

**Voluntary Corrective Action Agreement
Between
The United States Environmental Protection Agency and
General Motors Corporation
For GM Powertrain Group - Bedford Plant, Bedford**

I. Purpose

The United States Environmental Protection Agency (U.S. EPA) and General Motors Corporation (GM), collectively referred to as the Parties, establish this Agreement to enable GM to work independently and voluntarily to investigate, and as necessary stabilize and remediate releases of hazardous wastes or hazardous constituents at or from the GM Powertrain Group-Bedford Plant, more particularly delineated in attached Figure 1, (the "Site") located in Bedford, Indiana that may present an unacceptable risk to human health or the environment. The Parties believe that GM will appropriately, efficiently and effectively investigate and, as necessary, remediate the Site on an accelerated basis by following the procedures and guidelines in this Agreement.

II. Background

The Site (U.S. EPA ID# IND006036099) is located at 105 GM Drive, Bedford (Lawrence County), Indiana, 47421. The Bedford Plant produces aluminum casting products, such as transmission cases, pistons, and engine blocks. Major aluminum production processes include die casting and permanent molding.

The Site is bounded to the south by the Canadian and Pacific Railway, Imco, and residential property, to the east by undeveloped land and residential areas, to the north by residential and undeveloped areas, and to the west by former railway, residential, and industrial property.

The Site was originally developed in the early 1900s as limestone milling operations. In 1942, the operation became an Allison Aircraft aluminum engine foundry. After World War II, the Site remained an aluminum foundry, casting automotive parts as part of various General Motors divisions, including Delco-Remy, Allison, Fabricast, Central Foundry, and Powertrain. The Bedford Plant is still in operation today. In 1977, GM purchased a piece of property from the railroad, south of the original Plant, that had formerly included the railroad roundhouse. This property was leased by Mica Metals (a dross reclaimer of aluminum) until 1997. Other parcels, mostly undeveloped, have also been purchased over the years to the north and east of the original property boundaries. The Site today includes 152.5 acres (see attached site map in Figure 1), with approximately one million square feet of floor space.

U.S. EPA and GM expect that GM will investigate, and as necessary remediate, all releases of hazardous wastes or constituents at or from the Site under the guidelines established in this Voluntary Corrective Action Agreement.

III. Definitions

Unless otherwise specified herein, terms used in this Agreement which are defined in RCRA or in regulations promulgated under RCRA will have the definitions given to them in RCRA or in such regulations.

IV. Project Manager

U.S. EPA and GM will each designate a Project Manager and notify each other in writing of the Project Manager selected within 14 days of the effective date of this Agreement. Each Project Manager will be responsible for overseeing the implementation of this Agreement. The parties will provide prompt written notice whenever they change Project Managers.

V. Work to be Performed

GM agrees to perform the actions specified in this section, in the manner and by the dates specified herein. GM will perform the work undertaken pursuant to this Agreement in compliance with RCRA and other applicable Federal and State laws and their implementing regulations, and consistent with all relevant U.S. EPA guidance documents as appropriate to the Site. This guidance includes, but is not limited to, the Documentation of Environmental Indicator Determination Guidance, and relevant portions of the Model Scopes of Work for RCRA Corrective Action and of U.S. EPA's Risk Assessment Guidance for Superfund.

1. GM will complete activities necessary to identify and define the nature and extent of releases of hazardous waste and/or hazardous constituents at or from the Site. These activities include:
 - a. Provide to U.S. EPA, within 120 days after the effective date of this Agreement, a brief Current Conditions Report covering all areas of the Site. The Current Conditions Report will include any recent sampling data and a summary of the historic operations, remedial efforts, and physical setting of the Site. The Current Conditions Report, in total, will describe, at a minimum, conditions at the locations identified in the Indiana Department of Environmental Management (IDEM) Preliminary Assessment, dated April 30, 1985 and any past or present locations at the Site for which GM knows of past treatment, storage, or disposal of hazardous waste or hazardous constituents.
 - b. Perform phased investigations, at a minimum, at the locations identified in the Current Conditions Report as needing further investigation to identify the nature and extent of any releases of hazardous waste and/or hazardous constituents at

or from the Site which may pose an unacceptable risk to human health or the environment, and provide a report to U.S. EPA. The report will also describe the nature and extent of any releases of hazardous waste and/or hazardous constituents at or from the Site which do not pose an unacceptable risk to human health or the environment, and provide the basis for those conclusions, including an evaluation of the risks. The report may be prepared in phases to provide timely support for the demonstrations described in Section V.2, below, and for the determinations and proposal described in Section V.3, below. If investigation determines that acceptable risks to human health or the environment are exceeded, GM will determine the need for interim measures based on a professional evaluation of the data and will notify the U.S. EPA of the planned course of action.

- c. GM may choose to proceed with remedial actions to limit site investigation or risk assessment activities in order to complete the work as defined in Sections V.2 and V.3 below.
2. GM will demonstrate by the dates indicated, through submitting an Environmental Indicators Report and by performing any other necessary activities, consistent with this Section, that:
 - a. By January 30, 2005, all current human exposures to contamination at or from the Site 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 30, 2007, migration of contaminated groundwater at or from the Site 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 Sections V.2.a and V.2.b., above, GM will:
 - i. Determine appropriate risk screening criteria under current use scenarios and provide the basis and justification for the use of these criteria.
 - ii. Determine any current unacceptable risks to human health 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.
- v. Conduct groundwater monitoring to confirm that any contaminated groundwater remains within the original area of contamination.
- vi. Prepare a report, either prior to or as part of the Environmental Indicators Report, that provides a description and justification for any interim actions performed to meet the requirements of this Section, including sampling documentation, construction completion documentation, and/or confirmatory sampling results.

3. Final Corrective Measures:

- a. GM will propose to U.S. EPA by December 31, 2007, final Corrective Measures necessary to protect human health and the environment from all current and future unacceptable risks due to releases of hazardous waste or hazardous constituents at or from the Site (the "Final Corrective Measures Proposal"). The proposal will describe all Corrective Measures implemented at the Site since the effective date of this Agreement. It will also include a description of all other final Corrective Measures evaluated by GM, a detailed explanation of why the proposed final Corrective Measures were preferred by GM, and cost estimates for the final Corrective Measures evaluated. The proposal will also include a detailed schedule to construct and implement the final Corrective Measures and to submit a Final Remedy Construction Completion Report. This schedule will provide that as much of the initial construction work as practicable will be completed within one year after U.S. EPA selects the final Corrective Measures and that all final Corrective Measures will be completed within a reasonable period of time to protect human health and the environment.
- b. As part of developing its proposals, GM must propose appropriate risk screening criteria, cleanup objectives, and points of compliance under current and reasonably expected future land use scenarios and provide the basis and justification for these decisions.
- c. U.S. EPA may request supplemental information from GM if it determines that the proposals and supporting information do not provide an adequate basis to select final Corrective Measures that will protect human health and the environment from the release of hazardous waste or hazardous constituents at or

from the Site. GM will provide such supplemental information in a timely manner as directed in writing by U.S. EPA.

- d. U.S. EPA will provide the public with an opportunity to review and comment on its proposed final Corrective Measures, including a detailed description and justification for the proposals (the "Statement of Basis"). Following the public comment period, U.S. EPA will select the final Corrective Measures and provide notification of its decision and rationale in a "Final Decision and Response to Comments ("Final Decision").
 - e. If GM agrees with U.S. EPA's selection of final Corrective Measures, GM will implement the final Corrective Measures selected in U.S. EPA's Final Decision according to the schedule therein.
4. Reporting and other requirements:
- a. GM will establish a publicly accessible repository for information regarding site activities and conduct public outreach and involvement activities in accordance with U.S. EPA's RCRA public participation guidance, as appropriate for the Site.
 - b. GM will provide quarterly progress reports to U.S. EPA by the 15th day of the month following a quarter. The report will list work performed to date, data collected, problems encountered, project schedule, and percent project completed. The parties will communicate frequently and in good faith to assure successful completion of the requirements of this Agreement, and will meet on at least a semi-annual basis to discuss the work proposed and performed under this Agreement.
 - c. GM will provide a Final Remedy Construction Completion Report documenting all work that it has performed pursuant to the schedule in U.S. EPA's Final Decision.
 - d. If ongoing monitoring or operation and maintenance is required after construction of the selected final Corrective Measures, GM will include an operations and maintenance plan in the Final Remedy Construction Completion Report. GM will revise and resubmit the Report in response to U.S. EPA's written comments, if any, by the dates U.S. EPA specifies. Upon U.S. EPA's written approval, GM will implement the approved operation and maintenance plan according to the schedule and provisions contained therein.
 - e. 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. Risk assessments will be conducted in accordance with the Risk Assessment Guidance for Superfund (RAGS) or other appropriate U.S. EPA guidance. GM will use appropriate, conservative screening values when screening to determine whether further investigation is required. Appropriate screening values may include those

derived from Federal Maximum Contaminant Levels, U.S. EPA Region 9 Preliminary Remediation Goals, U.S. EPA Region 5 Ecological Screening Levels, U.S. EPA Region 5 Risk Based Screening Levels, U.S. EPA Region 3 Risk Based Concentration Table, or RAGS.

- f. All sampling and analysis conducted under this Agreement will be performed in accordance with the Region 5 RCRA Quality Assurance Project Plan Policy (April 1998) as appropriate for the Site, and be sufficient to identify and characterize the nature and extent of all releases. U.S. EPA may audit laboratories selected by GM or require GM to purchase and have analyzed any Performance Evaluation (PE) samples selected by U.S. EPA which are compounds of concern. GM will notify U.S. EPA in writing at least 14 days before beginning each separate phase of field work performed under this Agreement. At the request of U.S. EPA, GM will provide or allow U.S. EPA or its authorized representative to take split or duplicate samples of all samples collected by GM under this Agreement.

VI. Record Preservation

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 U.S. EPA in writing 90 days before destroying any such records, and provide U.S. EPA the opportunity to take possession of any such non-privileged documents. GM's notice will refer to the effective date, caption, and docket number of this Agreement and will be addressed to:

Director
Waste, Pesticides and Toxics Division
U.S. EPA, Region 5 (D-8J)
77 W. Jackson Blvd.
Chicago, IL 60604-3590

GM will also promptly provide U.S. EPA's Project Manager a copy of any such notice.

GM further agrees that within 30 days of 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 non-privileged documents produced under this Agreement.

GM agrees that it will not assert any privilege claim concerning any data developed to prepare any reports or conduct any investigations or other actions taken under the Agreement.

VII. Modification, Termination and Satisfaction

This Agreement may be modified by written, mutual agreement of the Parties. The Project Managers may agree in writing to extend any deadline in this Agreement. Either Party may unilaterally terminate this Agreement upon written notice to the other Party. U.S. EPA's participation in this Agreement is subject to the Anti-Deficiency Act, 31 USC § 1341.

GM may request that U.S. EPA issue a determination that GM has met the corrective action cleanup objectives for the Site or a portion of the Site. GM will submit documentation that it has achieved the objectives and U.S. EPA will respond in writing indicating whether GM has completed RCRA corrective action. If U.S. EPA agrees that RCRA corrective action is complete it will issue a "No Further Action" determination for all or a portion of the Site.

The provisions of the Agreement will be satisfied upon GM's and U.S. EPA's execution of an "Acknowledgment of Termination and Agreement on Record Preservation and Reservation of Rights", consistent with U.S. EPA's Model Scope of Work. GM's execution of the Acknowledgment will affirm its continuing obligation to preserve all records as required by Section VI, to maintain any necessary institutional controls or other long term measures, and to recognize the Parties' reservation of rights as required in Section VIII.

VIII. Reservation of Rights

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.

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. The Parties agree that this Agreement does not constitute any decision on pre-authorization of funds under §111(a)(2) of CERCLA.

IX. Effective Date

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

DATE: 3-20-01

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

DATE: March 16, 2001

BY: Robert Springer
Robert Springer, Director
Waste, Pesticides and Toxics Division
U.S. Environmental Protection Agency
Region 5