

**RCRA FACILITY INVESTIGATION  
AND CERCLA REMOVAL ACTION**

**QUARTERLY PROGRESS REPORT #48  
FIRST QUARTER 2013**

**GM CETC - BEDFORD FACILITY  
105 GM DRIVE  
BEDFORD, INDIANA**

**EPA ID# IND006036099  
AOC DOCKET NO. V-W-'03-C-747**

**Prepared For:  
General Motors LLC**

**APRIL 12, 2013  
REF. NO. 013968 (367)**  
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**Real Estate & Facilities  
Remediation Team**

April 12, 2013

Reference No. 013968

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Dear Messers Stimple and Ramanauskas:

Re: GM CETC – Bedford Facility, IND 006036099  
Performance-Based RCRA Corrective Action  
Quarterly Progress Report #48, First Quarter 2013  
GM CETC - Bedford Facility  
Bedford, Indiana

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Please find enclosed the Quarterly Progress Report #48 (First Quarter 2013) for the Performance-Based RCRA Corrective Action project and the CERCLA Removal Action (RA) at the GM Castings, Engines, Transmissions, and Components (CETC; formerly Powertrain) - Bedford Facility (Facility) 105 GM Drive Bedford, Indiana, and select surrounding properties (Site). This report is being submitted in accordance with the Performance-Based RCRA Corrective Action Agreement, signed March 20, 2001 and amended October 1, 2002, March 29, 2007, and May 9, 2008 and in accordance with the Administrative Order on Consent (AOC) for Removal Action Proceeding Under Sections 104, 106(a), 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. SS 9604, 9606(a), 9607, and 9622 (United States Environmental Protection Agency (U.S. EPA) Docket No.: V-W-'03-C-747) effective July 31, 2003, as amended for quarterly reporting by U.S. EPA approval, September 14, 2012.

The next RCRA/CERCLA quarterly progress report covering the second Quarter of 2013 will be submitted on or before July 15, 2013.

Should you have any questions regarding this document, please do not hesitate to contact me at (313) 510-4328.

Yours truly,

General Motors LLC

Cheryl R. Hiatt  
Project Manager

YD/cs/1

Encl.

c.c.: See Attached Distribution List

Messers Ramanauskas and Stimple  
April 12, 2013

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***GM Bedford Distribution List***

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**QUARTERLY PROGRESS REPORT  
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## 1.0 INTRODUCTION

This Quarterly Progress Report is submitted by General Motors LLC (GM) in accordance with the Bedford Performance-Based Corrective Action Agreement (Agreement), executed on March 20, 2001, and modified on October 1, 2002, March 29, 2007, and May 9, 2008; and in accordance with the Administrative Order on Consent (AOC) for Removal Action Proceeding Under Sections 104, 106(a), 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. SS 9604, 9606(a), 9607, and 9622 (United States Environmental Protection Agency (U.S. EPA) Docket No.: V-W-'03-C-747) effective July 31, 2003, as amended for quarterly reporting by U.S. EPA approval, September 14, 2012. This report covers the period of the first calendar quarter of 2013 for the Resource Conservation and Recovery Act (RCRA) Corrective Action (CA) Project and the CERCLA Removal Action (RA) at the GM Castings, Engines, Transmissions, and Components (CETC; formerly Powertrain) - Bedford Facility (Facility) and select surrounding properties (Site), Bedford, Indiana.

The next RCRA/CERCLA quarterly progress report covering the Second Quarter of 2013 will be submitted on or before July 15, 2013.

## 2.0 LIST OF COMPLETED ACTIVITIES

The following activities took place and the following documents were prepared and distributed during this quarter:

- Maintenance of storm water and erosion controls continued on an as-needed basis.
- Completion of the remedial strategy for the Spring 018 area continued into this quarter.
  - Spring 018 water continues to be collected and treated by SES's on-Site water treatment system. Bimonthly sampling of the treatment system was completed in February during this period and results emailed to U.S. EPA. Sample results from SES's water treatment system during the reporting period are provided in Table 2.1. Samples will be collected for the next reporting period in April and June 2013.
  - Results for samples collected from Spring 018 during the quarter are presented in Table 2.2. Sample results for the monthly sampling were previously emailed to U.S. EPA and IDEM.
  - A memorandum in response to the December 27, 2012, U.S. EPA's comments regarding the memorandum summarizing the results from the Spring 018 dye trace test (CRA, November 27, 2012) was submitted to the U.S. EPA on February 12, 2013
  - A memorandum regarding the Spring 018 Interim Measure (IM) Status was submitted to the U.S. EPA and IDEM on March 19, 2013.
  - Concrete sealing work of the creek channel in proximity to Spring 018 as well as improvements to the Spring 018 containment berm commenced in December. Photos of the concrete work progress were emailed to U.S. EPA and IDEM on January 18 and 25, and on February 8 and 19. Concrete placement was completed in February 2013, with final clean-up work completed in March 2013. Check-dams and by-pass pumps were removed and the natural flow of the creek through the Spring 018 Area was restored on April 1, 2013.
- Fact Sheet 35 was published on January 3, 2013.
- A memorandum of the results from the AOI 8 NAPL pumping tests was submitted on February 26, 2013.
- A memorandum proposing additional investigation on Parcels 400, 430, and 431 was submitted on February 27, 2013
  - U.S. EPA indicated there were no comments on the proposed plan on March 21, 2013

- The quarterly static groundwater level measurements for the EI CA750 monitoring were completed at the end of March 2013.
- Public and Community Liaison Panel (CLP) meetings were held on January 16, 2013, to provide an update of the project and address questions and concerns from local residents. The Bedford Times Mail published an article on the meeting on January 17, 2013.
- The first quarterly sampling events for the Leachate Collection and Leak Detection Sumps were completed on March 12, 2013.
- Conference calls were held with U.S. EPA and IDEM on January 4 and 31, February 14 and 20, and March 12 and 28, 2013, to discuss items related to the RA and the design and construction of the East Plant Area Interim Measures (IM).
- On-Site construction meetings for the reporting period have been held informally daily and formally as needed. During this maintenance period, formal SES construction meetings were held on January 8, February 12, and March 12, 2013. Tailgate safety meetings are held daily for both the consultant and the contractor.
- The RCRA/CERCLA Quarterly Progress Report #47, covering the fourth Quarter of 2012, was submitted to the U.S. EPA and IDEM on January 14, 2013.



### 3.0 **SUMMARIES OF ALL ANTICIPATED PROBLEMS AND PLANNED RESOLUTIONS**

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- GM completed additional remedial activities and has proposed a process addressing Spring 018 to U.S. EPA and IDEM. GM conducted additional temperature monitoring and new dye-trace studies to more fully understand the Spring 018 hydrogeologic system in support of the design. Additional activities have been completed in the area with the installation of a concrete sealing layer within the former swallet areas upstream of Spring 018. GM continues to collect and treat water emanating at Spring 018 and will be monitoring changes to the conditions in the creek and spring related to the concrete sealing including additional monitoring to determine the effectiveness of the sealing.

#### 4.0 **SUMMARIES OF ALL CHANGES MADE IN THE CORRECTIVE ACTION (CA) DURING THE REPORTING PERIOD**

The following changes were made to the CA during the reporting period:

- Submission of response to U.S. EPA's comments on the Spring 018 dye trace test memorandum on February 12, 2013.
- Submission of a proposal to conduct additional investigation sampling on Parcels 400, 430, and 431 on February 27, 2013.
- Submission of Spring 018 Interim Measure (IM) Status memorandum dated March 19, 2013.
- Concrete rock sealing activities in the Tributary 2 creek bed and Bailey's Branch as part of the Spring 018 remedial activities were completed in February 2013.

## 5.0 COMMUNITY RELATIONS

The telephone number for public contact is 812-277-8954 (Katie Kamm, CRA). Individual meetings can be arranged to discuss project progress with residents as requested.

The next neighborhood/public meeting and CLP meetings are tentatively scheduled for Fall, 2013. Presentations for past meetings are posted on the GM website at [www.bedfordpowertraincorrectiveaction.com](http://www.bedfordpowertraincorrectiveaction.com).

The document repository has been restored at the Bedford Public Library, with relevant project related documents available on compact disc (CD) in PDF format. Information will be updated periodically, as new documents become available. All data located in the Library repository can also be found on the aforementioned website.

## 6.0 CHANGES IN PERSONNEL DURING THE REPORTING PERIOD

Primary oversight personnel for CRA and Severson Environmental Services (SES) remain unchanged. Workers were mobilized during the fourth quarter 2012 in support of the Spring 018 concrete sealing construction activities and remained active on-Site through most of the first quarter 2013. Some personnel also remained on-site for routine site monitoring and maintenance and other site related projects as they occur.

## 7.0 PROJECTED WORK FOR THE NEXT REPORTING PERIOD

Work anticipated for the next reporting period includes:

- Continue maintenance of erosion controls as needed of the East Plant Area Cover System.
- Sample SES's on-Site water treatment plant in April and June, 2013 in accordance with the monitoring schedule.
- Submit the restoration design for the two remaining properties west of Peerless Road that GM LLC is responsible for restoring.
- Submit the report outlining the results of the 2012 inspection of the Parcel 22 restoration south of Broomsage Road.
- Submit results summary of the downhole geophysical testing of coreholes along the proposed alignment for the East Plant Area Groundwater Collection Trench.
- Submit the EI CA750 results from the second semi-annual 2012 monitoring event.
- The next round of EI CA750 static groundwater level measurements and water quality samples are scheduled to be completed in June/July 2013.
- Submit the East Plant Area Vault Construction Certification Report.

8.0 **COPIES OF DAILY REPORTS, INSPECTION REPORTS,  
LABORATORY/MONITORING DATA**

Tables 2.1 and 2.2 present results from the SES on-Site water treatment plant and Spring 018, respectively. Additional packages of analytical data were submitted to U.S. EPA once the validated data became available. Validated data will continue to be submitted as it becomes available.

TABLE 2.1

SES TREATMENT SYSTEM #1 SAMPLING RESULTS - FEBRUARY 2013  
 GM CETC BEDFORD FACILITY  
 BEDFORD, INDIANA

<i>Sample Date</i>	<i>Analysis</i>	<i>Influent</i>	<i>After Sand Filter 1</i>	<i>After Sand Filter 2</i>	<i>Between Carbons 1 &amp; 3</i>	<i>Between Carbons 2 &amp; 4</i>	<i>Effluent</i>
2/19/2013	PCB (ug/L) Turbidity (NTU)	ND (0.19) 6.45	ND (0.20) 15.30	ND (0.19) 3.83	ND (0.19) 0.00	ND (0.19) / ND (0.19) 1.11 / 1.21	ND (0.20) 0.00

Note:

J - Estimated Value

ND - Non detect

TABLE 2.2

SPRING 018 SAMPLING RESULTS - JANUARY/FEBRUARY/MARCH 2013  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA

Sample Location		Spring 018C	Spring 018C	Spring 018C	Spring 018C
Sample Identification		SW-015-010913-GS-39925	SW-015-021313-GS-39928	SW-015-031313-GS-39940	SW-015-031313-GS-39941
Sample Date		1/9/2013	2/13/2013	3/13/2013	3/13/2013
Sample Type					Duplicate
	<i>Units</i>				
<b>PCBs</b>					
Aroclor-1016 (PCB-1016)	ug/L	0.21 U	0.20 U	0.19 U	0.19 U
Aroclor-1232 (PCB-1232)	ug/L	0.21 U	0.20 U	0.19 U	0.19 U
Aroclor-1242 (PCB-1242)	ug/L	0.21 U	0.088 J	0.19 U	0.19 U
Aroclor-1248 (PCB-1248)	ug/L	0.12 J	0.20 U	0.12 J	0.19 U
Aroclor-1254 (PCB-1254)	ug/L	0.21 U	0.20 U	0.19 U	0.19 U
Aroclor-1260 (PCB-1260)	ug/L	0.21 U	0.20 U	0.19 U	0.19 U
Total PCBs	ug/L	0.12 J	0.088 J	0.12 J	ND
<b>General Chemistry</b>					
Total suspended solids (TSS)	ug/L	5000	4000 U	5000	3000

Notes:

U - Not present at or above the associated value.

J - Result is less than the RL (reporting limit) but greater than or equal to the MDL (method detection limit) and the concentration is an estimated value.