



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY - REMEDIATION AND REDEVELOPMENT DIVISION
PO BOX 30426, LANSING, MICHIGAN 48909-7926, Phone 517-373-9837, Fax 517-373-2637

Request for DEQ Review of Response Activity Plan

This form is required for submittal of a request for the DEQ to review a Response Activity Plan, under Section 20114b, Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

Section A: Type of Response Activity Plan being Submitted:

Remedial Investigation	☐	Site Specific Criteria	☐
Evaluation Plan	☐	Mixing Zone	☐
Feasibility Study	☐	Section 20118(5) and (6) Request	☐
Remedial Action Plan	☐	Institutional Controls	☐
Interim Response Plan	☐	Other, Specify: GSI Evaluation	X

Section B: Facility/Property Subject to (Check all that apply):

Facility regulated under Part 201, other source, or source unknown <u>Part 201 Site ID, if known:</u>	☒
Leaking Underground Storage Tank regulated pursuant to Part 213 <u>Part 211/213. Facility ID, if known:</u>	☐
Oil or gas production and development regulated pursuant to Part 615 or 625	☐
Licensed landfill regulated pursuant to Part 115	☐
Licensed hazardous waste treatment, storage, or disposal facility regulated pursuant to Part 111	☐
Consent Agreement or other legal agreement with the MDEQ	☐

Section C: Facility and Locational Information:

Facility Name: RACER Saginaw Plant 2 Landfill (aka The Peninsula)	County: Saginaw
Street Address of Property: 79 West Center Street	City/Village/Township: Saginaw
City: Saginaw State: MI Zip:	Town: 12N Range: 4E Section: 35
Property Tax ID (include all applicable IDs): 19-2231-00100	Quarter: SW Quarter-Quarter: SW
Status of submitter relative to the property (check all that apply):	Decimal Degrees Latitude: 43.396305
	Decimal Degrees Longitude: -83.974859
	Reference point for latitude and longitude:
	Center of site ☒ Main/front door ☐
	Front gate/main entrance ☐ Other ☐
Owner	Collection method:
Former ☐ Current ☐ Prospective ☐	Survey ☐ GPS ☒ Interpolation ☐
Operator	
Former ☒ Current ☐ Prospective ☐	

Section D: Submitter Information:

Entity/person requesting review: RACER Trust	
Contact Person (name and title): David Favero	
Submitter Address: 500 Woodward Ave., Suite 1510	
City: Detroit	State: MI Zip: 48226
Telephone: 734-879-9529	E-Mail: dfavero@racertrust.org
Relationship of contact person to the submitter: Deputy	
Cleanup Manager - MI	
Owner Name, if different from submitter: RACER Properties LLC	Company: RACER Trust
Address: 500 Woodward Ave., Suite 1510	State: MI Zip: 48226
City: Detroit	E-Mail: dfavero@racertrust.org
	Telephone: 734-879-9529

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Section E: Are/were the following present at the facility (Check all that apply):

	Current	Previous	Unknown
Free product / Non Aqueous Phase Liquid (NAPL)	☐	☐	☐
Soil contamination above any residential criteria	☒	☐	☐
Soil contamination above any non-residential criteria	☒	☐	☐
Soil aesthetic impacts	☐	☐	☐
Groundwater contamination above any residential criteria	☒	☐	☐
Groundwater contamination above any non-residential criteria	☒	☐	☐
Groundwater contamination above the Acute Inhalation screening level	☐	☐	☐
Groundwater aesthetic impacts	☐	☐	☐
Soil Gas contamination above residential vapor intrusion (VI) screening levels	☐	☐	☐
Soil Gas contamination above non-residential VI screening levels	☐	☐	☐
Conditions immediately dangerous to life or health (IDLH)	☐	☐	☐
Fire & Explosion hazards related to releases	☐	☐	☐
Contamination existing in drinking water supply	☐	☐	☐
Imminent threat to drinking water supply	☐	☐	☐
Impact to Surface Water	☐	☐	☐
Surface Water Sediments above screening levels	☐	☐	☐

Section F: The following questions assist DEQ in evaluating this request.

Known or Suspected Contaminant(s) Type (Check all that apply):			
Petroleum	☐	Volatile Organic Compounds	☐
Metals	☒	Other	☐
Current Site Status (Check all that apply):			
Undergoing property transfer	☐	Active operations	☐
Inactive operation	☒		
Current Property Use:			
Residential/Institutional (including schools, nursing homes, hospitals, etc.)	☐		
Non-residential	☒		
Anticipated Property Use:			
Residential/Institutional (including schools, nursing homes, hospitals, etc.)	☐		
Non-residential	☒		
Estimated Area of Contamination Addressed in Response Action Plan (Cumulative):			
Currently undetermined	☐	< 0.5 acre	☐
> 0.5 acre	☒		
Migration:			
	Yes	No	Unknown
Has contamination migrated beyond the property boundaries?	☐	☒	☐
Has the Notice of Migration been submitted?	☐	☒	☐
Facility Investigation Status:			
Ongoing	☐	Complete	☒
Facility Response Activity Status (Check all that apply):			
None	☐	IR Implemented	☐
Response Activity Ongoing	☒	Response Activity Completed	☐
Drinking Water Supply for Facility (Check all that apply):			
Municipal	☐	Private Well(s)	☐
No Current Water Supply	☐	Municipal Available	☒
On-site Well(s) (Check all that apply):			
Drinking Water	☐	Industrial/Commercial Production	☐
Agricultural/Irrigation	☐	No well on-site	☒
Approximate Depth of Well(s):			
Local Drinking Water Supply:			
Is facility in a designated Wellhead Protection Area?	Yes	☐	No
Distance to nearest off-site drinking water well: >0.5 mile	Private	☒	Municipal
			☐

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Surface Water Bodies on or Adjacent to Facility (Check all that apply):

Wetlands ☐ Ditch ☐ Stream/River ☒ Lake/Pond ☐

Local Surface Water Bodies:

Distance to nearest wetland: adjacent Ditch: seasonal wetland Stream/River: Lake/Pond:

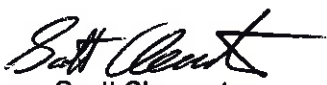
Have other plans been submitted for this facility?

Facility Name, if different than this submittal: NA

Date and Name of most recent submittal: 2013 Groundwater Sampling Report

Section G: Environmental Professional Signature:

With my signature below, I certify that this plan and all related materials are true, accurate, and complete to the best of my knowledge and belief.

Signature: 

Date: November 4, 2014

Printed Name: Scott Clearwater

Company of Environmental Professional: ARCADIS of MI, LLC

Address: 10559 Citation Drive, Suite 100

City: Brighton

State: MI Zip: 48116

Telephone: 801-225-1921

E-mail address: Scott.Clearwater@arcadis-us.com

Section H: Submitter Signature:

With my signature below, I certify that this plan and all related materials are true, accurate, and complete to the best of my knowledge and belief and I am legally authorized to sign for the submitter

Signature: 

Date: November 4, 2014

Printed name: David Favero

Title/Relationship of signatory to submitter: Deputy Clean-up Manager - Michigan

Address: 500 Woodward Avenue, Suite 1510

City: Detroit

State: MI Zip: 48226

Telephone: 734-879-9525

E-Mail address: dfavero@racertrust.org

This form and the Response Activity Plan should be submitted to the MDEQ Remediation & Redevelopment Division District Office for the county in which the property is located, unless the response activity is related to a facility that is regulated by another MDEQ Division. A district map is located at www.michigan.gov/deqrrd. If regulated by another division, contact should be made with that division for information on where to submit the form and plan.



Ms. Susan Kaelber-Matlock
Saginaw Bay District Office
Michigan Department of Environmental Quality
401 Ketchum Street, Suite B
Bay City, Michigan 48708

Subject:
June 2014 Groundwater Surface Water Interface Evaluation
RACER Plant 2 Landfill – Site 13280, Saginaw, MI

Dear Ms. Kaelber-Matlock:

ARCADIS of Michigan, LLC (ARCADIS) is pleased to present this summary of the Groundwater Surface Water Interface (GSI) evaluation conducted at the Revitalizing Auto Communities Environmental Response (RACER) Trust Site Plant 2 Landfill (aka the Peninsula), Site 13280, located in Saginaw, Michigan (the Site). Included in this summary are a description of the site activities and a summary of the groundwater analytical results.

Background

This evaluation was conducted in accordance with an email memorandum that was approved by the Michigan Department of Environmental Quality (MDEQ) on September 17, 2012, the intent of which was to revisit monitoring well locations with historical concentrations of metals in the groundwater that was nearby a historic wetland area. The MDEQ deemed that one additional round in 2014 to further evaluate trend stability and attenuation was warranted and approved this during a work plan phone discussion on June 6, 2014. The purpose of the additional sampling was to conduct an assessment to evaluate the potential GSI Pathway considerations related to metals, if found discharging via groundwater to the wetland area west of the Site.

Site Activities

ARCADIS was onsite to complete the sampling on June 19, 2014. ARCADIS collected groundwater samples from observation wells: TW98-111WT, MW04-122WT, MW97-104WT, MW01-118WT, TW98-109WT, MW04-123WT, MW04-124WT, and MW97-105WT using the ultra-low-flow groundwater sampling technique.

Imagine the result

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Suite 500
Novi
Michigan 48377
Tel 248 994 2240
Fax 248 994 2241
www.arcadis-us.com

ENVIRONMENT

Date:
November 4, 2014

Contact:
Scott Clearwater

Phone:
810.225.1921

Email:
Scott.Clearwater@arcadis-us.com

Our ref:
B0086991.2014

All groundwater samples collected were submitted to TestAmerica Laboratories, Inc. (TestAmerica) of North Canton, Ohio for analysis of cobalt, lead, manganese, selenium, and dissolved selenium in accordance with United States Environmental Protection Agency (USEPA) Method 6020. Field filtration was performed for the dissolved selenium collection. Prior to sampling, the observation wells were gauged with an electronic water-level indicator, graduated at 0.01-foot increments, to measure the depth to water. The groundwater analytical results are summarized in **Figure 1**.

Analytical Summary

Analytical results indicate that all of the parameters sampled were below the applicable MDEQ Part 201 cleanup criteria for GSI. It is likely the analytical samples encountered external impacts in the lab and the results are slightly skewed. Analytical results are summarized in the enclosed **Figure 1**.

The analytical results were compared to historic sampling results; based on the review of the data, concentration trends appear to be stable or decreasing. Possible impacts in the wetland area west of the Site are *de minimus* (Section 20120(e)(14)) in nature based on the limited area impacted and the analytical results identifying manganese below environmental and health based values, indicating a lack of effect on the ground water quality.

Conclusion

Based on the results from this sampling event, the continued decreasing trends, and lack of GSI exceedances in compliance monitoring wells, further evaluation is not warranted.

ARCADIS appreciates the opportunity to work with you, and should you have any questions please contact Scott Clearwater at 810.225.1921 or Scott.Clearwater@arcadis-us.com

Sincerely,

ARCADIS of Michigan, LLC



Scott Clearwater
Certified Project Manager

Enclosure:

Table 1 Groundwater Analytical Summary

Figure 1 Groundwater Analytical Summary Map

Copies:

Mr. Dave Favero, RACER Trust
File



Tables

Table 1 - Groundwater Analytical Summary Table. RACER Saginaw Plant 2 Landfill

Location ID	Date	Chromium (total)	Cobalt	Manganese	Lead	Selenium	Selenium (dissolved)
Groundwater Surface Water Interface Criteria & RBSLs		(G,X)	100	6.2E+3 (G,X)*	5.7E+1(G,X)*	5	5
TW-98-109WT	9/15/2004	NA	NA	NA	<1	3.3	2.9
TW-98-109WT	10/11/06	NA	NA	NA	NA	1.7 J	1.6 J
TW-98-109WT	9/19/2012	NA	0.87 J	790	0.30 J	<5.0	NA
TW-98-109WT	9/30/2013	0.64 J	NA	560 B	0.21 J	<5.0	NA
TW-98-109WT	6/19/2014	NA	0.65 J	670 B	0.17 J	0.38 J	<5.0 U
TW-98-110WT	9/17/2004	NA	NA	NA	<1	2.1	1.7 B
TW-98-110WT	9/19/2012	NA	0.67 J	190	0.20 J	<5.0	NA
TW-98-110WT	9/30/2013	1.9 J	NA	240 B	1.2 J,B	0.51 J	NA
TW-98-111WT	9/17/2004	NA	NA	NA	0.59 B	1.9 B	0.90 B
TW-98-111WT	9/19/2012	NA	2.9 J	59	1.0 J	<5.0	NA
TW-98-111WT	9/30/2013	3.9	NA	68 B	1.0 J,B	<5.0	NA
TW-98-111WT	6/19/2014	NA	2.5 J	68 B	0.85 J	<5.0 U	0.58 J
MW01-118WT	9/16/2004	NA	NA	NA	3.5	1.1 B	1.3 B
MW-01-118WT	9/19/2012	NA	2.7 J	240	<3.0	<5.0	NA
MW-01-118WT	9/30/2013	1.7 J	NA	140 B	0.69 J,B	<5.0	NA
MW-01-118WT	6/19/2014	NA	3.0 J	210 B	0.18 J	0.39 J	0.40 J
MW-01-118WT (Duplicate)	6/19/2014	NA	2.9 J	210 B	0.22 J	<5.0 U	0.46 J
MW-04-122WT	9/16/2004	NA	NA	NA	0.49 B	0.95 B	<2.0
MW-04-122WT	9/19/2012	1.9 J	3.1 J	200	0.43 J	<5.0	NA
MW-04-122WT	9/30/2013	2.0	NA	180 B	0.78 J,B	0.70 J	NA
MW-04-122WT	6/19/2014	NA	3.5 J	200 B	0.37 J	0.56 J	0.38 J
MW-04-123WT	9/16/2004	NA	NA	NA	<1	2.3	1.3 B
MW-04-123WT	10/11/06	NA	NA	NA	NA	0.86 J	0.83 J
MW-04-123WT	9/19/2012	NA	3.1 J [3.1 J]	960 [960]	<3.0 [<3.0]	<5.0 [<5.0]	NA
MW-04-123WT	9/30/2013	0.47 J [0.39 J]	NA	810 B [800 B]	<3.0 [<3.0]	<5.0 [<5.0]	NA
MW-04-123WT	6/19/2014	NA	2.4 J	920 B	0.23 J	0.69 J	<5.0 U
MW-04-124WT	9/15/2004	NA	NA	NA	<1	9.7	9.7
MW-04-124WT	12/21/2004	NA	NA	NA	NA	5.1	5.5
MW-04-124WT	9/19/2012	NA	0.53 J	410	<3.0	<5.0	NA
MW-04-124WT	9/30/2013	0.97 J	NA	580 B	0.14 J,B	<5.0	NA
MW-04-124WT	6/19/2014	NA	1.2 J	670 B	<3.0 U	<5.0 U	<5.0 U
MW-97-104WT	6/19/2014	NA	0.45 J	710 B	<3.0 U	<5.0 U	<5.0 U
MW-97-105WT	6/19/2014	NA	1.3 J	330 B	0.61 J	<5.0 U	0.34 J

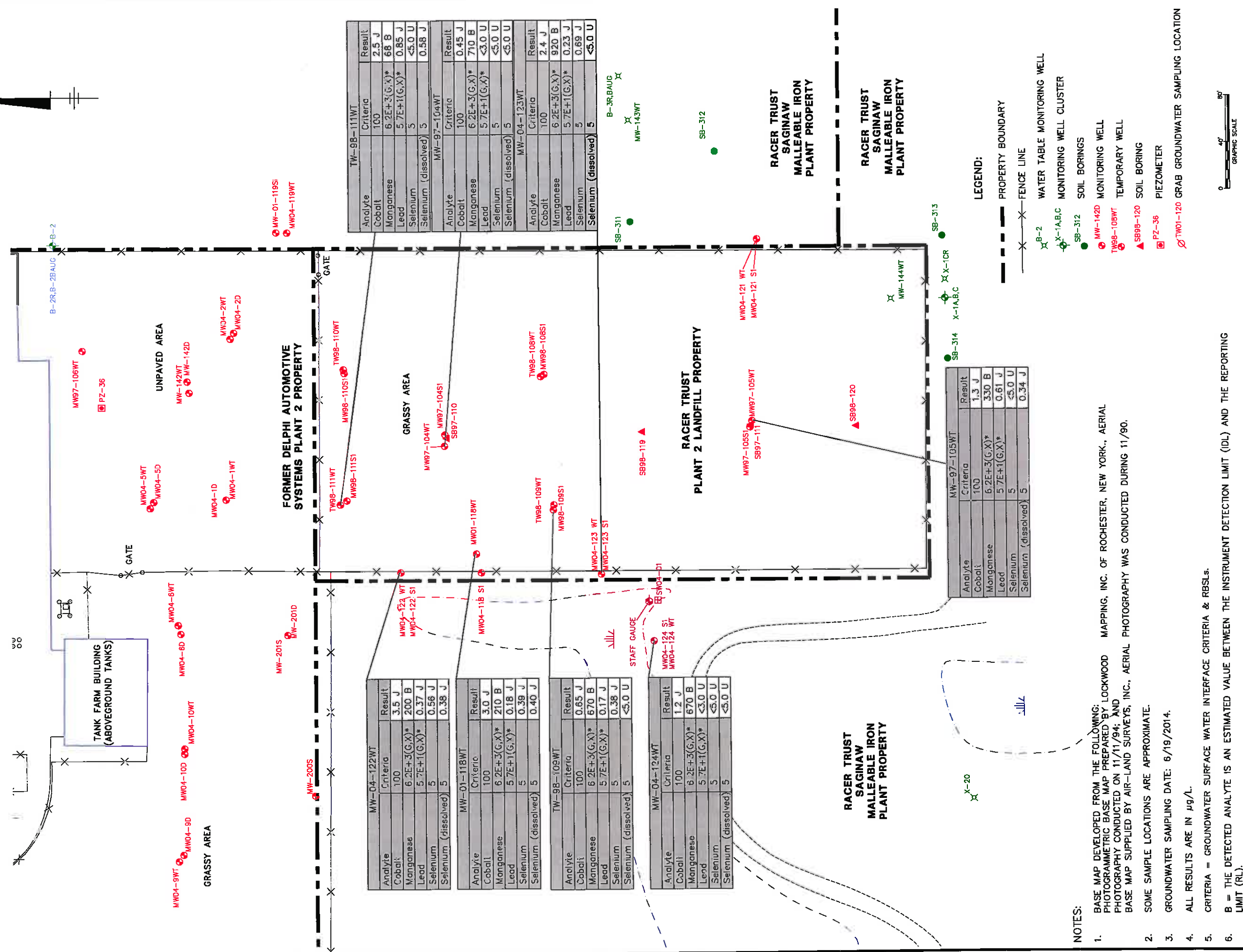
Notes on page 2

Notes:

- Exceedances: Exceedances are **bold and shaded**.
All results are in ug/L
B: The detected analyte is an estimated value between the instrument detection limit (IDL) and the reporting limit (RL).
ND / <: Not detected or under the listed detection limit.
NA: Not analyzed.
J: The constituent was positively identified; however, the associated numerical value is an estimated concentration only.
- Cleanup Criteria: Part 201 (Environmental Remediation) of the Michigan Department of Environmental Quality (MDEQ)
Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451 (Revised September 28, 2012) Residential Generic Cleanup Criteria and Screening Levels
- G: Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. A value of 150 mg/L and 400 mg/L CaCO₃ were used to calculate the GSI protection criteria value based on MDEQ Remediation Division Operational Memorandum No. 5 and Part 201 Cleanup Criteria Footnote (G).
GSI value was calculated using the MDEQ calculation of generic facility-specific Part 201 GSI criteria for {G} footnoted hazardous substances. A site specific hardness value
* of 370 mg/L of CaCO₃ was aquired from the *Site Investigation Report* completed by BBL dated August 2005. Generic values of 235 mg/L of CaCO₃, can be found for the Saginaw River in the *Michigan Water Chemistry Monitoring Great Lakes Tributaries 1998-2005 Report*. Results are below GSI RBSLs for either calulation.
- GSI: Groundwater surface water interface (GSI)
X: The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.
- E: Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).
Criteria for led are derived using a biologically based model, as allowed for under Secton 20120a(9) of the NREPA, and are not calculated using the algorithms and assumptions specified in pathway-specific rules. The
L: generic residential drinking water criterion of 4 ug/L is linked to the generic residential soil direct contact criterion of 4 00 mg/kg/
- A: Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
- U: Hazardous substance may exhibit the characteristic of corrosivity as defined in 40 C.F.R. §261.22 (revised as of July 1, 2001), which is adopted by reference in these rules and is available for inspection at the DEQ, 525 West Allegan Street, Lansing, Michigan. Copies of the regulation may be purchased, at a cost as of the time of adoption of these rules of \$45, from the Superintendent of Documents, Government Printing Office, Washington, DC 20401 (stock number 869-044-00155-1), or from the DEQ, RRD, 525 West Allegan Street, Lansing, Michigan 48933, at cost.
- NLV Hazardous substance is not likely to volatilize under most conditions.



Figures



- NOTES:
- BASE MAP DEVELOPED FROM THE FOLLOWING:
PHOTOGRAMMETRIC BASE MAP PREPARED BY LOCKWOOD MAPPING, INC. OF ROCHESTER, NEW YORK., AERIAL PHOTOGRAPHY CONDUCTED ON 11/11/94; AND
BASE MAP SUPPLIED BY AIR-LAND SURVEYS, INC., AERIAL PHOTOGRAPHY WAS CONDUCTED DURING 11/90.
 - SOME SAMPLE LOCATIONS ARE APPROXIMATE.
 - GROUNDWATER SAMPLING DATE: 6/19/2014.
 - ALL RESULTS ARE IN µg/L.
 - CRITERIA = GROUNDWATER SURFACE WATER INTERFACE CRITERIA & RBLS.
 - B = THE DETECTED ANALYTE IS AN ESTIMATED VALUE BETWEEN THE INSTRUMENT DETECTION LIMIT (IDL) AND THE REPORTING LIMIT (RL).
 - G = GROUNDWATER SURFACE WATER INTERFACE (GSI) CRITERION DEPENDS ON THE PH OR WATER HARDNESS, OR BOTH, OF THE RECEIVING SURFACE WATER. A VALUE OF 150 MG/L AND 400 MG/L CaCO₃.
 - J = THE CONSTITUENT WAS POSITIVELY IDENTIFIED; HOWEVER, THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY.
 - U = HAZARDOUS SUBSTANCE MAY EXHIBIT THE CHARACTERISTIC OF CORROSIVITY AS DEFINED IN 40 C.F.R. §261.22 (REVISED AS OF JULY 1, 2001), WHICH IS ADOPTED BY REFERENCE IN
 - X = THE GSI CRITERION SHOWN IN THE GENERIC CLEANUP CRITERIA TABLES IS NOT PROTECTIVE FOR SURFACE WATER THAT IS USED AS A DRINKING WATER SOURCE.
 - * = GSI VALUE WAS CALCULATED USING THE MDEQ CALCULATION OF GENERIC FACILITY-SPECIFIC PART 201 GSI CRITERIA FOR I&I FOOTNOTED HAZARDOUS SUBSTANCES. A SITE SPECIFIC HARDNESS VALUE OF 370 MG/L OF CaCO₃ WAS ACQUIRED FROM THE SITE INVESTIGATION REPORT COMPLETED BY BBL DATED AUGUST 2005. GENERIC VALUES OF 235 MG/L OF CaCO₃ CAN BE FOUND FOR THE SAGINAW RIVER IN THE MICHIGAN WATER CHEMISTRY MONITORING GREAT LAKES TRIBUTARIES 1998-2005 REPORT. RESULTS ARE BELOW GSI RBLS FOR EITHER CALCULATION.