17360-071007-BW-631*	*SO-17360-071007-BW-632*	*SO-17360-071007-BW-633*	*SO-17360-071007-BW-634*	*SO-17360-071007-BW-635*	*SO-17360-071007-BW-636*	*SO-17360-071007-BW-637*	*SO-17360-071007-BW-644*	*SO-17360-071007-BW-645*	*SO-17360-071007-BW-646*	*SO-17360-071007-BW-647*	*SO-17360-071007-BW-648*
Sample Date		*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type															
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	7860	3080	2570	2470	465	147	4660	2930	2100	3060	1850	1550	1450	1720
Antimony	mg/kg	R	4.2 J	R	R	1.3 J	0.74 J	R	R	R	0.17 UJ	0.17 UJ	0.16 UJ	0.17 UJ	0.17 UJ
Arsenic	mg/kg	3.1 J	**31.9 J[ca]**	3.7 J	1.4 J	2.5 J	0.71 J	0.98 J	1.0 J	1.4 J	1.4	1.2	1.1	0.87	1.6
Barium	mg/kg	76.2 J	476 J	11.2 J	12.9 J	21.9 J	2.4 J	25.7 J	6.7 J	5.9 J	19.7	42.6	7.9	7.8	8.9
Beryllium	mg/kg	2.2	0.18 U	0.17 U	0.17 U	0.17 U	0.16 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.16 U	0.17 U	0.17 U
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	R	7.6 J	R	R	0.13 J	0.094 J	1.4 J	0.67 J	0.12 J	0.083 U	0.083 U	0.082 U	0.083 U	0.083 U
Calcium	mg/kg	9770 J	13500 J	492 J	583 J	647 J	410 UJ	430 UJ	425 UJ	419 UJ	7750	8620	7700	7150	6190
Chromium	mg/kg	6.6 J	**1460 J[ca]**	6.5 J	6.1 J	41.0 J	16.5 J	6.9 J	6.6 J	8.0 J	5.8 J	6.6 J	3.8 J	3.0 J	6.1 J
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	7.8 J	35.4 J	2.0 J	1.7 J	7.4 J	0.78 J	1.8 J	2.6 J	1.8 J	2.4	2.0	1.5	1.4	1.7
Copper	mg/kg	55.0	838	3.4	3.7	19.5	5.0	2.1	3.5	3.4	5.4 J	10.9 J	3.3 J	3.6 J	6.9 J
Iron	mg/kg	6800	96000	7390	4370	11100	5580	4840	8000	4330	5270	3760	3160	2950	3610
Lead	mg/kg	3.6	**1170[ca]**	2.4	2.1	11.8	6.4	4.1	2.5	1.7	9.0	9.3	3.8	2.8	4.8
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	407 J	2300 J	863 J	772 J	227 J	82.0 UJ	468 J	1160 J	633 J	3550 J	3050 J	2510 J	2030 J	1950 J
Manganese	mg/kg	114	**1580[f]**	46.7	30.0	108	67.6	39.0	51.7	33.6	141 J	95.0 J	75.3 J	76.9 J	82.6 J
Mercury	mg/kg	0.046 U	0.045 U	0.043 U	0.043 U	0.042 U	0.041 U	0.043 U	0.043 U	0.042 U	0.042 U	0.042 U	0.041 U	0.042 U	0.041 U
Nickel	mg/kg	14.2 J	566 J	5.3 J	5.4 J	21.6 J	14.4 J	8.0 J	3.9 J	4.4 J	5.6	7.8	4.0	3.2	11.2
Potassium	mg/kg	457 U	446 U	428 U	425 U	418 U	410 U	430 U	425 U	419 U	417 U	416 U	412 U	416 U	415 U
Selenium	mg/kg	0.27 J	0.68 J	0.17 UJ	0.17 UJ	0.22 J	0.16 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 U	0.17 U	0.16 U	0.17 U	0.17 U
Silver	mg/kg	0.091 UJ	2.4 J	0.086 UJ	0.085 UJ	2.9 J	2.5 J	1.2 J	0.093 J	0.084 UJ	0.083 U	0.083 U	0.082 U	0.083 U	0.11
Sodium	mg/kg	1260	1460	242	211	704	245	809	359	383	83.4 U	83.3 U	82.4 U	83.3 U	82.9 U
Thallium	mg/kg	0.091 U	0.21	0.086 U	0.085 U	0.084 U	0.082 U	0.086 U	0.085 U	0.084 U	0.083 U	0.083 U	0.082 U	0.083 U	0.083 U
Vanadium	mg/kg	13.3 J	79.0 J	10.7 J	7.3 J	8.5 J	0.82 UJ	7.8 J	16.7 J	7.8 J	7.6	5.2	5.3	4.8	4.9
Zinc	mg/kg	7.4	792	8.2	8.3	10.6	6.4	29.9	5.0	8.2	14.8	16.7	14.3	10.7	20.4
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB28-07*	*SB28-07*	*SB28-07*	*SB28-07*	*SB29-07*	*SB29-07*	*SB29-07*	*SB29-07*	*SB29-07*	*SB30-07*	*SB30-07*	*SB30-07*	*SB30-07*	*SB30-07*
Sample Identification		*SO-17360-071007-BW-629*	*SO-17360-071007-BW-630*	*SO-17360-071007-BW-631*	*SO-17360-071007-BW-632*	*SO-17360-071007-BW-633*	*SO-17360-071007-BW-634*	*SO-17360-071007-BW-635*	*SO-17360-071007-BW-636*	*SO-17360-071007-BW-637*	*SO-17360-071007-BW-644*	*SO-17360-071007-BW-645*	*SO-17360-071007-BW-646*	*SO-17360-071007-BW-647*	*SO-17360-071007-BW-648*
Sample Date		*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type															
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	1.1 U
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	1.1 U
Acenaphthylene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	1.1 U
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	1.1 U
Benzo(a)anthracene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	1.1 U
Benzo(a)pyrene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	1.1 U
Benzo(b)fluoranthene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	1.1 U
Benzo(g,h,i)perylene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	1.1 U
Benzo(k)fluoranthene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	1.1 U
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	1.1 U
Dibenz(a,h)anthracene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	1.1 U
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.33	0.27 U	0.31	1.1 U
Fluorene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	1.1 U
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	1.1 U
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	1.1 U
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	1.1 U
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	6 U	15 U	0.28 U	0.28 U	0.28 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	1.1 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB28-07*	*SB28-07*	*SB28-07*	*SB28-07*	*SB29-07*	*SB29-07*	*SB29-07*	*SB29-07*	*SB29-07*	*SB30-07*	*SB30-07*	*SB30-07*	*SB30-07*	*SB30-07*
Sample Identification		*SO-17360-071007-BW-629*	*SO-17360-071007-BW-630*	*SO-17360-071007-BW-631*	*SO-17360-071007-BW-632*	*SO-17360-071007-BW-633*	*SO-17360-071007-BW-634*	*SO-17360-071007-BW-635*	*SO-17360-071007-BW-636*	*SO-17360-071007-BW-637*	*SO-17360-071007-BW-644*	*SO-17360-071007-BW-645*	*SO-17360-071007-BW-646*	*SO-17360-071007-BW-647*	*SO-17360-071007-BW-648*
Sample Date		*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type															
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MI	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichlorofluoromethane (CFC-11)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB28-07*	*SB28-07*	*SB28-07*	*SB28-07*	*SB29-07*	*SB29-07*	*SB29-07*	*SB29-07*	*SB29-07*	*SB30-07*	*SB30-07*	*SB30-07*	*SB30-07*	*SB30-07*
Sample Identification		*SO-17360-071007-BW-629*	*SO-17360-071007-BW-630*	*SO-17360-071007-BW-631*	*SO-17360-071007-BW-632*	*SO-17360-071007-BW-633*	*SO-17360-071007-BW-634*	*SO-17360-071007-BW-635*	*SO-17360-071007-BW-636*	*SO-17360-071007-BW-637*	*SO-17360-071007-BW-644*	*SO-17360-071007-BW-645*	*SO-17360-071007-BW-646*	*SO-17360-071007-BW-647*	*SO-17360-071007-BW-648*
Sample Date		*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type															
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	87.5	89.6	93.5	94.1	95.8	97.6	93.0	94.1	95.4	95.9	96.1	97.1	96.1	96.5
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB30-07*	*SB31-07*	*SB31-07*	*SB31-07*	*SB31-07*	*SB31-07*	*SB31-07*	*SB32-07*	*SB32-07*	*SB32-07*	*SB32-07*	*SB32-07*	*SB32-07*	*SB33-07*
Sample Identification		*SO-17360-071007-BW-649*	*SO-17360-071007-BW-656*	*SO-17360-071007-BW-657*	*SO-17360-071007-BW-658*	*SO-17360-071007-BW-659*	*SO-17360-071007-BW-660*	*SO-17360-071007-BW-661*	*SO-17360-071007-BW-638*	*SO-17360-071007-BW-639*	*SO-17360-071007-BW-640*	*SO-17360-071007-BW-641*	*SO-17360-071007-BW-642*	*SO-17360-071007-BW-643*	*SO-17360-071007-BW-650*
Sample Date		*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*
Sample Depth		*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(8-10) ft*	*(0-2) ft*
Sample Type		*Duplicate*						*Duplicate*						*Duplicate*	
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	1630	1750	2020	1600	1390	2860	2870	3150	2460	3250	3520	2760	2200	1590
Antimony	mg/kg	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.59 J	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.16 UJ
Arsenic	mg/kg	0.92	1.8	1.6	2.6 J	1.3 J	1.4 J	2.0 J	1.7	1.1	1.4	1.0	1.0	0.76	1.3
Barium	mg/kg	8.2	9.2	12.3	9.3	7.0	27.7	33.0	49.7	22.0	25.8	18.0	18.5	9.6	11.8
Beryllium	mg/kg	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.16 U
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	0.083 U	0.083 U	0.084 U	0.083 U	0.083 U	0.10 J	0.40 J	0.96	0.11	0.17	0.084 U	0.085 U	0.085 U	0.082 U
Calcium	mg/kg	9560	23000	27100	32900	19600	35600	14100	2610	1780	3230	1710	1020	546	22400
Chromium	mg/kg	4.8 J	4.1 J	4.6 J	3.9	3.8	8.4 J	70.9 J	21.5 J	7.0 J	9.2 J	11.4 J	6.4 J	5.2 J	4.3 J
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	mg/kg	1.6	1.8	3.5	2.3	1.5	2.3 J	14.2 J	3.7	2.0	2.5	3.0	2.0	1.9	3.4
Copper	mg/kg	7.0 J	4.9 J	7.1 J	5.8	3.9	6.7 J	49.0 J	57.5 J	11.7 J	20.5 J	6.0 J	5.0 J	4.2 J	6.5 J
Iron	mg/kg	3380	4240	4430	4100	3630	4040	7820	8190	3810	5090	5760	3900	3770	4220
Lead	mg/kg	4.4	5.7	6.6	7.1	3.7	8.4 J	40.4 J	65.8	12.3	14.5	5.7	5.4	3.9	6.6
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	3010 J	5710 J	11500 J	15800 J	5090 J	2060 J	5330 J	1140 J	941 J	1340 J	1690 J	788 J	629 J	6230 J
Manganese	mg/kg	76.8 J	125 J	149 J	127 J	102 J	141 J	239 J	165 J	81.0 J	108 J	94.9 J	68.1 J	41.7 J	122 J
Mercury	mg/kg	0.042 U	0.041 U	0.042 U	0.041 U	0.041 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.041 U
Nickel	mg/kg	10.9	3.8	4.5	3.7	3.6	6.9 J	44.6 J	37.1	5.6	10.7	7.6	4.6	4.0	4.4
Potassium	mg/kg	416 U	414 U	420 U	414 U	413 U	423 U	424 U	421 U	418 U	423 U	422 U	423 U	424 U	408 U
Selenium	mg/kg	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.16 U
Silver	mg/kg	0.083 U	0.083 U	0.084 U	0.083 U	0.083 U	0.085 U	0.59	0.17	0.084 U	0.10	0.084 U	0.085 U	0.085 U	0.082 U
Sodium	mg/kg	83.3 U	82.8 U	84.0 U	82.8 U	82.6 U	84.7 U	84.9 U	280	195	221	84.5 U	116	115	81.6 U
Thallium	mg/kg	0.083 U	0.083 U	0.084 U	0.083 U	0.083 U	0.085 U	0.085 U	0.084 U	0.084 U	0.085 U	0.084 U	0.085 U	0.085 U	0.082 U
Vanadium	mg/kg	4.9	6.1	6.2	7.2	5.0	6.5	8.8	7.5	5.9	8.0	8.5	6.7	6.7	5.3
Zinc	mg/kg	9.5	15.6	14.2	14.5 J	11.8 J	14.7 J	61.3 J	73.0	25.4	42.7	20.8	13.0	10.5	13.0
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB30-07*	*SB31-07*	*SB31-07*	*SB31-07*	*SB31-07*	*SB31-07*	*SB31-07*	*SB32-07*	*SB32-07*	*SB32-07*	*SB32-07*	*SB32-07*	*SB32-07*	*SB33-07*
Sample Identification		*SO-17360-071007-BW-649*	*SO-17360-071007-BW-656*	*SO-17360-071007-BW-657*	*SO-17360-071007-BW-658*	*SO-17360-071007-BW-659*	*SO-17360-071007-BW-660*	*SO-17360-071007-BW-661*	*SO-17360-071007-BW-638*	*SO-17360-071007-BW-639*	*SO-17360-071007-BW-640*	*SO-17360-071007-BW-641*	*SO-17360-071007-BW-642*	*SO-17360-071007-BW-643*	*SO-17360-071007-BW-650*
Sample Date		*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*
Sample Depth		*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(8-10) ft*	*(0-2) ft*
Sample Type		*Duplicate*						*Duplicate*						*Duplicate*	
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U
Acenaphthylene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U
Benzo(a)anthracene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U
Benzo(a)pyrene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U
Benzo(b)fluoranthene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U
Benzo(g,h,i)perylene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U
Benzo(k)fluoranthene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U
Dibenz(a,h)anthracene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.31	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U
Fluorene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB30-07*	*SB31-07*	*SB31-07*	*SB31-07*	*SB31-07*	*SB31-07*	*SB31-07*	*SB32-07*	*SB32-07*	*SB32-07*	*SB32-07*	*SB32-07*	*SB32-07*	*SB33-07*
Sample Identification		*SO-17360-071007-BW-649*	*SO-17360-071007-BW-656*	*SO-17360-071007-BW-657*	*SO-17360-071007-BW-658*	*SO-17360-071007-BW-659*	*SO-17360-071007-BW-660*	*SO-17360-071007-BW-661*	*SO-17360-071007-BW-638*	*SO-17360-071007-BW-639*	*SO-17360-071007-BW-640*	*SO-17360-071007-BW-641*	*SO-17360-071007-BW-642*	*SO-17360-071007-BW-643*	*SO-17360-071007-BW-650*
Sample Date		*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*
Sample Depth		*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(8-10) ft*	*(0-2) ft*
Sample Type		*Duplicate*						*Duplicate*						*Duplicate*	
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MI	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichlorofluoromethane (CFC-11)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB30-07*	*SB31-07*	*SB31-07*	*SB31-07*	*SB31-07*	*SB31-07*	*SB31-07*	*SB32-07*	*SB32-07*	*SB32-07*	*SB32-07*	*SB32-07*	*SB32-07*	*SB33-07*
Sample Identification		*SO-17360-071007-BW-649*	*SO-17360-071007-BW-656*	*SO-17360-071007-BW-657*	*SO-17360-071007-BW-658*	*SO-17360-071007-BW-659*	*SO-17360-071007-BW-660*	*SO-17360-071007-BW-661*	*SO-17360-071007-BW-638*	*SO-17360-071007-BW-639*	*SO-17360-071007-BW-640*	*SO-17360-071007-BW-641*	*SO-17360-071007-BW-642*	*SO-17360-071007-BW-643*	*SO-17360-071007-BW-650*
Sample Date		*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*
Sample Depth		*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(8-10) ft*	*(0-2) ft*
Sample Type		*Duplicate*						*Duplicate*						*Duplicate*	
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	96.1	96.6	95.2	96.6	96.8	94.5	94.3	95.1	95.7	94.6	94.7	94.6	94.4	98.1
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB33-07*	*SB33-07*	*SB33-07*	*SB33-07*	*SB33-07*	*SB34-10*	*SB34-10*	*SB34-10*	*SB34-10*	*SB34-10*	*SB35-10*	*SB35-10*	*SB35-10*	*SB35-10*
Sample Identification		*SO-17360-071007-BW-651*	*SO-17360-071007-BW-652*	*SO-17360-071007-BW-653*	*SO-17360-071007-BW-654*	*SO-17360-071007-BW-655*	*SO-17360-4/20/10-DR-037*	*SO-17360-4/20/10-DR-038*	*SO-17360-4/20/10-DR-039*	*SO-17360-4/20/10-DR-040*	*SO-17360-4/20/10-DR-041*	*SO-17360-4/20/10-DR-032*	*SO-17360-4/20/10-DR-033*	*SO-17360-4/20/10-DR-034*	*SO-17360-4/20/10-DR-035*
Sample Date		*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*
Sample Type						*Duplicate*									
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	1930	1460	1770	2900	2620	3340	2720	3230	2490	2120	1850	1770	4270	2610
Antimony	mg/kg	0.16 UJ	0.16 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.19 UJ	0.18 UJ	0.17 UJ	0.19 UJ	0.43 J	0.97 J	0.18 UJ
Arsenic	mg/kg	1.6	1.2	2.3	1.5	2.8	3.1 J	5.9 J	3.4 J	2.2 J	1.2	4.9 J	6.5 J	3.7 J	2.0 J
Barium	mg/kg	13.1	7.8	9.2	26.0	37.6	29.7	30.0	22.5	9.3	6.6	92.9	68.7	49.8	8.8
Beryllium	mg/kg	0.16 U	0.16 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.19 U	0.18 U	0.17 U	0.43	0.18 U	0.19 U	0.18 U
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	0.082 U	0.082 U	0.085 U	0.12	0.084 U	0.11	0.12	0.13	0.089 U	0.086 U	0.094 U	0.27	0.45	0.090 U
Calcium	mg/kg	24400	23100	32500	6500 J	523 J	7130 J	6520 J	2470 J	563 J	4290 J	1390 J	2620 J	78000 J	788 J
Chromium	mg/kg	4.8 J	3.7 J	4.5 J	6.4 J	4.2 J	6.0	6.1	4.7	5.1	6.1	6.7	**244[1]**	**919[1]**	6.7
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	244	917	--
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	0.90 U	1.2	--
Cobalt	mg/kg	2.7	2.2	2.2	2.5	1.7	2.9	2.3	1.1	1.4	2.2	5.0	10.4	10.3	1.7
Copper	mg/kg	6.9 J	5.1 J	6.5 J	10.5 J	4.6 J	9.1	14.5	3.0	1.5	4.4	20.3	43.2	165	2.4
Iron	mg/kg	4260	3620	4790	4460	3580	6370	6120	2090	3420	3290	5240	12700	30900	3580
Lead	mg/kg	6.2	5.9	5.5	17.5 J	5.6 J	9.8	16.4	3.2	1.8	1.9	9.8	382	**4750[VS]**	3.4
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	**760[S]**	**5440[VS]**	--
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	**1350[VS]**	**9210[VS]**	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	**862[S]**	**5720[VS]**	--
Magnesium	mg/kg	8490 J	10700 J	10900 J	2570 J	417 J	2080	3670	808	828	3020 J	311	745	14300	1000
Manganese	mg/kg	128 J	182 J	159 J	121 J	74.7 J	143	107	17.3	25.9	37.5	33.9	315	813	25.6
Mercury	mg/kg	0.041 U	0.041 U	0.042 U	0.042 U	0.042 U	0.043 U	0.043 U	0.048 U	0.045 U	0.043 U	0.047 U	0.045 U	0.047 U	0.018 J
Nickel	mg/kg	4.6	3.9	5.5	5.9	3.8	5.8 J	5.2 J	3.2 J	4.0 J	5.1	15.1 J	169 J	535 J	4.6 J
Potassium	mg/kg	411 U	412 U	424 U	419 U	419 U	172 J	204 J	126 J	117 J	174 J	164 J	135 J	417 J	229 J
Selenium	mg/kg	0.16 U	0.16 U	0.17 U	0.17 U	0.17 U	0.20 J	0.31 J	0.32 J	0.18 J	0.28 J	0.41 J	0.40 J	0.20 J	0.17 J
Silver	mg/kg	0.082 U	0.082 U	0.085 U	0.084 U	0.084 U	0.086 U	0.086 U	0.066 J	0.089 U	0.086 U	0.042 J	0.11	0.33	0.090 U
Sodium	mg/kg	82.1 U	82.3 U	99.1	83.8 U	83.9 U	575	683	1250	629	277	290	452	1120	446
Thallium	mg/kg	0.082 U	0.082 U	0.085 U	0.084 U	0.084 U	0.086 U	0.15	0.096 U	0.089 U	0.086 U	0.094 U	0.097 U	0.47 U	0.090 U
Vanadium	mg/kg	6.2	5.6	6.1	6.8	5.5	10.4	8.6	5.5	7.4	8.4	7.8	12.4	13.4	9.2
Zinc	mg/kg	12.4	13.8	21.4	20.7	21.3	15.2 J	14.1 J	22.1 J	6.0 J	8.5 J	43.8 J	38.2 J	49.4 J	6.6 J
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	0.28 U	0.28 U	0.32 U	0.29 U	0.28 U	0.31 U	0.3 U	0.31 U	0.3 U
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	0.28 UJ	0.28 UJ	0.32 UJ	0.29 U	0.28 U	0.31 U	0.3 U	0.31 U	0.3 U
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	0.28 U	0.28 U	0.32 U	0.29 U	0.28 U	0.31 U	0.3 U	0.31 U	0.3 U
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	0.28 U	0.28 U	0.32 U	0.29 U	0.28 U	0.31 U	0.3 U	0.31 U	0.3 U
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	0.28 U	0.28 U	0.32 U	0.29 U	0.28 U	0.31 U	0.3 U	0.31 U	0.3 U
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	0.28 U	0.28 U	0.32 U	0.29 U	0.28 U	0.31 U	0.3 U	0.31 U	0.3 U
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	0.28 U	0.28 U	0.32 U	0.29 U	0.28 U	0.31 U	0.3 U	0.04 J	0.3 U
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	--	--	--	--	--	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0.04 J / 0.04	0 / 0
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB33-07*	*SB33-07*	*SB33-07*	*SB33-07*	*SB33-07*	*SB34-10*	*SB34-10*	*SB34-10*	*SB34-10*	*SB34-10*	*SB35-10*	*SB35-10*	*SB35-10*	*SB35-10*
Sample Identification		*SO-17360-071007-BW-651*	*SO-17360-071007-BW-652*	*SO-17360-071007-BW-653*	*SO-17360-071007-BW-654*	*SO-17360-071007-BW-655*	*SO-17360-4/20/10-DR-037*	*SO-17360-4/20/10-DR-038*	*SO-17360-4/20/10-DR-039*	*SO-17360-4/20/10-DR-040*	*SO-17360-4/20/10-DR-041*	*SO-17360-4/20/10-DR-032*	*SO-17360-4/20/10-DR-033*	*SO-17360-4/20/10-DR-034*	*SO-17360-4/20/10-DR-035*
Sample Date		*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*
Sample Type						*Duplicate*									
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	0.27 U	0.27 U	1.1 U	0.28 U	1.4 U	0.13 J	0.96 J	0.31 J	2.9 U	1.1 U	0.096 J	0.46 J	2.2 J	0.3 U
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	0.27 U	0.27 U	1.1 U	0.28 U	1.4 U	1.1 U	1.4 U	1.6 U	2.9 U	1.1 U	1.2 U	1.6 J	18 J	0.3 U
Acenaphthylene	mg/kg	0.27 U	0.27 U	1.1 U	0.28 U	1.4 U	1.1 U	1.4 U	1.6 U	2.9 U	1.1 U	1.2 U	0.84 J	62 U	0.3 U
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	0.27 U	0.27 U	1.1 U	0.28 U	1.4 U	0.062 J	1.4 U	1.6 U	2.9 U	1.1 U	1.2 U	5.6 J	36 J	0.3 U
Benzo(a)anthracene	mg/kg	0.27 U	0.27 U	1.1 U	0.28 U	1.4 U	0.31 J	0.087 J	1.6 U	2.9 U	1.1 U	0.095 J	**23[a]**	**100[a&g]**	0.03 J
Benzo(a)pyrene	mg/kg	0.27 U	0.27 U	R	0.28 U	1.4 U	0.31 J	0.084 J	1.6 U	2.9 U	1.1 U	0.079 J	**23[a&g]**	**91[a&g]**	0.025 J
Benzo(b)fluoranthene	mg/kg	0.27 U	0.27 U	1.1 U	0.28 U	1.4 U	0.5 J	0.14 J	1.6 U	2.9 U	1.1 U	0.14 J	**34[a]**	**130[a&g]**	0.038 J
Benzo(g,h,i)perylene	mg/kg	0.27 U	0.27 U	1.1 U	0.28 U	1.4 U	0.26 J	0.12 J	1.6 U	2.9 U	1.1 U	0.077 J	16	61 J	0.015 J
Benzo(k)fluoranthene	mg/kg	0.27 U	0.27 U	1.1 U	0.28 U	1.4 U	0.16 J	0.047 J	1.6 U	2.9 U	1.1 U	0.043 J	11 J	42 J	0.013 J
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	0.27 U	0.27 U	1.1 U	0.28 U	1.4 U	0.39 J	0.17 J	1.6 U	2.9 U	1.1 U	0.15 J	25	110	0.032 J
Dibenz(a,h)anthracene	mg/kg	0.27 U	0.27 U	1.1 U	0.28 U	1.4 U	0.073 J	1.4 U	1.6 U	2.9 U	1.1 U	1.2 U	**5.2 J[a]**	**18 J[a&g]**	0.3 U
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	0.27 U	0.27 U	1.1 U	0.28 U	1.4 U	0.46 J	0.13 J	1.6 U	2.9 U	1.1 U	0.15 J	41	250	0.043 J
Fluorene	mg/kg	0.27 U	0.27 U	1.1 U	0.28 U	1.4 U	1.1 U	1.4 U	1.6 U	2.9 U	1.1 U	1.2 U	2 J	17 J	0.3 U
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	0.27 U	0.27 U	1.1 U	0.28 U	1.4 U	0.19 J	0.059 J	1.6 U	2.9 U	1.1 U	0.05 J	14	**53 J[a]**	0.013 J
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	0.27 U	0.27 U	1.1 U	0.28 U	1.4 U	0.076 J	0.63 J	0.21 J	2.9 U	1.1 U	0.039 J	0.81 J	4 J	0.3 U
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	0.27 U	0.27 U	1.1 U	0.28 U	1.4 U	0.27 J	0.4 J	0.12 J	2.9 U	1.1 U	0.2 J	22	180	0.029 J
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	0.27 U	0.27 U	1.1 U	0.28 U	1.4 U	0.38 J	0.11 J	1.6 U	2.9 U	1.1 U	0.12 J	31	180	0.035 J

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB33-07*	*SB33-07*	*SB33-07*	*SB33-07*	*SB33-07*	*SB34-10*	*SB34-10*	*SB34-10*	*SB34-10*	*SB34-10*	*SB35-10*	*SB35-10*	*SB35-10*	*SB35-10*
Sample Identification		*SO-17360-071007-BW-651*	*SO-17360-071007-BW-652*	*SO-17360-071007-BW-653*	*SO-17360-071007-BW-654*	*SO-17360-071007-BW-655*	*SO-17360-4/20/10-DR-037*	*SO-17360-4/20/10-DR-038*	*SO-17360-4/20/10-DR-039*	*SO-17360-4/20/10-DR-040*	*SO-17360-4/20/10-DR-041*	*SO-17360-4/20/10-DR-032*	*SO-17360-4/20/10-DR-033*	*SO-17360-4/20/10-DR-034*	*SO-17360-4/20/10-DR-035*
Sample Date		*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*
Sample Type						*Duplicate*									
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MI	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichlorofluoromethane (CFC-11)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB33-07*	*SB33-07*	*SB33-07*	*SB33-07*	*SB33-07*	*SB34-10*	*SB34-10*	*SB34-10*	*SB34-10*	*SB34-10*	*SB35-10*	*SB35-10*	*SB35-10*	*SB35-10*
Sample Identification		*SO-17360-071007-BW-651*	*SO-17360-071007-BW-652*	*SO-17360-071007-BW-653*	*SO-17360-071007-BW-654*	*SO-17360-071007-BW-655*	*SO-17360-4/20/10-DR-037*	*SO-17360-4/20/10-DR-038*	*SO-17360-4/20/10-DR-039*	*SO-17360-4/20/10-DR-040*	*SO-17360-4/20/10-DR-041*	*SO-17360-4/20/10-DR-032*	*SO-17360-4/20/10-DR-033*	*SO-17360-4/20/10-DR-034*	*SO-17360-4/20/10-DR-035*
Sample Date		*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*7/10/2007*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*
Sample Type						*Duplicate*									
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	97.4	97.2	94.3	95.5	95.4	93.5	92.9	83.1	89.6	92.8	85.4	98.2 / 88.5 / 99.0	97.9 / 95.2 / 85.7	89.3
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB35-10*	*SB36-10*	*SB36-10*	*SB36-10*	*SB36-10*	*SB36-10*	*SB36-10*	*SB37-10*	*SB37-10*	*SB37-10*	*SB37-10*	*SB37-10*	*SB37-10*	*SB38-10*
Sample Identification		*SO-17360-4/20/10-DR-036*	*SO-17360-4/20/10-DR-021*	*SO-17360-4/20/10-DR-022*	*SO-17360-4/20/10-DR-023*	*SO-17360-4/20/10-DR-024*	*SO-17360-4/20/10-DR-025*	*SO-17360-4/20/10-DR-026*	*SO-17360-4/20/10-DR-015*	*SO-17360-4/20/10-DR-016*	*SO-17360-4/20/10-DR-017*	*SO-17360-4/20/10-DR-018*	*SO-17360-4/20/10-DR-019*	*SO-17360-4/20/10-DR-020*	*SO-17360-4/20/10-DR-009*
Sample Date		*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*
Sample Depth		*(8-10) ft*	*(0-2) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*
Sample Type				*Duplicate*						*Duplicate*					
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	2080	2730	2940	1120	373	2840	1320	487	343	1150	3230	3940	2380	994
Antimony	mg/kg	0.17 UJ	0.59 J	0.60 J	2.2 J	5.0 J	0.17 UJ	0.17 UJ	1.5 J	1.5 J	0.34 J	0.17 UJ	0.18 UJ	0.17 UJ	0.17 UJ
Arsenic	mg/kg	0.68 J	5.8 J	5.2 J	**8.3 J[a]**	1.4 J	0.76 J	0.47 J	1.2 J	1.2 J	1.7 J	1.2 J	1.1 J	1.4 J	1.0 J
Barium	mg/kg	5.7	72.6	74.6	36.0	8.0	15.2	3.1	6.4	4.5	57.4	20.3	7.1	4.7	4.5
Beryllium	mg/kg	0.17 U	0.18 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.16 U	0.18 U	0.17 U	0.18 U	0.17 U	0.17 U
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	0.087 U	0.12	0.13	0.43 U	0.23	0.087 U	0.085 U	0.083 U	0.082 U	0.098 U	0.18	0.088 U	0.085 U	0.084 U
Calcium	mg/kg	602 J	15100 J	16100 J	13500 J	742 J	417 J	253 J	4200	4310	7150	413 J	272 J	310 J	12300
Chromium	mg/kg	4.7	**862[a]**	**424[a]**	**2540[a][d]**	233	5.4	3.7	12.0	16.1	11.1	3.4	4.8	6.0	3.2
Chromium III (trivalent)	mg/kg	--	861	--	2540	233	--	--	--	16.1	--	--	--	--	--
Chromium VI (hexavalent)	mg/kg	--	1.5	--	1.4	0.84 U	--	--	--	0.82 U	--	--	--	--	--
Cobalt	mg/kg	1.2	13.6	17.6	268	7.0	1.5	1.0	0.93	0.72	3.4	1.1	2.0	2.2	1.1
Copper	mg/kg	3.4	68.6	60.0	122	13.2	1.0	1.0	6.0	6.3	13.0	1.3	0.88 U	2.1	3.2
Iron	mg/kg	3100	14600	12100	122000	15200	2650	1670	3730	5310	5330	3840	4030	5000	2500
Lead	mg/kg	1.6	42.5	44.1	173	37.6	2.5	1.4	14.9	13.9	10.9	4.6	1.9	1.8	2.9
Lead - coarse fraction	mg/kg	--	42.7	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	mg/kg	--	83.0	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	54.7	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/kg	524	3240	4100	2960	165	794	565	830	1080	1910	320	545	860	4880
Manganese	mg/kg	15.6	795	593	1040	221	22.3	14.9	46.0	69.0	60.5	28.9	19.3	32.5	55.8
Mercury	mg/kg	0.043 U	0.044 U	0.043 U	0.043 U	0.042 U	0.044 U	0.043 U	0.041 U	0.041 U	0.044 U	0.019 J	0.044 U	0.042 U	0.042 U
Nickel	mg/kg	3.2 J	477 J	246 J	5540 J	216 J	3.2 J	2.3 J	9.0	8.9	15.6	8.5	3.2	3.9	3.5
Potassium	mg/kg	115 J	273 J	286 J	138 J	418 U	168 J	107 J	58.4 J	46.7 J	128 J	132 J	115 J	130 J	163 J
Selenium	mg/kg	0.30 J	0.44 J	0.39 J	0.12 J	0.17 UJ	0.14 J	0.10 J	0.17 UJ	0.16 UJ	0.15 J	0.16 J	0.17 J	0.11 J	0.097 J
Silver	mg/kg	0.087 U	0.23	0.17	0.84	2.1	0.087 U	0.085 U	0.083 U	0.082 U	0.22	0.087 U	0.088 U	0.085 U	0.084 U
Sodium	mg/kg	210	1220	1160	428	359	726	460	320	315	416	546	583	241	545
Thallium	mg/kg	0.087 U	0.097 U	0.088 U	0.086 U	0.084 U	0.087 U	0.085 U	0.083 U	0.082 U	0.088 U	0.087 U	0.088 U	0.085 U	0.084 U
Vanadium	mg/kg	5.4	10.8	11.3	33.4	2.1	8.0	5.4	1.7	1.3	5.5	6.9	7.7	9.8	3.9
Zinc	mg/kg	5.5 J	69.2 J	67.2 J	27.8 J	11.7 J	6.4 J	3.0 U	10.2	9.3	18.6	11.0	6.7	7.8	11.0
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	0.29 U	0.29 U	0.28 U	0.57 U	0.28 U	0.29 U	0.28 U	0.27 U	0.27 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U
Aroclor-1221 (PCB-1221)	mg/kg	0.29 U	0.29 U	0.28 U	0.57 U	0.28 U	0.29 U	0.28 U	0.27 U	0.27 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U
Aroclor-1232 (PCB-1232)	mg/kg	0.29 U	0.29 U	0.28 U	0.57 U	0.28 U	0.29 U	0.28 U	0.27 U	0.27 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U
Aroclor-1242 (PCB-1242)	mg/kg	0.29 U	0.29 U	0.28 U	0.57 U	0.28 U	0.29 U	0.28 U	0.27 U	0.27 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U
Aroclor-1248 (PCB-1248)	mg/kg	0.29 U	0.29 U	0.28 U	0.57 U	0.28 U	0.29 U	0.28 U	0.27 U	0.27 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U
Aroclor-1254 (PCB-1254)	mg/kg	0.29 U	0.29 U	0.28 U	0.57 U	0.28 U	0.29 U	0.28 U	0.27 U	0.27 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U
Aroclor-1260 (PCB-1260)	mg/kg	0.29 U	0.29 U	0.28 U	0.57 U	0.28 U	0.29 U	0.28 U	0.27 U	0.27 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB35-10*	*SB36-10*	*SB36-10*	*SB36-10*	*SB36-10*	*SB36-10*	*SB36-10*	*SB37-10*	*SB37-10*	*SB37-10*	*SB37-10*	*SB37-10*	*SB37-10*	*SB38-10*
Sample Identification		*SO-17360-4/20/10-DR-036*	*SO-17360-4/20/10-DR-021*	*SO-17360-4/20/10-DR-022*	*SO-17360-4/20/10-DR-023*	*SO-17360-4/20/10-DR-024*	*SO-17360-4/20/10-DR-025*	*SO-17360-4/20/10-DR-026*	*SO-17360-4/20/10-DR-015*	*SO-17360-4/20/10-DR-016*	*SO-17360-4/20/10-DR-017*	*SO-17360-4/20/10-DR-018*	*SO-17360-4/20/10-DR-019*	*SO-17360-4/20/10-DR-020*	*SO-17360-4/20/10-DR-009*
Sample Date		*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*
Sample Depth		*(8-10) ft*	*(0-2) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*
Sample Type				*Duplicate*						*Duplicate*					
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	0.29 U	0.076 J	0.068 J	0.1 J	0.2 J	0.29 U	0.28 U	5.5 U	5.4 U	0.011 J	0.0082 J	0.29 U	0.28 U	0.28 U
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	0.29 U	0.03 J	0.019 J	0.53 J	0.054 J	0.29 U	0.28 U	5.5 U	5.4 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U
Acenaphthylene	mg/kg	0.29 U	0.0099 J	0.009 J	3.6 U	1.1 U	0.29 U	0.28 U	5.5 U	5.4 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	0.29 U	0.079 J	0.047 J	1.5 J	0.12 J	0.29 U	0.28 U	5.5 U	5.4 U	0.29 U	0.29 U	0.29 U	0.28 U	0.0089 J
Benzo(a)anthracene	mg/kg	0.0085 J	0.32	0.22 J	5.3	0.32 J	0.29 U	0.28 U	5.5 U	5.4 U	0.012 J	0.008 J	0.29 U	0.28 U	0.035 J
Benzo(a)pyrene	mg/kg	0.29 U	0.31	0.22 J	**4.9[a]**	0.3 J	0.29 U	0.28 U	5.5 U	5.4 U	0.0085 J	0.009 J	0.29 U	0.28 U	0.035 J
Benzo(b)fluoranthene	mg/kg	0.01 J	0.62	0.47	8	0.46 J	0.29 U	0.28 U	5.5 U	5.4 U	0.019 J	0.016 J	0.29 U	0.28 U	0.05 J
Benzo(g,h,i)perylene	mg/kg	0.29 U	0.28 J	0.23 J	4.1	0.24 J	0.29 U	0.28 U	5.5 U	5.4 U	0.012 J	0.0086 J	0.29 U	0.28 U	0.029 J
Benzo(k)fluoranthene	mg/kg	0.29 U	0.17 J	0.12 J	2.5 J	0.11 J	0.29 U	0.28 U	5.5 U	5.4 U	0.0087 J	0.29 U	0.29 U	0.28 U	0.019 J
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	0.008 J	0.43	0.31	5.9	0.35 J	0.29 U	0.28 U	5.5 U	5.4 U	0.021 J	0.014 J	0.29 U	0.28 U	0.044 J
Dibenz(a,h)anthracene	mg/kg	0.29 U	0.084 J	0.064 J	1.1 J	0.048 J	0.29 U	0.28 U	5.5 U	5.4 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	0.016 J	0.71	0.43	14	0.8 J	0.29 U	0.28 U	5.5 U	5.4 U	0.018 J	0.017 J	0.29 U	0.28 U	0.075 J
Fluorene	mg/kg	0.29 U	0.032 J	0.017 J	0.54 J	0.048 J	0.29 U	0.28 U	5.5 U	5.4 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	0.29 U	0.24 J	0.2 J	3.6	0.2 J	0.29 U	0.28 U	5.5 U	5.4 U	0.0081 J	0.0077 J	0.29 U	0.28 U	0.023 J
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	0.29 U	0.046 J	0.043 J	0.13 J	0.13 J	0.29 U	0.28 U	5.5 U	5.4 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	0.012 J	0.46	0.27 J	6.9	0.5 J	0.29 U	0.28 U	5.5 U	5.4 U	0.019 J	0.01 J	0.29 U	0.28 U	0.033 J
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	0.013 J	0.53	0.34	8.4	0.63 J	0.29 U	0.28 U	5.5 U	5.4 U	0.013 J	0.011 J	0.29 U	0.28 U	0.058 J

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB35-10*	*SB36-10*	*SB36-10*	*SB36-10*	*SB36-10*	*SB36-10*	*SB36-10*	*SB37-10*	*SB37-10*	*SB37-10*	*SB37-10*	*SB37-10*	*SB37-10*	*SB38-10*
Sample Identification		*SO-17360-4/20/10-DR-036*	*SO-17360-4/20/10-DR-021*	*SO-17360-4/20/10-DR-022*	*SO-17360-4/20/10-DR-023*	*SO-17360-4/20/10-DR-024*	*SO-17360-4/20/10-DR-025*	*SO-17360-4/20/10-DR-026*	*SO-17360-4/20/10-DR-015*	*SO-17360-4/20/10-DR-016*	*SO-17360-4/20/10-DR-017*	*SO-17360-4/20/10-DR-018*	*SO-17360-4/20/10-DR-019*	*SO-17360-4/20/10-DR-020*	*SO-17360-4/20/10-DR-009*
Sample Date		*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*
Sample Depth		*(8-10) ft*	*(0-2) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*
Sample Type				*Duplicate*						*Duplicate*					
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MI	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichlorofluoromethane (CFC-11)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
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FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB35-10*	*SB36-10*	*SB36-10*	*SB36-10*	*SB36-10*	*SB36-10*	*SB36-10*	*SB37-10*	*SB37-10*	*SB37-10*	*SB37-10*	*SB37-10*	*SB37-10*	*SB38-10*
Sample Identification		*SO-17360-4/20/10-DR-036*	*SO-17360-4/20/10-DR-021*	*SO-17360-4/20/10-DR-022*	*SO-17360-4/20/10-DR-023*	*SO-17360-4/20/10-DR-024*	*SO-17360-4/20/10-DR-025*	*SO-17360-4/20/10-DR-026*	*SO-17360-4/20/10-DR-015*	*SO-17360-4/20/10-DR-016*	*SO-17360-4/20/10-DR-017*	*SO-17360-4/20/10-DR-018*	*SO-17360-4/20/10-DR-019*	*SO-17360-4/20/10-DR-020*	*SO-17360-4/20/10-DR-009*
Sample Date		*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*
Sample Depth		*(8-10) ft*	*(0-2) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*
Sample Type				*Duplicate*						*Duplicate*					
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	92.4	98.3 / 99.2 / 90.3	92.8	92.6	95.7	91.8	93.9	96.7	97.2	90.8	91.9	91.1	94.6	95.4
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB38-10*	*SB38-10*	*SB38-10*	*SB38-10*	*SB38-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB40-10*
Sample Identification		*SO-17360-4/20/10-DR-010*	*SO-17360-4/20/10-DR-011*	*SO-17360-4/20/10-DR-012*	*SO-17360-4/20/10-DR-013*	*SO-17360-4/20/10-DR-014*	*SO-17360-4/20/10-DR-001*	*SO-17360-4/20/10-DR-002*	*SO-17360-4/20/10-DR-003*	*SO-17360-4/20/10-DR-004*	*SO-17360-4/20/10-DR-005*	*SO-17360-4/20/10-DR-006*	*SO-17360-4/20/10-DR-007*	*SO-17360-4/20/10-DR-008*	*SO-17360-4/20/10-DR-027*
Sample Date		*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*
Sample Depth		*(2-4) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-15) ft*	*(0-2) ft*
Sample Type			*Duplicate*												
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Alcohols															
2-Ethanoxyethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Aluminum	mg/kg	2050	1760	3910	2540	2650	2230	2190	2080	1880	1780	2810	3510	2310	3580
Antimony	mg/kg	0.17 UJ	0.18 J	0.17 UJ	0.17 UJ	0.17 UJ	0.16 UJ	0.18 UJ	0.17 UJ	0.16 UJ	0.16 UJ	0.14 J	0.17 UJ	0.17 UJ	27.8 J
Arsenic	mg/kg	1.3 J	1.4 J	1.0 J	1.2 J	1.7 J	1.8 J	1.9 J	2.1 J	1.5 J	1.5 J	2.1 J	0.62 J	0.73 J	**11.4 J[a]**
Barium	mg/kg	10.2	9.9	7.3	7.2	6.7	14.3	12.7	12.9	9.3	8.0	27.7	11.6	10.6	329
Beryllium	mg/kg	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.16 U	0.18 U	0.17 U	0.16 U	0.16 U	0.17 U	0.17 U	0.17 U	0.18 U
Boron	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	mg/kg	0.53	0.41	0.11 U	0.084 U	0.085 U	0.077 J	0.088 U	0.083 U	0.082 U	0.082 U	1.1	0.085 U	0.084 U	3.9
Calcium	mg/kg	8330	7450	249 J	300 J	421 J	46900	33800	44700	25600	24000	13900	518	311 J	29400 J
Chromium	mg/kg	11.4	8.6	4.0	4.3	6.3	5.8	5.7	5.5	5.3	4.2	13.1	4.8	4.4	**475[a]**
Chromium III (trivalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	12.8	--	--	471
Chromium VI (hexavalent)	mg/kg	--	--	--	--	--	--	--	--	--	--	0.38 J	--	--	3.7
Cobalt	mg/kg	2.0	1.8	1.6	1.7	2.9	2.2	2.2	2.2	1.8	1.8	2.4	1.5	1.4	15.6
Copper	mg/kg	13.3	7.1	1.1	1.2	4.4	10.2	7.5	7.8	4.7	4.0	13.7	0.85 U	0.84 U	613
Iron	mg/kg	5050	5150	3830	3550	5630	4710	5090	5270	4110	3510	4760	3610	3280	61600
Lead	mg/kg	10.5	12.3	2.2	1.7	2.7	7.0	6.9	6.0	6.4	4.0	18.2	1.9	1.7	**976[a,b]**
Lead - coarse fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	**1130[a,b]**
Lead - fine fraction	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	**1260[a,b]**
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	**1140[a,b]**
Magnesium	mg/kg	2100	1780	496	728	1100	14600	8270	13000	9640	8810	2110	693	612	9200
Manganese	mg/kg	91.8	85.4	18.6	24.9	68.4	147	145	194	108	105	106	22.5	20.0	914
Mercury	mg/kg	0.042 U	0.042 U	0.043 U	0.042 U	0.043 U	0.041 U	0.044 U	0.041 U	0.041 U	0.041 U	0.043 U	0.042 U	0.042 U	0.42
Nickel	mg/kg	16.6	15.6	3.6	3.5	5.7	5.5	5.3	6.1	4.0	3.5	11.9	3.1	2.7	268 J
Potassium	mg/kg	120 J	104 J	104 J	93.5 J	225 J	418	285 J	283 J	232 J	194 J	153 J	104 J	88.4 J	463 J
Selenium	mg/kg	0.14 J	0.12 J	0.17 UJ	0.11 J	0.60 J	0.15 J	0.17 J	0.17 J	0.13 J	0.16 J	0.16 J	0.11 J	0.17 UJ	0.91 J
Silver	mg/kg	0.81	0.67	0.086 U	0.084 U	0.085 U	0.63	0.088 U	0.083 U	0.72	0.082 U	0.086 U	0.085 U	0.084 U	1.3
Sodium	mg/kg	1550	1500	924	442	1220	104	88.1 U	75.5 J	82.1 U	82.2 U	86.5 U	84.8 U	84.1 U	1380
Thallium	mg/kg	0.085 U	0.085 U	0.086 U	0.084 U	0.085 U	0.082 U	0.088 U	0.083 U	0.082 U	0.082 U	0.086 U	0.085 U	0.084 U	0.23
Vanadium	mg/kg	5.0	4.1	6.7	6.7	9.2	6.8	8.0	7.3	6.3	6.0	8.2	7.1	6.7	15.8
Zinc	mg/kg	21.0	23.1	6.4	5.9	10.6	14.8	14.1	15.2	13.8	11.0	26.2	6.5	4.9	819 J
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.29 U	0.27 U	0.27 U	0.27 U	0.29 U	0.28 U	0.28 U	0.58 U
Aroclor-1221 (PCB-1221)	mg/kg	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.29 U	0.27 U	0.27 U	0.27 U	0.29 U	0.28 U	0.28 U	0.58 U
Aroclor-1232 (PCB-1232)	mg/kg	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.29 U	0.27 U	0.27 U	0.27 U	0.29 U	0.28 U	0.28 U	0.58 U
Aroclor-1242 (PCB-1242)	mg/kg	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.29 U	0.27 U	0.27 U	0.27 U	0.29 U	0.28 U	0.28 U	0.58 U
Aroclor-1248 (PCB-1248)	mg/kg	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.29 U	0.27 U	0.27 U	0.27 U	0.29 U	0.28 U	0.28 U	0.58 U
Aroclor-1254 (PCB-1254)	mg/kg	0.028 J	0.022 J	0.28 U	0.28 U	0.28 U	0.27 U	0.29 U	0.27 U	0.27 U	0.27 U	0.29 U	0.28 U	0.28 U	0.58 U
Aroclor-1260 (PCB-1260)	mg/kg	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.27 U	0.29 U	0.27 U	0.27 U	0.27 U	0.29 U	0.28 U	0.28 U	0.58 U
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	0.028 / 0.028 J	0.022 / 0.022 J	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
Pesticides															
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB38-10*	*SB38-10*	*SB38-10*	*SB38-10*	*SB38-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB40-10*
Sample Identification		*SO-17360-4/20/10-DR-010*	*SO-17360-4/20/10-DR-011*	*SO-17360-4/20/10-DR-012*	*SO-17360-4/20/10-DR-013*	*SO-17360-4/20/10-DR-014*	*SO-17360-4/20/10-DR-001*	*SO-17360-4/20/10-DR-002*	*SO-17360-4/20/10-DR-003*	*SO-17360-4/20/10-DR-004*	*SO-17360-4/20/10-DR-005*	*SO-17360-4/20/10-DR-006*	*SO-17360-4/20/10-DR-007*	*SO-17360-4/20/10-DR-008*	*SO-17360-4/20/10-DR-027*
Sample Date		*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*
Sample Depth		*(2-4) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-15) ft*	*(0-2) ft*
Sample Type			*Duplicate*												
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Semi-Volatile Organic Compounds															
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	0.011 J	0.0098 J	0.28 U	0.28 U	0.28 U	5.4 U	0.29 U	2.7 U	0.27 U	0.27 U	0.099 J	0.28 U	0.28 U	1 J
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	5.4 U	0.29 U	2.7 U	0.27 U	0.013 J	0.29 U	0.28 U	0.28 U	2 J
Acenaphthylene	mg/kg	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	5.4 U	0.29 U	2.7 U	0.27 U	0.27 U	0.29 U	0.28 U	0.28 U	2.9 J
Aniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/kg	0.011 J	0.012 J	0.28 U	0.28 U	0.28 U	5.4 U	0.29 U	2.7 U	0.27 U	0.034 J	0.29 U	0.28 U	0.28 U	6.7 J
Benzo(a)anthracene	mg/kg	0.046 J	0.048 J	0.28 U	0.28 U	0.28 U	5.4 U	0.023 J	2.7 U	0.02 J	0.11 J	0.038 J	0.28 U	0.28 U	**30[a]**
Benzo(a)pyrene	mg/kg	0.052 J	0.052 J	0.28 U	0.28 U	0.28 U	5.4 U	0.025 J	2.7 U	0.021 J	0.11 J	0.039 J	0.28 U	0.28 U	**27[a][b]**
Benzo(b)fluoranthene	mg/kg	0.073 J	0.073 J	0.28 U	0.28 U	0.28 U	5.4 U	0.035 J	2.7 U	0.032 J	0.15 J	0.076 J	0.28 U	0.28 U	**42[a]**
Benzo(g,h,i)perylene	mg/kg	0.048 J	0.048 J	0.28 U	0.28 U	0.28 U	5.4 U	0.026 J	2.7 U	0.019 J	0.075 J	0.04 J	0.28 U	0.28 U	20
Benzo(k)fluoranthene	mg/kg	0.033 J	0.03 J	0.28 U	0.28 U	0.28 U	5.4 U	0.014 J	2.7 U	0.0095 J	0.05 J	0.019 J	0.28 U	0.28 U	13 J
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	0.064 J	0.061 J	0.28 U	0.28 U	0.28 U	5.4 U	0.028 J	2.7 U	0.026 J	0.13 J	0.063 J	0.28 U	0.28 U	30
Dibenz(a,h)anthracene	mg/kg	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	5.4 U	0.29 U	2.7 U	0.27 U	0.015 J	0.29 U	0.28 U	0.28 U	**5.6 J[a]**
Dibenzofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	0.11 J	0.11 J	0.28 U	0.28 U	0.28 U	5.4 U	0.047 J	2.7 U	0.046 J	0.3	0.087 J	0.28 U	0.28 U	53
Fluorene	mg/kg	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	5.4 U	0.29 U	2.7 U	0.27 U	0.011 J	0.29 U	0.28 U	0.28 U	2.7 J
Hexabromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	0.035 J	0.035 J	0.28 U	0.28 U	0.28 U	5.4 U	0.018 J	2.7 U	0.014 J	0.061 J	0.032 J	0.28 U	0.28 U	16
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mirex	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	0.0092 J	0.28 U	0.28 U	0.28 U	0.28 U	5.4 U	0.29 U	2.7 U	0.27 U	0.27 U	0.063 J	0.28 U	0.28 U	1.5 J
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	0.052 J	0.052 J	0.28 U	0.28 U	0.28 U	5.4 U	0.019 J	2.7 U	0.022 J	0.12 J	0.086 J	0.28 U	0.28 U	25
Phenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	0.079 J	0.081 J	0.28 U	0.28 U	0.28 U	5.4 U	0.036 J	2.7 U	0.036 J	0.21 J	0.06 J	0.28 U	0.28 U	37

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB38-10*	*SB38-10*	*SB38-10*	*SB38-10*	*SB38-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB40-10*
Sample Identification		*SO-17360-4/20/10-DR-010*	*SO-17360-4/20/10-DR-011*	*SO-17360-4/20/10-DR-012*	*SO-17360-4/20/10-DR-013*	*SO-17360-4/20/10-DR-014*	*SO-17360-4/20/10-DR-001*	*SO-17360-4/20/10-DR-002*	*SO-17360-4/20/10-DR-003*	*SO-17360-4/20/10-DR-004*	*SO-17360-4/20/10-DR-005*	*SO-17360-4/20/10-DR-006*	*SO-17360-4/20/10-DR-007*	*SO-17360-4/20/10-DR-008*	*SO-17360-4/20/10-DR-027*
Sample Date		*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*
Sample Depth		*(2-4) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-15) ft*	*(0-2) ft*
Sample Type			*Duplicate*												
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MI	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichlorofluoromethane (CFC-11)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB38-10*	*SB38-10*	*SB38-10*	*SB38-10*	*SB38-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB39-10*	*SB40-10*
Sample Identification		*SO-17360-4/20/10-DR-010*	*SO-17360-4/20/10-DR-011*	*SO-17360-4/20/10-DR-012*	*SO-17360-4/20/10-DR-013*	*SO-17360-4/20/10-DR-014*	*SO-17360-4/20/10-DR-001*	*SO-17360-4/20/10-DR-002*	*SO-17360-4/20/10-DR-003*	*SO-17360-4/20/10-DR-004*	*SO-17360-4/20/10-DR-005*	*SO-17360-4/20/10-DR-006*	*SO-17360-4/20/10-DR-007*	*SO-17360-4/20/10-DR-008*	*SO-17360-4/20/10-DR-027*
Sample Date		*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*
Sample Depth		*(2-4) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(0-2) ft*	*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*	*(10-12) ft*	*(12-14) ft*	*(14-15) ft*	*(0-2) ft*
Sample Type			*Duplicate*												
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
General Chemistry															
Chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	%	94.5	94.2	93.2	95.7	93.7	97.3	90.8	96.8	97.4	97.4	92.5	94.4	95.1	98.3 / 91.1 / 97.4
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB40-10*	*SB40-10*	*SB40-10*	*SB40-10*
Sample Identification		*SO-17360-4/20/10-DR-028*	*SO-17360-4/20/10-DR-029*	*SO-17360-4/20/10-DR-030*	*SO-17360-4/20/10-DR-031*
Sample Date		*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type					
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Alcohols					
2-Ethanoxyethanol	mg/kg	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/kg	--	--	--	--
Isopropyl alcohol	mg/kg	--	--	--	--
Methanol	mg/kg	--	--	--	--
Propylene glycol	mg/kg	--	--	--	--
Metals					
Aluminum	mg/kg	3110	2840	4540	1910
Antimony	mg/kg	5.8 J	1.8 J	0.20 UJ	0.17 UJ
Arsenic	mg/kg	7.4 J	6.2 J	2.1 J	0.43 J
Barium	mg/kg	92.0	67.3	16.1	6.0
Beryllium	mg/kg	0.18 U	0.17 U	0.20 U	0.17 U
Boron	mg/kg	--	--	--	--
Cadmium	mg/kg	1.1	0.43 U	0.29	0.087 U
Calcium	mg/kg	31200 J	51900 J	8480 J	564 J
Chromium	mg/kg	170	53.4	11.5	4.7
Chromium III (trivalent)	mg/kg	169	52.6	--	--
Chromium VI (hexavalent)	mg/kg	1.1	0.78 J	--	--
Cobalt	mg/kg	33.1	9.2	1.9	1.4
Copper	mg/kg	240	75.9	13.6	2.3
Iron	mg/kg	68500	84000	12200	2010
Lead	mg/kg	**576**[a]	37.3	10.4	1.8
Lead - coarse fraction	mg/kg	**786**[a]	--	--	--
Lead - fine fraction	mg/kg	**578**[a]	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	**757**[a]	--	--	--
Magnesium	mg/kg	4540	8450	1400	716
Manganese	mg/kg	717	740	114	18.5
Mercury	mg/kg	0.28	0.024 J	0.028 J	0.043 U
Nickel	mg/kg	141 J	61.7 J	11.6 J	3.2 J
Potassium	mg/kg	305 J	373 J	412 J	204 J
Selenium	mg/kg	0.28 J	0.16 J	0.76 J	0.21 J
Silver	mg/kg	0.25	0.097	0.029 J	0.087 U
Sodium	mg/kg	892	672	2670	280
Thallium	mg/kg	0.089 U	0.086 U	0.10 U	0.087 U
Vanadium	mg/kg	12.0	8.4	10.2	6.8
Zinc	mg/kg	260 J	105 J	52.4 J	8.0 J
PCBs					
Aroclor-1016 (PCB-1016)	mg/kg	0.29 U	0.28 U	0.33 U	0.29 U
Aroclor-1221 (PCB-1221)	mg/kg	0.29 U	0.28 U	0.33 U	0.29 U
Aroclor-1232 (PCB-1232)	mg/kg	0.29 U	0.28 U	0.33 U	0.29 U
Aroclor-1242 (PCB-1242)	mg/kg	0.29 U	0.28 U	0.33 U	0.29 U
Aroclor-1248 (PCB-1248)	mg/kg	0.29 U	0.28 U	0.33 U	0.29 U
Aroclor-1254 (PCB-1254)	mg/kg	0.29 U	0.28 U	0.33 U	0.29 U
Aroclor-1260 (PCB-1260)	mg/kg	0.29 U	0.28 U	0.33 U	0.29 U
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--
Total PCBs	mg/kg	0 / 0	0 / 0	0 / 0	0 / 0
Pesticides					
4,4'-DDD	mg/kg	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--
Aldrin	mg/kg	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--
beta-BHC	mg/kg	--	--	--	--
Chlordane	mg/kg	--	--	--	--
delta-BHC	mg/kg	--	--	--	--
Dieldrin	mg/kg	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--
Endrin	mg/kg	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--
gamma-BHC (lindane)	mg/kg	--	--	--	--
Heptachlor	mg/kg	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--
Toxaphene	mg/kg	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB40-10*	*SB40-10*	*SB40-10*	*SB40-10*
Sample Identification		*SO-17360-4/20/10-DR-028*	*SO-17360-4/20/10-DR-029*	*SO-17360-4/20/10-DR-030*	*SO-17360-4/20/10-DR-031*
Sample Date		*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type					
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Semi-Volatile Organic Compounds					
1,2,3,4-Tetrachlorobenzene	mg/kg	--	--	--	--
1,2,4,5-Tetrachlorobenzene	mg/kg	--	--	--	--
1,3,5-Trichlorobenzene	mg/kg	--	--	--	--
2,2'-Oxybis(1-chloropropane)	mg/kg	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--
2-Methylnaphthalene	mg/kg	0.55 J	0.21 J	17 U	5.7 U
2-Methylphenol	mg/kg	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--
4-Chloroaniline	mg/kg	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--
Acenaphthene	mg/kg	0.65 J	2.1 J	3.5 J	5.7 U
Acenaphthylene	mg/kg	1.3 J	7.1 U	17 U	5.7 U
Aniline	mg/kg	--	--	--	--
Anthracene	mg/kg	2.7 J	5.2 J	9.1 J	5.7 U
Benzo(a)anthracene	mg/kg	12	12	20	5.7 U
Benzo(a)pyrene	mg/kg	**9.9[eg]**	**11[eg]**	**18[eg]**	5.7 U
Benzo(b)fluoranthene	mg/kg	15	15	**25[a]**	5.7 U
Benzo(g,h,i)perylene	mg/kg	7.7	7.6	11 J	5.7 U
Benzo(k)fluoranthene	mg/kg	5.9 J	6 J	8.6 J	5.7 U
Benzoic acid	mg/kg	--	--	--	--
Benzyl alcohol	mg/kg	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	--	--	--	--
Butyl benzylphthalate (BBP)	mg/kg	--	--	--	--
Carbazole	mg/kg	--	--	--	--
Chrysene	mg/kg	11	13	21	5.7 U
Dibenz(a,h)anthracene	mg/kg	2 J	1.6 J	**2.7 J[a]**	5.7 U
Dibenzofuran	mg/kg	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--
Di-n-butylphthalate (DBP)	mg/kg	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/kg	--	--	--	--
Fluoranthene	mg/kg	21	32	59	5.7 U
Fluorene	mg/kg	1.1 J	2.4 J	3.9 J	5.7 U
Hexabromobenzene	mg/kg	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	6.4 J	5.9 J	9.7 J	5.7 U
Isophorone	mg/kg	--	--	--	--
Mirex	mg/kg	--	--	--	--
Naphthalene	mg/kg	0.78 J	7.1 U	17 U	5.7 U
Nitrobenzene	mg/kg	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--
Pentachlorobenzene	mg/kg	--	--	--	--
Pentachloronitrobenzene	mg/kg	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--
Phenanthrene	mg/kg	11	25	41	5.7 U
Phenol	mg/kg	--	--	--	--
Polybrominated biphenyls	mg/kg	--	--	--	--
Pyrene	mg/kg	14	26	37	5.7 U

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB40-10*	*SB40-10*	*SB40-10*	*SB40-10*
Sample Identification		*SO-17360-4/20/10-DR-028*	*SO-17360-4/20/10-DR-029*	*SO-17360-4/20/10-DR-030*	*SO-17360-4/20/10-DR-031*
Sample Date		*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type					
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
Volatile Organic Compounds					
1,1,1,2-Tetrachloroethane	mg/kg	--	--	--	--
1,1,1-Trichloroethane	mg/kg	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	--	--	--	--
1,1,2-Trichloroethane	mg/kg	--	--	--	--
1,1-Dichloroethane	mg/kg	--	--	--	--
1,1-Dichloroethene	mg/kg	--	--	--	--
1,1-Dichloropropene	mg/kg	--	--	--	--
1,2,3-Trichlorobenzene	mg/kg	--	--	--	--
1,2,3-Trichloropropane	mg/kg	--	--	--	--
1,2,4-Trichlorobenzene	mg/kg	--	--	--	--
1,2,4-Trimethylbenzene	mg/kg	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	--	--	--	--
1,2-Dichlorobenzene	mg/kg	--	--	--	--
1,2-Dichloroethane	mg/kg	--	--	--	--
1,2-Dichloropropane	mg/kg	--	--	--	--
1,3,5-Trimethylbenzene	mg/kg	--	--	--	--
1,3-Dichlorobenzene	mg/kg	--	--	--	--
1,3-Dichloropropane	mg/kg	--	--	--	--
1,3-Dichloropropene	mg/kg	--	--	--	--
1,4-Dichlorobenzene	mg/kg	--	--	--	--
2,2-Dichloropropane	mg/kg	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	--	--	--	--
2-Chlorotoluene	mg/kg	--	--	--	--
2-Hexanone	mg/kg	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/kg	--	--	--	--
4-Chlorotoluene	mg/kg	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MI	mg/kg	--	--	--	--
Acetone	mg/kg	--	--	--	--
Acrylonitrile	mg/kg	--	--	--	--
Benzene	mg/kg	--	--	--	--
Benzyl chloride	mg/kg	--	--	--	--
Bromobenzene	mg/kg	--	--	--	--
Bromodichloromethane	mg/kg	--	--	--	--
Bromoform	mg/kg	--	--	--	--
Bromomethane (Methyl bromide)	mg/kg	--	--	--	--
Carbon disulfide	mg/kg	--	--	--	--
Carbon tetrachloride	mg/kg	--	--	--	--
Chlorobenzene	mg/kg	--	--	--	--
Chlorobromomethane	mg/kg	--	--	--	--
Chloroethane	mg/kg	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	--	--	--	--
Chloromethane (Methyl chloride)	mg/kg	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	--	--	--	--
Cyclohexane	mg/kg	--	--	--	--
Dibromochloromethane	mg/kg	--	--	--	--
Dibromomethane	mg/kg	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/kg	--	--	--	--
Ethyl ether	mg/kg	--	--	--	--
Ethylbenzene	mg/kg	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--
Hexane	mg/kg	--	--	--	--
Isopropyl benzene	mg/kg	--	--	--	--
Isopropyl toluene	mg/kg	--	--	--	--
m&p-Xylenes	mg/kg	--	--	--	--
Methyl acetate	mg/kg	--	--	--	--
Methyl cyclohexane	mg/kg	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/kg	--	--	--	--
Methylene chloride	mg/kg	--	--	--	--
Naphthalene	mg/kg	--	--	--	--
N-Butylbenzene	mg/kg	--	--	--	--
N-Propylbenzene	mg/kg	--	--	--	--
o-Xylene	mg/kg	--	--	--	--
Styrene	mg/kg	--	--	--	--
tert-Butylbenzene	mg/kg	--	--	--	--
Tetrachloroethene	mg/kg	--	--	--	--
Tetrahydrofuran	mg/kg	--	--	--	--
Toluene	mg/kg	--	--	--	--
trans-1,2-Dichloroethene	mg/kg	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	--	--	--	--
Trichloroethene	mg/kg	--	--	--	--
Trichlorofluoromethane (CFC-11)	mg/kg	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/kg	--	--	--	--
Vinyl chloride	mg/kg	--	--	--	--
Xylenes (total)	mg/kg	--	--	--	--

TABLE 5.1

ANALYTICAL RESULTS OF SOIL SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*SB40-10*	*SB40-10*	*SB40-10*	*SB40-10*
Sample Identification		*SO-17360-4/20/10-DR-028*	*SO-17360-4/20/10-DR-029*	*SO-17360-4/20/10-DR-030*	*SO-17360-4/20/10-DR-031*
Sample Date		*4/20/2010*	*4/20/2010*	*4/20/2010*	*4/20/2010*
Sample Depth		*(2-4) ft*	*(4-6) ft*	*(6-8) ft*	*(8-10) ft*
Sample Type					
AOI	*Units*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*	*AOI 27, AOI 4.1*
General Chemistry					
Chloride	mg/kg	--	--	--	--
Chlorinated paraffin	mg/kg	--	--	--	--
Cyanide (total)	mg/kg	--	--	--	--
Fluoride	mg/kg	--	--	--	--
Nitrate (as N)	mg/kg	--	--	--	--
Nitrite (as N)	mg/kg	--	--	--	--
Oil and grease	mg/kg	--	--	--	--
Sulfate	mg/kg	--	--	--	--
Total solids	%	98.3 / 90.1 / 97.3	93.0	79.5	92.4
pH	none	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
Residential - Residential & Commercial I
Industrial - Industrial & Commerical II, III, IV
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location			Michigan Act 451, Part 201 Groundwater: Residential and Industrial-Commercial Generic Cleanup Criteria [1]				85-1	85-1	85-1	85-1	85-1	85-1	85-1
Sample Identification		Residential & Commercial I Drinking Water	Industrial & Commercial II, III, IV Drinking Water	Groundwater Surface Water Interface	Industrial & Commercial II, III & IV Groundwater Volatilization to Indoor Air Inhalation	Groundwater Contact	85-1~120685	85-1~050586	GW-17360-081004-DCR-206	GW-17360-100504-DCR-263	GW-17360-120304-DCR-326	GW-17360-040605-DCR-365	GW-17360-062805-DCR-384
Sample Date							12/6/1985	5/5/1986	8/10/2004	10/5/2004	12/3/2004	4/6/2005	6/28/2005
Sample Depth							-	-	-	-	-	-	-
AOI		a	b	c	d	e	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	2.3	6.7	NC	76000	25000	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	0.47	1.3	57	NLV	13000	--	--	--	--	--	--	--
Methanol	mg/L	3.7	10	0.48	29000	29000	--	--	--	--	--	--	--
Propylene glycol	mg/L	150	420	290	NLV	1000000	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Ethene	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Methane	mg/L	ID	ID	ID	K	ID	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Iron	mg/L	0.3	0.3	NC	NLV	58000	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	0.3	0.3	NC	NLV	58000	--	--	--	--	--	--	--
Magnesium	mg/L	400	1100	NC	NLV	1000000	--	--	--	--	--	--	--
Manganese	mg/L	0.05	0.05	2.8	NLV	9100	--	--	--	--	--	--	--
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	0.0005	0.0005	0.0002	0.045	0.0033	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	0.0005	0.0005	0.0002	0.045	0.0033	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	0.0005	0.0005	0.0002	0.045	0.0033	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	0.0005	0.0005	0.0002	0.045	0.0033	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	0.0005	0.0005	0.0002	0.045	0.0033	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	0.0005	0.0005	0.0002	0.045	0.0033	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	0.0005	0.0005	0.0002	0.045	0.0033	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	0.0005	0.0005	0.0002	0.045	0.0033	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	0.0005	0.0005	0.0002	0.045	0.0033	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	0.07	0.07	0.03	300	19	0.003 U	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	0.6	0.6	0.016	160	160	0.003 U	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	NC	NC	NC	NC	NC	0.001 U	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	0.0066	0.019	0.038	ID	2	0.003 U	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	0.075	0.075	0.013	74	6.4	0.003 U	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	NC	NC	NC	NC	NC	0.001 U	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	0.73	2.1	NC	NLV	170	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	0.12	0.47	0.0044	NLV	10	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	0.073	0.21	0.019	NLV	48	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	0.37	1	0.38	NLV	520	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	0.0077	0.032	NC	NLV	8.6	0.01 U	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	NC	NC	NC	NC	NC	0.009 U	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	1.8	5.2	NC	ID	6.7	0.002 U	--	--	--	--	--	--
2-Chlorophenol	mg/L	0.045	0.13	0.022	ID	94	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	0.26	0.75	ID	ID	25	--	--	--	--	--	--	--
2-Methylphenol	mg/L	0.37	1	0.071	NLV	810	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	0.02	0.058	ID	NLV	79	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	0.0011	0.0043	0.0003	NLV	0.18	0.02 U	--	--	--	--	--	--
3-Nitroaniline	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	0.02	0.02	NC	NLV	9.5	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	NC	NC	NC	NC	NC	0.007 U	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	0.15	0.42	0.0074	NLV	79	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	NC	NC	NC	NC	NC	0.003 U	--	--	--	--	--	--
4-Methylphenol	mg/L	0.37	1	0.071	NLV	810	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Acenaphthene	mg/L	1.3	3.8	0.019	4.2	4.2	0.002 U	--	--	--	--	--	--
Acenaphthylene	mg/L	0.052	0.15	ID	3.9	3.9	0.001 U	--	--	--	--	--	--
Acetophenone	mg/L	1.5	4.4	NC	6100	6100	--	--	--	--	--	--	--
Anthracene	mg/L	0.043	0.043	ID	0.043	0.043	0.001 U	--	--	--	--	--	--
Atrazine	mg/L	0.003	0.003	0.0073	NLV	5.4	--	--	--	--	--	--	--
Benzaldehyde	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Benzidine	mg/L	0.0003	0.0003	ID	NLV	0.0071	0.05 U	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	0.0021	0.0085	ID	NLV	0.0094	0.005 U	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	0.005	0.005	ID	NLV	0.001	0.005 U	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	0.0015	0.0015	ID	ID	0.0015	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	0.001	0.001	NC	NLV	0.001	0.01 U	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	0.001	0.001	NC	NLV	0.001	0.005 U	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	NC	NC	NC	NC	NC	0.004 U	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	0.002	0.0083	0.015	210	5.7	0.004 U	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	0.006	0.006	0.032	NLV	0.32	0.002 U	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		Michigan Act 451, Part 201 Groundwater: Residential and Industrial-Commercial Generic Cleanup Criteria [1]					85-1	85-1	85-1	85-1	85-1	85-1	85-1
Sample Identification		Residential & Commercial I Drinking Water	Industrial & Commercial II, III, IV Drinking Water	Groundwater Surface Water Interface	Industrial & Commercial II, III & IV Groundwater Volatilization to Indoor Air Inhalation	Groundwater Contact	85-1~120685	85-1~050586	GW-17360-081004-DCR-206	GW-17360-100504-DCR-263	GW-17360-120304-DCR-326	GW-17360-040605-DCR-365	GW-17360-062805-DCR-384
Sample Date							12/6/1985	5/5/1986	8/10/2004	10/5/2004	12/3/2004	4/6/2005	6/28/2005
Sample Depth							-	-	-	-	-	-	-
AOI		a	b	c	d	e	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1
	Units												
bis(Chloromethyl)ether	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	1.2	2.7	0.014	NLV	2.7	0.003 U	--	--	--	--	--	--
Caprolactam	mg/L	5.8	17	NC	NLV	390000	--	--	--	--	--	--	--
Carbazole	mg/L	0.085	0.35	0.01	NLV	7.4	--	--	--	--	--	--	--
Chrysene	mg/L	0.0016	0.0016	ID	ID	0.0016	0.005 U	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/L	0.002	0.002	ID	NLV	0.002	0.01 U	--	--	--	--	--	--
Dibenzofuran	mg/L	ID	ID	0.004	ID	ID	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	5.5	16	0.11	NLV	1100	0.002 U	--	--	--	--	--	--
Dimethyl phthalate	mg/L	73	210	NC	NLV	4200	0.002 U	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	0.88	2.5	0.0097	NLV	11	0.001 U	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	0.13	0.38	ID	NLV	0.4	0.002 U	--	--	--	--	--	--
Fluoranthene	mg/L	0.21	0.21	0.0016	0.21	0.21	0.001 U	--	--	--	--	--	--
Fluorene	mg/L	0.88	2	0.012	2	2	0.002 U	--	--	--	--	--	--
Hexachlorobenzene	mg/L	0.001	0.001	0.0002	3	0.0046	0.005 U	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	0.015	0.042	0.00005	3.2	0.4	0.005 U	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	0.05	0.05	ID	0.42	1.6	0.005 U	--	--	--	--	--	--
Hexachloroethane	mg/L	0.0073	0.021	0.0067	50	1.9	0.007 U	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	0.002	0.002	ID	NLV	0.002	0.01 U	--	--	--	--	--	--
Isophorone	mg/L	0.77	3.1	0.57	NLV	990	0.002 U	--	--	--	--	--	--
Naphthalene	mg/L	0.52	1.5	0.013	31	31	0.001 U	--	--	--	--	--	--
Nitrobenzene	mg/L	0.0034	0.0096	0.18	550	11	0.004 U	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	0.005	0.005	NC	NLV	0.36	0.004 U	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	0.27	1.1	NC	NLV	35	0.003 U	--	--	--	--	--	--
Pentachlorophenol	mg/L	0.001	0.001	G,X	NLV	0.2	--	--	--	--	--	--	--
Phenanthrene	mg/L	0.052	0.15	0.0024	1	1	0.001 U	--	--	--	--	--	--
Phenol	mg/L	4.4	13	0.21	NLV	29000	--	--	--	--	--	--	--
Pyrene	mg/L	0.14	0.14	ID	0.14	0.14	0.001 U	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Volatile Organic Compounds													
1,1,1,2-Tetrachloroethane	mg/L	0.077	0.32	ID,X	96	30	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	0.2	0.2	0.2	1300	1300	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.0085	0.035	0.078	77	4.7	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.005	0.005	0.33	110	21	0.003 U	0.003 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.88	2.5	0.74	2300	2400	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.007	0.007	0.065	1.3	11	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloropropene	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	0.042	0.12	NC	ID	84	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	0.07	0.07	0.03	300	19	--	--	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 UJ
1,2,4-Trimethylbenzene	mg/L	0.063	0.063	0.017	56	56	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.0002	0.0002	NC	1.2	0.39	--	--	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.00005	0.00005	0.0002	15	0.025	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.6	0.6	0.016	160	160	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.005	0.005	0.36	59	19	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethene (total)	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/L	0.005	0.005	0.29	36	16	0.003 U	0.003 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3,5-Trimethylbenzene	mg/L	0.072	0.072	0.045	61	61	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	0.0066	0.019	0.038	ID	2	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichloropropane	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	0.0085	0.035	NC	26	5.5	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	0.075	0.075	0.013	74	6.4	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2,2-Dichloropropane	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	13	38	2.2	240000	240000	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
2-Chloroethyl vinyl ether	mg/L	ID	ID	NC	ID	ID	0.01 U	0.01 U	--	--	--	--	--
2-Chlorotoluene	mg/L	0.15	0.42	ID	370	44	--	--	--	--	--	--	--
2-Hexanone	mg/L	1	2.9	NC	8700	5200	--	--	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U
2-Phenylbutane (sec-Butylbenzene)	mg/L	0.08	0.23	ID	ID	4.4	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	1.8	5.2	ID	20000	13000	--	--	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 UJ
Acetone	mg/L	0.73	2.1	1.7	1000000	31000	--	--	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 U
Acrylonitrile	mg/L	0.0026	0.011	0.0049	190	14	--	--	--	--	--	--	--
Benzene	mg/L	0.005	0.005	0.2	35	11	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Benzyl chloride	mg/L	0.0077	0.032	NC	77	3.6	--	--	--	--	--	--	--
Bromobenzene	mg/L	0.018	0.05	NC	390	12	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	0.08	0.08	ID	37	14	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ
Bromoform	mg/L	0.08	0.08	ID	3100	140	0.015 U	0.015 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ
Bromomethane (Methyl bromide)	mg/L	0.01	0.029	0.035	9	70	0.01 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U
Carbon disulfide	mg/L	0.8	2.3	ID	550	1200	--	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.005	0.005	0.045	2.4	4.6	0.004 U	0.004 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.1	0.1	0.047	470	86	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobromomethane	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Chloroethane	mg/L	0.43	1.7	ID	5700	440	0.01 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ
Chloroform (Trichloromethane)	mg/L	0.08	0.08	0.17	180	150	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloromethane (Methyl chloride)	mg/L	0.26	1.1	ID	45	490	0.01 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location			Michigan Act 451, Part 201 Groundwater: Residential and Industrial-Commercial Generic Cleanup Criteria [1]				85-1	85-1	85-1	85-1	85-1	85-1	85-1
Sample Identification		Residential &	Industrial &	Groundwater	Industrial &	Groundwater	85-1~120685	85-1~050586	GW-17360-081004-DCR-206	GW-17360-100504-DCR-263	GW-17360-120304-DCR-326	GW-17360-040605-DCR-365	GW-17360-062805-DCR-384
Sample Date		Commercial I	Commercial II, III, IV	Surface Water	Commercial II, III & IV Groundwater	Contact	12/6/1985	5/5/1986	8/10/2004	10/5/2004	12/3/2004	4/6/2005	6/28/2005
Sample Depth		Drinking Water	Drinking Water	Interface	Volatilization to Indoor Air Inhalation		-	-	-	-	-	-	-
AOI		a	b	c	d	e	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1
	Units												
cis-1,2-Dichloroethene	mg/L	0.07	0.07	0.62	210	200	--	--	0.0019	0.0013	0.0011	0.0027	0.004
cis-1,2-Dichloropropene	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	NC	NC	NC	NC	NC	0.004 U	0.004 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ
Cyclohexane	mg/L	NC	NC	NC	NC	NC	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.08	0.08	ID	110	18	0.003 U	0.003 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ
Dibromomethane	mg/L	0.08	0.23	NC	ID	530	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	1.7	4.8	ID	300	300	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ
Ethyl ether	mg/L	0.01	0.01	ID	61000	35000	--	--	--	--	--	--	--
Ethylbenzene	mg/L	0.074	0.074	0.018	170	170	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Hexachlorobutadiene	mg/L	0.015	0.042	0.00005	3.2	0.4	--	--	--	--	--	--	--
Hexane	mg/L	3	8.6	NC	12	12	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	0.8	2.3	ID	56	56	--	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Isopropyl toluene	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Methyl acetate	mg/L	NC	NC	NC	NC	NC	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	NC	NC	NC	NC	NC	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether (MTBE)	mg/L	0.04	0.04	0.73	47000	610	--	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.005	0.005	0.94	1400	220	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U
Naphthalene	mg/L	0.52	1.5	0.013	31	31	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	0.08	0.23	ID	ID	5.9	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	0.08	0.23	ID	ID	15	--	--	--	--	--	--	--
o-Xylene	mg/L	0.28	0.28	0.035	190	190	--	--	--	--	--	--	--
Styrene	mg/L	0.1	0.1	0.08	310	9.7	--	--	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U
tert-Butylbenzene	mg/L	0.08	0.23	NC	ID	8.9	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	0.005	0.005	0.045	170	12	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrahydrofuran	mg/L	0.095	0.27	11	16000	1600	--	--	--	--	--	--	--
Toluene	mg/L	0.79	0.79	0.14	530	530	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.1	0.1	1.5	200	220	0.012	0.026	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	NC	NC	NC	NC	NC	0.004 U	0.004 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U
Trichloroethene	mg/L	0.005	0.005	0.2	97	22	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane (CFC-11)	mg/L	2.6	7.3	NC	1100	1100	0.003 U	0.003 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U
Trifluorotrichloroethane (Freon 113)	mg/L	170	170	0.032	170	170	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.002	0.002	0.015	13	1	0.01 U	0.01 U	0.0011	0.00097 J	0.00065 J	0.0014	0.0019
Xylenes (total)	mg/L	0.28	0.28	0.035	190	190	--	--	0.003 U	0.003 U	0.003 U	0.002 U	0.002 U
General Chemistry													
Alkalinity, total (as CaCO3)	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Ammonia	mg/L	10	10	CC [1]	7100	ID	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Chloride	mg/L	250	250	FF [1]	NLV	ID	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Hardness	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	10	10	NC	NLV	310000	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	1	1	NC	NC	ID	--	--	--	--	--	--	--
Oil and grease	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Orthophosphate	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
pH (water)	s.u.	6.5 - 8.5	6.5 - 8.5	6.5 - 9.0	NC	NC	--	--	--	--	--	--	--
Phosphorus	mg/L	63	240	EE [1]	NLV	ID	--	--	--	--	--	--	--
Sulfate	mg/L	250	250	NC	NLV	ID	--	--	--	--	--	--	--
Sulfide	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
pH	none	6.5 - 8.5	6.5 - 8.5	6.5 - 9.0	NC	NC	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	NC	NC	NC	NC	NC	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	NC	NC	NC	NC	NC	--	--	--	--	--	--	--

Notes:
[1] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-1*	*85-1*	*85-1*	*85-1*	*85-1*	*85-1*	*85-1*	*85-1*	*85-1*	*85-2*	*85-2*	*85-2*
Sample Identification		*GW-17360-120405-DCR-562*	*GW-17360-091206-DR-036*	*GW-17360-050907-JY-081*	*GW-17360-101607-DR-121*	*GW-17360-042208-DR-163*	*GW-17360-100708-DR-211*	*GW-17360-040709-DR-257*	*GW-17360-100709-DR-303*	*GW-17360-101210-BW-068*	*85-2~120685*	*85-2~050586*	*GW-17360-081004-DCR-210*
Sample Date		*12/4/2005*	*9/12/2006*	*5/9/2007*	*10/16/2007*	*4/22/2008*	*10/7/2008*	*4/7/2009*	*10/7/2009*	*10/12/2010*	*12/6/1985*	*5/5/1986*	*8/10/2004*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	0.003 U	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	0.003 U	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	0.001 U	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	0.003 U	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	0.003 U	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	0.001 U	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	0.01 U	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	0.009 U	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	0.002 U	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	0.02 U	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	0.007 U	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	0.003 U	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	0.002 U	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	0.001 U	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	0.001 U	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	0.05 U	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	0.005 U	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	0.005 U	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	0.01 U	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	0.005 U	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	0.004 U	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	0.004 U	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	0.002 U	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-1*	*85-1*	*85-1*	*85-1*	*85-1*	*85-1*	*85-1*	*85-1*	*85-1*	*85-2*	*85-2*	*85-2*
Sample Identification		*GW-17360-120405-DCR-562*	*GW-17360-091206-DR-036*	*GW-17360-050907-JY-081*	*GW-17360-101607-DR-121*	*GW-17360-042208-DR-163*	*GW-17360-100708-DR-211*	*GW-17360-040709-DR-257*	*GW-17360-100709-DR-303*	*GW-17360-101210-BW-068*	*85-2~120685*	*85-2~050586*	*GW-17360-081004-DCR-210*
Sample Date		*12/4/2005*	*9/12/2006*	*5/9/2007*	*10/16/2007*	*4/22/2008*	*10/7/2008*	*4/7/2009*	*10/7/2009*	*10/12/2010*	*12/6/1985*	*5/5/1986*	*8/10/2004*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	0.003 U	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	0.005 U	--	--
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	0.01 U	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	0.002 U	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	0.002 U	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	0.001 U	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	0.002 U	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	0.001 U	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	0.002 U	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	0.005 U	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	0.005 U	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	0.005 U	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	0.007 U	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	0.01 U	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	0.002 U	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	0.001 U	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	0.004 U	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	0.004 U	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	0.003 U	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	0.001 U	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	0.001 U	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds													
1,1,1-Trichloroethane	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.0038
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 U	0.002 U	0.002 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U	0.003 U	0.001 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	--	--	0.005 U
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U
1,2-Dichloroethane	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U
1,2-Dichloroethene (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U	0.003 U	0.001 U
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--	--	0.025 U
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	0.01 U	0.01 U	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	--	--	0.05 U
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	--	--	0.05 U
Acetone	mg/L	0.025 UJ	0.025 U	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--	--	0.025 U
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U
Bromoform	mg/L	0.001 UJ	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.015 U	0.015 U	0.001 U
Bromomethane (Methyl bromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.01 U	0.01 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	--	--	0.005 U
Carbon tetrachloride	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.004 U	0.004 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.01 U	0.01 U	0.001 U
Chloroform (Trichloromethane)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloromethane (Methyl chloride)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.01 U	0.01 U	0.001 U

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-1*	*85-1*	*85-1*	*85-1*	*85-1*	*85-1*	*85-1*	*85-1*	*85-1*	*85-2*	*85-2*	*85-2*
Sample Identification		*GW-17360-120405-DCR-562*	*GW-17360-091206-DR-036*	*GW-17360-050907-JY-081*	*GW-17360-101607-DR-121*	*GW-17360-042208-DR-163*	*GW-17360-100708-DR-211*	*GW-17360-040709-DR-257*	*GW-17360-100709-DR-303*	*GW-17360-101210-BW-068*	*85-2~120685*	*85-2~050586*	*GW-17360-081004-DCR-210*
Sample Date		*12/4/2005*	*9/12/2006*	*5/9/2007*	*10/16/2007*	*4/22/2008*	*10/7/2008*	*4/7/2009*	*10/7/2009*	*10/12/2010*	*12/6/1985*	*5/5/1986*	*8/10/2004*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
cis-1,2-Dichloroethene	mg/L	0.0027 J	0.00099 J	0.0019	0.0038	0.0016	0.0019	0.0016	0.0026	0.0014	--	--	0.001 U
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.004 U	0.004 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U
Dibromochloromethane	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.003 U	0.003 U	0.001 U
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 U	--	--	0.001 U
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U
Methyl cyclohexane	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	--	--	0.001 U
Methyl tert butyl ether (MTBE)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	--	--	0.005 U
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.002 U	0.002 U	0.005 U
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.021	0.018	0.001 U
trans-1,3-Dichloropropene	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.004 U	0.004 U	0.001 U
Trichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.006**[1b]	**0.006**[1b]	0.00074 J
Trichlorofluoromethane (CFC-11)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.003 U	0.003 U	0.001 U
Trifluorotrichloroethane (Freon 113)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	--	--	0.001 U
Vinyl chloride	mg/L	**0.0022**[1b]	0.001	0.00093 J	0.0019	0.0015	0.00067 J	0.0011	0.0015	0.0006 J	0.01 U	0.01 U	0.001 U
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--	--	0.003 U
General Chemistry													
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
[1] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		85-2	85-2	85-2	85-2	85-2	85-2	85-2	85-2	85-2	85-2	85-2	85-2
Sample Identification		GW-17360-100504-DCR-259	GW-17360-120104-DCR-305	GW-17360-040505-DCR-351	GW-17360-062805-DCR-381	GW-17360-120405-DCR-557	GW-17360-091206-DR-030	GW-17360-091206-DR-031	GW-17360-050907-JY-077	GW-17360-101607-DR-117	GW-17360-042208-DR-159	GW-17360-042208-DR-160	GW-17360-100708-DR-209
Sample Date		10/5/2004	12/1/2004	4/5/2005	6/28/2005	12/4/2005	9/12/2006	9/12/2006	5/9/2007	10/16/2007	4/22/2008	4/22/2008	10/7/2008
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
								Duplicate				Duplicate	
AOI		AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		85-2	85-2	85-2	85-2	85-2	85-2	85-2	85-2	85-2	85-2	85-2	85-2	85-2
Sample Identification		GW-17360-100504-DCR-259	GW-17360-120104-DCR-305	GW-17360-040505-DCR-351	GW-17360-062805-DCR-381	GW-17360-120405-DCR-557	GW-17360-091206-DR-030	GW-17360-091206-DR-031	GW-17360-050907-JY-077	GW-17360-101607-DR-117	GW-17360-042208-DR-159	GW-17360-042208-DR-160	GW-17360-100708-DR-209	
Sample Date		10/5/2004	12/1/2004	4/5/2005	6/28/2005	12/4/2005	9/12/2006	9/12/2006	5/9/2007	10/16/2007	4/22/2008	4/22/2008	10/7/2008	
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	
								Duplicate				Duplicate		
AOI		AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	
	Units													
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Volatile Organic Compounds														
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,1,1-Trichloroethane	mg/L	0.004	0.003	0.0021 J	0.0035	0.0026 J	0.0047	0.0048	0.0038 J	0.0021	0.0027	0.0027	0.004	
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00024 J	0.00024 J	0.001 U	0.001 U	0.001 U	0.001 U	0.00038 J	
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.00021 J	0.00023 J	0.00019 J	0.00032 J	0.00023 J	0.00073 J	0.001 U	0.001 U	0.00028 J	0.00038 J	
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2,4-Trichlorobenzene	mg/L	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 U	
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,2-Dichloroethene (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
2-Hexanone	mg/L	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Acetone	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 U	0.025 U	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 U	
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	
Bromoform	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 U	
Bromomethane (Methyl bromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Chloroform (Trichloromethane)	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Chloromethane (Methyl chloride)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00024 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-2*	*85-2*	*85-2*	*85-2*	*85-2*	*85-2*	*85-2*	*85-2*	*85-2*	*85-2*	*85-2*	*85-2*
Sample Identification		*GW-17360-100504-DCR-259*	*GW-17360-120104-DCR-305*	*GW-17360-040505-DCR-351*	*GW-17360-062805-DCR-381*	*GW-17360-120405-DCR-557*	*GW-17360-091206-DR-030*	*GW-17360-091206-DR-031*	*GW-17360-050907-JY-077*	*GW-17360-101607-DR-117*	*GW-17360-042208-DR-159*	*GW-17360-042208-DR-160*	*GW-17360-100708-DR-209*
Sample Date		*10/5/2004*	*12/1/2004*	*4/5/2005*	*6/28/2005*	*12/4/2005*	*9/12/2006*	*9/12/2006*	*5/9/2007*	*10/16/2007*	*4/22/2008*	*4/22/2008*	*10/7/2008*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
								Duplicate				*Duplicate*	
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
cis-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.00028 J	0.00024 J	0.00035 J	0.001 U	0.00025 J	0.00023 J	0.00028 J
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 UJ
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether (MTBE)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ
Trichloroethene	mg/L	0.00092 J	0.00087 J	0.00062 J	0.0008 J	0.00077 J	0.0011	0.0012	0.00098 J	0.00076 J	0.00082 J	0.00087 J	0.0011
Trichlorofluoromethane (CFC-11)	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane (Freon 113)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.003 U	0.003 U	0.002 U	0.002 U	0.002 U	0.002 UJ	0.002 UJ	0.002 UJ	0.002 U	0.002 U	0.002 U	0.002 U
General Chemistry													
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
[(1)] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-2*	*85-2*	*85-2*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*
Sample Identification		*GW-17360-040609-DR-238*	*GW-17360-100609-DR-283*	*GW-17360-101110-BW-066*	*85-3~120685*	*85-3~050586*	*GW-17360-071503-SP-064*	*GW-17360-100703-JB-097*	*GW-17360-121703-JB-096*	*GW-17360-031704-JB-149*	*GW-17360-080904-DCR-200*	*GW-17360-100604-DCR-277*	*GW-17360-120204-DCR-312*
Sample Date		*4/6/2009*	*10/6/2009*	*10/11/2010*	*12/6/1985*	*5/5/1986*	*7/15/2003*	*10/7/2003*	*12/18/2003*	*3/17/2004*	*8/9/2004*	*10/6/2004*	*12/2/2004*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	--	--	--	0.3 U	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	0.3 U	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	0.1 U	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	0.3 U	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	0.3 U	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	0.1 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	0.2 U	0.3 U	0.04 U	0.02 U	0.04 U	0.02 U	0.02 U
2,4-Dichlorophenol	mg/L	--	--	--	--	--	0.5 U	0.75 U	0.1 U	0.05 U	0.1 U	0.05 U	0.05 U
2,4-Dimethylphenol	mg/L	--	--	--	--	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
2,4-Dinitrophenol	mg/L	--	--	--	--	--	1 UJ	1.5 UJ	0.2 U	0.1 U	0.2 U	0.1 U	0.1 U
2,4-Dinitrotoluene	mg/L	--	--	--	1 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
2,6-Dinitrotoluene	mg/L	--	--	--	0.9 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
2-Chloronaphthalene	mg/L	--	--	--	0.2 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
2-Chlorophenol	mg/L	--	--	--	--	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
2-Methylnaphthalene	mg/L	--	--	--	--	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
2-Methylphenol	mg/L	--	--	--	--	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
2-Nitroaniline	mg/L	--	--	--	--	--	1 U	1.5 U	0.2 U	0.1 U	0.2 U	0.1 U	0.1 U
2-Nitrophenol	mg/L	--	--	--	--	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
3,3'-Dichlorobenzidine	mg/L	--	--	--	2 U	--	0.2 U	0.3 U	0.04 U	0.02 U	0.04 U	0.02 U	0.02 U
3-Nitroaniline	mg/L	--	--	--	--	--	1 U	1.5 U	0.2 U	0.1 U	0.2 U	0.1 U	0.1 U
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	1 U	1.5 UJ	0.2 U	0.1 U	0.2 U	0.1 U	0.1 U
4-Bromophenyl phenyl ether	mg/L	--	--	--	0.7 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
4-Chloroaniline	mg/L	--	--	--	--	--	1 U	1.5 U	0.2 U	0.1 U	0.2 U	0.1 U	0.1 U
4-Chlorophenyl phenyl ether	mg/L	--	--	--	0.3 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
4-Methylphenol	mg/L	--	--	--	--	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
4-Nitroaniline	mg/L	--	--	--	--	--	1 U	1.5 U	0.2 U	0.1 U	0.2 U	0.1 U	0.1 U
4-Nitrophenol	mg/L	--	--	--	--	--	1 U	1.5 U	0.2 U	0.1 U	0.2 U	0.1 U	0.1 U
Acenaphthene	mg/L	--	--	--	0.2 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Acenaphthylene	mg/L	--	--	--	0.1 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Acetophenone	mg/L	--	--	--	--	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Anthracene	mg/L	--	--	--	0.1 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Atrazine	mg/L	--	--	--	--	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Benzaldehyde	mg/L	--	--	--	--	--	0.5 U	0.75 U	0.1 U	0.05 U	0.1 U	0.05 U	0.05 U
Benzidine	mg/L	--	--	--	5 U	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	0.5 U	--	0.2 U	0.3 U	0.04 U	0.02 U	0.04 U	0.02 U	0.02 U
Benzo(a)pyrene	mg/L	--	--	--	0.5 U	--	0.2 U	0.3 U	0.04 U	0.02 U	0.04 U	0.02 U	0.02 U
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	0.2 U	0.3 U	0.04 U	0.02 U	0.04 U	0.02 U	0.02 U
Benzo(g,h,i)perylene	mg/L	--	--	--	1 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Benzo(k)fluoranthene	mg/L	--	--	--	0.5 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	0.5 U	0.75 U	0.1 U	0.05 U	0.1 U	0.05 U	0.05 U
bis(2-Chloroethoxy)methane	mg/L	--	--	--	0.4 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
bis(2-Chloroethyl)ether	mg/L	--	--	--	0.4 U	--	0.2 U	0.3 U	0.04 U	0.02 U	0.04 U	0.02 U	0.02 U
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	0.2 U	--	**0.02 J**[AD]	**0.097 J**[AD,L]	0.0047 J	0.025 U	**0.0084 J**[AD]	0.025 U	0.025 U

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-2*	*85-2*	*85-2*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*
Sample Identification		*GW-17360-040609-DR-238*	*GW-17360-100609-DR-283*	*GW-17360-101110-BW-066*	*85-3~120685*	*85-3~050586*	*GW-17360-071503-SP-064*	*GW-17360-100703-JB-097*	*GW-17360-121703-JB-096*	*GW-17360-031704-JB-149*	*GW-17360-080904-DCR-200*	*GW-17360-100604-DCR-277*	*GW-17360-120204-DCR-312*
Sample Date		*4/6/2009*	*10/6/2009*	*10/11/2010*	*12/6/1985*	*5/5/1986*	*7/15/2003*	*10/7/2003*	*12/18/2003*	*3/17/2004*	*8/9/2004*	*10/6/2004*	*12/2/2004*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*
	Units												
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	0.3 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Caprolactam	mg/L	--	--	--	--	--	0.5 U	0.75 U	0.1 U	0.05 U	0.0095 J	0.05 U	0.05 U
Carbazole	mg/L	--	--	--	--	--	0.5 U	0.75 U	0.1 U	0.05 U	0.1 U	0.05 U	0.05 U
Chrysene	mg/L	--	--	--	0.5 U	--	0.25 U	**0.036 J**[abe]	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Dibenz(a,h)anthracene	mg/L	--	--	--	1 U	--	0.2 U	0.3 U	0.04 U	0.02 U	0.04 U	0.02 U	0.02 U
Dibenzofuran	mg/L	--	--	--	--	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Diethyl phthalate	mg/L	--	--	--	0.2 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Dimethyl phthalate	mg/L	--	--	--	0.2 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Di-n-butylphthalate (DBP)	mg/L	--	--	--	0.1 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	0.2 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Fluoranthene	mg/L	--	--	--	**0.46**[abcde]	--	0.25 U	0.38 U	0.05 U	0.025 U	**0.0058 J**[c]	0.025 U	0.025 U
Fluorene	mg/L	--	--	--	**3.2**[abcde]	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Hexachlorobenzene	mg/L	--	--	--	0.5 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Hexachlorobutadiene	mg/L	--	--	--	0.5 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Hexachlorocyclopentadiene	mg/L	--	--	--	0.5 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Hexachloroethane	mg/L	--	--	--	0.7 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	1 U	--	0.2 U	0.3 U	0.04 U	0.02 U	0.04 U	0.02 U	0.02 U
Isophorone	mg/L	--	--	--	0.2 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Naphthalene	mg/L	--	--	--	**0.17**[e]	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Nitrobenzene	mg/L	--	--	--	0.4 U	--	0.2 U	0.3 U	0.04 U	0.02 U	0.04 U	0.02 U	0.02 U
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	0.004 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
N-Nitrosodiphenylamine	mg/L	--	--	--	0.4 U	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Pentachlorophenol	mg/L	--	--	--	--	--	1 U	1.5 U	0.2 U	0.1 U	0.2 U	0.1 U	0.1 U
Phenanthrene	mg/L	--	--	--	**2.8**[abcde]	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Phenol	mg/L	--	--	--	--	--	0.25 U	0.38 U	0.05 U	0.025 U	0.05 U	0.025 U	0.025 U
Pyrene	mg/L	--	--	--	**0.56**[abcde]	--	0.25 U	0.11 J	0.05 U	0.005 J	0.0061 J	0.025 U	0.025 U
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds													
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	0.0053	0.0064	0.0076	0.002 U	0.002	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 UJ	0.001 U	0.002 U	0.002 U	--	0.001 U	--	0.001 UJ	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.003 U	0.003 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.00081 J	0.0011	0.0013	0.002 U	0.002 U	--	0.00029 J	--	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.00055 J	0.0004 J	0.0005 J	0.002 U	0.002 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	0.005 U	0.005 U	0.005 U	--	--	--	0.005 UJ	--	0.005 U	0.005 U	0.005 U	0.005 U
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.001 U	0.001 U	0.001 U	--	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.001 U	0.001 U	0.001 U	--	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	--	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethene (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.003 U	0.003 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	--	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	--	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.025 U	0.025 U	0.025 U	--	--	--	0.025 UJ	--	0.0031 J	0.025 U	0.0011 J	0.025 U
2-Chloroethyl vinyl ether	mg/L	--	--	--	0.01 U	0.01 U	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	0.05 U	0.05 U	0.05 U	--	--	--	0.05 UJ	--	0.05 U	0.05 U	0.05 U	0.05 U
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.05 U	0.05 U	0.05 U	--	--	--	0.05 UJ	--	0.05 U	0.05 U	0.00041 J	0.05 U
Acetone	mg/L	0.025 U	0.025 U	0.025 U	--	--	--	0.025 UJ	--	0.025 U	0.025 U	0.025 U	0.025 U
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	0.001 U	0.001 UJ	0.001 U	0.002 U	0.002 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.001 U	0.001 U	0.015 U	0.015 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane (Methyl bromide)	mg/L	0.001 UJ	0.001 UJ	0.001 U	0.01 U	0.01 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	--	--	--	0.005 U	--	0.005 U	0.005 U	0.005 U	0.00068 J
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.004 U	0.004 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	0.001 U	0.001 U	0.001 UJ	0.01 U	0.01 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform (Trichloromethane)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Chloromethane (Methyl chloride)	mg/L	0.001 U	0.001 U	0.001 U	0.01 U	0.01 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-2*	*85-2*	*85-2*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*
Sample Identification		*GW-17360-040609-DR-238*	*GW-17360-100609-DR-283*	*GW-17360-101110-BW-066*	*85-3~120685*	*85-3~050586*	*GW-17360-071503-SP-064*	*GW-17360-100703-JB-097*	*GW-17360-121703-JB-096*	*GW-17360-031704-JB-149*	*GW-17360-080904-DCR-200*	*GW-17360-100604-DCR-277*	*GW-17360-120204-DCR-312*	
Sample Date		*4/6/2009*	*10/6/2009*	*10/11/2010*	*12/6/1985*	*5/5/1986*	*7/15/2003*	*10/7/2003*	*12/18/2003*	*3/17/2004*	*8/9/2004*	*10/6/2004*	*12/2/2004*	
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	
	Units													
cis-1,2-Dichloroethene	mg/L	0.00024 J	0.001 U	0.001 U	--	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
cis-1,3-Dichloropropene	mg/L	0.001 UJ	0.001 UJ	0.001 U	0.004 U	0.004 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	--	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 UJ	0.003 U	0.003 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dichlorodifluoromethane (CFC-12)	mg/L	0.001 UJ	0.001 UJ	0.001 U	--	--	--	0.001 U	--	0.001 UJ	0.001 U	0.001 U	0.001 U	
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Isopropyl benzene	mg/L	0.005 U	0.005 U	0.005 U	--	--	--	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Methyl acetate	mg/L	0.01 U	0.01 UJ	0.01 U	--	--	--	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	
Methyl cyclohexane	mg/L	0.001 UJ	0.001 U	0.001 U	--	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	
Methyl tert butyl ether (MTBE)	mg/L	0.005 U	0.005 U	0.005 UJ	--	--	--	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.002 U	0.002 U	--	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Styrene	mg/L	0.001 U	0.001 U	0.001 U	--	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.002 U	0.002	--	0.00054 J	--	0.0006 J	0.00035 J	0.00031 J	0.00038 J	
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.003	0.001 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	
trans-1,3-Dichloropropene	mg/L	0.001 UJ	0.001 UJ	0.001 U	0.004 U	0.004 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	
Trichloroethene	mg/L	0.00099 J	0.0012	0.0014	0.002 U	0.002 U	--	0.00069 J	--	0.00036 J	0.001 U	0.001 U	0.001 U	
Trichlorofluoromethane (CFC-11)	mg/L	0.001 U	0.001 UJ	0.001 U	0.003 U	0.003 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	
Trifluorotrichloroethane (Freon 113)	mg/L	0.001 U	0.001 UJ	0.001 U	--	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	
Vinyl chloride	mg/L	0.001 U	0.001 U	0.001 U	0.01 U	0.01 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	--	--	--	0.003 U	--	0.003 U	0.003 U	0.003 U	0.003 U	
General Chemistry														
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	

Notes:
[(1)] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-4*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*
Sample Identification		*GW-17360-040605-DCR-357*	*GW-17360-062905-DCR-407*	*GW-17360-042308-DR-175*	*GW-17360-100808-DR-222*	*GW-17360-040809-DR-271*	*GW-17360-100709-DR-293*	*85-4~120685*	*85-5B~120685*	*GW-17360-100703-JB-096*	*GW-17360-121703-JB-098*	*GW-17360-031704-JB-148*	*GW-17360-080904-DCR-199*
Sample Date		*4/6/2005*	*6/29/2005*	*4/23/2008*	*10/8/2008*	*4/8/2009*	*10/7/2009*	*12/6/1985*	*12/6/1985*	*10/7/2003*	*12/18/2003*	*3/17/2004*	*8/9/2004*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	0.003 U	0.003 U	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	0.003 U	0.003 U	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	0.001 U	0.001 U	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	0.003 U	0.003 U	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	0.003 U	0.003 U	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.02 U	0.005 U	0.02 U
2,4,5-Trichlorophenol	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	--	--	0.005 U	0.02 U	0.005 U	0.02 U
2,4,6-Trichlorophenol	mg/L	0.004 U	0.004 U	0.04 U	0.02 U	0.016 U	0.004 U	--	--	0.004 U	0.016 U	0.004 U	0.016 U
2,4-Dichlorophenol	mg/L	0.01 U	0.01 U	0.1 U	0.05 U	0.04 U	0.01 U	--	--	0.01 U	0.04 U	0.01 U	0.04 U
2,4-Dimethylphenol	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	--	--	0.005 U	0.02 U	0.005 U	0.02 U
2,4-Dinitrophenol	mg/L	0.02 U	0.02 U	0.2 U	0.1 U	0.08 U	0.02 U	--	--	0.02 UJ	0.08 U	0.02 U	0.08 U
2,4-Dinitrotoluene	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.01 U	0.01 U	0.005 U	0.02 U	0.005 U	0.02 U
2,6-Dinitrotoluene	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.009 U	0.009 U	0.005 U	0.02 U	0.005 U	0.02 U
2-Chloronaphthalene	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.002 U	0.002 U	0.005 U	0.02 U	0.005 U	0.02 U
2-Chlorophenol	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	--	--	0.005 U	0.02 U	0.005 U	0.02 U
2-Methylnaphthalene	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	--	--	0.005 U	0.02 U	0.005 U	0.02 U
2-Methylphenol	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	--	--	0.005 U	0.02 U	0.005 U	0.02 U
2-Nitroaniline	mg/L	0.02 U	0.02 U	0.2 U	0.1 U	0.08 U	0.02 U	--	--	0.02 U	0.08 U	0.02 U	0.08 U
2-Nitrophenol	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	--	--	0.005 U	0.02 U	0.005 U	0.02 U
3,3'-Dichlorobenzidine	mg/L	0.004 U	R	0.04 U	0.02 U	0.016 U	0.004 U	0.02 U	0.02 U	0.004 U	0.016 U	0.004 U	0.016 U
3-Nitroaniline	mg/L	0.02 U	0.02 U	0.2 U	0.1 U	0.08 U	0.02 U	--	--	0.02 U	0.08 U	0.02 U	0.08 U
4,6-Dinitro-2-methylphenol	mg/L	0.02 U	0.02 U	0.2 U	0.1 U	0.08 U	0.02 U	--	--	0.02 UJ	0.08 U	0.02 U	0.08 U
4-Bromophenyl phenyl ether	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.007 U	0.007 U	0.005 U	0.02 U	0.005 U	0.02 U
4-Chloro-3-methylphenol	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	--	--	0.005 U	0.02 U	0.005 U	0.02 U
4-Chloroaniline	mg/L	0.02 U	0.02 U	0.2 U	0.1 U	0.08 U	0.02 U	--	--	0.02 U	0.08 U	0.02 U	0.08 U
4-Chlorophenyl phenyl ether	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.003 U	0.003 U	0.005 U	0.02 U	0.005 U	0.02 U
4-Methylphenol	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	--	--	0.005 U	0.02 U	0.005 U	0.02 U
4-Nitroaniline	mg/L	0.02 U	0.02 U	0.2 U	0.1 U	0.08 U	0.02 U	--	--	0.02 U	0.08 U	0.02 U	0.08 U
4-Nitrophenol	mg/L	0.02 U	0.02 U	0.2 U	0.1 U	0.08 U	0.02 U	--	--	0.02 U	0.08 U	0.02 U	0.08 U
Acenaphthene	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.00061 J	0.002 U	0.002 U	0.0014 J	0.02 U	0.001 J	0.02 U
Acenaphthylene	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.02 U	0.005 U	0.02 U
Acetophenone	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	--	--	0.005 U	0.02 U	0.005 U	0.02 U
Anthracene	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.02 U	0.00074 J	0.02 U
Atrazine	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	--	--	0.005 U	0.02 U	0.005 U	0.02 U
Benzaldehyde	mg/L	0.01 U	0.01 U	0.1 U	0.05 U	0.04 U	0.01 U	--	--	0.01 U	0.04 U	0.01 U	0.04 U
Benzidine	mg/L	--	--	--	--	--	--	0.05 U	0.05 U	--	--	--	--
Benzo(a)anthracene	mg/L	0.001 U	0.001 U	0.01 U	0.005 U	0.004 U	0.001 U	0.005 U	0.005 U	0.004 U	0.016 U	0.0015 J	**0.0054 J [a]**
Benzo(a)pyrene	mg/L	0.002 U	0.002 U	0.02 U	0.01 U	0.008 U	0.002 U	0.005 U	0.005 U	0.004 U	0.016 U	0.004 U	**0.0023 J [e]**
Benzo(b)fluoranthene	mg/L	0.002 U	0.002 U	0.02 U	0.01 U	0.008 U	0.002 U	--	--	0.004 U	0.016 U	0.0013 J	**0.0043 J [abe]**
Benzo(g,h,i)perylene	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.01 U	0.01 U	0.005 U	0.02 U	0.005 U	**0.002 J [abe]**
Benzo(k)fluoranthene	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U	**0.0021 J [abe]**
Biphenyl (1,1-Biphenyl)	mg/L	0.01 U	0.01 U	0.1 U	0.05 U	0.04 U	0.01 U	--	--	0.01 U	0.04 U	0.01 U	0.04 U
bis(2-Chloroethoxy)methane	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.004 U	0.004 U	0.005 U	0.02 U	0.005 U	0.02 U
bis(2-Chloroethyl)ether	mg/L	0.004 U	0.004 U	0.04 U	0.02 U	0.016 U	0.004 U	0.004 U	0.004 U	0.004 U	0.016 U	0.004 U	0.016 U
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.002	0.002 U	0.00086 J	0.02 U	0.005 U	0.02 U

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-4*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*
Sample Identification		*GW-17360-040605-DCR-357*	*GW-17360-062905-DCR-407*	*GW-17360-042308-DR-175*	*GW-17360-100808-DR-222*	*GW-17360-040809-DR-271*	*GW-17360-100709-DR-293*	*85-4~120685*	*85-5B~120685*	*GW-17360-100703-JB-096*	*GW-17360-121703-JB-098*	*GW-17360-031704-JB-148*	*GW-17360-080904-DCR-199*
Sample Date		*4/6/2005*	*6/29/2005*	*4/23/2008*	*10/8/2008*	*4/8/2009*	*10/7/2009*	*12/6/1985*	*12/6/1985*	*10/7/2003*	*12/18/2003*	*3/17/2004*	*8/9/2004*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*
	Units												
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.003 U	0.003 U	0.005 U	0.02 U	0.005 U	0.02 U
Caprolactam	mg/L	0.01 U	0.01 U	0.1 U	0.05 UJ	0.04 U	0.01 U	--	--	0.01 U	0.04 U	0.016	0.04 U
Carbazole	mg/L	0.01 U	0.01 U	0.1 U	0.05 U	0.04 U	0.01 U	--	--	0.01 U	0.04 U	0.01 U	0.04 U
Chrysene	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.005 U	0.005 U	0.00086 J	0.02 U	0.0015 J	**0.004 J[abz]**
Dibenz(a,h)anthracene	mg/L	0.002 U	0.002 U	0.02 U	0.01 U	0.008 U	0.002 U	0.01 U	0.01 U	0.004 U	0.016 U	0.004 U	0.016 U
Dibenzofuran	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.00043 J	--	--	0.00081 J	0.02 U	0.00067 J	0.02 U
Diethyl phthalate	mg/L	0.0036 J	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.002 U	0.002 U	0.005 U	0.02 U	0.005 U	0.02 U
Dimethyl phthalate	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.002 U	0.002 U	0.005 U	0.02 U	0.005 U	0.02 U
Di-n-butylphthalate (DBP)	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.007	0.001 U	0.005 U	0.02 U	0.005 U	0.02 U
Di-n-octyl phthalate (DnOP)	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.002 U	0.002 U	0.005 U	0.02 U	0.005 U	0.02 U
Fluoranthene	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	**0.004[c]**	0.001 U	**0.0076[c]**	**0.01 J[c]**	**0.013[c]**	**0.019 J[c]**
Fluorene	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.00049 J	0.002 U	0.004	0.0012 J	0.02 U	0.0016 J	0.02 U
Hexachlorobenzene	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U	0.02 U
Hexachlorobutadiene	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U	0.02 U
Hexachlorocyclopentadiene	mg/L	0.005 U	R	0.05 U	0.025 U	0.02 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U	0.02 U
Hexachloroethane	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.007 U	0.007 U	0.005 U	0.02 U	0.005 U	0.02 U
Indeno(1,2,3-cd)pyrene	mg/L	0.002 U	0.002 U	0.02 U	0.01 U	0.008 U	0.002 U	0.01 U	0.01 U	0.004 U	0.016 U	0.00075 J	0.0018 J
Isophorone	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.002 U	0.002 U	0.005 U	0.02 U	0.005 U	0.02 U
Naphthalene	mg/L	0.005 U	0.005 UJ	0.05 U	0.025 U	0.02 U	0.00039 J	0.001 U	0.001 U	0.005 U	0.02 U	0.005 U	0.02 U
Nitrobenzene	mg/L	0.004 U	0.004 U	0.04 U	0.02 U	0.016 U	0.004 U	0.004 U	0.004 U	0.004 U	0.016 U	0.004 U	0.016 U
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.004 U	0.004 U	0.005 U	0.02 U	0.005 U	0.02 U
N-Nitrosodiphenylamine	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.003 U	0.003 U	0.005 U	0.02 U	0.005 U	0.02 U
Pentachlorophenol	mg/L	0.02 U	0.02 U	0.2 U	0.1 U	0.08 U	0.02 U	--	--	0.02 U	0.08 U	0.02 U	0.08 U
Phenanthrene	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	**0.01[c]**	**0.003[c]**	**0.0037 J[c]**	**0.0049 J[c]**	**0.0065[c]**	**0.0043 J[c]**
Phenol	mg/L	0.005 U	0.005 U	0.0098 J	0.025 U	0.02 U	0.005 U	--	--	0.01	0.02 U	0.0022 J	0.02 U
Pyrene	mg/L	0.005 U	0.005 U	0.05 U	0.025 U	0.02 U	0.005 U	0.003	0.005	0.0068	0.012 J	0.01	0.022
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds													
1,1,1-Trichloroethane	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	0.005	0.003	0.001 U	--	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.005 U	0.001 UJ	0.004 U	0.004 UJ	0.001 U	0.001 UJ	0.002 U	0.002 U	0.001 U	--	0.001 UJ	0.001 U
1,1,2-Trichloroethane	mg/L	0.005 U	0.001 UJ	0.004 U	0.004 UJ	0.001 U	0.001 U	0.003 U	0.003 U	0.001 U	--	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.005 U	0.001 U	0.004 U	0.004 UJ	0.001 U	0.001 U	0.002	0.006	0.00041 J	--	0.00064 J	0.00042 J
1,1-Dichloroethene	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	--	0.001 U	0.001 U
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	0.025 UJ	0.005 U	0.02 U	0.02 U	0.005 U	0.005 UJ	--	--	0.005 UJ	--	0.005 U	0.005 U
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.005 UJ	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	--	0.001 U	0.001 U
1,2-Dichloroethene (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	0.003 U	0.003 U	0.001 U	--	0.001 U	0.001 U
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.12 U	0.025 UJ	0.015 J	0.1 U	0.00097 J	0.025 U	--	--	0.025 UJ	--	0.025 U	0.025 U
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	0.01 U	0.01 U	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	0.25 UJ	0.05 UJ	0.2 U	0.2 U	0.05 U	0.05 U	--	--	0.05 UJ	--	0.05 U	0.05 U
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.25 UJ	0.05 UJ	0.2 U	0.2 U	0.05 U	0.05 U	--	--	0.0045 J	--	0.00035 J	0.00057 J
Acetone	mg/L	0.12 U	0.025 UJ	0.005 J	0.1 U	0.0091 J	0.025 U	--	--	0.025 UJ	--	0.025 U	0.002 J
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	0.005 U	0.001 U	0.004 UJ	0.004 UJ	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	--	0.001 U	0.001 U
Bromoform	mg/L	0.005 U	0.001 U	0.004 UJ	0.004 UJ	0.001 U	0.001 U	0.015 U	0.015 U	0.001 U	--	0.001 U	0.001 U
Bromomethane (Methyl bromide)	mg/L	0.005 UJ	0.001 UJ	0.004 U	0.004 U	0.001 UJ	0.001 U	0.01 U	0.01 U	0.001 U	--	0.001 U	0.001 U
Carbon disulfide	mg/L	0.025 U	0.005 U	0.02 U	0.02 UJ	0.00087 J	0.005 U	--	--	0.005 U	--	0.005 U	0.0073
Carbon tetrachloride	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	0.004 U	0.004 U	0.001 U	--	0.001 U	0.001 U
Chlorobenzene	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	0.005 UJ	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	0.01 U	0.01 U	0.001 U	--	0.001 U	0.001 U
Chloroform (Trichloromethane)	mg/L	0.005 U	0.001 U	0.004 UJ	0.004 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U
Chloromethane (Methyl chloride)	mg/L	0.005 U	0.001 UJ	0.004 U	0.004 U	0.001 UJ	0.001 U	0.01 U	0.01 U	0.001 U	--	0.001 U	0.001 U

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-3*	*85-4*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*
Sample Identification		*GW-17360-040605-DCR-357*	*GW-17360-062905-DCR-407*	*GW-17360-042308-DR-175*	*GW-17360-100808-DR-222*	*GW-17360-040809-DR-271*	*GW-17360-100709-DR-293*	*85-4~120685*	*85-5B~120685*	*GW-17360-100703-JB-096*	*GW-17360-121703-JB-098*	*GW-17360-031704-JB-148*	*GW-17360-080904-DCR-199*
Sample Date		*4/6/2005*	*6/29/2005*	*4/23/2008*	*10/8/2008*	*4/8/2009*	*10/7/2009*	*12/6/1985*	*12/6/1985*	*10/7/2003*	*12/18/2003*	*3/17/2004*	*8/9/2004*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*
	Units												
cis-1,2-Dichloroethene	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.00036 J	0.00039 J	--	--	0.00029 J	--	0.0014	0.0027
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	0.005 U	0.001 UJ	0.004 UJ	0.004 UJ	0.001 U	0.001 U	0.004 U	0.004 U	0.001 U	--	0.001 U	0.001 U
Cyclohexane	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.005 U	0.001 U	0.004 UJ	0.004 U	0.001 U	0.001 U	0.003 U	0.003 U	0.001 U	--	0.001 U	0.001 U
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	0.005 U	0.001 U	0.004 U	0.004 UJ	0.001 UJ	0.001 UJ	--	--	0.001 U	--	0.001 UJ	0.001 U
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	0.005 U	0.001 U	0.004 UJ	0.004 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	0.025 U	0.005 U	0.02 U	0.02 U	0.005 U	0.005 U	--	--	0.005 U	--	0.00031 J	0.00044 J
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	0.05 U	0.01 UJ	0.04 U	0.04 U	0.01 U	0.01 U	--	--	0.01 U	--	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.005 U	0.001 UJ	0.004 U	0.004 U	0.001 U	0.001 UJ	--	--	0.001 U	--	0.001 U	0.001 U
Methyl tert butyl ether (MTBE)	mg/L	0.025 U	0.005 U	0.02 U	0.02 U	0.0048 J	0.0031 J	--	--	0.005 U	--	0.005 U	0.005 U
Methylene chloride	mg/L	0.025 UJ	0.005 UJ	0.02 U	0.02 U	0.005 U	0.005 U	0.002 U	0.002 U	0.005 U	--	0.005 U	0.005 U
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	0.005 U	0.00042 J	0.004 U	0.004 U	0.00099 J	0.00064 J	0.002	0.002	0.00064 J	--	0.00039 J	0.001 U
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	0.002 U	0.012	0.001 U	--	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.005 UJ	0.001 U	0.004 UJ	0.004 UJ	0.001 U	0.001 U	0.004 U	0.004 U	0.001 U	--	0.001 U	0.001 U
Trichloroethene	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.00028 J	0.00028 J	0.002	0.004	0.0011	--	0.00077 J	0.0003 J
Trichlorofluoromethane (CFC-11)	mg/L	0.005 UJ	0.001 U	0.004 U	0.004 U	0.001 UJ	0.001 U	0.003 U	0.003 U	0.001 U	--	0.001 U	0.001 U
Trifluorotrichloroethane (Freon 113)	mg/L	0.005 U	0.0061	0.004 U	0.004 U	0.001 UJ	0.001 UJ	--	--	0.001 U	--	0.001 U	0.001 U
Vinyl chloride	mg/L	0.005 U	0.001 U	0.004 U	0.004 U	0.001 U	0.001 U	0.01 U	0.01 U	0.001 U	--	0.001 U	0.001 U
Xylenes (total)	mg/L	0.01 U	0.002 U	0.008 UJ	0.008 UJ	0.002 U	0.002 U	--	--	0.003 U	--	0.003 U	0.003 U
General Chemistry													
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*
Sample Identification		*GW-17360-100604-DCR-276*	*GW-17360-120204-DCR-311*	*GW-17360-040605-DCR-361*	*GW-17360-062905-DCR-406*	*GW-17360-120605-DCR-581*	*GW-17360-091306-DR-044*	*GW-17360-051007-JY-086*	*GW-17360-051007-JY-087*	*GW-17360-101607-DR-128*	*GW-17360-042308-DR-176*	*GW-17360-100808-DR-221*	*GW-17360-040809-DR-272*
Sample Date		*10/6/2004*	*12/2/2004*	*4/6/2005*	*6/29/2005*	*12/6/2005*	*9/13/2006*	*5/10/2007*	*5/10/2007*	*10/16/2007*	*4/23/2008*	*10/8/2008*	*4/8/2009*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
									Duplicate				
AOI		*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	--	--	119	--	115	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	**2.4**[ab]	--	**1.8**[ab]	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	32.5	--	30.9	--	--	--	--	--	--	--
Manganese	mg/L	--	--	0.046	--	**0.061**[ab]	--	--	--	--	--	--	--
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
2,4,5-Trichlorophenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
2,4,6-Trichlorophenol	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 UJ	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.016 U
2,4-Dichlorophenol	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.04 U
2,4-Dimethylphenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
2,4-Dinitrophenol	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 UJ	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.08 U
2,4-Dinitrotoluene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
2,6-Dinitrotoluene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
2-Chloronaphthalene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
2-Chlorophenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
2-Methylnaphthalene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
2-Methylphenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
2-Nitroaniline	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 UJ	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.08 U
2-Nitrophenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
3,3'-Dichlorobenzidine	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 UJ	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.016 U
3-Nitroaniline	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 UJ	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.08 U
4,6-Dinitro-2-methylphenol	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 UJ	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.08 U
4-Bromophenyl phenyl ether	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
4-Chloro-3-methylphenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
4-Chloroaniline	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 UJ	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.08 U
4-Chlorophenyl phenyl ether	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
4-Methylphenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
4-Nitroaniline	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 UJ	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.08 U
4-Nitrophenol	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 UJ	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.08 U
Acenaphthene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Acenaphthylene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Acetophenone	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Anthracene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Atrazine	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Benzaldehyde	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.04 U
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	0.004 U	0.004 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.004 U
Benzo(a)pyrene	mg/L	0.004 U	0.004 U	0.002 U	0.002 U	0.002 UJ	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.008 U
Benzo(b)fluoranthene	mg/L	0.004 U	0.004 U	0.002 U	0.002 U	0.002 UJ	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.008 U
Benzo(g,h,i)perylene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Benzo(k)fluoranthene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Biphenyl (1,1-Biphenyl)	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.04 U
bis(2-Chloroethoxy)methane	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
bis(2-Chloroethyl)ether	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 UJ	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.016 U
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	0.005 U	0.005 U	0.005 U	0.0061 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		85-5B	85-5B	85-5B	85-5B	85-5B	85-5B	85-5B	85-5B	85-5B	85-5B	85-5B	85-5B
Sample Identification		GW-17360-100604-DCR-276	GW-17360-120204-DCR-311	GW-17360-040605-DCR-361	GW-17360-062905-DCR-406	GW-17360-120605-DCR-581	GW-17360-091306-DR-044	GW-17360-051007-JY-086	GW-17360-051007-JY-087	GW-17360-101607-DR-128	GW-17360-042308-DR-176	GW-17360-100808-DR-221	GW-17360-040809-DR-272
Sample Date		10/6/2004	12/2/2004	4/6/2005	6/29/2005	12/6/2005	9/13/2006	5/10/2007	5/10/2007	10/16/2007	4/23/2008	10/8/2008	4/8/2009
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
									Duplicate				
AOI		AOI 6, AOI 25, AOI 19, AOI 4.1	AOI 6, AOI 25, AOI 19, AOI 4.1	AOI 6, AOI 25, AOI 19, AOI 4.1	AOI 6, AOI 25, AOI 19, AOI 4.1	AOI 6, AOI 25, AOI 19, AOI 4.1	AOI 6, AOI 25, AOI 19, AOI 4.1	AOI 6, AOI 25, AOI 19, AOI 4.1	AOI 6, AOI 25, AOI 19, AOI 4.1	AOI 6, AOI 25, AOI 19, AOI 4.1	AOI 6, AOI 25, AOI 19, AOI 4.1	AOI 6, AOI 25, AOI 19, AOI 4.1	AOI 6, AOI 25, AOI 19, AOI 4.1
	Units												
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Caprolactam	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 UJ	0.01 UJ	0.01 U	0.01 U	0.01 UJ	0.04 U
Carbazole	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.04 U
Chrysene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Dibenz(a,h)anthracene	mg/L	0.004 U	0.004 U	0.002 U	0.002 U	0.002 UJ	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.008 U
Dibenzofuran	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Diethyl phthalate	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Dimethyl phthalate	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Di-n-butylphthalate (DBP)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Di-n-octyl phthalate (DnOP)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Fluoranthene	mg/L	**0.002 J[c]**	0.005 U	0.0015 J	0.001 J	0.0012 J	0.0012 J	0.0012 J	0.0012 J	0.0013 J	0.00082 J	0.0011 J	0.00091 J
Fluorene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Hexachlorobenzene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Hexachlorobutadiene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Hexachlorocyclopentadiene	mg/L	0.005 U	0.005 U	0.005 U	R	R	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Hexachloroethane	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Indeno(1,2,3-cd)pyrene	mg/L	0.004 U	0.004 U	0.002 U	0.002 U	0.002 UJ	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.008 U
Isophorone	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Naphthalene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Nitrobenzene	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 UJ	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.016 U
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
N-Nitrosodiphenylamine	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Pentachlorophenol	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 UJ	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.08 U
Phenanthrene	mg/L	0.005 U	0.005 U	0.00071 J	0.00057 J	0.005 UJ	0.005 U	0.00052 J	0.00058 J	0.00055 J	0.00033 J	0.00038 J	0.02 U
Phenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
Pyrene	mg/L	0.0017 J	0.005 U	0.0011 J	0.00082 J	0.0011 J	0.00093 J	0.00091 J	0.00086 J	0.0011 J	0.00066 J	0.00088 J	0.02 U
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds													
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	0.00036 J	0.00027 J	0.001 U	0.001 U	0.001 U	0.00026 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.00036 J	0.00035 J	0.00021 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethene (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.0022 J
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	0.05 U	0.05 U	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.05 U	0.05 U	0.00034 J	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.00079 J	0.05 U	0.05 U	0.00064 J
Acetone	mg/L	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 U	0.025 U	0.025 UJ	0.025 UJ	0.025 U	0.025 U	0.025 U	0.014 J
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U
Bromoform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 U
Bromomethane (Methyl bromide)	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.0019 J	0.005 U	0.005 U	0.005 U	0.005 U	0.00034 J	0.005 U	0.005 UJ	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform (Trichloromethane)	mg/L	0.00033 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U
Chloromethane (Methyl chloride)	mg/L	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*	*85-5B*
Sample Identification		*GW-17360-100604-DCR-276*	*GW-17360-120204-DCR-311*	*GW-17360-040605-DCR-361*	*GW-17360-062905-DCR-406*	*GW-17360-120605-DCR-581*	*GW-17360-091306-DR-044*	*GW-17360-051007-JY-086*	*GW-17360-051007-JY-087*	*GW-17360-101607-DR-128*	*GW-17360-042308-DR-176*	*GW-17360-100808-DR-221*	*GW-17360-040809-DR-272*	
Sample Date		*10/6/2004*	*12/2/2004*	*4/6/2005*	*6/29/2005*	*12/6/2005*	*9/13/2006*	*5/10/2007*	*5/10/2007*	*10/16/2007*	*4/23/2008*	*10/8/2008*	*4/8/2009*	
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	
									Duplicate					
AOI		*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	
	Units													
cis-1,2-Dichloroethene	mg/L	0.00026 J	0.00081 J	0.0013	0.0016	0.00047 J	0.0005 J	0.00081 J	0.00085 J	0.00067 J	0.00047 J	0.00046 J	0.0019	
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dichlorodifluoromethane (CFC-12)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Isopropyl benzene	mg/L	0.005 U	0.005 U	0.00018 J	0.00044 J	0.0015 J	0.005 U	0.00023 J	0.00023 J	0.00032 J	0.00017 J	0.00017 J	0.00031 J	
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Methyl tert butyl ether (MTBE)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.00073 J	0.005 U	
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 UJ	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Tetrachloroethene	mg/L	0.00087 J	0.00064 J	0.0011	0.00043 J	0.0012	0.00068 J	0.00053 J	0.00047 J	0.001 U	0.0006 J	0.001	0.001 U	
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	
Trichloroethene	mg/L	0.00065 J	0.00047 J	0.00053 J	0.00049 J	0.00052 J	0.00072 J	0.00053 J	0.00047 J	0.00056 J	0.00078 J	0.00082 J	0.00063 J	
Trichlorofluoromethane (CFC-11)	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	
Trifluorotrichloroethane (Freon 113)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	
Vinyl chloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Xylenes (total)	mg/L	0.003 U	0.003 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 UJ	0.002 UJ	0.002 U	
General Chemistry														
Alkalinity, total (as CaCO3)	mg/L	--	--	329	--	307	--	--	--	--	--	--	--	
Ammonia	mg/L	--	--	0.55 J	--	2.0 U	--	--	--	--	--	--	--	
Biochemical oxygen demand (BOD)	mg/L	--	--	5	--	2 U	--	--	--	--	--	--	--	
Chemical oxygen demand (COD)	mg/L	--	--	110	--	45	--	--	--	--	--	--	--	
Chloride	mg/L	--	--	**351**[ID]	--	**346**[ID]	--	--	--	--	--	--	--	
Dissolved organic carbon (DOC)	mg/L	--	--	28	--	12	--	--	--	--	--	--	--	
Hardness	mg/L	--	--	480	--	430	--	--	--	--	--	--	--	
Nitrate (as N)	mg/L	--	--	0.39	--	1.2	--	--	--	--	--	--	--	
Nitrite (as N)	mg/L	--	--	0.10 U	--	0.10 U	--	--	--	--	--	--	--	
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Orthophosphate	mg/L	--	--	0.50 U	--	0.50 UJ	--	--	--	--	--	--	--	
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	
Phosphorus	mg/L	--	--	0.3	--	0.08 J	--	--	--	--	--	--	--	
Sulfate	mg/L	--	--	22.2	--	30.0	--	--	--	--	--	--	--	
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Sulfide (acid soluble)	mg/L	--	--	1 U	--	1 U	--	--	--	--	--	--	--	
Total kjeldahl nitrogen (TKN)	mg/L	--	--	3 U	--	3 U	--	--	--	--	--	--	--	
Total organic carbon (TOC)	mg/L	--	--	29	--	14	--	--	--	--	--	--	--	
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	

Notes:
[(1)] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-5B*	*85-5B*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*
Sample Identification		*GW-17360-100709-DR-292*	*GW-17360-101210-BW-082*	*85-6~120685*	*85-6~050586*	*GW-17360-100703-JB-099*	*GW-17360-121703-JB-101*	*GW-17360-031704-JB-152*	*GW-17360-081004-DCR-202*	*GW-17360-081004-DCR-203*	*GW-17360-100604-DCR-266*	*GW-17360-120304-DCR-322*	*GW-17360-040705-DCR-367*
Sample Date		*10/7/2009*	*10/12/2010*	*12/6/1985*	*5/5/1986*	*10/7/2003*	*12/18/2003*	*3/17/2004*	*8/10/2004*	*8/10/2004*	*10/6/2004*	*12/3/2004*	*4/7/2005*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
										Duplicate			
AOI		*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	--	--	0.003 U	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	0.003 U	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	0.001 U	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	0.003 U	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	0.003 U	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	0.02 U	0.005 U	0.001 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2,4,5-Trichlorophenol	mg/L	0.02 U	0.005 U	--	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2,4,6-Trichlorophenol	mg/L	0.016 U	0.004 U	--	--	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
2,4-Dichlorophenol	mg/L	0.04 U	0.01 U	--	--	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2,4-Dimethylphenol	mg/L	0.02 U	0.005 U	--	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2,4-Dinitrophenol	mg/L	0.08 U	0.02 U	--	--	0.02 UJ	0.02 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
2,4-Dinitrotoluene	mg/L	0.02 U	0.005 U	0.01 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2,6-Dinitrotoluene	mg/L	0.02 U	0.005 U	0.009 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Chloronaphthalene	mg/L	0.02 U	0.005 U	0.002 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Chlorophenol	mg/L	0.02 U	0.005 U	--	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Methylnaphthalene	mg/L	0.02 U	0.005 U	--	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Methylphenol	mg/L	0.02 U	0.005 U	--	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Nitroaniline	mg/L	0.08 U	0.02 U	--	--	0.02 U	0.02 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
2-Nitrophenol	mg/L	0.02 U	0.005 U	--	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
3,3'-Dichlorobenzidine	mg/L	0.016 U	0.004 U	0.02 U	--	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
3-Nitroaniline	mg/L	0.08 U	0.02 U	--	--	0.02 U	0.02 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4,6-Dinitro-2-methylphenol	mg/L	0.08 U	0.02 U	--	--	0.02 UJ	0.02 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4-Bromophenyl phenyl ether	mg/L	0.02 U	0.005 U	0.007 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
4-Chloro-3-methylphenol	mg/L	0.02 U	0.005 U	--	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
4-Chloroaniline	mg/L	0.08 U	0.02 U	--	--	0.02 U	0.02 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4-Chlorophenyl phenyl ether	mg/L	0.02 U	0.005 U	0.003 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
4-Methylphenol	mg/L	0.02 U	0.005 U	--	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
4-Nitroaniline	mg/L	0.08 U	0.02 U	--	--	0.02 U	0.02 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4-Nitrophenol	mg/L	0.08 U	0.02 U	--	--	0.02 U	0.02 UJ	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Acenaphthene	mg/L	0.02 U	0.005 U	0.002 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Acenaphthylene	mg/L	0.02 U	0.005 U	0.001 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Acetophenone	mg/L	0.02 U	0.005 U	--	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Anthracene	mg/L	0.00089 J	0.005 U	0.001 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Atrazine	mg/L	0.02 U	0.005 U	--	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Benzaldehyde	mg/L	0.04 U	0.01 U	--	--	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzidine	mg/L	--	--	0.05 U	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	**0.0037 J[a]**	0.001 U	0.005 U	--	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.001 U
Benzo(a)pyrene	mg/L	**0.0038 J[c]**	0.002 U	0.005 U	--	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.002 U
Benzo(b)fluoranthene	mg/L	**0.0038 J[abc]**	0.002 U	--	--	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.002 U
Benzo(g,h,i)perylene	mg/L	**0.0032 J[abc]**	0.005 U	0.01 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Benzo(k)fluoranthene	mg/L	**0.0028 J[abc]**	0.005 U	0.005 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Biphenyl (1,1-Biphenyl)	mg/L	0.04 U	0.01 U	--	--	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
bis(2-Chloroethoxy)methane	mg/L	0.02 U	0.005 U	0.004 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
bis(2-Chloroethyl)ether	mg/L	0.016 U	0.004 U	0.004 U	--	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 UJ
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	0.02 U	0.005 U	0.002 U	--	0.0005 J	0.00079 J	0.012 U	**0.0086[ab]**	0.005 U	0.005 U	0.005 U	0.005 U

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-5B*	*85-5B*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*
Sample Identification		*GW-17360-100709-DR-292*	*GW-17360-101210-BW-082*	*85-6~120685*	*85-6~050586*	*GW-17360-100703-JB-099*	*GW-17360-121703-JB-101*	*GW-17360-031704-JB-152*	*GW-17360-081004-DCR-202*	*GW-17360-081004-DCR-203*	*GW-17360-100604-DCR-266*	*GW-17360-120304-DCR-322*	*GW-17360-040705-DCR-367*
Sample Date		*10/7/2009*	*10/12/2010*	*12/6/1985*	*5/5/1986*	*10/7/2003*	*12/18/2003*	*3/17/2004*	*8/10/2004*	*8/10/2004*	*10/6/2004*	*12/3/2004*	*4/7/2005*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
										Duplicate			
AOI		*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*
	Units												
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	0.02 U	0.005 U	0.003 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Caprolactam	mg/L	0.04 U	0.01 U	--	--	0.034	0.01 U	0.026	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Carbazole	mg/L	0.0018 J	0.01 U	--	--	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene	mg/L	**0.0041 J [abz]**	0.005 U	0.005 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Dibenz(a,h)anthracene	mg/L	0.008 U	0.002 U	0.01 U	--	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.002 U
Dibenzofuran	mg/L	0.02 U	0.005 U	--	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Diethyl phthalate	mg/L	0.02 U	0.005 U	0.002 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Dimethyl phthalate	mg/L	0.02 U	0.005 U	0.002 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Di-n-butylphthalate (DBP)	mg/L	0.02 U	0.005 U	0.001 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Di-n-octyl phthalate (DnOP)	mg/L	0.02 U	0.005 U	0.002 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Fluoranthene	mg/L	**0.01 J [c]**	0.005 U	0.001 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Fluorene	mg/L	0.02 U	0.005 U	0.002 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Hexachlorobenzene	mg/L	0.02 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Hexachlorobutadiene	mg/L	0.02 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Hexachlorocyclopentadiene	mg/L	0.02 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	R
Hexachloroethane	mg/L	0.02 U	0.005 U	0.007 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Indeno(1,2,3-cd)pyrene	mg/L	**0.0025 J [abz]**	0.002 U	0.01 U	--	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.002 U
Isophorone	mg/L	0.02 U	0.005 U	0.002 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Naphthalene	mg/L	0.02 U	0.00032 J	0.001 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Nitrobenzene	mg/L	0.016 U	0.004 U	0.004 U	--	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	0.02 U	0.005 U	0.004 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
N-Nitrosodiphenylamine	mg/L	0.02 U	0.005 U	0.003 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Pentachlorophenol	mg/L	0.08 U	0.02 U	--	--	0.02 U	0.02 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Phenanthrene	mg/L	**0.0063 J [c]**	0.005 U	0.001 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Phenol	mg/L	0.02 U	0.005 U	--	--	0.005 U	0.009	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Pyrene	mg/L	0.0072 J	0.005 U	0.001 U	--	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds													
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.002 U	0.002 U	0.00051 J	--	0.001 U	0.001 U	0.001 U	0.001 U	0.00034 J	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 UJ	0.001 U	0.002 U	0.002 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.003 U	0.003 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	0.005 UJ	0.005 U	--	--	0.005 UJ	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethene (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.003 U	0.003 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.0008 J	0.025 U	--	--	0.025 UJ	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
2-Chloroethyl vinyl ether	mg/L	--	--	0.01 U	0.01 U	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	0.05 U	0.05 U	--	--	0.05 UJ	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.05 U	0.05 U	--	--	0.05 UJ	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ
Acetone	mg/L	0.025 U	0.025 U	--	--	0.025 UJ	--	0.00068 J	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.001 U	0.015 U	0.015 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane (Methyl bromide)	mg/L	0.001 U	0.001 U	0.01 U	0.01 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.00068 J	--	--	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.004 U	0.004 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	0.001 U	0.001 UJ	0.01 U	0.01 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform (Trichloromethane)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.00027 J	0.00028 J	0.00031 J	0.001 U	0.001 U	0.00037 J
Chloromethane (Methyl chloride)	mg/L	0.001 U	0.001 U	0.01 U	0.01 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-5B*	*85-5B*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*
Sample Identification		*GW-17360-100709-DR-292*	*GW-17360-101210-BW-082*	*85-6~120685*	*85-6~050586*	*GW-17360-100703-JB-099*	*GW-17360-121703-JB-101*	*GW-17360-031704-JB-152*	*GW-17360-081004-DCR-202*	*GW-17360-081004-DCR-203*	*GW-17360-100604-DCR-266*	*GW-17360-120304-DCR-322*	*GW-17360-040705-DCR-367*	
Sample Date		*10/7/2009*	*10/12/2010*	*12/6/1985*	*5/5/1986*	*10/7/2003*	*12/18/2003*	*3/17/2004*	*8/10/2004*	*8/10/2004*	*10/6/2004*	*12/3/2004*	*4/7/2005*	
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	
										Duplicate				
AOI		*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 19, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*
	Units													
cis-1,2-Dichloroethene	mg/L	0.0015	0.00041 J	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.004 U	0.004 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Cyclohexane	mg/L	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Dibromochloromethane	mg/L	0.001 U	0.001 UJ	0.003 U	0.003 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dichlorodifluoromethane (CFC-12)	mg/L	0.001 UJ	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Ethylbenzene	mg/L	0.0002 J	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Isopropyl benzene	mg/L	0.00042 J	0.005 U	--	--	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Methyl acetate	mg/L	0.01 U	0.01 U	--	--	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Methyl cyclohexane	mg/L	0.001 UJ	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Methyl tert butyl ether (MTBE)	mg/L	0.0016 J	0.00062 J	--	--	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Methylene chloride	mg/L	0.005 U	0.005 U	0.002 U	0.002 U	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Styrene	mg/L	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.004	**0.007**[1D]	**0.0053**[1D]	--	0.0018	0.0015	0.0015	0.002	0.0024	0.0022	
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.004 U	0.004 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	
Trichloroethene	mg/L	0.001 U	0.00051 J	0.002 U	0.002 U	0.0013	--	0.001 U	0.001 U	0.001 U	0.001 U	0.00029 J	0.001 U	
Trichlorofluoromethane (CFC-11)	mg/L	0.001 U	0.001 U	0.003 U	0.003 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Trifluorotrichloroethane (Freon 113)	mg/L	0.001 UJ	0.001 U	--	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Vinyl chloride	mg/L	0.001 U	0.001 U	0.01 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Xylenes (total)	mg/L	0.0014 J	0.002 U	--	--	0.003 U	--	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.002 UJ	
General Chemistry														
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	

Notes:
[1] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*
Sample Identification		*GW-17360-062905-DCR-400*	*GW-17360-120405-DCR-559*	*GW-17360-091306-DR-041*	*GW-17360-050907-JY-079*	*GW-17360-101607-DR-122*	*GW-17360-042308-DR-177*	*GW-17360-100808-DR-225*	*GW-17360-040809-DR-273*	*GW-17360-100609-DR-290*	*GW-17360-100609-DR-291*	*GW-17360-101310-BW-087*	*GW-17360-101310-BW-088*
Sample Date		*6/29/2005*	*12/4/2005*	*9/13/2006*	*5/9/2007*	*10/16/2007*	*4/23/2008*	*10/8/2008*	*4/8/2009*	*10/6/2009*	*10/6/2009*	*10/13/2010*	*10/13/2010*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
											Duplicate		*Duplicate*
AOI		*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2,4,5-Trichlorophenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2,4,6-Trichlorophenol	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
2,4-Dichlorophenol	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2,4-Dimethylphenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2,4-Dinitrophenol	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
2,4-Dinitrotoluene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2,6-Dinitrotoluene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Chloronaphthalene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Chlorophenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Methylnaphthalene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Methylphenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Nitroaniline	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
2-Nitrophenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
3,3'-Dichlorobenzidine	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
3-Nitroaniline	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4,6-Dinitro-2-methylphenol	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4-Bromophenyl phenyl ether	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
4-Chloro-3-methylphenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
4-Chloroaniline	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4-Chlorophenyl phenyl ether	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
4-Methylphenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
4-Nitroaniline	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4-Nitrophenol	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Acenaphthene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Acenaphthylene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Acetophenone	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Anthracene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Atrazine	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Benzaldehyde	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Benzo(a)pyrene	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Benzo(b)fluoranthene	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Benzo(g,h,i)perylene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Benzo(k)fluoranthene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Biphenyl (1,1-Biphenyl)	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
bis(2-Chloroethoxy)methane	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
bis(2-Chloroethyl)ether	mg/L	0.004 U	0.004 UJ	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.00096 J	0.0013 J	0.0016 J	0.005 U	0.005 U

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*
Sample Identification		*GW-17360-062905-DCR-400*	*GW-17360-120405-DCR-559*	*GW-17360-091306-DR-041*	*GW-17360-050907-JY-079*	*GW-17360-101607-DR-122*	*GW-17360-042308-DR-177*	*GW-17360-100808-DR-225*	*GW-17360-040809-DR-273*	*GW-17360-100609-DR-290*	*GW-17360-100609-DR-291*	*GW-17360-101310-BW-087*	*GW-17360-101310-BW-088*	
Sample Date		*6/29/2005*	*12/4/2005*	*9/13/2006*	*5/9/2007*	*10/16/2007*	*4/23/2008*	*10/8/2008*	*4/8/2009*	*10/6/2009*	*10/6/2009*	*10/13/2010*	*10/13/2010*	
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	
											Duplicate		*Duplicate*	
AOI		*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	
	Units													
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Butyl benzylphthalate (BBP)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.001 J	0.005 U	
Caprolactam	mg/L	0.01 U	0.0035 J	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Carbazole	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Chrysene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Dibenz(a,h)anthracene	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	
Dibenzofuran	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Diethyl phthalate	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Dimethyl phthalate	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Di-n-butylphthalate (DBP)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Di-n-octyl phthalate (DnOP)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Fluoranthene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Fluorene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Hexachlorobenzene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Hexachlorobutadiene	mg/L	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Hexachlorocyclopentadiene	mg/L	R	R	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Hexachloroethane	mg/L	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Indeno(1,2,3-cd)pyrene	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	
Isophorone	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Naphthalene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Nitrobenzene	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Nitrosodi-n-propylamine	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
N-Nitrosodiphenylamine	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Pentachlorophenol	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	
Phenanthrene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Phenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Pyrene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Volatile Organic Compounds														
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,1,1-Trichloroethane	mg/L	0.001 U	0.00057 J	0.00048 J	0.001 U	0.00026 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2,4-Trichlorobenzene	mg/L	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,2-Dichloroethane	mg/L	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,2-Dichloroethene (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 UJ	
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
2-Hexanone	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 UJ	
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 UJ	
Acetone	mg/L	0.025 UJ	0.025 UJ	0.025 U	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 UJ	
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Bromodichloromethane	mg/L	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	
Bromoform	mg/L	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Bromomethane (Methyl bromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 U	
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Carbon tetrachloride	mg/L	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Chloroethane	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Chloroform (Trichloromethane)	mg/L	0.0003 J	0.00038 J	0.00021 J	0.001 U	0.00016 J	0.001 UJ	0.001 U	0.001 U	0.00017 J	0.00018 J	0.00032 J	0.00028 J	
Chloromethane (Methyl chloride)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*	*85-6*
Sample Identification		*GW-17360-062905-DCR-400*	*GW-17360-120405-DCR-559*	*GW-17360-091306-DR-041*	*GW-17360-050907-JY-079*	*GW-17360-101607-DR-122*	*GW-17360-042308-DR-177*	*GW-17360-100808-DR-225*	*GW-17360-040809-DR-273*	*GW-17360-100609-DR-290*	*GW-17360-100609-DR-291*	*GW-17360-101310-BW-087*	*GW-17360-101310-BW-088*
Sample Date		*6/29/2005*	*12/4/2005*	*9/13/2006*	*5/9/2007*	*10/16/2007*	*4/23/2008*	*10/8/2008*	*4/8/2009*	*10/6/2009*	*10/6/2009*	*10/13/2010*	*10/13/2010*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
											Duplicate		*Duplicate*
AOI		*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*	*AOI 6, AOI 25, AOI 1, AOI 4.1*
	Units												
cis-1,2-Dichloroethene	mg/L	0.001 U	0.00037 J	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 UJ	0.01 UJ	0.01 UJ	0.01 UJ
Methyl cyclohexane	mg/L	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether (MTBE)	mg/L	0.005 U	0.0002 J	0.005 U	0.005 U	0.005 U	0.00025 J	0.00044 J	0.002 J	0.0012 J	0.0013 J	0.005 UJ	0.005 UJ
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	0.0014	**0.0052 J[JD]**	0.0049 J	0.0017	0.0039	0.0041	0.0021	0.001	0.0013	0.0013	0.0027	0.0026
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ
Trichloroethene	mg/L	0.001 U	0.0021	0.0016	0.001 U	0.0011	0.00048 J	0.00038 J	0.001 U	0.001 U	0.001 U	0.00056 J	0.0006 J
Trichlorofluoromethane (CFC-11)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ
Trifluorotrichloroethane (Freon 113)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 U
Vinyl chloride	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.002 UJ	0.002 U	0.002 UJ	0.002 UJ	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
General Chemistry													
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*
Sample Identification		*E58330~12/06/85*	*E62226~05/05/86*	*E70821~01/21/87*	*E11590~12/21/88*	*E15517~03/17/89*	*E21115~06/15/89*	*E25594~09/20/89*	*E30989~12/21/89*	*E35816~03/16/90*	*E42010~06/18/90*	*E48214~09/14/90*	*E54814~12/17/90*
Sample Date		*12/6/1985*	*5/5/1986*	*1/21/1987*	*12/21/1988*	*3/17/1989*	*6/15/1989*	*9/20/1989*	*12/21/1989*	*3/16/1990*	*6/18/1990*	*9/14/1990*	*12/17/1990*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	**44**[ab]	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	0.003 U	--	0.003 U	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	0.003 U	--	0.003 U	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	0.001 U	--	0.001 U	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	0.003 U	--	0.003 U	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	0.003 U	--	0.003 U	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	0.001 U	--	0.001 U	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	0.005 U	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	0.003 U	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	0.003 U	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	0.05 U	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	0.01 U	--	0.01 U	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	0.009 U	--	0.009 U	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	0.002 U	--	0.002 U	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	0.002 U	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	0.005 U	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	0.02 U	--	0.02 U	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	0.02 U	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	0.007 U	--	0.007 U	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	0.004 U	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	0.003 U	--	0.003 U	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	0.015 U	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	0.002 U	--	0.002 U	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	0.001 U	--	0.001 U	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	0.001 U	--	0.001 U	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	0.05 U	--	0.05 U	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	0.005 U	--	0.005 U	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	0.005 U	--	0.005 U	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	0.01 U	--	0.01 U	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	0.005 U	--	0.005 U	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	0.004 U	--	0.004 U	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	0.004 U	--	0.004 U	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	0.002 U	--	**0.068**[abc]	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*
Sample Identification		*E58330~12/06/85*	*E62226~05/05/86*	*E70821~01/21/87*	*E11590~12/21/88*	*E15517~03/17/89*	*E21115~06/15/89*	*E25594~09/20/89*	*E30989~12/21/89*	*E35816~03/16/90*	*E42010~06/18/90*	*E48214~09/14/90*	*E54814~12/17/90*
Sample Date		*12/6/1985*	*5/5/1986*	*1/21/1987*	*12/21/1988*	*3/17/1989*	*6/15/1989*	*9/20/1989*	*12/21/1989*	*3/16/1990*	*6/18/1990*	*9/14/1990*	*12/17/1990*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	0.003 U	--	0.003 U	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	0.005 U	--	0.005 U	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/L	0.01 U	--	0.01 U	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	0.002 U	--	0.002 U	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	0.002 U	--	0.002 U	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	0.001 U	--	0.001 U	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	0.002 U	--	0.002 U	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	0.001 U	--	0.001 U	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	0.002 U	--	0.002 U	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	0.005 U	--	0.005 U	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	0.005 U	--	0.005 U	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	0.005 U	--	0.005 U	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	0.007 U	--	0.007 U	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	0.01 U	--	0.01 U	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	0.002 U	--	0.002 U	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	0.001 U	--	0.001 U	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	0.004 U	--	0.004 U	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	0.004 U	--	0.004 U	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	0.003 U	--	0.003 U	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	0.02 U	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	0.001 U	--	0.001 U	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	0.002 U	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	0.001 U	--	0.001 U	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds													
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	0.002 U	0.002	0.002 U	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	0.002 U	0.002 U	0.002 U	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	0.003 U	0.003 U	0.003 U	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	0.002 U	0.002 U	0.002 U	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	0.002 U	0.002 U	0.002 U	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	0.002 U	0.002 U	0.002 U	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	--	--	--	0.002 U	0.0012	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U
1,2-Dichloropropane	mg/L	0.003 U	0.003 U	0.003 U	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	0.01 U	0.01 U	0.01 U	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	0.001 U	0.001	0.001 U	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	0.002 U	0.002 U	0.002 U	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	0.015 U	0.015 U	0.015 U	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	0.01 U	0.01 U	0.01 U	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	0.004 U	0.004 U	0.004 U	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	0.01 U	0.01 U	0.01 U	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	0.01 U	0.01 U	0.01 U	--	--	--	--	--	--	--	--	--

TABLE 5.2

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CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*
Sample Identification		*E58330~12/06/85*	*E62226~05/05/86*	*E70821~01/21/87*	*E11590~12/21/88*	*E15517~03/17/89*	*E21115~06/15/89*	*E25594~09/20/89*	*E30989~12/21/89*	*E35816~03/16/90*	*E42010~06/18/90*	*E48214~09/14/90*	*E54814~12/17/90*
Sample Date		*12/6/1985*	*5/5/1986*	*1/21/1987*	*12/21/1988*	*3/17/1989*	*6/15/1989*	*9/20/1989*	*12/21/1989*	*3/16/1990*	*6/18/1990*	*9/14/1990*	*12/17/1990*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
cis-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	0.004 U	0.004 U	0.004 U	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	0.003 U	0.003 U	0.003 U	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/L	0.002 U	0.002 U	0.002 U	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	0.002 U	0.002 U	0.002 U	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/L	0.004	0.01	0.004	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/L	0.004 U	0.004 U	0.004 U	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/L	**0.084**[AD]	**0.24**[AD]	**0.15**[AD]	**0.097**[AD]	**0.07**[AD]	**0.045**[AD]	**0.04**[AD]	**0.029**[AD]	**0.023**[AD]	**0.021**[AD]	**0.035**[AD]	**0.021**[AD]
Trichlorofluoromethane (CFC-11)	mg/L	0.003 U	0.003 U	0.003 U	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/L	0.01 U	0.01 U	0.01 U	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/L	--	--	0.01 U	--	--	--	--	--	--	--	--	--
General Chemistry													
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	350	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	1.2	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	7.68	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
[1] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*
Sample Identification		*E59922~03/11/91*	*E67558~06/13/91*	*E72976~09/12/91*	*E07643~12/13/91*	*E15380~03/13/92*	*E23259~06/12/92*	*E31913~09/11/92*	*E40326~12/10/92*	*E47623~03/11/93*	*E56589~06/14/93*	*E66025~09/15/93*	*E75745~12/17/93*
Sample Date		*3/11/1991*	*6/13/1991*	*9/12/1991*	*12/13/1991*	*3/13/1992*	*6/12/1992*	*9/11/1992*	*12/10/1992*	*3/11/1993*	*6/14/1993*	*9/15/1993*	*12/17/1993*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*
Sample Identification		*E59922~03/11/91*	*E67558~06/13/91*	*E72976~09/12/91*	*E07643~12/13/91*	*E15380~03/13/92*	*E23259~06/12/92*	*E31913~09/11/92*	*E40326~12/10/92*	*E47623~03/11/93*	*E56589~06/14/93*	*E66025~09/15/93*	*E75745~12/17/93*
Sample Date		*3/11/1991*	*6/13/1991*	*9/12/1991*	*12/13/1991*	*3/13/1992*	*6/12/1992*	*9/11/1992*	*12/10/1992*	*3/11/1993*	*6/14/1993*	*9/15/1993*	*12/17/1993*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds													
1,1,1-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	0.001 U	0.001 U	0.001	0.002	0.003	0.0016	0.0011	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*
Sample Identification		*E59922~03/11/91*	*E67558~06/13/91*	*E72976~09/12/91*	*E07643~12/13/91*	*E15380~03/13/92*	*E23259~06/12/92*	*E31913~09/11/92*	*E40326~12/10/92*	*E47623~03/11/93*	*E56589~06/14/93*	*E66025~09/15/93*	*E75745~12/17/93*
Sample Date		*3/11/1991*	*6/13/1991*	*9/12/1991*	*12/13/1991*	*3/13/1992*	*6/12/1992*	*9/11/1992*	*12/10/1992*	*3/11/1993*	*6/14/1993*	*9/15/1993*	*12/17/1993*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
cis-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/L	**0.022**[40]	**0.034**[40]	**0.025**[40]	**0.022**[40]	**0.037**[40]	**0.038**[40]	**0.038**[40]	**0.033**[40]	**0.023**[40]	**0.017**[40]	**0.021**[40]	**0.013**[40]
Trichlorofluoromethane (CFC-11)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
General Chemistry													
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
[1] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*
Sample Identification		*E81239~03/16/94*	*E89391~06/14/94*	*E97442~09/14/94*	*E106399~12/16/94*	*E112947~03/17/95*	*E120791~06/20/95*	*E127380~09/14/95*	*E134966~12/18/95*	*E139837~03/19/96*	*E146841~06/13/96*	*E154124~09/13/96*	*E161523~12/12/96*
Sample Date		*3/16/1994*	*6/14/1994*	*9/14/1994*	*12/16/1994*	*3/17/1995*	*6/20/1995*	*9/14/1995*	*12/18/1995*	*3/19/1996*	*6/13/1996*	*9/13/1996*	*12/12/1996*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		85-7	85-7	85-7	85-7	85-7	85-7	85-7	85-7	85-7	85-7	85-7	85-7
Sample Identification		E81239~03/16/94	E89391~06/14/94	E97442~09/14/94	E106399~12/16/94	E112947~03/17/95	E120791~06/20/95	E127380~09/14/95	E134966~12/18/95	E139837~03/19/96	E146841~06/13/96	E154124~09/13/96	E161523~12/12/96
Sample Date		3/16/1994	6/14/1994	9/14/1994	12/16/1994	3/17/1995	6/20/1995	9/14/1995	12/18/1995	3/19/1996	6/13/1996	9/13/1996	12/12/1996
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1
	Units												
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds													
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*
Sample Identification		*E81239~03/16/94*	*E89391~06/14/94*	*E97442~09/14/94*	*E106399~12/16/94*	*E112947~03/17/95*	*E120791~06/20/95*	*E127380~09/14/95*	*E134966~12/18/95*	*E139837~03/19/96*	*E146841~06/13/96*	*E154124~09/13/96*	*E161523~12/12/96*	
Sample Date		*3/16/1994*	*6/14/1994*	*9/14/1994*	*12/16/1994*	*3/17/1995*	*6/20/1995*	*9/14/1995*	*12/18/1995*	*3/19/1996*	*6/13/1996*	*9/13/1996*	*12/12/1996*	
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	
	Units													
cis-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
cis-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dibromochloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Ethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Isopropyl benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Methyl acetate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Methyl cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Methylene chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Styrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Tetrachloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
trans-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
trans-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Trichloroethene	mg/L	**0.012**[40]	**0.011**[40]	**0.012**[40]	**0.007**[40]	**0.0068**[40]	0.0044	0.0031	0.0017	0.0018	0.0015	0.002	0.0017	
Trichlorofluoromethane (CFC-11)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Vinyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Xylenes (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
General Chemistry														
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	

Notes:
[1] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*
Sample Identification		*E166207~03/13/97*	*E172379~06/19/97*	*E177742~09/11/97*	*E184901~12/16/97*	*E190814~03/12/98*	*82953-3397~06/16/98*	*84367-8364~09/17/98*	*85755-2520~12/16/98*	*90995-6091~03/10/99*	*3990294012~06/15/99*	*3991971006~09/20/99*	*3993622012~12/16/99*
Sample Date		*3/13/1997*	*6/19/1997*	*9/11/1997*	*12/16/1997*	*3/12/1998*	*6/16/1998*	*9/17/1998*	*12/16/1998*	*3/10/1999*	*6/15/1999*	*9/20/1999*	*12/16/1999*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*
Sample Identification		*E166207~03/13/97*	*E172379~06/19/97*	*E177742~09/11/97*	*E184901~12/16/97*	*E190814~03/12/98*	*82953-3397~06/16/98*	*84367-8364~09/17/98*	*85755-2520~12/16/98*	*90995-6091~03/10/99*	*3990294012~06/15/99*	*3991971006~09/20/99*	*3993622012~12/16/99*
Sample Date		*3/13/1997*	*6/19/1997*	*9/11/1997*	*12/16/1997*	*3/12/1998*	*6/16/1998*	*9/17/1998*	*12/16/1998*	*3/10/1999*	*6/15/1999*	*9/20/1999*	*12/16/1999*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds													
1,1,1-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*
Sample Identification		*E166207~03/13/97*	*E172379~06/19/97*	*E177742~09/11/97*	*E184901~12/16/97*	*E190814~03/12/98*	*82953-3397~06/16/98*	*84367-8364~09/17/98*	*85755-2520~12/16/98*	*90995-6091~03/10/99*	*3990294012~06/15/99*	*3991971006~09/20/99*	*3993622012~12/16/99*
Sample Date		*3/13/1997*	*6/19/1997*	*9/11/1997*	*12/16/1997*	*3/12/1998*	*6/16/1998*	*9/17/1998*	*12/16/1998*	*3/10/1999*	*6/15/1999*	*9/20/1999*	*12/16/1999*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
cis-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/L	0.001 U	0.001 U	0.0014	0.0014	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0013	0.0017	0.0011
Trichlorofluoromethane (CFC-11)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
General Chemistry													
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*
Sample Identification		*3001152009~03/16/00*	*3002633009~06/13/00*	*E261225~09/22/00*	*E268212~12/20/00*	*E274380~03/21/01*	*E281016~06/13/01*	*E287756~09/13/01*	*GW--032802-TJ-007*	*GW-062602-JB-023*	*GW-062602-JB-024*	*GW-092602-JB-054*	*GW-17360-120902-JB-074*
Sample Date		*3/16/2000*	*6/13/2000*	*9/22/2000*	*12/20/2000*	*3/21/2001*	*6/13/2001*	*9/13/2001*	*3/28/2002*	*6/26/2002*	*6/26/2002*	*9/26/2002*	*12/9/2002*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
											Duplicate		
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*
Sample Identification		*3001152009~03/16/00*	*3002633009~06/13/00*	*E261225~09/22/00*	*E268212~12/20/00*	*E274380~03/21/01*	*E281016~06/13/01*	*E287756~09/13/01*	*GW--032802-TJ-007*	*GW-062602-JB-023*	*GW-062602-JB-024*	*GW-092602-JB-054*	*GW-17360-120902-JB-074*
Sample Date		*3/16/2000*	*6/13/2000*	*9/22/2000*	*12/20/2000*	*3/21/2001*	*6/13/2001*	*9/13/2001*	*3/28/2002*	*6/26/2002*	*6/26/2002*	*9/26/2002*	*12/9/2002*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
											Duplicate		
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds													
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--
1,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*
Sample Identification		*3001152009~03/16/00*	*3002633009~06/13/00*	*E261225~09/22/00*	*E268212~12/20/00*	*E274380~03/21/01*	*E281016~06/13/01*	*E287756~09/13/01*	*GW--032802-TJ-007*	*GW-062602-JB-023*	*GW-062602-JB-024*	*GW-092602-JB-054*	*GW-17360-120902-JB-074*
Sample Date		*3/16/2000*	*6/13/2000*	*9/22/2000*	*12/20/2000*	*3/21/2001*	*6/13/2001*	*9/13/2001*	*3/28/2002*	*6/26/2002*	*6/26/2002*	*9/26/2002*	*12/9/2002*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
											Duplicate		
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
cis-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/L	0.001 U	0.001 U	0.0012	0.0015	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane (CFC-11)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
General Chemistry													
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*
Sample Identification		*GW-17360-120902-JB-075*	*GW-17360-032103-JB-095*	*GW-17360-071503-SP-055*	*GW-17360-071503-SP-056*	*GW-17360-100203-JB-086*	*GW-17360-100203-JB-087*	*GW-17360-121703-JB-100*	*GW-17360-031604-BW-143*	*GW-17360-081004-DCR-208*	*GW-17360-100504-DCR-257*	*GW-17360-120104-DCR-301*	*GW-17360-040605-DCR-353*
Sample Date		*12/9/2002*	*3/21/2003*	*7/15/2003*	*7/15/2003*	*10/2/2003*	*10/2/2003*	*12/18/2003*	*3/16/2004*	*8/10/2004*	*10/5/2004*	*12/1/2004*	*4/6/2005*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*Duplicate* *AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*Duplicate* *AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*Duplicate* *AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	--	--	0.0005 U	0.0005 U	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	0.0005 U	0.0005 U	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	0.0005 U	0.0005 U	--	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	--	--	100	109	--	--	--	--	--	--	--	131
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.11 U
Magnesium	mg/L	--	--	21.2	23.1	--	--	--	--	--	--	--	26.3
Manganese	mg/L	--	--	0.015 U	0.015 U	--	--	--	--	--	--	--	0.015 U
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		85-7	85-7	85-7	85-7	85-7	85-7	85-7	85-7	85-7	85-7	85-7	85-7	85-7
Sample Identification		GW-17360-120902-JB-075	GW-17360-032103-JB-095	GW-17360-071503-SP-055	GW-17360-071503-SP-056	GW-17360-100203-JB-086	GW-17360-100203-JB-087	GW-17360-121703-JB-100	GW-17360-031604-BW-143	GW-17360-081004-DCR-208	GW-17360-100504-DCR-257	GW-17360-120104-DCR-301	GW-17360-040605-DCR-353	
Sample Date		12/9/2002	3/21/2003	7/15/2003	7/15/2003	10/2/2003	10/2/2003	12/18/2003	3/16/2004	8/10/2004	10/5/2004	12/1/2004	4/6/2005	
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	
AOI		Duplicate AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	Duplicate AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	Duplicate AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	
	Units													
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Volatile Organic Compounds														
1,1,1-Trichloroethane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,1,2,2-Tetrachloroethane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,1,2-Trichloroethane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,1-Dichloroethane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,1-Dichloroethene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2,4-Trichlorobenzene	mg/L	--	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,2-Dichlorobenzene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,2-Dichloroethane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,2-Dichloroethene (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2-Dichloropropane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,3-Dichlorobenzene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,4-Dichlorobenzene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	0.025 U	0.025 U	0.025 UJ	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
2-Hexanone	mg/L	--	--	0.05 U	0.05 U	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	0.05 U	0.05 U	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	
Acetone	mg/L	--	--	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Benzene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Bromodichloromethane	mg/L	--	--	0.00032 J	0.001 U	0.00039 J	0.0004 J	0.00033 J	0.00042 J	0.00041 J	0.00047 J	0.00052 J	0.00053 J	
Bromoform	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Bromomethane (Methyl bromide)	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	
Carbon disulfide	mg/L	--	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Carbon tetrachloride	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Chlorobenzene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Chloroethane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	
Chloroform (Trichloromethane)	mg/L	--	--	0.002	0.0021	0.0027	0.0026	0.0022 J	0.0027	0.0027	0.0035	0.0035	0.0032	
Chloromethane (Methyl chloride)	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*
Sample Identification		*GW-17360-120902-JB-075*	*GW-17360-032103-JB-095*	*GW-17360-071503-SP-055*	*GW-17360-071503-SP-056*	*GW-17360-100203-JB-086*	*GW-17360-100203-JB-087*	*GW-17360-121703-JB-100*	*GW-17360-031604-BW-143*	*GW-17360-081004-DCR-208*	*GW-17360-100504-DCR-257*	*GW-17360-120104-DCR-301*	*GW-17360-040605-DCR-353*
Sample Date		*12/9/2002*	*3/21/2003*	*7/15/2003*	*7/15/2003*	*10/2/2003*	*10/2/2003*	*12/18/2003*	*3/16/2004*	*8/10/2004*	*10/5/2004*	*12/1/2004*	*4/6/2005*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*Duplicate AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*Duplicate AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*Duplicate AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
cis-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	0.01 U	0.01 U	0.01 UJ	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether (MTBE)	mg/L	--	--	0.005 U	0.005 U	0.00021 J	0.00023 J	0.005 UJ	0.00021 J	0.005 U	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	--	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ
Trichloroethene	mg/L	0.001 U	0.0011	0.00079 J	0.00088 J	0.00093 J	0.0009 J	0.00086 J	0.00072 J	0.00068 J	0.00077 J	0.00081 J	0.00078 J
Trichlorofluoromethane (CFC-11)	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	--	--	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.002 U
General Chemistry													
Alkalinity, total (as CaCO3)	mg/L	--	--	250	250	--	--	--	--	--	--	--	255
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	2.0 U
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	2 U
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	13 J
Chloride	mg/L	--	--	**253**[ID]	244	--	--	--	--	--	--	--	**651**[ID]
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	1
Hardness	mg/L	--	--	450	460	--	--	--	--	--	--	--	500
Nitrate (as N)	mg/L	--	--	9.7 J	9.5 J	--	--	--	--	--	--	--	6.8
Nitrite (as N)	mg/L	--	--	0.10 U	0.10 U	--	--	--	--	--	--	--	0.10 U
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.50 U
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.1 U
Sulfate	mg/L	--	--	45.2	45.3	--	--	--	--	--	--	--	47.2
Sulfide	mg/L	--	--	1.2 J	1.2 J	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	1 U
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	3 U
Total organic carbon (TOC)	mg/L	--	--	3	2	--	--	--	--	--	--	--	1
pH	none	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
[1] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*86-1*
Sample Identification		*GW-17360-062805-DCR-382*	*GW-17360-120605-DCR-571*	*GW-17360-120605-DCR-572*	*GW-17360-091206-JY-032*	*GW-17360-050907-JY-076*	*GW-17360-101607-DR-120*	*GW-17360-042208-DR-161*	*GW-17360-100708-DR-210*	*GW-17360-040609-DR-240*	*GW-17360-100609-DR-281*	*GW-17360-101210-BW-074*	*86-1~050586*
Sample Date		*6/28/2005*	*12/6/2005*	*12/6/2005*	*9/12/2006*	*5/9/2007*	*10/16/2007*	*4/22/2008*	*10/7/2008*	*4/6/2009*	*10/6/2009*	*10/12/2010*	*5/5/1986*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
				Duplicate									
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	--	139	132	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	0.10 U	0.10 U	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	29.8	28.2	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	0.00075 J	0.00082 J	--	--	--	--	--	--	--	--	--
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		85-7	85-7	85-7	85-7	85-7	85-7	85-7	85-7	85-7	85-7	85-7	86-1
Sample Identification		GW-17360-062805-DCR-382	GW-17360-120605-DCR-571	GW-17360-120605-DCR-572	GW-17360-091206-JY-032	GW-17360-050907-JY-076	GW-17360-101607-DR-120	GW-17360-042208-DR-161	GW-17360-100708-DR-210	GW-17360-040609-DR-240	GW-17360-100609-DR-281	GW-17360-101210-BW-074	86-1~050586
Sample Date		6/28/2005	12/6/2005	12/6/2005	9/12/2006	5/9/2007	10/16/2007	4/22/2008	10/7/2008	4/6/2009	10/6/2009	10/12/2010	5/5/1986
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
				Duplicate									
AOI		AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1
	Units												
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds													
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 U	0.002 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00039 J	0.001 U	0.002 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U
1,2-Dichloroethene (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.01 U
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	--
Acetone	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	0.00037 J	0.00026 J	0.00027 J	0.00017 J	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 UJ	0.001 U	0.002 U
Bromoform	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.015 U
Bromomethane (Methyl bromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.01 U
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	--
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.004 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.01 U
Chloroform (Trichloromethane)	mg/L	0.0028	0.0021	0.0021 J	0.0019	0.0007 J	0.00016 J	0.001 U	0.00021 J	0.001 U	0.001 U	0.001 U	0.001 U
Chloromethane (Methyl chloride)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.01 U

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*85-7*	*86-1*
Sample Identification		*GW-17360-062805-DCR-382*	*GW-17360-120605-DCR-571*	*GW-17360-120605-DCR-572*	*GW-17360-091206-JY-032*	*GW-17360-050907-JY-076*	*GW-17360-101607-DR-120*	*GW-17360-042208-DR-161*	*GW-17360-100708-DR-210*	*GW-17360-040609-DR-240*	*GW-17360-100609-DR-281*	*GW-17360-101210-BW-074*	*86-1~050586*
Sample Date		*6/28/2005*	*12/6/2005*	*12/6/2005*	*9/12/2006*	*5/9/2007*	*10/16/2007*	*4/22/2008*	*10/7/2008*	*4/6/2009*	*10/6/2009*	*10/12/2010*	*5/5/1986*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
				Duplicate									
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*
	Units												
cis-1,2-Dichloroethene	mg/L	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00039 J	0.0027	0.00036 J	--
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.004 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--
Dibromochloromethane	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.003 U
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	--
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--
Methyl tert butyl ether (MTBE)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	--
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.002 U
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00038 J	0.001 U	0.002 U
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.004 U
Trichloroethene	mg/L	0.0007 J	0.0005 J	0.00054 J	0.00048 J	0.00035 J	0.00051 J	0.00058 J	0.001	0.0013	0.0025	0.0028	0.002 U
Trichlorofluoromethane (CFC-11)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.003 U
Trifluorotrichloroethane (Freon 113)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	--
Vinyl chloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.01 U
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.002 UJ	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--
General Chemistry													
Alkalinity, total (as CaCO3)	mg/L	--	281	277	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	0.87 J	2.0 U	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	2 U	2 U	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	22	14 J	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	**1040**[a]	**1080 J**[a]	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	2	2	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	460	480	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	8.3	8.4	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	2.0 U	2.0 U	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	0.50 UJ	0.50 UJ	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	0.1 U	0.1 U	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	59.6	59.9	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	1 U	1 U	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	3 U	3 U	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	2	2	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
[1] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		86-1	86-1	86-1	86-1	86-1	86-1	86-1	86-1	86-1	86-1	86-1	86-1
Sample Identification		GW-17360-100703-JB-098	GW-17360-121703-JB-099	GW-17360-031704-JB-150	GW-17360-031704-JB-151	GW-17360-080904-DCR-197	GW-17360-100604-DCR-267	GW-17360-120204-DCR-316	GW-17360-120204-DCR-317	GW-17360-040605-DCR-354	GW-17360-040605-DCR-355	GW-17360-062805-DCR-387	GW-17360-120505-DCR-563
Sample Date		10/7/2003	12/18/2003	3/17/2004	3/17/2004	8/9/2004	10/6/2004	12/2/2004	12/2/2004	4/6/2005	4/6/2005	6/28/2005	12/5/2005
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	Duplicate AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	Duplicate AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	Duplicate AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ
2,4,5-Trichlorophenol	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2,4,6-Trichlorophenol	mg/L	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
2,4-Dichlorophenol	mg/L	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2,4-Dimethylphenol	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2,4-Dinitrophenol	mg/L	0.02 UJ	0.02 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
2,4-Dinitrotoluene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2,6-Dinitrotoluene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Chloronaphthalene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Chlorophenol	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Methylnaphthalene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Methylphenol	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Nitroaniline	mg/L	0.02 U	0.02 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
2-Nitrophenol	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
3,3'-Dichlorobenzidine	mg/L	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
3-Nitroaniline	mg/L	0.02 U	0.02 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4,6-Dinitro-2-methylphenol	mg/L	0.02 UJ	0.02 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4-Bromophenyl phenyl ether	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
4-Chloro-3-methylphenol	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
4-Chloroaniline	mg/L	0.02 U	0.02 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4-Chlorophenyl phenyl ether	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
4-Methylphenol	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
4-Nitroaniline	mg/L	0.02 U	0.02 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4-Nitrophenol	mg/L	0.02 U	0.02 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Acenaphthene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Acenaphthylene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Acetophenone	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Anthracene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Atrazine	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Benzaldehyde	mg/L	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.001 U	0.001 U	0.001 U	0.001 U
Benzo(a)pyrene	mg/L	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.002 U	0.002 U	0.002 U	0.002 U
Benzo(b)fluoranthene	mg/L	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.002 U	0.002 U	0.002 U	0.002 U
Benzo(g,h,i)perylene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Benzo(k)fluoranthene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Biphenyl (1,1-Biphenyl)	mg/L	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
bis(2-Chloroethoxy)methane	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
bis(2-Chloroethyl)ether	mg/L	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 UJ
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	0.005	0.00097 J	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*
Sample Identification		*GW-17360-100703-JB-098*	*GW-17360-121703-JB-099*	*GW-17360-031704-JB-150*	*GW-17360-031704-JB-151*	*GW-17360-080904-DCR-197*	*GW-17360-100604-DCR-267*	*GW-17360-120204-DCR-316*	*GW-17360-120204-DCR-317*	*GW-17360-040605-DCR-354*	*GW-17360-040605-DCR-355*	*GW-17360-062805-DCR-387*	*GW-17360-120505-DCR-563*	
Sample Date		*10/7/2003*	*12/18/2003*	*3/17/2004*	*3/17/2004*	*8/9/2004*	*10/6/2004*	*12/2/2004*	*12/2/2004*	*4/6/2005*	*4/6/2005*	*6/28/2005*	*12/5/2005*	
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	
					Duplicate				*Duplicate*		*Duplicate*			
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	
	Units													
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Butyl benzylphthalate (BBP)	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Caprolactam	mg/L	0.012	0.01 U	0.047	0.032	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0018 J	
Carbazole	mg/L	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Chrysene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Dibenz(a,h)anthracene	mg/L	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.002 U	0.002 U	0.002 U	0.002 U	
Dibenzofuran	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Diethyl phthalate	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Dimethyl phthalate	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Di-n-butylphthalate (DBP)	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Di-n-octyl phthalate (DnOP)	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Fluoranthene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Fluorene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Hexachlorobenzene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Hexachlorobutadiene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	
Hexachlorocyclopentadiene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	R	R	
Hexachloroethane	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	
Indeno(1,2,3-cd)pyrene	mg/L	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.002 U	0.002 U	0.002 U	0.002 U	
Isophorone	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Naphthalene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Nitrobenzene	mg/L	0.004 U	0.004 U	0.01 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Nitrosodi-n-propylamine	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
N-Nitrosodiphenylamine	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Pentachlorophenol	mg/L	0.02 U	0.02 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	
Phenanthrene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Phenol	mg/L	0.0016 J	0.0013 J	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Pyrene	mg/L	0.005 U	0.005 U	0.012 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Volatile Organic Compounds														
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,1,1-Trichloroethane	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	--	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,1,2-Trichloroethane	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,1-Dichloroethane	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,1-Dichloroethene	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2,4-Trichlorobenzene	mg/L	0.005 UJ	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 UJ	0.005 UJ	0.005 U	
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,2-Dichlorobenzene	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,2-Dichloroethane	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	
1,2-Dichloroethene (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,2-Dichloropropane	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,3-Dichlorobenzene	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
1,4-Dichlorobenzene	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.025 UJ	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
2-Hexanone	mg/L	0.05 UJ	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 UJ	0.05 U	0.05 U	
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.05 UJ	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 UJ	0.05 UJ	0.05 U	
Acetone	mg/L	0.025 UJ	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 UJ	
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Benzene	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Bromodichloromethane	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	
Bromoform	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	
Bromomethane (Methyl bromide)	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	
Carbon disulfide	mg/L	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Carbon tetrachloride	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	
Chlorobenzene	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Chloroethane	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	
Chloroform (Trichloromethane)	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Chloromethane (Methyl chloride)	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*
Sample Identification		*GW-17360-100703-JB-098*	*GW-17360-121703-JB-099*	*GW-17360-031704-JB-150*	*GW-17360-031704-JB-151*	*GW-17360-080904-DCR-197*	*GW-17360-100604-DCR-267*	*GW-17360-120204-DCR-316*	*GW-17360-120204-DCR-317*	*GW-17360-040605-DCR-354*	*GW-17360-040605-DCR-355*	*GW-17360-062805-DCR-387*	*GW-17360-120505-DCR-563*	
Sample Date		*10/7/2003*	*12/18/2003*	*3/17/2004*	*3/17/2004*	*8/9/2004*	*10/6/2004*	*12/2/2004*	*12/2/2004*	*4/6/2005*	*4/6/2005*	*6/28/2005*	*12/5/2005*	
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	
					Duplicate				*Duplicate*		*Duplicate*			
AOI		*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	
	Units													
cis-1,2-Dichloroethene	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
cis-1,3-Dichloropropene	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	
Cyclohexane	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Dibromochloromethane	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dichlorodifluoromethane (CFC-12)	mg/L	0.001 U	--	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Ethylbenzene	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Isopropyl benzene	mg/L	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Methyl acetate	mg/L	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Methyl cyclohexane	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	
Methyl tert butyl ether (MTBE)	mg/L	0.005 U	--	0.00038 J	0.00037 J	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Methylene chloride	mg/L	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 UJ	0.005 U	0.005 U	
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Styrene	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Tetrachloroethene	mg/L	0.001 U	--	0.001 U	0.00026 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00024 J	0.001 U	0.00022 J	
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Toluene	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
trans-1,2-Dichloroethene	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
trans-1,3-Dichloropropene	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	
Trichloroethene	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Trichlorofluoromethane (CFC-11)	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	
Trifluorotrichloroethane (Freon 113)	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Vinyl chloride	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Xylenes (total)	mg/L	0.003 U	--	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.002 U	0.002 U	0.002 U	0.002 U	
General Chemistry														
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	

Notes:
[1] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-2*	*86-2*
Sample Identification		*GW-17360-091306-JY-042*	*GW-17360-091306-JY-043*	*GW-17360-051007-JY-085*	*GW-17360-101607-DR-126*	*GW-17360-042308-DR-174*	*GW-17360-100808-DR-223*	*GW-17360-040809-DR-269*	*GW-17360-040809-DR-270*	*GW-17360-100709-DR-294*	*GW-17360-101210-BW-085*	*GW-17360-100709-DR-298*	*GW-17360-101210-BW-077*
Sample Date		*9/13/2006*	*9/13/2006*	*5/10/2007*	*10/16/2007*	*4/23/2008*	*10/8/2008*	*4/8/2009*	*4/8/2009*	*10/7/2009*	*10/12/2010*	*10/7/2009*	*10/12/2010*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*Duplicate AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*Duplicate AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units												
Alcohols													
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Gas													
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Metals													
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds													
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
2,4,5-Trichlorophenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
2,4,6-Trichlorophenol	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	--
2,4-Dichlorophenol	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
2,4-Dimethylphenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
2,4-Dinitrophenol	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--
2,4-Dinitrotoluene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
2,6-Dinitrotoluene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
2-Chloronaphthalene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
2-Chlorophenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
2-Methylnaphthalene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
2-Methylphenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
2-Nitroaniline	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--
2-Nitrophenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
3,3'-Dichlorobenzidine	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	--
3-Nitroaniline	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--
4,6-Dinitro-2-methylphenol	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--
4-Bromophenyl phenyl ether	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
4-Chloro-3-methylphenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
4-Chloroaniline	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--
4-Chlorophenyl phenyl ether	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
4-Methylphenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
4-Nitroaniline	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--
4-Nitrophenol	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--
Acenaphthene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Acenaphthylene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Acetophenone	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Anthracene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Atrazine	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Benzaldehyde	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
Benzo(a)pyrene	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--	--
Benzo(b)fluoranthene	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--	--
Benzo(g,h,i)perylene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Benzo(k)fluoranthene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Biphenyl (1,1-Biphenyl)	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
bis(2-Chloroethoxy)methane	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
bis(2-Chloroethyl)ether	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		86-1	86-1	86-1	86-1	86-1	86-1	86-1	86-1	86-1	86-1	86-2	86-2
Sample Identification		GW-17360-091306-JY-042	GW-17360-091306-JY-043	GW-17360-051007-JY-085	GW-17360-101607-DR-126	GW-17360-042308-DR-174	GW-17360-100808-DR-223	GW-17360-040809-DR-269	GW-17360-040809-DR-270	GW-17360-100709-DR-294	GW-17360-101210-BW-085	GW-17360-100709-DR-298	GW-17360-101210-BW-077
Sample Date		9/13/2006	9/13/2006	5/10/2007	10/16/2007	4/23/2008	10/8/2008	4/8/2009	4/8/2009	10/7/2009	10/12/2010	10/7/2009	10/12/2010
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
			Duplicate						Duplicate				
AOI		AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 6, AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
	Units												
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Caprolactam	mg/L	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	--	--
Carbazole	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
Chrysene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Dibenz(a,h)anthracene	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--	--
Dibenzofuran	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Diethyl phthalate	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Dimethyl phthalate	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Di-n-butylphthalate (DBP)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Di-n-octyl phthalate (DnOP)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Fluoranthene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Fluorene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Hexachlorobenzene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Hexachlorobutadiene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Hexachlorocyclopentadiene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Hexachloroethane	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Indeno(1,2,3-cd)pyrene	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--	--
Isophorone	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Naphthalene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Nitrobenzene	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
N-Nitrosodiphenylamine	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Pentachlorophenol	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--
Phenanthrene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Phenol	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Pyrene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds													
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 UJ	0.005 U
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethene (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Acetone	mg/L	0.025 U	0.025 U	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane (Methyl bromide)	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ
Chloroform (Trichloromethane)	mg/L	0.001 U	0.001 U	0.001 U	0.00031 J	0.001 UJ	0.001 U	0.001 U	0.001 U	0.00042 J	0.00023 J	0.00053 J	0.00054 J
Chloromethane (Methyl chloride)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-1*	*86-2*	*86-2*
Sample Identification		*GW-17360-091306-JY-042*	*GW-17360-091306-JY-043*	*GW-17360-051007-JY-085*	*GW-17360-101607-DR-126*	*GW-17360-042308-DR-174*	*GW-17360-100808-DR-223*	*GW-17360-040809-DR-269*	*GW-17360-040809-DR-270*	*GW-17360-100709-DR-294*	*GW-17360-101210-BW-085*	*GW-17360-100709-DR-298*	*GW-17360-101210-BW-077*
Sample Date		*9/13/2006*	*9/13/2006*	*5/10/2007*	*10/16/2007*	*4/23/2008*	*10/8/2008*	*4/8/2009*	*4/8/2009*	*10/7/2009*	*10/12/2010*	*10/7/2009*	*10/12/2010*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 6, AOI 25, AOI 4.1*	*Duplicate AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*Duplicate AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 6, AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units												
cis-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 U
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 U
Methyl tert butyl ether (MTBE)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.00026 J	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 UJ
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.0061** [1]	**0.0065** [1]
Trichlorofluoromethane (CFC-11)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane (Freon 113)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 U
Vinyl chloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 UJ	0.002 UJ	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
General Chemistry													
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
[1] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*
Sample Identification		*E62229~05/05/86*	*E70824~01/21/87*	*86-3~012387*	*E91243~06/08/88*	*E11592~12/21/88*	*E15518~03/16/89*	*E21116~06/15/89*	*E25595~09/20/89*	*E30997~12/21/89*	*E35817~03/16/90*	*E42011~06/18/90*	*E48215~09/14/90*	*E54822~12/17/90*	*E59923~03/11/91*
Sample Date		*5/5/1986*	*1/21/1987*	*1/23/1987*	*6/8/1988*	*12/21/1988*	*3/16/1989*	*6/15/1989*	*9/20/1989*	*12/21/1989*	*3/16/1990*	*6/18/1990*	*9/14/1990*	*12/17/1990*	*3/11/1991*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*
	Units														
Alcohols															
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas															
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	**2.8**[ab]	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds															
1,2,4-Trichlorobenzene	mg/L	--	--	0.003 U	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	0.003 U	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	0.001 U	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	0.003 U	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	0.003 U	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	0.001 U	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	0.005 U	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	0.05 U	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	0.01 U	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	0.009 U	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	0.002 U	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	0.002 U	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	0.005 U	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	0.02 U	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	0.007 U	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	0.004 U	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	0.003 U	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	0.015 U	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	0.002 U	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	0.001 U	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	0.001 U	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	0.05 U	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	0.005 U	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	0.005 U	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	0.01 U	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	0.005 U	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	0.004 U	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	0.004 U	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	**0.026**[ab]	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3
Sample Identification		E62229~05/05/86	E70824~01/21/87	86-3~012387	E91243~06/08/88	E11592~12/21/88	E15518~03/16/89	E21116~06/15/89	E25595~09/20/89	E30997~12/21/89	E35817~03/16/90	E42011~06/18/90	E48215~09/14/90	E54822~12/17/90	E59923~03/11/91
Sample Date		5/5/1986	1/21/1987	1/23/1987	6/8/1988	12/21/1988	3/16/1989	6/15/1989	9/20/1989	12/21/1989	3/16/1990	6/18/1990	9/14/1990	12/17/1990	3/11/1991
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3
	Units														
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	0.003 U	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	0.005 U	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/L	--	--	0.01 U	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	0.002 U	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	0.002 U	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	0.001 U	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	0.002 U	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	0.001 U	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	0.002 U	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	0.005 U	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	0.005 U	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	0.005 U	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	0.007 U	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	0.01 U	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	0.002 U	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	0.001 U	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	0.004 U	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	0.004 U	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	0.003 U	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	0.02 U	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	0.001 U	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	0.002 U	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	0.001 U	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	0.011	0.006	--	0.002 U	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	0.01 U	0.002 U	--	0.002 U	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	0.015 U	0.003 U	--	0.003 U	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	0.002 U	0.002 U	--	0.002 U	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	0.01 U	0.002 U	--	0.002 U	--	--	--	--	0.01 U	--	--	--	0.004 U	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	0.01 U	0.002 U	--	0.002 U	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	--	--	--	--	0.02 U	0.01 U	0.001 U	0.007	0.015	0.01 U	0.01 U	0.004	0.004	0.002 U
1,2-Dichloropropane	mg/L	0.015 U	0.003 U	--	0.003 U	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	0.01 U	0.01 U	--	0.001 U	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	0.001 U	0.001 U	--	0.001 U	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	0.002 U	0.002 U	--	0.002 U	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	0.015 U	0.015 U	--	0.015 U	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	0.05 U	0.01 U	--	0.01 U	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	0.004 U	0.004 U	--	0.004 U	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	0.001 U	0.001 U	--	0.001 U	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	0.05 U	0.01 U	--	0.01 U	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	0.005 U	0.001 U	--	0.01 U	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	0.01 U	0.01 U	--	0.01 U	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3
Sample Identification		E62229~05/05/86	E70824~01/21/87	86-3~012387	E91243~06/08/88	E11592~12/21/88	E15518~03/16/89	E21116~06/15/89	E25595~09/20/89	E30997~12/21/89	E35817~03/16/90	E42011~06/18/90	E48215~09/14/90	E54822~12/17/90	E59923~03/11/91
Sample Date		5/5/1986	1/21/1987	1/23/1987	6/8/1988	12/21/1988	3/16/1989	6/15/1989	9/20/1989	12/21/1989	3/16/1990	6/18/1990	9/14/1990	12/17/1990	3/11/1991
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3
	Units														
cis-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	0.02 U	0.004 U	--	0.004 U	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	0.015 U	0.003 U	--	0.003 U	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	0.005 U	0.001 U	--	0.001 U	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/L	0.01 U	0.002 U	--	0.002 U	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	0.01 U	0.002 U	--	0.002 U	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	0.001 U	0.001 U	--	0.001 U	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/L	0.01	0.004	--	0.01	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/L	0.02 U	0.004 U	--	0.004 U	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/L	**1.4**[ADC]	**0.34**[ADC]	--	**0.17**[AD]	**0.63**[ADC]	**0.38**[ADC]	**0.15**[AD]	**0.13**[AD]	**0.43**[ADC]	**0.44**[ADC]	**0.24**[ADC]	**0.21**[ADC]	**0.15**[AD]	**0.094**[AD]
Trichlorofluoromethane (CFC-11)	mg/L	0.003 U	0.003 U	--	0.003 U	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/L	0.05 U	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--	--	--	0.02 U	--
Xylenes (total)	mg/L	--	0.01 U	--	0.01 U	--	--	--	--	--	--	--	--	--	--
General Chemistry															
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	360	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	1.7	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	7.82	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
[(1)] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3
Sample Identification		E67555~06/13/91	E72977~09/13/91	E07651~12/13/91	E15388~03/13/92	E23261~06/12/92	E31916~09/11/92	E40332~12/10/92	E47625~03/11/93	E56583~06/15/93	E69399~10/19/93	E75751~12/17/93	E81241~03/16/94	E89393~06/14/94	E97440~09/14/94
Sample Date		6/13/1991	9/13/1991	12/13/1991	3/13/1992	6/12/1992	9/11/1992	12/10/1992	3/11/1993	6/15/1993	10/19/1993	12/17/1993	3/16/1994	6/14/1994	9/14/1994
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3
	Units														
Alcohols															
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas															
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds															
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3
Sample Identification		E67555~06/13/91	E72977~09/13/91	E07651~12/13/91	E15388~03/13/92	E23261~06/12/92	E31916~09/11/92	E40332~12/10/92	E47625~03/11/93	E56583~06/15/93	E69399~10/19/93	E75751~12/17/93	E81241~03/16/94	E89393~06/14/94	E97440~09/14/94
Sample Date		6/13/1991	9/13/1991	12/13/1991	3/13/1992	6/12/1992	9/11/1992	12/10/1992	3/11/1993	6/15/1993	10/19/1993	12/17/1993	3/16/1994	6/14/1994	9/14/1994
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3
	Units														
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	--	--	0.002 U	--	--	--	0.001 U	--	--	--	0.002 U	--	--	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	0.002	0.011	0.013	0.019	0.0086	0.0064	0.003	0.002 U	0.003	0.0018	0.0091	0.0034	0.0021	0.001
1,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*
Sample Identification		*E67555~06/13/91*	*E72977~09/13/91*	*E07651~12/13/91*	*E15388~03/13/92*	*E23261~06/12/92*	*E31916~09/11/92*	*E40332~12/10/92*	*E47625~03/11/93*	*E56583~06/15/93*	*E69399~10/19/93*	*E75751~12/17/93*	*E81241~03/16/94*	*E89393~06/14/94*	*E97440~09/14/94*
Sample Date		*6/13/1991*	*9/13/1991*	*12/13/1991*	*3/13/1992*	*6/12/1992*	*9/11/1992*	*12/10/1992*	*3/11/1993*	*6/15/1993*	*10/19/1993*	*12/17/1993*	*3/16/1994*	*6/14/1994*	*9/14/1994*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*
	Units														
cis-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/L	**0.056[1]**	**0.058[1]**	**0.073[1]**	**0.099[1]**	**0.14[1]**	**0.088[1]**	**0.11[1]**	**0.072[1]**	**0.07[1]**	**0.04[1]**	**0.046[1]**	**0.057[1]**	**0.053[1]**	**0.044[1]**
Trichlorofluoromethane (CFC-11)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/L	--	--	0.002 U	--	--	--	0.001 U	--	--	--	0.002 U	--	--	--
Xylenes (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
General Chemistry															
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
[1] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3
Sample Identification		E106407~12/16/94	E112959~03/17/95	E120795~06/20/95	E127390~09/14/95	E134976~12/18/95	E139846~03/19/96	E146843~06/13/96	E154127~09/13/96	E161534~12/13/96	E166219~03/13/97	E172385~06/19/97	E177752~09/11/97	E184905~12/16/97	E190817~03/12/98
Sample Date		12/16/1994	3/17/1995	6/20/1995	9/14/1995	12/18/1995	3/19/1996	6/13/1996	9/13/1996	12/13/1996	3/13/1997	6/19/1997	9/11/1997	12/16/1997	3/12/1998
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3
	Units														
Alcohols															
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas															
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals															
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds															
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3
Sample Identification		E106407~12/16/94	E112959~03/17/95	E120795~06/20/95	E127390~09/14/95	E134976~12/18/95	E139846~03/19/96	E146843~06/13/96	E154127~09/13/96	E161534~12/13/96	E166219~03/13/97	E172385~06/19/97	E177752~09/11/97	E184905~12/16/97	E190817~03/12/98
Sample Date		12/16/1994	3/17/1995	6/20/1995	9/14/1995	12/18/1995	3/19/1996	6/13/1996	9/13/1996	12/13/1996	3/13/1997	6/19/1997	9/11/1997	12/16/1997	3/12/1998
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3
	Units														
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	0.001 U	--	--	--	0.001 U	--	--	--	0.001 U	--	--	--	0.001 U	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	0.001 U	0.0024	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0012	0.001 U
1,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*
Sample Identification		*E106407~12/16/94*	*E112959~03/17/95*	*E120795~06/20/95*	*E127390~09/14/95*	*E134976~12/18/95*	*E139846~03/19/96*	*E146843~06/13/96*	*E154127~09/13/96*	*E161534~12/13/96*	*E166219~03/13/97*	*E172385~06/19/97*	*E177752~09/11/97*	*E184905~12/16/97*	*E190817~03/12/98*
Sample Date		*12/16/1994*	*3/17/1995*	*6/20/1995*	*9/14/1995*	*12/18/1995*	*3/19/1996*	*6/13/1996*	*9/13/1996*	*12/13/1996*	*3/13/1997*	*6/19/1997*	*9/11/1997*	*12/16/1997*	*3/12/1998*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*
	Units														
cis-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/L	**0.032[40]**	**0.027[40]**	**0.031[40]**	**0.024[40]**	**0.016[40]**	**0.01[40]**	**0.015[40]**	**0.021[40]**	**0.01[40]**	**0.011[40]**	**0.016[40]**	**0.014[40]**	**0.011[40]**	**0.0052[40]**
Trichlorofluoromethane (CFC-11)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/L	0.001 U	--	--	--	0.001 U	--	--	--	0.001 U	--	--	--	0.001 U	--
Xylenes (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
General Chemistry															
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
[(1)] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*86-3*	*86-3*
Sample Identification		*82953-3400~06/16/98*	*84367-8370~09/17/98*
Sample Date		*6/16/1998*	*9/17/1998*
Sample Depth		-	-
AOI		*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*
	Units		
Alcohols			
2-Ethanoxyethanol	mg/L	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--
Isopropyl alcohol	mg/L	--	--
Methanol	mg/L	--	--
Propylene glycol	mg/L	--	--
Gas			
Ethane	mg/L	--	--
Ethene	mg/L	--	--
Methane	mg/L	--	--
Metals			
Calcium	mg/L	--	--
Iron	mg/L	--	--
Iron (dissolved)	mg/L	--	--
Magnesium	mg/L	--	--
Manganese	mg/L	--	--
PCBs			
Aroclor-1016 (PCB-1016)	mg/kg	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--
Semi-Volatile Organic Compounds			
1,2,4-Trichlorobenzene	mg/L	--	--
1,2-Dichlorobenzene	mg/L	--	--
1,2-Diphenylhydrazine	mg/L	--	--
1,3-Dichlorobenzene	mg/L	--	--
1,4-Dichlorobenzene	mg/L	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--
2,4,5-Trichlorophenol	mg/L	--	--
2,4,6-Trichlorophenol	mg/L	--	--
2,4-Dichlorophenol	mg/L	--	--
2,4-Dimethylphenol	mg/L	--	--
2,4-Dinitrophenol	mg/L	--	--
2,4-Dinitrotoluene	mg/L	--	--
2,6-Dinitrotoluene	mg/L	--	--
2-Chloronaphthalene	mg/L	--	--
2-Chlorophenol	mg/L	--	--
2-Methylnaphthalene	mg/L	--	--
2-Methylphenol	mg/L	--	--
2-Nitroaniline	mg/L	--	--
2-Nitrophenol	mg/L	--	--
3,3'-Dichlorobenzidine	mg/L	--	--
3-Nitroaniline	mg/L	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--
4-Bromophenyl phenyl ether	mg/L	--	--
4-Chloro-3-methylphenol	mg/L	--	--
4-Chloroaniline	mg/L	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--
4-Methylphenol	mg/L	--	--
4-Nitroaniline	mg/L	--	--
4-Nitrophenol	mg/L	--	--
Acenaphthene	mg/L	--	--
Acenaphthylene	mg/L	--	--
Acetophenone	mg/L	--	--
Anthracene	mg/L	--	--
Atrazine	mg/L	--	--
Benzaldehyde	mg/L	--	--
Benzidine	mg/L	--	--
Benzo(a)anthracene	mg/L	--	--
Benzo(a)pyrene	mg/L	--	--
Benzo(b)fluoranthene	mg/L	--	--
Benzo(g,h,i)perylene	mg/L	--	--
Benzo(k)fluoranthene	mg/L	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--
bis(2-Chloroethyl)ether	mg/L	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*86-3*	*86-3*
Sample Identification		*82953-3400~06/16/98*	*84367-8370~09/17/98*
Sample Date		*6/16/1998*	*9/17/1998*
Sample Depth		-	-
AOI		*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*
	Units		
bis(Chloromethyl)ether	mg/L	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--
Caprolactam	mg/L	--	--
Carbazole	mg/L	--	--
Chrysene	mg/L	--	--
Dibenz(a,h)anthracene	mg/L	--	--
Dibenzofuran	mg/L	--	--
Diethyl phthalate	mg/L	--	--
Dimethyl phthalate	mg/L	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--
Fluoranthene	mg/L	--	--
Fluorene	mg/L	--	--
Hexachlorobenzene	mg/L	--	--
Hexachlorobutadiene	mg/L	--	--
Hexachlorocyclopentadiene	mg/L	--	--
Hexachloroethane	mg/L	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--
Isophorone	mg/L	--	--
Naphthalene	mg/L	--	--
Nitrobenzene	mg/L	--	--
N-Nitrosodimethylamine	mg/L	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--
N-Nitrosodiphenylamine	mg/L	--	--
Pentachlorophenol	mg/L	--	--
Phenanthrene	mg/L	--	--
Phenol	mg/L	--	--
Pyrene	mg/L	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--
Volatile Organic Compounds			
1,1,1,2-Tetrachloroethane	mg/L	--	--
1,1,1-Trichloroethane	mg/L	--	--
1,1,2,2-Tetrachloroethane	mg/L	--	--
1,1,2-Trichloroethane	mg/L	--	--
1,1-Dichloroethane	mg/L	--	--
1,1-Dichloroethene	mg/L	--	--
1,1-Dichloropropene	mg/L	--	--
1,2,3-Trichlorobenzene	mg/L	--	--
1,2,3-Trichloropropane	mg/L	--	--
1,2,4-Trichlorobenzene	mg/L	--	--
1,2,4-Trimethylbenzene	mg/L	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--
1,2-Dichlorobenzene	mg/L	--	--
1,2-Dichloroethane	mg/L	--	--
1,2-Dichloroethene (total)	mg/L	0.002 U	0.001 U
1,2-Dichloropropane	mg/L	--	--
1,3,5-Trimethylbenzene	mg/L	--	--
1,3-Dichlorobenzene	mg/L	--	--
1,3-Dichloropropane	mg/L	--	--
1,3-Dichloropropene	mg/L	--	--
1,4-Dichlorobenzene	mg/L	--	--
2,2-Dichloropropane	mg/L	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--
2-Chloroethyl vinyl ether	mg/L	--	--
2-Chlorotoluene	mg/L	--	--
2-Hexanone	mg/L	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--
4-Chlorotoluene	mg/L	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--
Acetone	mg/L	--	--
Acrylonitrile	mg/L	--	--
Benzene	mg/L	--	--
Benzyl chloride	mg/L	--	--
Bromobenzene	mg/L	--	--
Bromodichloromethane	mg/L	--	--
Bromoform	mg/L	--	--
Bromomethane (Methyl bromide)	mg/L	--	--
Carbon disulfide	mg/L	--	--
Carbon tetrachloride	mg/L	--	--
Chlorobenzene	mg/L	--	--
Chlorobromomethane	mg/L	--	--
Chloroethane	mg/L	--	--
Chloroform (Trichloromethane)	mg/L	--	--
Chloromethane (Methyl chloride)	mg/L	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*86-3*	*86-3*
Sample Identification		*82953-3400~06/16/98*	*84367-8370~09/17/98*
Sample Date		*6/16/1998*	*9/17/1998*
Sample Depth		-	-
AOI		*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*
	Units		
cis-1,2-Dichloroethene	mg/L	--	--
cis-1,2-Dichloropropene	mg/L	--	--
cis-1,3-Dichloropropene	mg/L	--	--
Cyclohexane	mg/L	--	--
Dibromochloromethane	mg/L	--	--
Dibromomethane	mg/L	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--
Ethyl ether	mg/L	--	--
Ethylbenzene	mg/L	--	--
Hexachlorobutadiene	mg/L	--	--
Hexane	mg/L	--	--
Isopropyl benzene	mg/L	--	--
Isopropyl toluene	mg/L	--	--
m&p-Xylenes	mg/L	--	--
Methyl acetate	mg/L	--	--
Methyl cyclohexane	mg/L	--	--
Methyl tert butyl ether (MTBE)	mg/L	--	--
Methylene chloride	mg/L	--	--
Naphthalene	mg/L	--	--
N-Butylbenzene	mg/L	--	--
N-Propylbenzene	mg/L	--	--
o-Xylene	mg/L	--	--
Styrene	mg/L	--	--
tert-Butylbenzene	mg/L	--	--
Tetrachloroethene	mg/L	--	--
Tetrahydrofuran	mg/L	--	--
Toluene	mg/L	--	--
trans-1,2-Dichloroethene	mg/L	--	--
trans-1,3-Dichloropropene	mg/L	--	--
Trichloroethene	mg/L	**0.009**[J]	0.004
Trichlorofluoromethane (CFC-11)	mg/L	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	--	--
Vinyl chloride	mg/L	--	--
Xylenes (total)	mg/L	--	--
General Chemistry			
Alkalinity, total (as CaCO3)	mg/L	--	--
Ammonia	mg/L	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--
Chemical oxygen demand (COD)	mg/L	--	--
Chloride	mg/L	--	--
Dissolved organic carbon (DOC)	mg/L	--	--
Hardness	mg/L	--	--
Nitrate (as N)	mg/L	--	--
Nitrite (as N)	mg/L	--	--
Oil and grease	mg/L	--	--
Orthophosphate	mg/L	--	--
pH (water)	s.u.	--	--
Phosphorus	mg/L	--	--
Sulfate	mg/L	--	--
Sulfide	mg/L	--	--
Sulfide (acid soluble)	mg/L	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--
Total organic carbon (TOC)	mg/L	--	--
pH	none	--	--
Reactive cyanide	mg/kg	--	--
Reactive sulfide	mg/kg	--	--

Notes:
[(1)] Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*
Sample Identification		*85755-2525~12/16/98*	*90995-6095~03/10/99*	*3990294016~06/15/99*	*3991971012~09/20/99*	*3993622010~12/16/99*	*3001152013~03/16/00*	*3002633014~06/13/00*	*E261233~09/22/00*	*E268215~12/20/00*	*E274391~03/21/01*	*E281021~06/14/01*	*E287759~09/13/01*	*GW--032802-TJ-013*	*GW-062602-JB-026*	*GW-092702-JB-059*
Sample Date		*12/16/1998*	*3/10/1999*	*6/15/1999*	*9/20/1999*	*12/16/1999*	*3/16/2000*	*6/13/2000*	*9/22/2000*	*12/20/2000*	*3/21/2001*	*6/14/2001*	*9/13/2001*	*3/28/2002*	*6/26/2002*	*9/27/2002*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*
	Units															
Alcohols																
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas																
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals																
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi - Volatile Organic Compounds																
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*
Sample Identification		*85755-2525~12/16/98*	*90995-6095~03/10/99*	*3990294016~06/15/99*	*3991971012~09/20/99*	*3993622010~12/16/99*	*3001152013~03/16/00*	*3002633014~06/13/00*	*E261233~09/22/00*	*E268215~12/20/00*	*E274391~03/21/01*	*E281021~06/14/01*	*E287759~09/13/01*	*GW--032802-TJ-013*	*GW-062602-JB-026*	*GW-092702-JB-059*
Sample Date		*12/16/1998*	*3/10/1999*	*6/15/1999*	*9/20/1999*	*12/16/1999*	*3/16/2000*	*6/13/2000*	*9/22/2000*	*12/20/2000*	*3/21/2001*	*6/14/2001*	*9/13/2001*	*3/28/2002*	*6/26/2002*	*9/27/2002*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*
	Units															
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	0.001 U	--	--	--	0.001 U	--	--	--	0.001 U	--	--	--	--	--	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--
1,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	0.0018	0.001 U	0.001 U
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3
Sample Identification		85755-2525~12/16/98	90995-6095~03/10/99	3990294016~06/15/99	3991971012~09/20/99	3993622010~12/16/99	3001152013~03/16/00	3002633014~06/13/00	E261233~09/22/00	E268215~12/20/00	E274391~03/21/01	E281021~06/14/01	E287759~09/13/01	GW--032802-TJ-013	GW-062602-JB-026	GW-092702-JB-059
Sample Date		12/16/1998	3/10/1999	6/15/1999	9/20/1999	12/16/1999	3/16/2000	6/13/2000	9/22/2000	12/20/2000	3/21/2001	6/14/2001	9/13/2001	3/28/2002	6/26/2002	9/27/2002
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3
	Units															
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/L	0.004	0.004	0.0046	0.0048	0.003	0.0024	0.0017	0.0034	0.0039	0.0039	**0.0052**[a,b]	**0.0057**[a,b]	**0.0087**[a,b]	0.0012	0.0019
Trichlorofluoromethane (CFC-11)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/L	0.001 U	--	--	--	0.001 U	--	--	--	0.001 U	--	--	--	--	--	--
Xylenes (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
General Chemistry																
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1,
updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*
Sample Identification		*GW-17360-010603-JB-088*	*GW-17360-032103-JB-097*	*GW-17360-071403-SP-053*	*GW-17360-093003-JB-073*	*GW-17360-121803-JB-104*	*GW-17360-031504-BW-132*	*GW-17360-081004-DCR-216*	*GW-17360-100504-DCR-253*	*GW-17360-120104-DCR-298*	*GW-17360-040505-DCR-341*	*GW-17360-062805-DCR-378*	*GW-17360-120305-DCR-554*	*GW-17360-091206-JY-028*	*GW-17360-050907-JY-074*	*GW-17360-101607-DR-115*
Sample Date		*1/6/2003*	*3/21/2003*	*7/14/2003*	*9/30/2003*	*12/18/2003*	*3/15/2004*	*8/10/2004*	*10/5/2004*	*12/1/2004*	*4/5/2005*	*6/28/2005*	*12/3/2005*	*9/12/2006*	*5/9/2007*	*10/16/2007*
Sample Depth		-	-	*(41.5-46.5) ft*	-	-	-	-	-	-	*(41.5-46.6) ft*	*(41.5-41.5) ft*	*(41.5-46.5) ft*	-	-	-
AOI		*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*
	Units															
Alcohols																
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas																
Ethane	mg/L	--	--	0.0005 U	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	0.0005 U	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	0.0005 U	--	--	--	--	--	--	--	--	--	--	--	--
Metals																
Calcium	mg/L	--	--	102	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	27.6	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	0.015 U	--	--	--	--	--	--	--	--	--	--	--	--
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi - Volatile Organic Compounds																
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*86-3*
Sample Identification		*GW-17360-010603-JB-088*	*GW-17360-032103-JB-097*	*GW-17360-071403-SP-053*	*GW-17360-093003-JB-073*	*GW-17360-121803-JB-104*	*GW-17360-031504-BW-132*	*GW-17360-081004-DCR-216*	*GW-17360-100504-DCR-253*	*GW-17360-120104-DCR-298*	*GW-17360-040505-DCR-341*	*GW-17360-062805-DCR-378*	*GW-17360-120305-DCR-554*	*GW-17360-091206-JY-028*	*GW-17360-050907-JY-074*	*GW-17360-101607-DR-115*
Sample Date		*1/6/2003*	*3/21/2003*	*7/14/2003*	*9/30/2003*	*12/18/2003*	*3/15/2004*	*8/10/2004*	*10/5/2004*	*12/1/2004*	*4/5/2005*	*6/28/2005*	*12/3/2005*	*9/12/2006*	*5/9/2007*	*10/16/2007*
Sample Depth		-	-	*(41.5-46.5) ft*	-	-	-	-	-	-	*(41.5-46.6) ft*	*(41.5-41.5) ft*	*(41.5-46.5) ft*	-	-	-
AOI		*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*
	Units															
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	--	--	0.001 U	0.00061 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00023 J
1,1-Dichloroethene	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethene (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	0.025 UJ	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.00054 J	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 UJ	0.05 U	0.05 U	0.05 U
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	0.05 U	0.05 U	0.00038 J	0.00051 J	0.05 U	0.05 U	0.00037 J	0.00036 J	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 U
Acetone	mg/L	--	--	0.025 UJ	0.025 UJ	0.025 UJ	0.0028 J	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.0017 J	0.025 U	0.025 UJ	0.025 U
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.0002 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	0.001 U	0.00044 J	0.00038 J	0.00023 J	0.00041 J	0.00032 J	0.00035 J	0.00018 J	0.001 UJ	0.00018 J	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 UJ	0.001 U
Bromomethane (Methyl bromide)	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	--	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform (Trichloromethane)	mg/L	--	--	0.0015	0.0027	0.0025	0.0018	0.0027	0.0029	0.002	0.0016 J	0.0019	0.0018	0.0016	0.00042 J	0.00029 J
Chloromethane (Methyl chloride)	mg/L	--	--	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00072 J	0.0011
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ
Cyclohexane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	0.001 UJ	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3	86-3
Sample Identification		GW-17360-010603-JB-088	GW-17360-032103-JB-097	GW-17360-071403-SP-053	GW-17360-093003-JB-073	GW-17360-121803-JB-104	GW-17360-031504-BW-132	GW-17360-081004-DCR-216	GW-17360-100504-DCR-253	GW-17360-120104-DCR-298	GW-17360-040505-DCR-341	GW-17360-062805-DCR-378	GW-17360-120305-DCR-554	GW-17360-091206-JY-028	GW-17360-050907-JY-074	GW-17360-101607-DR-115
Sample Date		1/6/2003	3/21/2003	7/14/2003	9/30/2003	12/18/2003	3/15/2004	8/10/2004	10/5/2004	12/1/2004	4/5/2005	6/28/2005	12/3/2005	9/12/2006	5/9/2007	10/16/2007
Sample Depth		-	-	(41.5-46.5) ft	-	-	-	-	-	-	(41.5-46.6) ft	(41.5-41.5) ft	(41.5-46.5) ft	-	-	-
AOI		AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3
	Units															
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U
Methyl tert butyl ether (MTBE)	mg/L	--	--	0.005 U	0.005 U	0.005 UJ	0.005 UJ	0.00024 J	0.00028 J	0.005 U	0.005 U	0.005 U	0.005 U	0.00019 J	0.005 U	0.005 U
Methylene chloride	mg/L	--	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.00025 J	0.00035 J
trans-1,3-Dichloropropene	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	**0.0052**[2b]	0.0047	0.0043	0.0022	0.0021	0.0014	0.0024	0.002	0.00099 J	0.00089 J	0.0011	0.00068 J	0.0018	0.0046	**0.0054**[2b]
Trichlorofluoromethane (CFC-11)	mg/L	--	--	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	--	--	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.002 U	0.002 U	0.002 U	0.002 UJ	0.002 U	0.002 U
General Chemistry																
Alkalinity, total (as CaCO3)	mg/L	--	--	260	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	**328**[2b]	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	420	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	3.5	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	0.10 U	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	40.7	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	0.91 J	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		*GW-17360-042308-DR-182*	*GW-17360-100708-DR-206*	*GW-17360-040709-DR-255*	*GW-17360-100609-DR-286*	*GW-17360-101210-BW-071*	*E70825~01/23/87*	*E11593~12/21/88*	*E15519~03/16/89*	*E21117~06/16/89*	*E25596~09/20/89*	*E30990~12/21/89*	*E35818~03/16/90*	*E42012~06/18/90*	*E48216~09/14/90*	*E54815~12/18/90*
Sample Date		*4/23/2008*	*10/7/2008*	*4/7/2009*	*10/6/2009*	*10/12/2010*	*1/23/1987*	*12/21/1988*	*3/16/1989*	*6/16/1989*	*9/20/1989*	*12/21/1989*	*3/16/1990*	*6/18/1990*	*9/14/1990*	*12/18/1990*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Alcohols																
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas																
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals																
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi - Volatile Organic Compounds																
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		86-3	86-3	86-3	86-3	86-3	87-1	87-1	87-1	87-1	87-1	87-1	87-1	87-1	87-1	87-1
Sample Identification		GW-17360-042308-DR-182	GW-17360-100708-DR-206	GW-17360-040709-DR-255	GW-17360-100609-DR-286	GW-17360-101210-BW-071	E70825~01/23/87	E11593~12/21/88	E15519~03/16/89	E21117~06/16/89	E25596~09/20/89	E30990~12/21/89	E35818~03/16/90	E42012~06/18/90	E48216~09/14/90	E54815~12/18/90
Sample Date		4/23/2008	10/7/2008	4/7/2009	10/6/2009	10/12/2010	1/23/1987	12/21/1988	3/16/1989	6/16/1989	9/20/1989	12/21/1989	3/16/1990	6/18/1990	9/14/1990	12/18/1990
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.3	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
	Units															
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	0.001 U	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 U	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.00039 J	0.00022 J	0.00028 J	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.01 U	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	0.001 U	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	--	--	--	--	--	0.016	0.008	0.014	0.015	0.015	0.022	0.066	0.06	0.058	0.047
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	0.0033 J	0.025 U	0.025 U	0.025 U	0.025 U	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 UJ	0.001 U	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	0.001 U	0.00022 J	0.001 U	0.001 U	0.00022 J	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/L	0.001 U	0.00076 J	0.0025	0.00068 J	0.0016	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 UJ	0.001 U	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 U	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*86-3*	*86-3*	*86-3*	*86-3*	*86-3*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		*GW-17360-042308-DR-182*	*GW-17360-100708-DR-206*	*GW-17360-040709-DR-255*	*GW-17360-100609-DR-286*	*GW-17360-101210-BW-071*	*E70825~01/23/87*	*E11593~12/21/88*	*E15519~03/16/89*	*E21117~06/16/89*	*E25596~09/20/89*	*E30990~12/21/89*	*E35818~03/16/90*	*E42012~06/18/90*	*E48216~09/14/90*	*E54815~12/18/90*
Sample Date		*4/23/2008*	*10/7/2008*	*4/7/2009*	*10/6/2009*	*10/12/2010*	*1/23/1987*	*12/21/1988*	*3/16/1989*	*6/16/1989*	*9/20/1989*	*12/21/1989*	*3/16/1990*	*6/18/1990*	*9/14/1990*	*12/18/1990*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.3*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/L	0.005 U	0.005 U	0.00069 J	0.0029 J	0.00019 J	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/L	0.001 U	0.0002 J	0.00038 J	0.001 U	0.00042 J	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/L	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 U	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/L	0.0036	0.0039	0.0045	0.0043	**0.0061**[2D]	**1.2**[4BC]	**0.54**[4BC]	**0.38**[4BC]	**0.14**[2D]	**0.18**[2D]	**0.17**[2D]	**0.23**[4BC]	**0.37**[4BC]	**0.3**[4BC]	**0.26**[4BC]
Trichlorofluoromethane (CFC-11)	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/L	0.001 U	0.001 U	0.00025 J	0.001 U	0.001 U	0.05 U	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--	--	--	--	--	--	--	--	--	--
General Chemistry																
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1,
updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		*E59925~03/11/91*	*E67553~06/13/91*	*E72978~09/12/91*	*E07644~12/13/91*	*E15381~03/13/92*	*E23255~06/12/92*	*E31911~09/11/92*	*E40323~12/10/92*	*E47621~03/11/93*	*E56588~06/14/93*	*E66023~09/15/93*	*E75742~12/17/93*	*E81234~03/16/94*	*E89386~06/14/94*	*E97443~09/14/94*
Sample Date		*3/11/1991*	*6/13/1991*	*9/12/1991*	*12/13/1991*	*3/13/1992*	*6/12/1992*	*9/11/1992*	*12/10/1992*	*3/11/1993*	*6/14/1993*	*9/15/1993*	*12/17/1993*	*3/16/1994*	*6/14/1994*	*9/14/1994*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Alcohols																
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas																
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals																
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi - Volatile Organic Compounds																
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		*E59925~03/11/91*	*E67553~06/13/91*	*E72978~09/12/91*	*E07644~12/13/91*	*E15381~03/13/92*	*E23255~06/12/92*	*E31911~09/11/92*	*E40323~12/10/92*	*E47621~03/11/93*	*E56588~06/14/93*	*E66023~09/15/93*	*E75742~12/17/93*	*E81234~03/16/94*	*E89386~06/14/94*	*E97443~09/14/94*
Sample Date		*3/11/1991*	*6/13/1991*	*9/12/1991*	*12/13/1991*	*3/13/1992*	*6/12/1992*	*9/11/1992*	*12/10/1992*	*3/11/1993*	*6/14/1993*	*9/15/1993*	*12/17/1993*	*3/16/1994*	*6/14/1994*	*9/14/1994*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	0.01 U	0.043	0.055	0.04	0.05	0.037	0.036	0.021	0.02	0.022	0.024	0.023	0.023	0.025	0.015
1,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		*E59925~03/11/91*	*E67553~06/13/91*	*E72978~09/12/91*	*E07644~12/13/91*	*E15381~03/13/92*	*E23255~06/12/92*	*E31911~09/11/92*	*E40323~12/10/92*	*E47621~03/11/93*	*E56588~06/14/93*	*E66023~09/15/93*	*E75742~12/17/93*	*E81234~03/16/94*	*E89386~06/14/94*	*E97443~09/14/94*
Sample Date		*3/11/1991*	*6/13/1991*	*9/12/1991*	*12/13/1991*	*3/13/1992*	*6/12/1992*	*9/11/1992*	*12/10/1992*	*3/11/1993*	*6/14/1993*	*9/15/1993*	*12/17/1993*	*3/16/1994*	*6/14/1994*	*9/14/1994*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/L	**0.2**[AD]	**0.18**[AD]	**0.17**[AD]	**0.18**[AD]	**0.23**[ANC]	**0.2**[AD]	**0.19**[AD]	**0.2**[AD]	**0.14**[AD]	**0.13**[AD]	**0.17**[AD]	**0.14**[AD]	**0.2**[AD]	**0.2**[AD]	**0.19**[AD]
Trichlorofluoromethane (CFC-11)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
General Chemistry																
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		*E106394~12/16/94*	*E112954~03/17/95*	*E120786~06/20/95*	*E127382~09/14/95*	*E134972~12/19/95*	*E139838~03/19/96*	*E146838~06/13/96*	*E154120~09/13/96*	*E161522~12/12/96*	*E166218~03/13/97*	*E172376~06/19/97*	*E177736~09/11/97*	*E184898~12/16/97*	*E190812~03/12/98*	*82953-3391~06/16/98*
Sample Date		*12/16/1994*	*3/17/1995*	*6/20/1995*	*9/14/1995*	*12/19/1995*	*3/19/1996*	*6/13/1996*	*9/13/1996*	*12/12/1996*	*3/13/1997*	*6/19/1997*	*9/11/1997*	*12/16/1997*	*3/12/1998*	*6/16/1998*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Alcohols																
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas																
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals																
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi - Volatile Organic Compounds																
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		*E106394~12/16/94*	*E112954~03/17/95*	*E120786~06/20/95*	*E127382~09/14/95*	*E134972~12/19/95*	*E139838~03/19/96*	*E146838~06/13/96*	*E154120~09/13/96*	*E161522~12/12/96*	*E166218~03/13/97*	*E172376~06/19/97*	*E177736~09/11/97*	*E184898~12/16/97*	*E190812~03/12/98*	*82953-3391~06/16/98*
Sample Date		12/16/1994	3/17/1995	6/20/1995	9/14/1995	12/19/1995	3/19/1996	6/13/1996	9/13/1996	12/12/1996	3/13/1997	6/19/1997	9/11/1997	12/16/1997	3/12/1998	6/16/1998
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	0.022	0.021	0.02 U	0.017	0.017	0.019	0.023	0.027	0.036	0.052	0.05	0.055	0.055	0.046	0.002 U
1,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		*E106394~12/16/94*	*E112954~03/17/95*	*E120786~06/20/95*	*E127382~09/14/95*	*E134972~12/19/95*	*E139838~03/19/96*	*E146838~06/13/96*	*E154120~09/13/96*	*E161522~12/12/96*	*E166218~03/13/97*	*E172376~06/19/97*	*E177736~09/11/97*	*E184898~12/16/97*	*E190812~03/12/98*	*82953-3391~06/16/98*
Sample Date		*12/16/1994*	*3/17/1995*	*6/20/1995*	*9/14/1995*	*12/19/1995*	*3/19/1996*	*6/13/1996*	*9/13/1996*	*12/12/1996*	*3/13/1997*	*6/19/1997*	*9/11/1997*	*12/16/1997*	*3/12/1998*	*6/16/1998*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/L	**0.17**[2b]	**0.18**[2b]	**0.23**[2bc]	**0.17**[2b]	**0.17**[2b]	**0.18**[2b]	**0.17**[2b]	**0.17**[2b]	**0.15**[2b]	**0.17**[2b]	**0.17**[2b]	**0.18**[2b]	**0.17**[2b]	**0.2**[2b]	**0.029**[2b]
Trichlorofluoromethane (CFC-11)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
General Chemistry																
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1,
updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		*84367-8353~09/17/98*	*85755-2515~12/16/98*	*90995-6089~03/10/99*	*3990294006~06/15/99*	*3991971003~09/20/99*	*3993622014~12/16/99*	*3001152005~03/16/00*	*3002633006~06/13/00*	*E261217~09/22/00*	*E268205~12/20/00*	*E274378~03/21/01*	*E281013~06/13/01*	*E287753~09/13/01*	*GW--032802-TJ-006*	*GW-062702-JB-040*
Sample Date		*9/17/1998*	*12/16/1998*	*3/10/1999*	*6/15/1999*	*9/20/1999*	*12/16/1999*	*3/16/2000*	*6/13/2000*	*9/22/2000*	*12/20/2000*	*3/21/2001*	*6/13/2001*	*9/13/2001*	*3/28/2002*	*6/27/2002*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Alcohols																
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas																
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals																
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi - Volatile Organic Compounds																
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		*84367-8353~09/17/98*	*85755-2515~12/16/98*	*90995-6089~03/10/99*	*3990294006~06/15/99*	*3991971003~09/20/99*	*3993622014~12/16/99*	*3001152005~03/16/00*	*3002633006~06/13/00*	*E261217~09/22/00*	*E268205~12/20/00*	*E274378~03/21/01*	*E281013~06/13/01*	*E287753~09/13/01*	*GW--032802-TJ-006*	*GW-062702-JB-040*
Sample Date		*9/17/1998*	*12/16/1998*	*3/10/1999*	*6/15/1999*	*9/20/1999*	*12/16/1999*	*3/16/2000*	*6/13/2000*	*9/22/2000*	*12/20/2000*	*3/21/2001*	*6/13/2001*	*9/13/2001*	*3/28/2002*	*6/27/2002*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	0.001	0.005 U	0.005 U	0.01 U	0.015 D	0.017 D	0.027 D	0.031 D	0.043	0.058	0.065	0.052	0.041	--	--
1,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	0.066	0.089[FD]
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		*84367-8353~09/17/98*	*85755-2515~12/16/98*	*90995-6089~03/10/99*	*3990294006~06/15/99*	*3991971003~09/20/99*	*3993622014~12/16/99*	*3001152005~03/16/00*	*3002633006~06/13/00*	*E261217~09/22/00*	*E268205~12/20/00*	*E274378~03/21/01*	*E281013~06/13/01*	*E287753~09/13/01*	*GW--032802-TJ-006*	*GW-062702-JB-040*
Sample Date		*9/17/1998*	*12/16/1998*	*3/10/1999*	*6/15/1999*	*9/20/1999*	*12/16/1999*	*3/16/2000*	*6/13/2000*	*9/22/2000*	*12/20/2000*	*3/21/2001*	*6/13/2001*	*9/13/2001*	*3/28/2002*	*6/27/2002*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0079	0.0065
trans-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/L	**0.042 D[20]**	**0.056 D[20]**	**0.075 D[20]**	**0.068 D[20]**	**0.072 D[20]**	**0.072[20]**	**0.079 D[20]**	**0.06 D[20]**	**0.078[20]**	**0.1[20]**	**0.12[20]**	**0.14[20]**	**0.14[20]**	**0.12[20]**	**0.11[20]**
Trichlorofluoromethane (CFC-11)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
General Chemistry																
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		*GW-092602-JB-051*	*GW-092602-JB-052*	*GW-17360-120902-JB-068*	*GW-17360-032103-JB-091*	*GW-17360-071503-SP-061*	*GW-17360-100203-JB-083*	*GW-17360-121703-JB-093*	*GW-17360-031604-BW-139*	*GW-17360-080904-DCR-192*	*GW-17360-100604-DCR-269*	*GW-17360-120204-DCR-310*	*GW-17360-040605-DCR-359*	*GW-17360-062905-DCR-403*	*GW-17360-120505-DCR-565*	*GW-17360-091306-DR-045*
Sample Date		*9/26/2002*	*9/26/2002*	*12/9/2002*	*3/21/2003*	*7/15/2003*	*10/2/2003*	*12/18/2003*	*3/16/2004*	*8/9/2004*	*10/6/2004*	*12/2/2004*	*4/6/2005*	*6/29/2005*	*12/5/2005*	*9/13/2006*
Sample Depth		*-*	*-*	*-*	*-*	*(24-29) ft*	*-*	*-*	*-*	*-*	*-*	*-*	*(24-29) ft*	*(24-29) ft*	*(24-29) ft*	*-*
			Duplicate													
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Alcohols																
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas																
Ethane	mg/L	--	--	--	--	0.0005 U	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	0.0005 U	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	0.088	--	--	--	--	--	--	--	--	--	--
Metals																
Calcium	mg/L	--	--	--	--	89.7	--	--	--	--	--	--	97.6	--	91.1	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.14 U	--	0.10 U	--
Magnesium	mg/L	--	--	--	--	24.0	--	--	--	--	--	--	26.5	--	25.7	--
Manganese	mg/L	--	--	--	--	**0.54**[SD]	--	--	--	--	--	--	**0.61**[SD]	--	**0.58**[SD]	--
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi - Volatile Organic Compounds																
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		*GW-092602-JB-051*	*GW-092602-JB-052*	*GW-17360-120902-JB-068*	*GW-17360-032103-JB-091*	*GW-17360-071503-SP-061*	*GW-17360-100203-JB-083*	*GW-17360-121703-JB-093*	*GW-17360-031604-BW-139*	*GW-17360-080904-DCR-192*	*GW-17360-100604-DCR-269*	*GW-17360-120204-DCR-310*	*GW-17360-040605-DCR-359*	*GW-17360-062905-DCR-403*	*GW-17360-120505-DCR-565*	*GW-17360-091306-DR-045*
Sample Date		*9/26/2002*	*9/26/2002*	*12/9/2002*	*3/21/2003*	*7/15/2003*	*10/2/2003*	*12/18/2003*	*3/16/2004*	*8/9/2004*	*10/6/2004*	*12/2/2004*	*4/6/2005*	*6/29/2005*	*12/5/2005*	*9/13/2006*
Sample Depth		-	-	-	-	*(24-29) ft*	-	-	-	-	-	-	*(24-29) ft*	*(24-29) ft*	*(24-29) ft*	-
			Duplicate													
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 UJ	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	--	--	--	--	0.0037	0.0048	0.0042	0.0034	0.0034	0.0034	0.0031	0.0036	0.0031	0.0023	0.0018
1,1-Dichloroethene	mg/L	--	--	--	--	0.0024 J	0.0034	0.003	0.0022	0.0029	0.0027 U	0.0021	0.0025	0.0019	0.0021	0.0012
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	0.012 U	0.017 U	0.012 U	0.01 U	0.0084 U	0.01 U	0.0072 U	0.0072 UJ	0.0084 UJ	0.005 U	0.005 U
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 UJ	0.0017 U	0.001 U	0.001 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 UJ	0.001 U
1,2-Dichloroethene (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 U
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 U
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 U
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	0.062 U	0.083 UJ	0.062 U	0.05 U	0.042 U	0.05 U	0.00091 J	0.036 U	0.042 UJ	0.025 U	0.025 U
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	0.12 U	0.17 UJ	0.12 U	0.1 U	0.084 U	0.1 U	0.072 U	0.072 UJ	0.084 U	0.05 U	0.05 U
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	0.12 U	0.17 UJ	0.12 U	0.1 U	0.084 U	0.1 U	0.072 U	0.072 UJ	0.084 U	0.05 U	0.05 U
Acetone	mg/L	--	--	--	--	0.062 UJ	0.083 UJ	0.062 UJ	0.05 UJ	0.0015 J	0.05 U	0.036 U	0.036 U	0.042 UJ	0.025 UJ	0.025 U
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 U
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 UJ	0.001 UJ	0.001 U
Bromoform	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 UJ	0.001 UJ	0.001 U
Bromomethane (Methyl bromide)	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 UJ	0.0017 U	0.001 U	0.001 U
Carbon disulfide	mg/L	--	--	--	--	0.012 U	0.017 U	0.012 U	0.01 U	0.0084 U	0.01 U	0.0072 U	0.0072 U	0.0084 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 UJ	0.001 UJ	0.001 U
Chlorobenzene	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 U
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 UJ	0.0017 UJ	0.001 U	0.001 U
Chloroform (Trichloromethane)	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 U
Chloromethane (Methyl chloride)	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	**0.08[a]**	**0.08[a]**	0.065	0.057	0.05	**0.1[a]**	0.04	0.052	0.044	0.056	0.039	0.046	0.049	0.037 J	0.03
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 UJ	0.001 U
Cyclohexane	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 UJ	0.001 UJ	0.001 U
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	0.0025 U	0.0033 UJ	0.0025 U	0.002 UJ	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 UJ
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 U
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*
Sample Identification		*GW-092602-JB-051*	*GW-092602-JB-052*	*GW-17360-120902-JB-068*	*GW-17360-032103-JB-091*	*GW-17360-071503-SP-061*	*GW-17360-100203-JB-083*	*GW-17360-121703-JB-093*	*GW-17360-031604-BW-139*	*GW-17360-080904-DCR-192*	*GW-17360-100604-DCR-269*	*GW-17360-120204-DCR-310*	*GW-17360-040605-DCR-359*	*GW-17360-062905-DCR-403*	*GW-17360-120505-DCR-565*	*GW-17360-091306-DR-045*
Sample Date		*9/26/2002*	*9/26/2002*	*12/9/2002*	*3/21/2003*	*7/15/2003*	*10/2/2003*	*12/18/2003*	*3/16/2004*	*8/9/2004*	*10/6/2004*	*12/2/2004*	*4/6/2005*	*6/29/2005*	*12/5/2005*	*9/13/2006*
Sample Depth		*-*	*-*	*-*	*-*	*(24-29) ft*	*-*	*-*	*-*	*-*	*-*	*-*	*(24-29) ft*	*(24-29) ft*	*(24-29) ft*	*-*
			Duplicate													
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	--	--	0.012 U	0.017 U	0.012 U	0.01 U	0.0084 U	0.01 U	0.0072 U	0.0072 U	0.0084 U	0.005 U	0.005 U
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	--	--	0.025 U	0.033 UJ	0.025 U	0.02 U	0.017 U	0.02 U	0.014 U	0.014 U	0.017 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 UJ	0.001 U
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	0.012 U	0.017 U	0.012 UJ	0.01 UJ	0.0084 U	0.01 U	0.0072 U	0.0072 U	0.0084 U	0.005 U	0.005 U
Methylene chloride	mg/L	--	--	--	--	0.012 U	0.017 U	0.012 U	0.01 U	0.0084 U	0.01 U	0.0072 U	0.0072 UJ	0.0084 U	0.005 U	0.005 U
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 U
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 UJ	0.001 UJ
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.0057	0.0057	0.0049	0.0032	0.0033	0.0083	0.0067	0.0053	0.0062	0.0068	0.0057	0.0073	0.0073	0.0078	0.0038
trans-1,3-Dichloropropene	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 UJ	0.0017 U	0.001 UJ	0.001 U
Trichloroethene	mg/L	**0.082**[a,b]	**0.078**[a,b]	**0.093**[a,b]	**0.04**[a,b]	**0.055**[a,b]	0.0019 J	**0.076**[a,b]	**0.03**[a,b]	**0.037**[a,b]	**0.027**[a,b]	**0.039**[a,b]	**0.047**[a,b]	**0.028**[a,b]	**0.037**[a,b]	**0.03**[a,b]
Trichlorofluoromethane (CFC-11)	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 UJ	0.0017 U	0.001 U	0.001 U
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	0.0025 U	0.0033 U	0.0025 U	0.002 U	0.0017 U	0.002 U	0.0014 U	0.0014 U	0.0017 U	0.001 U	0.001 U
Vinyl chloride	mg/L	--	--	--	--	**0.0072**[a,b]	**0.0051**[a,b]	**0.0052**[a,b]	**0.0079**[a,b]	**0.006**[a,b]	**0.012**[a,b]	**0.0055**[a,b]	**0.009**[a,b]	**0.012 J**[a,b]	**0.014**[a,b]	**0.013**[a,b]
Xylenes (total)	mg/L	--	--	--	--	0.0075 U	0.01 U	0.0075 U	0.006 U	0.005 U	0.006 U	0.0043 U	0.0029 U	0.0033 U	0.002 U	0.002 U
General Chemistry																
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	330	--	--	--	--	--	--	324	--	341	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	2.0 U	--	2.0 U	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	2 U	--	2 U	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	68	--	20 U	--
Chloride	mg/L	--	--	--	--	204	--	--	--	--	--	--	197	--	203	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	3	--	4	--
Hardness	mg/L	--	--	--	--	410	--	--	--	--	--	--	370	--	310	--
Nitrate (as N)	mg/L	--	--	--	--	0.010 J	--	--	--	--	--	--	0.10 U	--	0.10 U	--
Nitrite (as N)	mg/L	--	--	--	--	0.10 U	--	--	--	--	--	--	0.10 U	--	R	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.50 U	--	0.50 U	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.1 U	--	0.1 U	--
Sulfate	mg/L	--	--	--	--	21.4	--	--	--	--	--	--	32.4	--	32.9 J	--
Sulfide	mg/L	--	--	--	--	1.7 J	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.4 J	--	1 U	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	3 U	--	3 U	--
Total organic carbon (TOC)	mg/L	--	--	--	--	5	--	--	--	--	--	--	3	--	4	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1,
updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*
Sample Identification		*GW-17360-051007-JY-093*	*GW-17360-101707-DR-136*	*GW-17360-042208-DR-169*	*GW-17360-100708-DR-219*	*GW-17360-040809-DR-266*	*GW-17360-040809-DR-267*	*GW-17360-100709-DR-301*	*GW-17360-101210-BW-081*	*E70826~01/23/87*	*E11594~12/21/88*	*E15520~03/16/89*	*E21118~06/15/89*	*E25597~09/20/89*	*E30991~12/21/89*	*E35819~03/16/90*
Sample Date		*5/10/2007*	*10/17/2007*	*4/22/2008*	*10/7/2008*	*4/8/2009*	*4/8/2009*	*10/7/2009*	*10/12/2010*	*1/23/1987*	*12/21/1988*	*3/16/1989*	*6/15/1989*	*9/20/1989*	*12/21/1989*	*3/16/1990*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
							Duplicate									
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Alcohols																
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas																
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals																
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi - Volatile Organic Compounds																
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*
Sample Identification		*GW-17360-051007-JY-093*	*GW-17360-101707-DR-136*	*GW-17360-042208-DR-169*	*GW-17360-100708-DR-219*	*GW-17360-040809-DR-266*	*GW-17360-040809-DR-267*	*GW-17360-100709-DR-301*	*GW-17360-101210-BW-081*	*E70826~01/23/87*	*E11594~12/21/88*	*E15520~03/16/89*	*E21118~06/15/89*	*E25597~09/20/89*	*E30991~12/21/89*	*E35819~03/16/90*
Sample Date		*5/10/2007*	*10/17/2007*	*4/22/2008*	*10/7/2008*	*4/8/2009*	*4/8/2009*	*10/7/2009*	*10/12/2010*	*1/23/1987*	*12/21/1988*	*3/16/1989*	*6/15/1989*	*9/20/1989*	*12/21/1989*	*3/16/1990*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
							Duplicate									
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 UJ	0.001 U	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	0.0014	0.0015	0.0017	0.0013	0.0012	0.0012	0.0012	0.00075 J	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	0.001 U	0.00058 J	0.0011	0.00078 J	0.0005 J	0.00055 J	0.00092 J	0.00055 J	0.002 U	--	--	--	--	--	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	--	--	--	--	--	--	--	--	0.012	0.015	0.016	0.015	0.015	0.01	0.017
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	--	--	--	--	--	--	--
Acetone	mg/L	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
Bromoform	mg/L	0.001 UJ	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	--	--	--	--	--	--	--
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/L	0.016	0.019	0.03	0.021	0.015	0.015	0.019	0.016	--	--	--	--	--	--	--
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-1*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*
Sample Identification		*GW-17360-051007-JY-093*	*GW-17360-101707-DR-136*	*GW-17360-042208-DR-169*	*GW-17360-100708-DR-219*	*GW-17360-040809-DR-266*	*GW-17360-040809-DR-267*	*GW-17360-100709-DR-301*	*GW-17360-101210-BW-081*	*E70826~01/23/87*	*E11594~12/21/88*	*E15520~03/16/89*	*E21118~06/15/89*	*E25597~09/20/89*	*E30991~12/21/89*	*E35819~03/16/90*
Sample Date		*5/10/2007*	*10/17/2007*	*4/22/2008*	*10/7/2008*	*4/8/2009*	*4/8/2009*	*10/7/2009*	*10/12/2010*	*1/23/1987*	*12/21/1988*	*3/16/1989*	*6/15/1989*	*9/20/1989*	*12/21/1989*	*3/16/1990*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
							Duplicate									
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	--	--	--	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	--	--	--	--	--
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.00019 J	0.00018 J	--	--	--	--	--	--	--
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/L	0.00066 J	0.0012	0.007	0.0038	0.0024	0.0025	0.0034	0.0025	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--
Trichloroethene	mg/L	**0.015**[a,b]	**0.016**[a,b]	**0.014**[a,b]	**0.017**[a,b]	**0.012**[a,b]	**0.012**[a,b]	**0.021**[a,b]	**0.016**[a,b]	**0.065**[a,b]	**0.072**[a,b]	**0.05**[a,b]	**0.051**[a,b]	**0.057**[a,b]	**0.037**[a,b]	**0.063**[a,b]
Trichlorofluoromethane (CFC-11)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	--	--	--	--	--	--	--
Vinyl chloride	mg/L	**0.016**[a,b]	**0.017**[a,b]	**0.015**[a,b]	**0.015**[a,b]	**0.016**[a,b]	**0.017**[a,b]	**0.01**[a,b]	**0.0063**[a,b]	0.01 U	--	--	--	--	--	--
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--	--	--	--	--	--	--
General Chemistry																
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1,
updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*
Sample Identification		*E42013~06/18/90*	*E48217~09/14/90*	*E54816~12/17/90*	*E59926~03/11/91*	*E67554~06/13/91*	*E72979~09/12/91*	*E07645~12/13/91*	*E15382~03/13/92*	*E23257~06/12/92*	*E31909~09/11/92*	*E40321~12/10/92*	*E47620~03/11/93*	*E56585~06/14/93*	*E66020~09/15/93*	*E75740~12/17/93*
Sample Date		*6/18/1990*	*9/14/1990*	*12/17/1990*	*3/11/1991*	*6/13/1991*	*9/12/1991*	*12/13/1991*	*3/13/1992*	*6/12/1992*	*9/11/1992*	*12/10/1992*	*3/11/1993*	*6/14/1993*	*9/15/1993*	*12/17/1993*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Alcohols																
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas																
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals																
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi - Volatile Organic Compounds																
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*
Sample Identification		*E42013~06/18/90*	*E48217~09/14/90*	*E54816~12/17/90*	*E59926~03/11/91*	*E67554~06/13/91*	*E72979~09/12/91*	*E07645~12/13/91*	*E15382~03/13/92*	*E23257~06/12/92*	*E31909~09/11/92*	*E40321~12/10/92*	*E47620~03/11/93*	*E56585~06/14/93*	*E66020~09/15/93*	*E75740~12/17/93*
Sample Date		*6/18/1990*	*9/14/1990*	*12/17/1990*	*3/11/1991*	*6/13/1991*	*9/12/1991*	*12/13/1991*	*3/13/1992*	*6/12/1992*	*9/11/1992*	*12/10/1992*	*3/11/1993*	*6/14/1993*	*9/15/1993*	*12/17/1993*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	0.017	0.018	0.013	0.001	0.011	0.013	0.006	0.01	0.0067	0.019	0.006	0.0087	0.014	0.019	0.011
1,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2
Sample Identification		E42013~06/18/90	E48217~09/14/90	E54816~12/17/90	E59926~03/11/91	E67554~06/13/91	E72979~09/12/91	E07645~12/13/91	E15382~03/13/92	E23257~06/12/92	E31909~09/11/92	E40321~12/10/92	E47620~03/11/93	E56585~06/14/93	E66020~09/15/93	E75740~12/17/93
Sample Date		6/18/1990	9/14/1990	12/17/1990	3/11/1991	6/13/1991	9/12/1991	12/13/1991	3/13/1992	6/12/1992	9/11/1992	12/10/1992	3/11/1993	6/14/1993	9/15/1993	12/17/1993
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
	Units															
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/L	0.065[a,b]	0.071[a,b]	0.049[a,b]	0.045[a,b]	0.044[a,b]	0.042[a,b]	0.037[a,b]	0.039[a,b]	0.035[a,b]	0.033[a,b]	0.036[a,b]	0.037[a,b]	0.039[a,b]	0.057[a,b]	0.042[a,b]
Trichlorofluoromethane (CFC-11)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
General Chemistry																
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2
Sample Identification		E81237~03/16/94	E89388~06/14/94	E97444~09/14/94	E106396~12/16/94	E112952~03/17/95	E120789~06/20/95	E127394~09/14/95	E134971~12/19/95	E139840~03/19/96	E146836~06/13/96	E154121~09/13/96	E161519~12/12/96	E166214~03/13/97	E172374~06/19/97	E177737~09/11/97
Sample Date		3/16/1994	6/14/1994	9/14/1994	12/16/1994	3/17/1995	6/20/1995	9/14/1995	12/19/1995	3/19/1996	6/13/1996	9/13/1996	12/12/1996	3/13/1997	6/19/1997	9/11/1997
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
	Units															
Alcohols																
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas																
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals																
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi - Volatile Organic Compounds																
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2
Sample Identification		E81237~03/16/94	E89388~06/14/94	E97444~09/14/94	E106396~12/16/94	E112952~03/17/95	E120789~06/20/95	E127394~09/14/95	E134971~12/19/95	E139840~03/19/96	E146836~06/13/96	E154121~09/13/96	E161519~12/12/96	E166214~03/13/97	E172374~06/19/97	E177737~09/11/97
Sample Date		3/16/1994	6/14/1994	9/14/1994	12/16/1994	3/17/1995	6/20/1995	9/14/1995	12/19/1995	3/19/1996	6/13/1996	9/13/1996	12/12/1996	3/13/1997	6/19/1997	9/11/1997
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
	Units															
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	0.015	0.016	0.012	0.015	0.019	0.016	0.0217	0.022	0.027	0.029	0.03	0.03	0.027	0.031	0.027
1,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2
Sample Identification		E81237~03/16/94	E89388~06/14/94	E97444~09/14/94	E106396~12/16/94	E112952~03/17/95	E120789~06/20/95	E127394~09/14/95	E134971~12/19/95	E139840~03/19/96	E146836~06/13/96	E154121~09/13/96	E161519~12/12/96	E166214~03/13/97	E172374~06/19/97	E177737~09/11/97
Sample Date		3/16/1994	6/14/1994	9/14/1994	12/16/1994	3/17/1995	6/20/1995	9/14/1995	12/19/1995	3/19/1996	6/13/1996	9/13/1996	12/12/1996	3/13/1997	6/19/1997	9/11/1997
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
	Units															
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/L	0.045[2b]	0.05[2b]	0.037[2b]	0.046[2b]	0.054[2b]	0.036[2b]	0.041[2b]	0.039[2b]	0.046[2b]	0.052[2b]	0.052[2b]	0.048[2b]	0.045[2b]	0.055[2b]	0.052[2b]
Trichlorofluoromethane (CFC-11)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
General Chemistry																
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1,
updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*
Sample Identification		*E184897~12/16/97*	*E190811~03/12/98*	*82953-3390~06/16/98*	*84367-8354~09/17/98*	*85755-2513~12/16/98*	*90995-6087~03/10/99*	*3990294002~06/15/99*	*3991971002~09/20/99*	*3993622003~12/16/99*	*3001152002~03/16/00*	*3002633002~06/13/00*	*E261219~09/22/00*	*E268206~12/20/00*	*E274373~03/21/01*	*E281012~06/13/01*
Sample Date		*12/16/1997*	*3/12/1998*	*6/16/1998*	*9/17/1998*	*12/16/1998*	*3/10/1999*	*6/15/1999*	*9/20/1999*	*12/16/1999*	*3/16/2000*	*6/13/2000*	*9/22/2000*	*12/20/2000*	*3/21/2001*	*6/13/2001*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Alcohols																
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas																
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals																
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi - Volatile Organic Compounds																
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*
Sample Identification		*E184897~12/16/97*	*E190811~03/12/98*	*82953-3390~06/16/98*	*84367-8354~09/17/98*	*85755-2513~12/16/98*	*90995-6087~03/10/99*	*3990294002~06/15/99*	*3991971002~09/20/99*	*3993622003~12/16/99*	*3001152002~03/16/00*	*3002633002~06/13/00*	*E261219~09/22/00*	*E268206~12/20/00*	*E274373~03/21/01*	*E281012~06/13/01*
Sample Date		*12/16/1997*	*3/12/1998*	*6/16/1998*	*9/17/1998*	*12/16/1998*	*3/10/1999*	*6/15/1999*	*9/20/1999*	*12/16/1999*	*3/16/2000*	*6/13/2000*	*9/22/2000*	*12/20/2000*	*3/21/2001*	*6/13/2001*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	0.027	0.031	0.012	0.01 D	0.012 D	0.011 D	0.013 D	0.013 D	0.015 D	0.012 D	0.016 D	0.019	0.022	0.018	0.017
1,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2
Sample Identification		E184897~12/16/97	E190811~03/12/98	82953-3390~06/16/98	84367-8354~09/17/98	85755-2513~12/16/98	90995-6087~03/10/99	3990294002~06/15/99	3991971002~09/20/99	3993622003~12/16/99	3001152002~03/16/00	3002633002~06/13/00	E261219~09/22/00	E268206~12/20/00	E274373~03/21/01	E281012~06/13/01
Sample Date		12/16/1997	3/12/1998	6/16/1998	9/17/1998	12/16/1998	3/10/1999	6/15/1999	9/20/1999	12/16/1999	3/16/2000	6/13/2000	9/22/2000	12/20/2000	3/21/2001	6/13/2001
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
	Units															
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/L	**0.051[ab]**	**0.061[ab]**	**0.03[ab]**	**0.041 D[ab]**	**0.044 D[ab]**	**0.049 D[ab]**	**0.057 D[ab]**	**0.064 D[ab]**	**0.051[ab]**	**0.053 D[ab]**	**0.042 D[ab]**	**0.049[ab]**	**0.056[ab]**	**0.046[ab]**	**0.042[ab]**
Trichlorofluoromethane (CFC-11)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
General Chemistry																
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1,
updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2
Sample Identification		E287752~09/13/01	GW--032802-TJ-002	GW--032802-TJ-003	GW-062702-JB-038	GW-062702-JB-039	GW-092602-JB-053	GW-17360-120902-JB-070	GW-17360-032103-JB-092	GW-17360-071503-SP-062	GW-17360-100203-JB-085	GW-17360-121703-JB-095	GW-17360-121703-JB-097	GW-17360-031604-BW-141	GW-17360-080904-DCR-198	GW-17360-100604-DCR-273
Sample Date		9/13/2001	3/28/2002	3/28/2002	6/27/2002	6/27/2002	9/26/2002	12/9/2002	3/21/2003	7/15/2003	10/2/2003	12/18/2003	12/18/2003	3/16/2004	8/9/2004	10/6/2004
Sample Depth		-	-	-	-	-	-	-	-	(33.2-38.2) ft	-	-	-	-	-	-
				Duplicate		Duplicate							Duplicate			
AOI		AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
	Units															
Alcohols																
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas																
Ethane	mg/L	--	--	--	--	--	--	--	--	0.0005 U	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	0.0005 U	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	0.00086	--	--	--	--	--	--
Metals																
Calcium	mg/L	--	--	--	--	--	--	--	--	88.8	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	26.6	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	0.073 U	--	--	--	--	--	--
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi - Volatile Organic Compounds																
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2
Sample Identification		E287752~09/13/01	GW--032802-TJ-002	GW--032802-TJ-003	GW-062702-JB-038	GW-062702-JB-039	GW-092602-JB-053	GW-17360-120902-JB-070	GW-17360-032103-JB-092	GW-17360-071503-SP-062	GW-17360-100203-JB-085	GW-17360-121703-JB-095	GW-17360-121703-JB-097	GW-17360-031604-BW-141	GW-17360-080904-DCR-198	GW-17360-100604-DCR-273
Sample Date		9/13/2001	3/28/2002	3/28/2002	6/27/2002	6/27/2002	9/26/2002	12/9/2002	3/21/2003	7/15/2003	10/2/2003	12/18/2003	12/18/2003	3/16/2004	8/9/2004	10/6/2004
Sample Depth		-	-	-	-	-	-	-	-	(33.2-38.2) ft	-	-	-	-	-	-
				Duplicate		Duplicate							Duplicate			
AOI		AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
	Units															
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
1,1,2,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
1,1,2-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
1,1-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
1,1-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	0.005 U	0.0072 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0072 U
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
1,2-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
1,2-Dichloroethene (total)	mg/L	U SS	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	0.025 U	0.036 UJ	0.025 U	0.025 U	0.025 U	0.025 U	0.036 U
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	0.05 U	0.072 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.072 U
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	0.05 U	0.072 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.072 U
Acetone	mg/L	--	--	--	--	--	--	--	--	0.025 UJ	0.036 UJ	0.025 UJ	0.025 UJ	0.025 U	0.025 U	0.036 U
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Bromoform	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Bromomethane (Methyl bromide)	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	0.005 U	0.0072 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0005 J
Carbon tetrachloride	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Chlorobenzene	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Chloromethane (Methyl chloride)	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
cis-1,2-Dichloroethene	mg/L	--	0.025	0.025	0.038	0.037	0.018	0.024	0.023	0.023	0.041	0.023	0.023	0.021	0.026	0.033
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Dibromochloromethane	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2
Sample Identification		E287752~09/13/01	GW--032802-TJ-002	GW--032802-TJ-003	GW-062702-JB-038	GW-062702-JB-039	GW-092602-JB-053	GW-17360-120902-JB-070	GW-17360-032103-JB-092	GW-17360-071503-SP-062	GW-17360-100203-JB-085	GW-17360-121703-JB-095	GW-17360-121703-JB-097	GW-17360-031604-BW-141	GW-17360-080904-DCR-198	GW-17360-100604-DCR-273
Sample Date		9/13/2001	3/28/2002	3/28/2002	6/27/2002	6/27/2002	9/26/2002	12/9/2002	3/21/2003	7/15/2003	10/2/2003	12/18/2003	12/18/2003	3/16/2004	8/9/2004	10/6/2004
Sample Depth		-	-	-	-	-	-	-	-	(33.2-38.2) ft	-	-	-	-	-	-
				Duplicate		Duplicate							Duplicate			
AOI		AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
	Units															
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	--	--	--	--	--	--	--	--	0.005 U	0.0072 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0072 U
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	--	--	--	--	--	--	--	--	0.01 U	0.014 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.014 U
Methyl cyclohexane	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Methyl tert butyl ether (MTBE)	mg/L	--	--	--	--	--	--	--	--	0.00067 J	0.00085 J	0.00062 J	0.00053 J	0.00078 J	0.00093 J	0.00097 J
Methylene chloride	mg/L	--	--	--	--	--	--	--	--	0.005 U	0.0072 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0072 U
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
trans-1,2-Dichloroethene	mg/L	--	0.0037	0.0036	0.0021	0.0021	0.0032	0.0042	0.0035	0.0024	0.0026	0.0031	0.0029	0.0027	0.0028	0.0023
trans-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Trichloroethene	mg/L	U SS	**0.042**[2b]	**0.041**[2b]	**0.014**[2b]	**0.015**[2b]	**0.043**[2b]	**0.041**[2b]	**0.035**[2b]	**0.026**[2b]	**0.0085**[2b]	**0.035**[2b]	**0.033**[2b]	**0.025**[2b]	**0.025**[2b]	**0.0077**[2b]
Trichlorofluoromethane (CFC-11)	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Trifluorotrichloroethane (Freon 113)	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0014 U
Vinyl chloride	mg/L	--	--	--	--	--	--	--	--	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.00068 J	0.0019
Xylenes (total)	mg/L	--	--	--	--	--	--	--	--	0.003 U	0.0043 U	0.003 U	0.003 U	0.003 U	0.003 U	0.0043 U
General Chemistry																
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	280	--	--	--	--	--	--
Ammonia	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	--	--	--	164	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	--	--	--	--	--	--	--	400	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--	--	--	--	0.33 J	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	--	--	--	--	--	--	--	0.10 U	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--	--	--	--	50.5	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	1.3 J	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1,
updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-2*	*87-4*	*87-4*
Sample Identification		*GW-17360-120204-DCR-313*	*GW-17360-040605-DCR-363*	*GW-17360-062905-DCR-404*	*GW-17360-120505-DCR-569*	*GW-17360-091306-DR-048*	*GW-17360-051007-JY-092*	*GW-17360-101707-DR-135*	*GW-17360-042208-DR-170*	*GW-17360-100708-DR-214*	*GW-17360-040809-DR-265*	*GW-17360-100709-DR-300*	*GW-17360-101210-BW-078*	*GW-17360-101210-BW-079*	*E70827~01/23/87*	*E11595~12/21/88*
Sample Date		*12/2/2004*	*4/6/2005*	*6/29/2005*	*12/5/2005*	*9/13/2006*	*5/10/2007*	*10/17/2007*	*4/22/2008*	*10/7/2008*	*4/8/2009*	*10/7/2009*	*10/12/2010*	*10/12/2010*	*1/23/1987*	*12/21/1988*
Sample Depth		*-*	*(33.2-38.2) ft*	*(33.2-33.2) ft*	*(33.2-38.5) ft*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*Duplicate AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Alcohols																
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas																
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals																
Calcium	mg/L	--	99.6	--	98.7	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	0.27 U	--	0.25 U	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	29.8	--	30.8	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	0.085 [25]	--	0.087 J [25]	--	--	--	--	--	--	--	--	--	--	--
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi - Volatile Organic Compounds																
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-4	87-4
Sample Identification		GW-17360-120204-DCR-313	GW-17360-040605-DCR-363	GW-17360-062905-DCR-404	GW-17360-120505-DCR-569	GW-17360-091306-DR-048	GW-17360-051007-JY-092	GW-17360-101707-DR-135	GW-17360-042208-DR-170	GW-17360-100708-DR-214	GW-17360-040809-DR-265	GW-17360-100709-DR-300	GW-17360-101210-BW-078	GW-17360-101210-BW-079	E70827~01/23/87	E11595~12/21/88
Sample Date		12/2/2004	4/6/2005	6/29/2005	12/5/2005	9/13/2006	5/10/2007	10/17/2007	4/22/2008	10/7/2008	4/8/2009	10/7/2009	10/12/2010	10/12/2010	1/23/1987	12/21/1988
Sample Depth		-	(33.2-38.2) ft	(33.2-33.2) ft	(33.2-38.5) ft	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	Duplicate AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
	Units															
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 U	0.001 U	--	--
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	0.005 U	0.005 UJ	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
1,2-Dichloroethene (total)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	0.002 U	0.002 U
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.025 U	0.025 U	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	0.05 U	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.05 U	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	--	--
Acetone	mg/L	0.025 U	0.025 U	0.025 UJ	0.025 U	0.025 U	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
Bromoform	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
Bromomethane (Methyl bromide)	mg/L	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	--	--
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.00043 J	0.005 U	0.005 UJ	0.005 U	0.005 U	0.00085 J	0.00064 J	--	--
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	--	--
Chloroform (Trichloromethane)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
Chloromethane (Methyl chloride)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	--	--
cis-1,2-Dichloroethene	mg/L	0.021	0.022	0.033	0.024	0.021	0.02	0.019	0.017	0.02	0.017	0.016	0.015	0.014	--	--
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 U	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-2	87-4	87-4
Sample Identification		GW-17360-120204-DCR-313	GW-17360-040605-DCR-363	GW-17360-062905-DCR-404	GW-17360-120505-DCR-569	GW-17360-091306-DR-048	GW-17360-051007-JY-092	GW-17360-101707-DR-135	GW-17360-042208-DR-170	GW-17360-100708-DR-214	GW-17360-040809-DR-265	GW-17360-100709-DR-300	GW-17360-101210-BW-078	GW-17360-101210-BW-079	E70827~01/23/87	E11595~12/21/88
Sample Date		12/2/2004	4/6/2005	6/29/2005	12/5/2005	9/13/2006	5/10/2007	10/17/2007	4/22/2008	10/7/2008	4/8/2009	10/7/2009	10/12/2010	10/12/2010	1/23/1987	12/21/1988
Sample Depth		-	(33.2-38.2) ft	(33.2-33.2) ft	(33.2-38.5) ft	-	-	-	-	-	-	-	-	-	-	-
AOI		AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1	Duplicate AOI 25, AOI 4.1	AOI 25, AOI 4.1	AOI 25, AOI 4.1
	Units															
Hexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Isopropyl toluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	--	--
Methyl tert butyl ether (MTBE)	mg/L	0.00095 J	0.00086 J	0.00098 J	0.00069 J	0.0004 J	0.00035 J	0.00045 J	0.0004 J	0.00029 J	0.00037 J	0.005 U	0.00032 J	0.00029 J	--	--
Methylene chloride	mg/L	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Propylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
tert-Butylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
Tetrahydrofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--
trans-1,2-Dichloroethene	mg/L	0.0024	0.0028	0.0027	0.0027	0.0036	0.0037	0.0031	0.0037	0.0039	0.0038	0.0033	0.0026	0.0024	--	--
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	--	--
Trichloroethene	mg/L	**0.024**[a,b]	**0.029**[a,b]	0.0023	**0.013**[a,b]	**0.02**[a,b]	**0.022**[a,b]	**0.0057**[a,b]	**0.013**[a,b]	**0.012**[a,b]	**0.014**[a,b]	**0.011**[a,b]	**0.012**[a,b]	**0.011**[a,b]	**0.087**[a,b]	**0.042**[a,b]
Trichlorofluoromethane (CFC-11)	mg/L	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	--	--
Trifluorotrichloroethane (Freon 113)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 UJ	0.001 U	0.001 U	--	--
Vinyl chloride	mg/L	0.0012	**0.0026**[a,b]	**0.0097 J**[a,b]	**0.0076**[a,b]	**0.0078**[a,b]	**0.0079**[a,b]	**0.019**[a,b]	**0.014**[a,b]	**0.014**[a,b]	**0.012**[a,b]	**0.015**[a,b]	**0.0072**[a,b]	**0.0088**[a,b]	0.01 U	--
Xylenes (total)	mg/L	0.003 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--	--
General Chemistry																
Alkalinity, total (as CaCO3)	mg/L	--	298	--	312	--	--	--	--	--	--	--	--	--	--	--
Ammonia	mg/L	--	2.0 U	--	2.0 U	--	--	--	--	--	--	--	--	--	--	--
Biochemical oxygen demand (BOD)	mg/L	--	2 U	--	2 U	--	--	--	--	--	--	--	--	--	--	--
Chemical oxygen demand (COD)	mg/L	--	10 J	--	20 U	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	--	179	--	182	--	--	--	--	--	--	--	--	--	--	--
Dissolved organic carbon (DOC)	mg/L	--	2	--	2	--	--	--	--	--	--	--	--	--	--	--
Hardness	mg/L	--	350	--	340	--	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	mg/L	--	0.44	--	0.34 J	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	mg/L	--	0.10 U	--	R	--	--	--	--	--	--	--	--	--	--	--
Oil and grease	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Orthophosphate	mg/L	--	0.50 U	--	0.50 U	--	--	--	--	--	--	--	--	--	--	--
pH (water)	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	mg/L	--	0.1 U	--	0.1 U	--	--	--	--	--	--	--	--	--	--	--
Sulfate	mg/L	--	48.1	--	48.2 J	--	--	--	--	--	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (acid soluble)	mg/L	--	1 U	--	1 U	--	--	--	--	--	--	--	--	--	--	--
Total kjeldahl nitrogen (TKN)	mg/L	--	2 J	--	5	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	1	--	2	--	--	--	--	--	--	--	--	--	--	--
pH	none	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive cyanide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactive sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
--Parameter not analyzed.
ID - Insufficient data to develop criteria.
NA - Not applicable.
NLV - Not likely to volailize.

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*
Sample Identification		*E15521~03/17/89*	*E21119~06/15/89*	*E25598~09/20/89*	*E30992~12/21/89*	*E35820~03/16/90*	*E42014~06/18/90*	*E48218~09/14/90*	*E54817~12/17/90*	*E59927~03/11/91*	*E67556~06/13/91*	*E72980~09/12/91*	*E07646~12/13/91*	*E15384~03/13/92*	*E23258~06/12/92*	*E31910~09/11/92*
Sample Date		*3/17/1989*	*6/15/1989*	*9/20/1989*	*12/21/1989*	*3/16/1990*	*6/18/1990*	*9/14/1990*	*12/17/1990*	*3/11/1991*	*6/13/1991*	*9/12/1991*	*12/13/1991*	*3/13/1992*	*6/12/1992*	*9/11/1992*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Alcohols																
2-Ethanoxyethanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isobutanol (isobutyl alcohol)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl alcohol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methanol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propylene glycol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas																
Ethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals																
Calcium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi - Volatile Organic Compounds																
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Diphenylhydrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(Chloromethyl)ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
CURRENT CONDITIONS REPORT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*	*87-4*
Sample Identification		*E15521~03/17/89*	*E21119~06/15/89*	*E25598~09/20/89*	*E30992~12/21/89*	*E35820~03/16/90*	*E42014~06/18/90*	*E48218~09/14/90*	*E54817~12/17/90*	*E59927~03/11/91*	*E67556~06/13/91*	*E72980~09/12/91*	*E07646~12/13/91*	*E15384~03/13/92*	*E23258~06/12/92*	*E31910~09/11/92*
Sample Date		*3/17/1989*	*6/15/1989*	*9/20/1989*	*12/21/1989*	*3/16/1990*	*6/18/1990*	*9/14/1990*	*12/17/1990*	*3/11/1991*	*6/13/1991*	*9/12/1991*	*12/13/1991*	*3/13/1992*	*6/12/1992*	*9/11/1992*
Sample Depth		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOI		*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*	*AOI 25, AOI 4.1*
	Units															
Dibenz(a,h)anthracene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0077
1,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Phenylbutane (sec-Butylbenzene)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl ether	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--