

*GENERAL MOTORS CORPORATION*

**GM POWERTRAIN BEDFORD FACILITY  
105 GM DRIVE  
BEDFORD, INDIANA  
EPA ID #IND006036099**

*ADMINISTRATIVE ORDER ON CONSENT  
U.S. EPA DOCKET NO. V-W-'03-C-747  
REMOVAL ACTION*

**MONTHLY PROGRESS REPORT - DECEMBER 2007**

**January 14, 2008**

**TABLE OF CONTENTS**

	<u>Page</u>
1.0 INTRODUCTION .....	1
2.0 SIGNIFICANT DEVELOPMENTS IN THIS MONTH .....	4
3.0 SUMMARIES OF ALL ANTICIPATED PROBLEMS AND PLANNED RESOLUTIONS..	5
4.0 PROJECTED WORK FOR THE NEXT REPORTING PERIOD.....	67

LIST OF FIGURES

FIGURE 1	DOWNSTREAM PARCELS AIR SAMPLING LOCATIONS DECEMBER 2007
FIGURE 2	PARCELS 36, 37, AND 38 (VERIFICATION AREAS 190, 193 AND 194) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS
FIGURE 3	PARCELS 36 AND 37 (VERIFICATION AREAS 127, 128, AND 195) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS
FIGURE 4	PARCEL 38 (VERIFICATION AREAS 198, 199, AND 201) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS
FIGURE 5	PARCELS 37, 38, AND 39A (VERIFICATION AREAS 196 AND 200) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS
FIGURE 6	PARCELS 39A AND 40 (VERIFICATION AREAS 320, 321 AND 331) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS
FIGURE 7	PARCEL 39A (VERIFICATION AREAS 328 TO 330) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS
FIGURE 8	PARCEL 40 (VERIFICATION AREAS 347 TO 349) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS
FIGURE 9	PARCEL 40 (VERIFICATION AREAS 367 TO 369) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS
FIGURE 10	PARCEL 39A AND 40 (VERIFICATION AREAS 371, 408 AND 416) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS
FIGURE 11	PARCELS 39A AND 40 (VERIFICATION AREAS 370 AND 372) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS
FIGURE 12	PARCEL 39A (VERIFICATION AREAS 373 TO 375) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS
FIGURE 13	PARCEL 40 (VERIFICATION AREAS 365, 366 AND 378) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS
FIGURE 14	PARCEL 40 (VERIFICATION AREAS 379 TO 381) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS
FIGURE 15	PARCEL 40 (VERIFICATION AREAS 382 TO 384) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS
FIGURE 16	VERIFICATION AREAS - PARCELS 36 TO 39
FIGURE 17	VERIFICATION AREAS - PARCELS 38, 39 AND 40
FIGURE 18	VERIFICATION AREAS - PARCELS 39A, 40 AND 81

**LIST OF TABLES**

TABLE 1.1A	VALIDATED AIR MONITORING RESULTS - PCB
TABLE 1.1B	VALIDATED AIR MONITORING RESULTS - TSP
TABLE 2.1	TRANSPORTATION AND DISPOSAL SUMMARY OF PCB WASTE MATERIAL
TABLE 2.1A	TRANSPORTATION AND DISPOSAL SUMMARY OF <50 mg/kg PCB WASTE MATERIAL
TABLE 3.1	ENTACT TREATMENT SYSTEM SAMPLING RESULTS
TABLE 3.2	SES TREATMENT SYSTEM SAMPLING RESULTS

**LIST OF APPENDICES**

APPENDIX A	DELIVERABLES SUMMARY
------------	----------------------

## 1.0 INTRODUCTION

---

This Monthly Progress Report is submitted 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.

The next Monthly Progress Report, for the month of January 2008, will be submitted on or before February 15, 2008.

## 2.0 SIGNIFICANT DEVELOPMENTS IN THIS MONTH

---

- Air monitoring has continued. Final validated results of the creek Removal Action (RA) air-monitoring program for December 2007 are presented in Table 1.1a (polychlorinated biphenyl (PCB) results) and Table 1.1b (total suspended particulate (TSP) Stations 25C, 28A, and 32B). The locations of the air monitoring stations in the Downstream Parcels are presented on Figure 1.
- Verification results are presented on Figures 2 through 19 to show progress as of this reporting period. Work completed in the parcels, as presented, is not complete as either additional excavation or statistical evaluation may be required to confirm the cleanup objective has been met. Verification figures for a given parcel are included in the monthly report as new data become available until all cleanup criteria are met, whereupon the figure is presented with validated data. Final verification figures will be presented in the Downstream Parcels Construction Certification Report.
- Work continued in December 2007 along the stream channel of Parcels 36, 37, 38, 39, and 40 to remove impacted soil and sediment from the creek channel and floodplain. Confirmation sampling was conducted on the following excavated parcels:
  - Parcel 36 on December 7, 2007, as presented on Figures 2 and 3.
  - Parcel 37 on December 5, 7, and 20, 2007, as presented on Figures 3 and 5.
  - Parcel 38 on December 5, 6, and 20, 2007, as presented on Figures 4 and 5.
  - Parcel 39 on December 6, and 12, 2007, as presented on Figures 5, 6, 7, 10, 11, and 12.
  - Parcel 40 on December 12, 14, and 19, 2007, as presented on Figures 6, 8, 9, 10, 11, 13, 14, and 15.
  - Figures 16, 17, and 18, depict key-maps of verification area grids for the parcels sampled during this reporting period.

- A total of 7,168 tons of <50 mg/kg PCB material excavated from the creek RA and was placed in approved fill areas within the East Plant Area in December 2007.
- The summary of PCB soil disposal for December 2007 is presented in Table 2.1. The transportation and disposal summary for the <50 mg/kg PCB soil is presented in Table 2.1a.
- Water within the remediation areas was collected and treated by ENTACT Environmental Services' (ENTACT's) and/or Severson Environmental Services' (SES's) on-Site water treatment systems. U.S. EPA has approved direct discharge of treated water from both ENTACT's treatment system at Staging Area F and SES's treatment system at Parcel 216 Staging Area. Water treatment sample results for ENTACT's and SES's treatment systems for December 2007 are provided in Table 3.1 and 3.2, respectively.
- Dye-trace studies under the Site Source Control (SSC) Work Plan: Addendum No. 5 continued. The third dye trace test (Rhodamine WT in the Parcel 14 sinkhole location) was initiated on October 5, 2007. Monitoring of the third dye-trace test was completed during this reporting period.
- Operation of Borrow Area 39-1 continued.
- Tree consolidation, chipping, and mulching continued.
- A conference call was held on December 18, 2007, with the U.S. EPA, Agency for Toxic Substance and Disease Registry (ATSDR), the Indiana Department of Environmental Management (IDEM), and the Indiana State Department of Health (ISDH) to discuss items related to the RA and the design and construction of the East Plant Area Interim Measures (IM). The United States Fish and Wildlife Service (USFWS) was also invited to the call.
- On-Site construction meetings for the reporting period have been held informally daily and formally weekly. Meetings with SES are generally held on Wednesdays. The SES meeting was held on December 5, 2007. Meetings with ENTACT are held generally on Thursdays. ENTACT meetings were held on December 6 and 20, 2007. Minutes for December 2007, ENTACT meeting minutes for October 2007, and all meeting minutes for November and December 2007 will be submitted with the January 2008 Monthly Progress Report.
- The Construction Certification Report for the Upstream Parcels RA was approved on December 12, 2007 by U.S. EPA.

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

---

- GM continues to evaluate the Spring 018 Area. This spring water is currently captured and treated before entering the creek. SSC Work Plan: Addendum No. 5, investigation/evaluation of the Spring 018 area is ongoing.
- Transport of <50 ppm soil from Staging Area G to the East Plant area has slowed while additional areas in the East Plant Area where subgrade fill can be placed are evaluated.

### **4.0 PROJECTED WORK FOR THE NEXT REPORTING PERIOD**

---

- The following is a list of anticipated work for the next reporting period:
  - Continue excavation in the Downstream Parcels, downstream of Broomsage Road (ENTACT work area);
  - Continue operation of Borrow Area 39-1;
  - Continue tree consolidation, chipping, and mulching;
  - Continue road repair work, as needed;
  - Remove additional trees in work areas on Parcels 40 and 81;
  - Place <50 mg/kg RA soils from the creek in the approved East Plant Area fill areas;
  - Dispose ≥50 mg/kg RA soils from the creek at the Heritage Landfill in Roachdale, Indiana; and
  - Draft Parcel 22 Construction Certification Report will be submitted in January 2008.















































































