

**Voluntary Corrective Action Agreement
Between
The Michigan Department of Environmental Quality and
General Motors Corporation, Lansing Plants 2, 3 (MID 980 700 827),
and 6 (MID 005 356 928)**

This Voluntary Corrective Action Agreement (“Agreement”) is established between the Michigan Department of Environmental Quality (“MDEQ”) and General Motors Corporation (“GM”), collectively referred to as the Parties. The MDEQ enters into this Agreement in furtherance of its statutory and regulatory responsibilities pursuant to Part 111, Hazardous Waste Management, of Michigan’s Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (“NREPA”), Michigan Compiled Laws (“MCL”) 324.11101 *et seq.*, and other applicable state laws and regulations, including its authority as an authorized state under the federal Resource Conservation and Recovery Act of 1976 (“RCRA”), Title 42 of the United States Code, Section 6926.

I. STATEMENT OF PURPOSE

- 1.1 In entering into this Agreement, the mutual objectives of the Parties are:
- a. For GM to work independently, voluntarily, and expeditiously to investigate and, as necessary, stabilize and remediate releases of hazardous waste, hazardous constituents, and hazardous substances at or from the GM Lansing Plants 2, 3, and 6, located at 2801 West Saginaw Street, 2800 West Saginaw Street, and 401 North Verlinden Street, respectively, in Lansing, Michigan (“the Facilities”) that may present an unacceptable risk to public health, safety, welfare, or the environment. GM owns and operates the Facilities.
 - b. For GM to perform corrective action in accordance with the RCRA, Part 111, the applicable portions of Part 201, Environmental Remediation, of the

NREPA, MCL 324.20101 *et. seq.*, the administrative rules promulgated thereunder, and to provide all information necessary for the U.S. Environmental Protection Agency (“U.S. EPA”) to make the Environmental Indicator (“EI”) demonstrations required by the Government Performance and Results Act for the control of human exposures and migration of contaminated groundwater.

- c. For GM to use the protection standards and applicable processes of Part 201 as part of satisfying its corrective action obligations for releases of hazardous waste and hazardous constituents under Part 111 and its remedial obligations for releases of hazardous substances under Part 201.
- d. To facilitate GM’s efforts to restore the Facilities to beneficial use.

II. DEFINITIONS

- 2.1 Unless otherwise expressly provided herein, the terms used in this Agreement, which are defined in Part 111, the RCRA, or the regulations promulgated under those statutes, will have the definitions given to them in Part 111 or the RCRA or in such regulations.
- 2.2 The terms “hazardous substance,” “response activity,” “remedial action plan,” “interim response activity,” and “remedial action” shall have the meaning as defined in MCL 324.20101.
- 2.3 “Waste Management Unit” (“WMU”), as used in this Agreement, is equivalent to the term “Solid Waste Management Unit” (“SWMU”) as defined by the U.S. EPA in 61 *Federal Register* 19442 (May 1, 1996).
- 2.4 “Area of Concern” (“AOC”), as used in this Agreement, means those areas that may not meet the definition of a WMU but which may have released hazardous

waste, hazardous constituents, or hazardous substances to the environment on a nonroutine basis, which may present an unacceptable risk to public health, safety, welfare, or the environment and are subject to the corrective action requirements of Part 111 and the remediation requirements of Part 201.

III. BACKGROUND

- 3.1 According to GM, the Facilities lie north of Michigan Avenue, to the south of West Willow Street, and are divided by Saginaw Street. The Facilities encompass approximately 241 acres of land. The Facilities have manufactured parts for and assembled automobiles since 1900. The most recent operations at the Facilities have included pressed metal, body manufacturing, painting, and vehicle assembly. Plant 2 ceased operations in March of 2006. Plant 3 ceased operations in late 2006. Plant 6 ceased operations in 2005, and decommissioning and demolition began in 2006.
- 3.2 The Facilities were given U.S. EPA identification numbers MID 980 700 827 for the Lansing Plants 2 and 3, and MID 005 356 928 for Plant 6.
- 3.3 The U.S. EPA developed a Preliminary Assessment/Visual Site Inspection ("PA/VS") Report for Plants 2 and 3 (PRC Environmental Management, Inc., March 1994) and Plant 6 (PRC Environmental Management, Inc., March 1993), which identified WMUs and AOCs at the Facilities that require corrective action.

IV. PROJECT MANAGER

- 4.1 The MDEQ and GM will each designate a Project Manager and notify each other, in writing, of the Project Manager selected within fourteen (14) days of the effective date of this Agreement. Each Project Manager will be responsible for overseeing the implementation of this Agreement. To the maximum extent practicable, all communications between GM and the MDEQ, and all documents,

reports, approvals, and other correspondence concerning the activities performed pursuant to this Agreement, shall be directed through the Project Managers. The Parties will provide, within fourteen (14) days, written notice whenever there is a change of Project Manager.

V. WORK TO BE PERFORMED

5.1 GM agrees to perform the actions specified in this section in the manner and by the dates specified herein. GM will perform corrective action activities, pursuant to this Agreement, in compliance with the RCRA, Part 111, and other applicable State and Federal laws and their implementing regulations and consistent with all relevant MDEQ and U.S. EPA guidance documents as appropriate to the Facilities.

5.2 Remedial Investigation

GM will complete activities necessary, as set forth in R 299.528(3), to identify and define the nature and extent of releases of hazardous waste, hazardous constituents, and hazardous substances at or from the Facilities. These activities include:

- a. Provide to the MDEQ, within ninety (90) days after the effective date of this Agreement, a Current Conditions Report ("CCR") covering all areas of the Facilities. The CCR will include any recent sampling data, a summary of the historic operations and physical setting of the Facilities, and a Facilities map. The CCR will describe, at a minimum, conditions at all Facilities' locations specified in the PA/VSIs Reports and any known past or present locations of treatment, storage, or disposal of hazardous waste, hazardous constituents, or hazardous substances or newly discovered potential AOCs.

- b. Provide to the MDEQ a Remedial Investigation/RCRA Facilities Investigation (“RI/RFI”) Work Plan to identify the nature and extent of any releases of hazardous waste, hazardous constituents, and hazardous substances at or from the Facilities, which may pose an unacceptable risk to human health or the environment. Upon MDEQ approval, GM will implement the RI/RFI Work Plan.
- c. Provide an RI/RFI Report to the MDEQ for review and approval upon completion of the RI/RFI. The RI/RFI Report must describe the nature and extent of any releases of hazardous waste, hazardous constituents, or hazardous substances at or from the Facilities. The RI/RFI Report must also include a copy of the current zoning designation that pertains to the Facilities and the portion of the zoning ordinance that pertains to the zoning designation. If there is a change in land usage and/or subsequent zoning at the Facilities or any portion of the Facilities, a copy of the change in zoning designation must be submitted to the MDEQ. The RI/RFI Report may be prepared in phases to provide timely support for the demonstrations described in Paragraph 5.3 and for the determinations and proposal described in Paragraph 5.4. If the RI/RFI determines that acceptable risks to human health or the environment are exceeded, GM will determine the need for interim response activity, based on a professional evaluation of the data, and will notify the MDEQ of the planned course of action.

5.3 EI Reporting

No later than ninety (90) days prior to the dates indicated below, GM will demonstrate, through submitting an EI Report to the MDEQ for review and by performing any other necessary activities consistent with this Section, that:

- a. By April 1, 2013, all current human exposures to contamination at or from the Facilities are under control. That is, for all media known or reasonably

suspected to be contaminated with hazardous wastes or hazardous constituents above risk-based levels, for which there are complete pathways between contamination and human receptors, significant or unacceptable exposures do not exist.

- b. By April 1, 2014, migration of contaminated groundwater at or from the Facilities is stabilized. That is, the migration of all groundwater known or reasonably suspected to be contaminated with hazardous wastes or hazardous constituents above acceptable levels is stabilized to remain within any existing areas of contamination as defined by monitoring locations designated at the time of the demonstration. In addition, any discharge of groundwater to surface water is either insignificant or shown to be currently acceptable according to an appropriate interim assessment. Monitoring and measurement data must be collected in the future, as necessary, to verify that migration of any contaminated groundwater is stabilized.
- c. In order to prepare for and provide the demonstrations required by Paragraphs 5.3.a and 5.3.b., above, GM will:
 - i. Determine appropriate risk screening criteria under current land use scenarios and provide the basis and justification for the use of these criteria.
 - ii. Determine any current unacceptable risks to public health, safety, welfare, and the environment and describe why other identified risks are acceptable.
 - iii. Control any unacceptable current human exposures that are identified. This may include performing any corrective actions or other response measures (“Corrective Measures”) necessary to control current human exposures to contamination to within acceptable risk levels.

- iv. Stabilize the migration of contaminated groundwater. This may include implementing any Corrective Measures necessary to stabilize the migration of contaminated groundwater. An EI determination that migration of contaminated groundwater is under control does not substitute for achieving other stabilization or final remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses as required pursuant to MCL 324.11115a, MCL 324.11126, R 299.9629, and Part 201. Therefore, meeting this EI is not necessarily equivalent to a final remedy.
- v. Conduct groundwater monitoring to confirm that any contaminated groundwater remains within the known or suspected area of contamination.
- vi. An EI determination that current human exposures or contaminated groundwater are under control does not consider potential future land or groundwater use conditions or ecological receptors. Pursuant to MCL 324.11115a, MCL 324.11126, R 299.9629, and Part 201, RCRA corrective action final remedies must address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors). Therefore, meeting the EI for current human exposures or contaminated groundwater is not necessarily equivalent to a final remedy.

5.4 Remedial Action Plan/Corrective Measures Proposal ("RAP")

- 5.4.1 On or before December 31, 2014, GM agrees to submit to the MDEQ for review and approval, a RAP that is in accordance with Part 111 and its Rules, the applicable portions of Part 201 and its Rules, and that protects

public health, safety, welfare, and the environment from all current and reasonably expected future unacceptable risks due to past releases of hazardous waste, hazardous constituents, and hazardous substances at or from the Facility.

- 5.4.2 Any RAP submitted by GM will meet the applicable RAP requirements in MCL 324.20120b and R 299.5532.
- 5.4.3 If it is determined that response activities are necessary at the Facilities, GM agrees to identify, screen, and evaluate potential response activity alternatives for releases of hazardous waste, hazardous constituents, and hazardous substances at or from the Facilities. The RAP must include the selected final response activities with a justification for their selection and a brief summary of other alternatives not selected.
- 5.4.4 The RAP must reference and summarize any information regarding Interim Response Activities performed after approval of the RI/RFI Report.
- 5.4.5 The MDEQ may request supplemental information from GM if it determines that the RAP and supporting information do not provide an adequate basis to support the final response activities proposed to meet the requirements. GM will provide such supplemental information in a timely manner as directed, in writing, by the MDEQ.
- 5.4.6 Any risk assessments conducted by GM must estimate human health and ecological risk under reasonable maximum exposure for both current and reasonably expected future land use scenarios and be performed in accordance with applicable portions of Part 201 and its rules.
- 5.4.7 GM and the MDEQ agree that Michigan's 1E-5 cancer risk standard (i.e., increased cancer risk of 1 in 100,000) (MCL 324.20120a[4]) is a

substantive regulatory requirement. GM and the MDEQ further agree Michigan's 1E-5 cancer risk standard is defined in the Part 201 Rules (R 299.5701[k]). Although the Part 201 program is set primarily to evaluate risk on an individual chemical basis, there are provisions for the assessment of multiple chemicals with toxicological interactions

(R 299.5734). GM may use the U.S. EPA's risk assessment guidance (e.g., U.S. EPA, Region 5, RCRA Program, May 2005, Risk Management Strategy for Corrective Action Projects) to evaluate cumulative human health risks/hazards considering exposure to multiple chemicals provided that, ultimately, Michigan's required 1E-5 cancer risk standard is not exceeded for individual chemicals.

- 5.4.8 All sampling and analysis conducted under this Agreement will be performed in accordance with a Quality Assurance Project Plan ("QAPP") prepared in accordance with the U.S. EPA, Region 5, RCRA Quality Assurance Project Plan Policy (April 1998), as appropriate for the Facility, and be sufficient to identify, characterize, and delineate the nature and extent of all releases and determine the need for and design of any corrective actions for the Facility. The MDEQ may audit laboratories selected by GM or require GM to purchase and have analyzed any performance evaluation samples selected by the MDEQ for compounds of concern. GM will notify the MDEQ, in writing, at least fourteen (14) days before beginning each separate phase of field work performed under this Agreement. At the request of the MDEQ, GM will provide or allow the MDEQ or its authorized representative to take split or duplicate samples of all samples collected by GM under this Agreement.
- 5.4.9 GM will provide the MDEQ with written notification of an exceedance of a groundwater surface water interface ("GSI") standard based on acute toxicity as established pursuant to Part 201 and Part 31, Water Resources Protection, of the NREPA, MCL 324.101 *et seq.*, at any of the GSI

compliance monitoring wells approved by the MDEQ. This written notification shall be provided to the MDEQ within seven (7) days of GM obtaining knowledge and confirmation that the exceedance is occurring. Within thirty (30) days of submittal of the notification letter, GM will submit an interim response addressing the exceedance of the GSI standard(s) at the GSI compliance monitoring wells.

5.4.10 The MDEQ agrees to provide the public with an opportunity to review and comment on the proposed RAP.

5.4.11 Upon written MDEQ approval of the RAP, GM agrees to implement the RAP and submit a final operation and maintenance ("O&M") Plan for approval by the MDEQ.

5.4.12 If the RAP is based on criteria in categories provided for in Section MCL 324.20120a(1)(b)-(e), GM agrees to file a Notice of Approved Environmental Remediation ("NAER") or an MDEQ-approved alternative with the Ingham County Register of Deeds.

5.4.13 If the RAP is based on criteria in categories provided for in MCL 324.20120a(1)(f)-(j) or (2), GM agrees to enter into a legally enforceable agreement with the MDEQ or into an enforceable order with the U.S. EPA.

5.5 Construction Complete Report and Completion Report

GM agrees to submit a Construction Complete Report for MDEQ review and approval after the construction phase of the RAP is completed. Upon MDEQ approval of the Construction Complete Report, GM may request that the MDEQ provide a written acknowledgement of the approval. The MDEQ shall not unreasonably withhold such acknowledgement. GM also agrees to submit a final

Completion Report documenting that all work performed was completed in accordance with the approved RAP. The Completion Report shall include: (a) documentation of compliance with the cleanup objectives in the approved RAP; (b) verification of the recording of the NAER or restrictive covenant with the Ingham County Register of Deeds; and (c) documentation that GM has entered into a legally enforceable agreement with the MDEQ or an Order with the U.S. EPA. Upon MDEQ approval of the Completion Report, GM may request that the MDEQ provide a written acknowledgement of the approval. The MDEQ shall not unreasonably withhold such acknowledgement.

5.6 Part 111, Rule 299.9525

If GM intends to transfer ownership or operational control of one or more of the Facilities, GM agrees to provide a copy of the Part 111, R 299.9525, notice to potential new owners or operators.

5.7 Part 111, Rule 299.9522

GM agrees to submit a Site Identification Form (EQP5150) notifying the MDEQ of transfer of ownership of the Facility or any portion of the Facility..

VI. FACILITY ACCESS

- 6.1 For purposes of implementing this Agreement, the MDEQ and the U.S. EPA, their agents, employees, and/or any duly designated MDEQ or U.S. EPA representatives may enter, at all reasonable times, and freely move about the Facilities to, among other things, interview Facility personnel and contractors; review GM's progress in carrying out the terms of this Agreement; conduct tests, sampling, or monitoring as the MDEQ or the U.S. EPA deem necessary; use a camera, sound recording, or other documentary equipment; and verify the reports and data GM submits to the MDEQ or the U.S. EPA. GM will permit such

persons to inspect and copy all nonprivileged records, files, photographs, and documents, including all sampling and monitoring data that pertain to work under this Agreement and that are within the possession or under the control of GM or its contractors or consultants. GM may split samples collected by the MDEQ or the U.S. EPA.

- 6.2 Nothing in this Section limits or otherwise affects the MDEQ or the U.S. EPA's right of access and entry pursuant to applicable law, including the NREPA and the RCRA.

VII. REPORTING AND PUBLIC INVOLVEMENT

- 7.1 GM agrees to establish a publicly accessible repository for information regarding activities at the Facilities and conduct public outreach and involvement activities, consistent with the RCRA Public Participation Manual, as appropriate for the Facilities.
- 7.2 GM agrees to provide quarterly progress reports to the MDEQ Project Manager by the 15th day of the month following each quarter. The report will list the work performed to date, data collected, problems encountered, project schedule, and the percent of the project completed, and GM will attach summary tables or figures of all data collected during the previous quarter.
- 7.3 The Parties will communicate frequently and in good faith to ensure successful completion of the requirements of this Agreement and will meet on at least a semiannual basis to discuss the work proposed and performed under this Agreement.

VIII. RECORD PRESERVATION

- 8.1 GM will retain, during the pendency of this Agreement and for at least six (6) years after termination of the entire Agreement, all data and all final documents now in its possession or control or which come into its possession or control, which relate to this Agreement. GM will notify the MDEQ, in writing, ninety (90) days before destroying any such records and provide the MDEQ the opportunity to take possession or obtain copies of any such nonprivileged documents. GM's notice will refer to the effective date and name of this Agreement and will be addressed to:

Mr. George W. Bruchmann, Chief
Waste and Hazardous Materials Division
Michigan Department of Environmental Quality
P.O. Box 30241
Lansing, Michigan 48909-7741

GM will promptly provide the MDEQ's Project Manager a copy of any such notice.

- 8.2 GM further agrees that within thirty (30) days after retaining or employing any agent, consultant, or contractor ("Agents") to carry out the terms of this Agreement, GM will enter into an agreement with the Agents to provide GM a copy of all data and final nonprivileged documents produced under this Agreement.
- 8.3 GM agrees that it will not assert any claim of privilege for any data developed to prepare any reports or conduct any investigations or other actions taken under this Agreement.

IX. MODIFICATION, TERMINATION, AND SATISFACTION

- 9.1 This Agreement may be modified by written, mutual agreement of the Parties. Except for the dates established in subparagraph 5.3, the Project Managers may agree, in writing, to extend any deadline in this Agreement.
- 9.2 Either Party may unilaterally terminate this Agreement upon written notice to the other Party.
- 9.3 After completion of and based on the results of the final Completion Report and other relevant information, GM may, if it wishes to terminate corrective action for the Facility or a portion of the Facility, submit to the MDEQ a written request for a determination that corrective action is complete. GM must demonstrate that there have been no releases of hazardous waste, hazardous constituents, or hazardous substances at or from the Facilities or portion of the Facilities or that the Facilities or portion of the Facilities has been remediated to applicable generic Part 201 cleanup standards and poses no unacceptable risk to public health, safety, welfare, or the environment.
- 9.4 GM may submit a written request to the MDEQ for a Corrective Action Complete With Controls determination for the Facilities or a portion of the Facilities (see "Completion of Corrective Action Activities," 68 *Federal Register* 8757 [2003]).
- 9.4.1 The request must show how GM has:
- a. Defined a full set of corrective measures;
 - b. Completed construction and installation of all required remedial actions;

- c. Met all site-specific media cleanup objectives that reflect current and reasonably expected future land use; and
- d. All that remains is performance of required operation and maintenance (“O&M”) and monitoring actions, reporting, and/or compliance with and implementation of any institutional controls and a legally enforceable agreement to maintain those controls.

9.4.2 Prior to granting a request for a determination of Corrective Action Complete With Controls, the MDEQ may:

- a. Issue a notice with an opportunity to comment;
- b. Require notice of transfers of the facility ownership; and
- c. Require financial assurance to ensure continued O&M of any institutional controls.

9.5 The provisions of this Agreement will be satisfied when GM has completed all of the Work in Section V, achieved the corrective action cleanup objectives, and secured the specified approvals from the MDEQ. This Agreement will terminate upon GM's and the MDEQ's execution of an “Acknowledgment of Termination and Agreement on Record Preservation and Reservation of Rights” (“Acknowledgment”). GM's execution of the Acknowledgment will affirm its continuing obligation to preserve all records as required by Section VIII, to maintain any necessary land or resource-use restrictions, perform O&M and long-term monitoring activities, establish and maintain financial assurance and permanent markers or other long-term measures, and to recognize the Parties' reservation of rights as required in Section X. The MDEQ will not unreasonably withhold execution of the Acknowledgement.

9.6 A determination to terminate corrective action shall not preclude the MDEQ from requiring further corrective action at a later date if new information or subsequent analysis indicates that a historical release or threat of a historical release of a hazardous waste, hazardous constituents, or hazardous substance at or from the Facilities exists that may pose a threat to public health, safety, welfare, or the environment or if there is a change in the use of any portion of the Facilities such that the Part 201 cleanup criteria upon which the corrective action is based are no longer applicable.

X. RESERVATION OF RIGHTS

10.1 The Parties reserve any and all rights, remedies, authorities, or defenses that they respectively have under law. Nothing in this Agreement limits or affects the authority or ability of either Party to take any action authorized by law. Nothing in this Agreement creates any legal rights, claims, or defenses in either Party or by or for any Third Party. Nothing in this Agreement relieves GM from complying with applicable federal, state, and local laws.

10.2 This Agreement does not limit or affect the rights of the Parties against any Third Party, nor does it limit the rights of Third Parties.

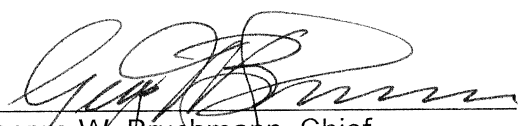
XI. EFFECTIVE DATE

This Agreement is effective on the date the last Party signs.

Date: 6-25-08

By: 
William J. McFarland, Director
Remediation Services
Worldwide Facilities Group
General Motors Corporation

Date: 7/1/08

By: 
George W. Bruchmann, Chief
Waste and Hazardous Materials Division
Michigan Department of Environmental
Quality