

# **RCRA FACILITY INVESTIGATION**

## **QUARTERLY PROGRESS REPORT #26 THIRD QUARTER 2007**

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

**EPA ID# IND006036099**

**Prepared For:  
General Motors Corporation**

**OCTOBER 12, 2007**

**REF. NO. 013968 (255)**

This report is printed on recycled paper.

TABLE OF CONTENTS

	<u>Page</u>
1.0 <u>INTRODUCTION</u> .....	3
2.0 <u>LIST OF COMPLETED ACTIVITIES</u> .....	4
3.0 <u>SUMMARIES OF ALL CHANGES MADE IN THE CORRECTIVE ACTION (CA) DURING THE REPORTING PERIOD</u> .....	7
4.0 <u>COMMUNITY RELATIONS</u> .....	8
5.0 <u>CHANGES IN PERSONNEL DURING THE REPORTING PERIOD</u> .....	9
6.0 <u>PROJECTED WORK FOR THE NEXT REPORTING PERIOD</u> .....	10
7.0 <u>COPIES OF DAILY REPORTS, INSPECTION REPORTS, LABORATORY/MONITORING DATA</u> .....	11

LIST OF FIGURES

FIGURE 2.1	EAST PLANT AREA AIR SAMPLING LOCATIONS
FIGURE 7.1	PARCELS 384 AND 386 (VERIFICATION AREAS 501 AND 502) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS
FIGURE 7.2	PARCELS 384 AND 386 (VERIFICATION AREAS 500, 503 AND 504) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS
FIGURE 7.3	PARCELS 384 AND 386 (VERIFICATION AREAS 505 AND 506) FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS

LIST OF TABLES

TABLE 2.1	VALIDATED AIR MONITORING RESULTS - PCB
TABLE 7.1	NORTHERN TRIBUTARY VALIDATED VERIFICATION SAMPLE ANALYTICAL RESULTS SUMMARY

LIST OF APPENDICES

APPENDIX A	EAST PLANT AREA CONSTRUCTION MEETING MINUTES
------------	--

**QUARTERLY PROGRESS REPORT  
DISTRIBUTION LIST**

<b>U.S. EPA - Waste, Pesticide and Toxins Division, Project Manager</b>	<b>Peter Ramanauskas (2 copies)</b>
<b>U.S. EPA - Emergency Response Branch, On-Scene Coordinator</b>	<b>Brad Stimple</b>
<b>TN and Associates, U.S. EPA Consultant</b>	<b>Stacy DeLaReintrie</b>
<b>Earth Tech, U.S. EPA Consultant</b>	<b>John Bassett</b>
<b>Indiana Department of Environmental Management</b>	<b>Gerald O'Callaghan (5 copies)</b>
<b>U.S. Fish and Wildlife Service</b>	<b>Dan Sparks</b>
<b>GM WFG Remediation</b>	<b>Cheryl Hiatt/Ed Peterson</b>
<b>CRA, Project Coordinator</b>	<b>James McGuigan</b>
<b>CRA, Project Geologist</b>	<b>Bill Steinmann</b>
<b>CRA, Oversight Engineer</b>	<b>Katie Kamm</b>
<b>CRA, QA/QC Officer</b>	<b>Jeff Nichols (3 copies)</b>
<b>ENVIRON</b>	<b>Steve Song</b>

## 1.0 INTRODUCTION

This Quarterly Progress Report is submitted in accordance with the Bedford Performance-Based Corrective Action Agreement (Agreement) between the United States Environmental Protection Agency (U.S. EPA) and General Motors Corporation (GM), executed on March 20, 2001, and modified on October 1, 2002. This report covers the period of the third calendar quarter of 2007 for the GM Powertrain - Bedford Facility (Facility), Bedford, Indiana. Some of the activities conducted as part of the overall Resource Conservation and Recovery Act (RCRA) Corrective Action (CA) work are being addressed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Removal Action (RA) Program, pursuant to the Administrative Order on Consent (AOC) between the U.S. EPA and GM (effective July 31, 2003). These activities are described in more detail within the CERCLA Monthly Progress Reports referred to herein.

The next quarterly progress report, covering the Fourth Quarter 2007, will be submitted on or before January 15, 2008.

## 2.0 LIST OF COMPLETED ACTIVITIES

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

- Conference calls were held with the U.S. EPA, Indiana Department of Environmental Management (IDEM), the Agency for Toxic Substance and Disease Registry (ATSDR) and Indiana State Department of Health (ISDH) on July 17, 2007; August 7, and 22, 2007; and September 6, and 18, 2007, to discuss project progress (United States Fish and Wildlife Service (USFWS) was also invited to attend the update calls);
- Information sessions for the public were held at the Facility September 13, 2007, with residents along the trucking routes. The Community Liaison Panel (CLP) met September 14, 2007;
- Fact Sheet 17 was released to the Public and the U.S. EPA on September 14, 2007;
- A series of aerial photographs taken of the Facility in April 2007 was submitted to the U.S. EPA and IDEM August 7, 2007;
- Air monitoring was conducted for construction activities in the East Plant Area and the Northern Tributary during construction activities. Air monitoring results completed for work in the East Plant Area are presented on Tables 2.1 (PCB) and 2.2 (TSP). Figure 2.1 presents the sampling locations in the Northern Tributary and East Plant Area. PCB air monitoring results are reported to the U.S. EPA as the data become available;
  - Draft preliminary East Plant Area air monitoring data were submitted July 17, 2007;
  - Draft preliminary East Plant Area and Northern Tributary air monitoring data were submitted September 18, 2007;
- Placement of creek RA <50 mg/kg PCB material in the East Plant Area continued during the Second Quarter of 2007;
- The U.S. EPA was notified of a hole opening up over an abandoned storm sewer in the West Plant Area on July 23, 2007. It was proposed the abandoned sewer be permanently grouted in the West Plant Area IM Work Plan and the hole filled;
- On July 5, 2007, the U.S. EPA was notified of a design change to the East Plant Area Cover System limits due to the inability to construct the cover to the limits of the edge of the fence line without affecting neighboring properties. The limit was moved 6 ft inside the fence line from affected boundaries;

- Revised "Issued for Construction" East Plant Area Cover System Construction Drawings were submitted July 18, 2007;
- On September 19, 2007, GM reported sediment from a temporarily sealed culvert under the road washed out into Tributary 3 in the East Plant Area when a hole opened up over a storm sewer in the northeast corner of the West Plant. Samples were collected September 19, 2007, and GM confirmed to the U.S. EPA on September 20, 2007, that the washout material consisted of materials less than 1.8 mg/kg PCBs. A figure showing the sampling locations was submitted September 25, 2007. The location of the sediment in Tributary 3 has since been covered with grading material;
- The Draft Environmental Indicator (EI) CA 750 Determination was submitted August 31, 2007, meeting the modified schedule approved by the U.S. EPA;
- Approval to commence pre-design non-aqueous phase liquid (NAPL) investigation for Area of Interest (AOI) 8 was granted by the U.S. EPA on July 17, 2007;
- Excavation being conducted under the Northern Tributary IM Work Plan began in July 2007. Material greater than or equal to 50 mg/kg PCBs was placed in the vault and sampled stockpiled material found to be less than 50 mg/kg PCBs is being moved to the East Plant Area for use as grading fill;
  - Photographs depicting the excavation progress were submitted to the U.S. EPA on September 5, 2007;
  - Sample results for stockpile samples collected in the Northern Tributary were submitted on September 10, 2007;
- A plan to expedite completion of the West Plant IM Work Plan and excavation of Parcel 201 was submitted to the U.S. EPA and IDEM on September 9, 2007;
  - The U.S. EPA verbally agreed with the plans concept pending submittal of design work plans;
- Due to the United Auto Workers (UAW) strike at the Facility on September 24, 2007, GM verbally notified the U.S. EPA of a potential *force majeure*. A follow-up letter was submitted to the U.S. EPA on September 27, 2007; and
- East Plant Area construction meetings for the reporting period have been held informally daily and formally weekly. Meetings with ENTACT Environmental Services (ENTACT) and Severson Environmental Services (SES) to discuss the East Plant Area are generally held on Tuesdays. East Plant Area meetings were held on: July 3, 10, and 18, 24, and 31, 2007; August 14, 21, and 28, 2007; and September 5, 11, and 18, 2007. Minutes of these meetings are attached in Appendix B.

The June 2007, July 2007, and August 2007 CERCLA RA Monthly Progress Reports were submitted during the first quarter of 2007. Quarterly Progress Report #25 for the Second Quarter 2007 was submitted July 13, 2007.

### 3.0 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 revised "Issued for Construction" drawings for the final Cover System, on July 5, 2007;
- Submission of East Plant Area Preliminary Air Monitoring Results Data, July 16, 2007;
- Approval of the AOI 8 NAPL investigation plan on July 17, 2007;
- Submission of April 2007 aerial photographs on, August 7, 2007;
- Submission of the Draft EI CA 750 Determination was submitted on August 31, 2007;
- Submission of Northern Tributary excavation progress photographs on September 5, 2007;
- Submission of letter outlining a plan to expedite excavation for the West Plant Area IM and Parcel 201 excavation;
- Submission of Northern Tributary stockpile sample results on September 10, 2007;
- Publication of Fact Sheet 17 on September 14, 2007;
- Submission of East Plant Area and Northern Tributary Preliminary Air Monitoring Results Data, September 18, 2007;
- Submission of sample results from material washed-out into Tributary 3, September 20, 2007;
- Submission of a figure detailing sample locations for samples collected of washout material in Tributary 3 on September 25, 2007; and
- Submission of a letter on September 27, 2007, notifying U.S. EPA of a potential *force majeure* condition resulting from the UAW strike.



#### 4.0 COMMUNITY RELATIONS

GM continues to maintain the toll free information telephone number. Individual meetings can also be arranged to discuss sampling results with individual residents as requested.

A meeting was held with residents who live along truck haul routes on September 13, 2007, to discuss trucking and road issues.

Quarterly meetings to review project status, are held both with the neighbors along the creek and around the plant, as well as with the general public. Quarterly meetings were postponed during this reporting period due to the UAW strike. The meetings were postponed until October 10, and 11, 2007, and will be held from 6:30 PM to 8:00 PM at the Bedford Facility as a regular information session. Presentations for the meetings will be posted on the web site at [www.bedfordpowertraincorrectiveaction.com](http://www.bedfordpowertraincorrectiveaction.com). The next set of public meetings will be tentatively scheduled for December 2007.

Fact Sheet 17 was issued September 14, 2007.

The CLP meeting occurred in this quarter on September 14, 2007. The CLP was formed to provide additional communication avenues for the community and the meetings are currently being held at the GM Facility approximately every three months or more frequently if information on the project changes significantly. The CLP meeting minutes are posted on the GM website at [www.bedfordpowertraincorrectiveaction.com](http://www.bedfordpowertraincorrectiveaction.com). The next CLP meeting is scheduled for December 7, 2007.

The Information Center, located at the plant lobby, is available by appointment through Ms. Becki Akers, GM Communications, at the project toll free number 866-223-0856. The repository located at the Bedford Public Library remains open at normal business hours. All data in the repository are also located on the aforementioned web site.

**5.0 CHANGES IN PERSONNEL DURING THE REPORTING PERIOD**

A number of field personnel have been rotated in and out of the field activities.

## 6.0 PROJECTED WORK FOR THE NEXT REPORTING PERIOD

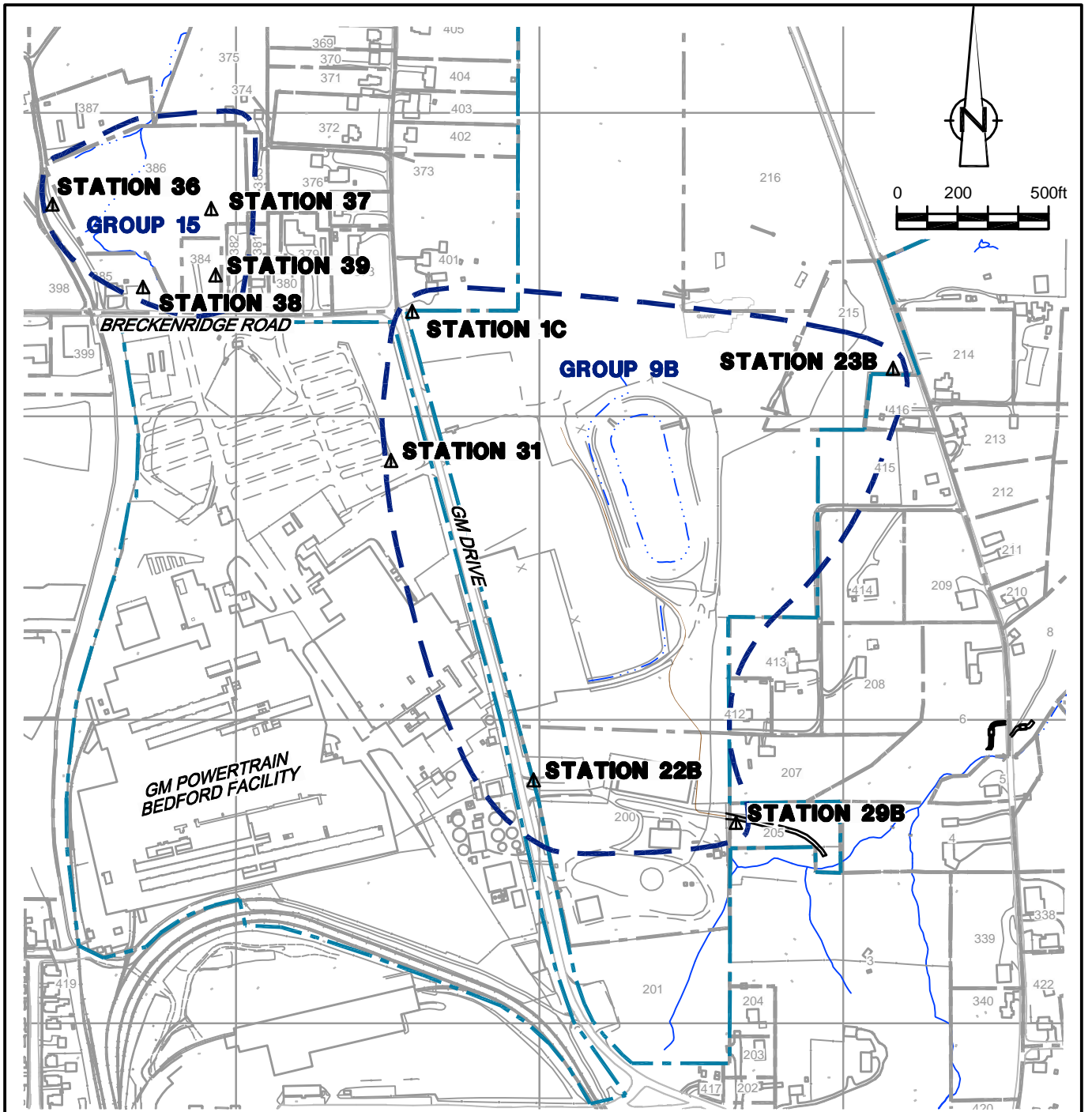
Work projected for the next reporting period includes:

- Conducting a neighborhood information sessions on October 10, 2007, and tentatively in December 2007;
- Conducting a general public information session tentatively on October 11, 2007, and tentatively in December 2007;
- Conducting a Community Liaison Panel Meeting, on December 7, 2007;
- Preparing and distributing Fact Sheet 18 in the next quarter;
- Continuing with RA activities on downstream parcels;
- Continuing the evaluation of RFI soil and groundwater data;
- Continuing evaluation of samples collected for RFI Work Plan: Addendum No. 13;
- Completing the Western Tributary IM Construction Certification Report;
- Completing work as outlined in the Northern Tributary IM Work Plan;
- Commencing work as outlined in the West Plant Area IM Work Plan, pending Work Plan and excavation design approvals;
- Submitting an IM Work Plan for Parcel 400;
- Completing additional delineation on Parcel 201 and submitting a Work Plan and excavation design plans for approval;
- Submitting additional data collected under the RFI Addendum No. 10 to the IDEM-Underground Storage Tank (UST) Division, along with a request for No Further Action (NFA) letter for the five former USTs;
- Continuing construction of the vault cover;
- Continuation of placement of the < 50 mg/kg PCB RA soils in the East Plant Area as grading fill beneath the landfill cover system;
- Potential modification to the East Plant Cover System design to address additional soil placement; and
- Completing an investigation work plan for the NAPL in and south of AOI 8.

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

Northern Tributary verification sample locations are presented on Figure 7.1, 7.2, and 7.3. Sample results validated to date are presented on Table 7.1.

Packages of analytical data from creek remediation verification sampling have been submitted monthly as they become available, after validation, in the monthly reports prepared for the CERCLA AOC, and will continue to be submitted during the next reporting period. Any other sampling data collected during the quarter will be submitted under separate cover once validation is completed.



SOURCE: BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI, APRIL 2001.

NOTES: 1) PROPERTY BOUNDARY LOCATIONS APPROXIMATED FROM THE LAWRENCE COUNTY SURVEY PLATS. LOCATIONS MAY NOT ACCURATELY REPRESENT THE TRUE BOUNDARIES

**LEGEND**

- |  |                                    |  |   |
|--|------------------------------------|--|---|
|  | EXISTING BUILDINGS                 |  | APPROXIMATE GM PROPERTY BOUNDARY        |
|  | FENCE LINE                         |  | <b>STATION 23</b> AIR SAMPLING LOCATION |
|  | RAILROAD TRACKS                    |  | AIR SAMPLING GROUP                      |
|  | DIRT ROADS                         |  |   |
|  | ROADS / PAVED AREAS                |  |   |
|  | APPROXIMATE SURFACE WATER LOCATION |  |   |
|  | APPROXIMATE PARCEL BOUNDARY        |  |   |

figure 2.1

**EAST PLANT AREA AIR MONITORING STATIONS  
 QUARTERLY PROGRESS REPORT No.25  
 GM POWERTRAIN BEDFORD FACILITY  
 Bedford, Indiana**



EXCAVATION FLOOR SAMPLE RESULTS

Verification Area	Grid	Sampling Round			
		R1		FINAL	
		Sample ID	Result (mg/kg)	Sample ID	Result (mg/kg)
501	A	-	-	-	-
	B	-	-	-	-
	C	S-386-091107-AH-26015	1.26	S-386-091107-AH-26015	1.26
	D	S-386-091107-AH-26016	0.18	S-386-091107-AH-26016	0.18
	E	-	-	-	-
	F	-	-	-	-
	G	S-386-091107-AH-26014	0.15 J	S-386-091107-AH-26014	0.15 J
	H	S-386-091107-AH-26017	0.13 J	S-386-091107-AH-26017	0.13 J
UCL Calculations					

Verification Area	Grid	Sampling Round			
		R1		FINAL	
		Sample ID	Result (mg/kg)	Sample ID	Result (mg/kg)
502	A	-	-	-	-
	B	-	-	-	-
	C	S-386-091907-AH-26023	0.53	S-386-091907-AH-26023	0.53
	D	S-386-091907-AH-26024	0.36	S-386-091907-AH-26024	0.36
	E	-	-	-	-
	F	-	-	-	-
	G	-	-	-	-
	H	-	-	-	-
UCL Calculations					

- GENERAL NOTES:
- Cleanup Criteria
    - Soils to  $\leq 1.8$  mg/kg.
      - if all results are  $< 5.0$  mg/kg, the cleanup objective can be verified in the Verification Area (approximately 100ft x 200ft) by calculating the Upper Confidence Limit (UCL) of the average concentration using statistics, if the UCL is  $\leq 1.8$  mg/kg the cleanup objective will be met for the given Verification Area. A value of 0 mg/kg is used in the UCL calculation for sample grids excavated to bedrock.
    - Sediments to  $\leq 1$  mg/kg.
  - Composite sidewall samples were collected in the location where the sidewall of the excavation exceeded 6 inches in height.
  - The surficial confirmation samples (8 composites per Verification Area except where bedrock is encountered) were collected after the soil/sediment removal was performed.
  - A value of 0 mg/kg is used for ND in the calculation of Total PCBs.
  - For UCL calculations, Aroclors 1016, 1221, and 1232 have been assigned a ND value of 0 mg/kg based upon their lack of presence in the data.
    - UCL calculations are performed on Aroclors 1242, 1248, 1254, and 1260 using the half the quantitation limit where ND results are reported.
    - UCL calculations included both floor and sidewall samples.
  - The sampling round (e.g. R1, R2, etc.) correlates to Verification Area grids or sidewalls where additional rounds of excavation were completed due to exceedances of the cleanup criteria.
  - Property boundary locations approximated from the Lawrence County survey plats. Locations may not accurately represent the true property boundaries.
  - The verification figure is presented to show progress for this reporting period. Excavation verification may not be complete as statistical analysis or further excavation may be required.

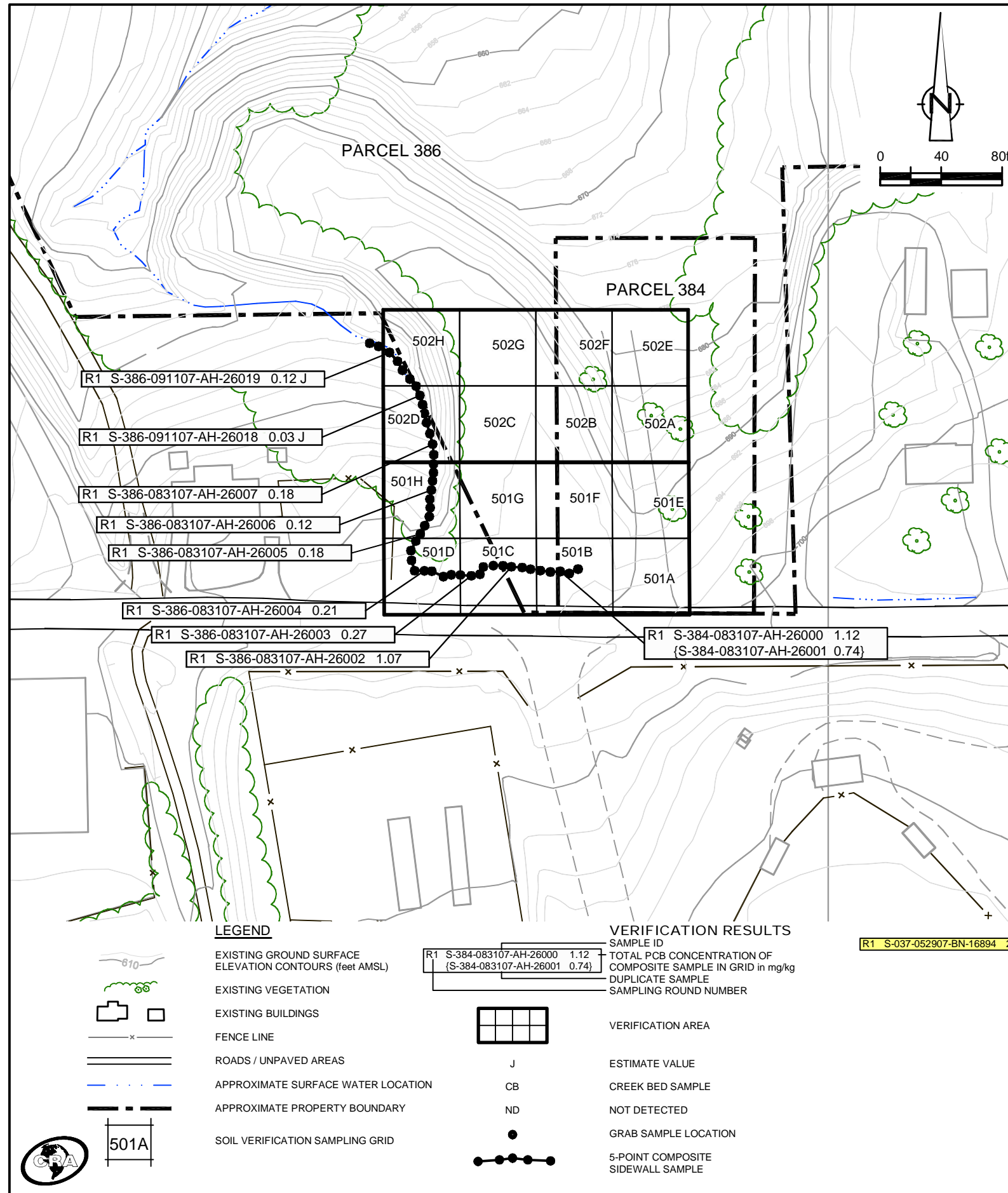


figure 7.1  
 PARCELS 384 AND 386 (VERIFICATION AREAS 501 AND 502)  
 FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS  
 POST - EXCAVATION SUMMARY  
 GM POWERTRAIN BEDFORD FACILITY  
 Bedford, Indiana

EXCAVATION FLOOR SAMPLE RESULTS

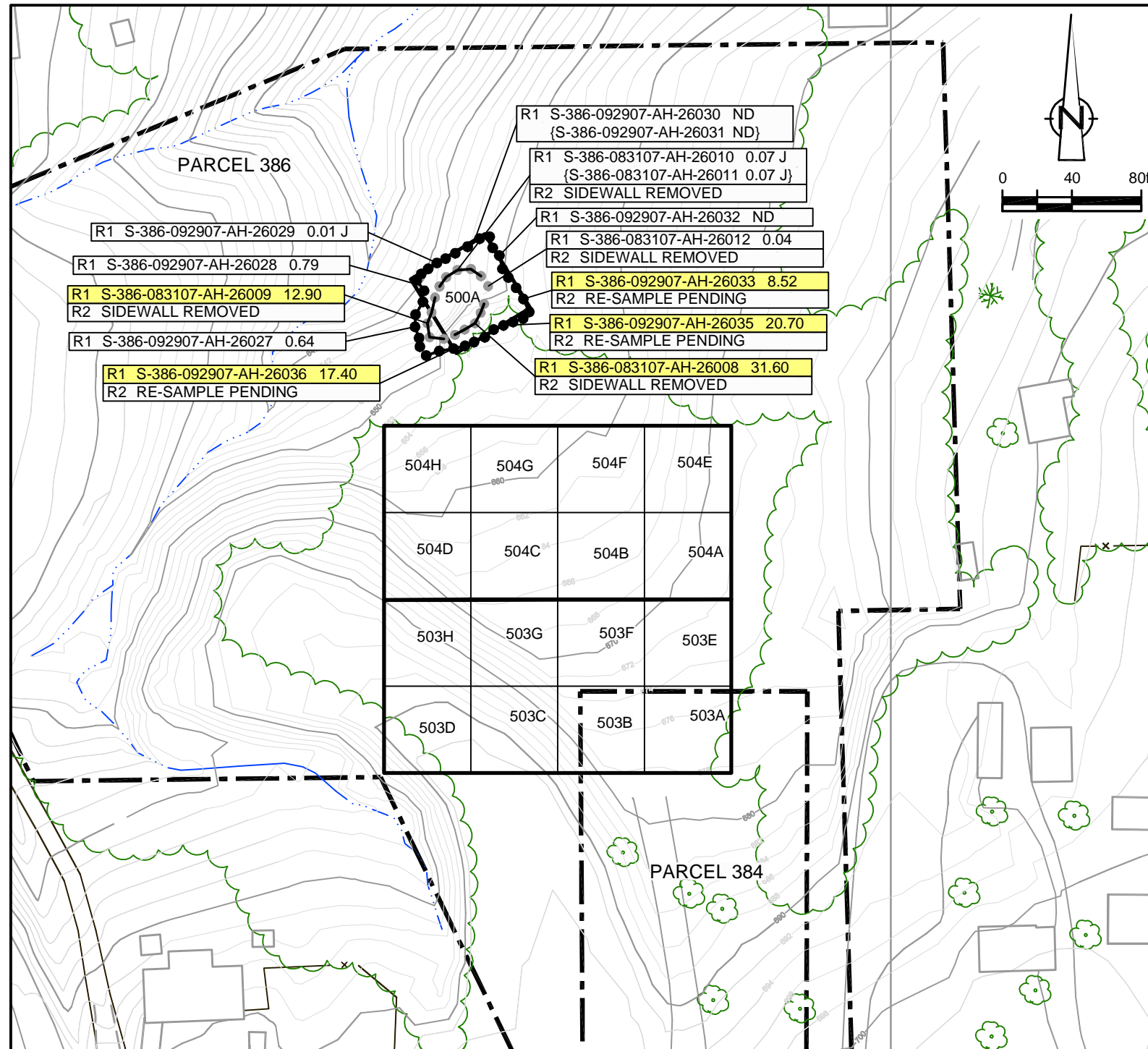
Verification Area	Grid	Sampling Round			
		R1	R2	FINAL	
		Sample ID	Result (mg/kg)	Sample ID	Result (mg/kg)
500	A	S-386-083107-AH-26013	15.50	S-386-092907-AH-26034	0.86
UCL Calculations		Not Required Based on Sample Results			

Verification Area	Grid	Sampling Round			
		R1	R2	FINAL	
		Sample ID	Result (mg/kg)	Sample ID	Result (mg/kg)
503	A	-	-	-	-
	B	-	-	-	-
	C	-	-	-	-
	D	-	-	-	-
	E	-	-	-	-
	F	-	-	-	-
	G	-	-	-	-
	H	-	-	-	-
UCL Calculations					

Verification Area	Grid	Sampling Round			
		R1	R2	FINAL	
		Sample ID	Result (mg/kg)	Sample ID	Result (mg/kg)
504	A	-	-	-	-
	B	-	-	-	-
	C	-	-	-	-
	D	-	-	-	-
	E	-	-	-	-
	F	-	-	-	-
	G	-	-	-	-
	H	-	-	-	-
UCL Calculations					

GENERAL NOTES:

- (1) Cleanup Criteria
  - a.) Soils to  $\leq 1.8$  mg/kg.
    - if all results are  $< 5.0$  mg/kg, the cleanup objective can be verified in the Verification Area (approximately 100ft x 200ft) by calculating the Upper Confidence Limit (UCL) of the average concentration using statistics, if the UCL is  $\leq 1.8$  mg/kg the cleanup objective will be met for the given Verification Area. A value of 0 mg/kg is used in the UCL calculation for sample grids excavated to bedrock.
  - b.) Sediments to  $\leq 1$  mg/kg.
- (2) Composite sidewall samples were collected in the location where the sidewall of the excavation exceeded 6 inches in height.
- (3) The surficial confirmation samples (8 composites per Verification Area except where bedrock is encountered) were collected after the soil/sediment removal was performed.
- (4) A value of 0 mg/kg is used for ND in the calculation of Total PCBs.
- (5) For UCL calculations, Aroclors 1016, 1221, and 1232 have been assigned a ND value of 0 mg/kg based upon their lack of presence in the data.
  - UCL calculations are performed on Aroclors 1242, 1248, 1254, and 1260 using the half the quantitation limit where ND results are reported.
  - UCL calculations included both floor and sidewall samples.
- (6) The sampling round (e.g. R1, R2, etc.) correlates to Verification Area grids or sidewalls where additional rounds of excavation were completed due to exceedances of the cleanup criteria.
- (7) Property boundary locations approximated from the Lawrence County survey plats. Locations may not accurately represent the true property boundaries.
- (8.) The verification figure is presented to show progress for this reporting period. Excavation verification may not be complete as statistical analysis or further excavation may be required.



LEGEND

- EXISTING GROUND SURFACE
- ELEVATION CONTOURS (feet AMSL)
- EXISTING VEGETATION
- EXISTING BUILDINGS
- FENCE LINE
- ROADS / UNPAVED AREAS
- APPROXIMATE SURFACE WATER LOCATION
- APPROXIMATE PROPERTY BOUNDARY
- SOIL VERIFICATION SAMPLING GRID

VERIFICATION RESULTS

- SAMPLE ID
- TOTAL PCB CONCENTRATION OF COMPOSITE SAMPLE IN GRID in mg/kg
- DUPLICATE SAMPLE
- SAMPLING ROUND NUMBER
- VERIFICATION AREA
- ESTIMATE VALUE
- CREEK BED SAMPLE
- NOT DETECTED
- GRAB SAMPLE LOCATION
- 5-POINT COMPOSITE SIDEWALL SAMPLE

- 5-POINT COMPOSITE SIDEWALL SAMPLE REMOVED OR EXCAVATED TO BEDROCK
- SAMPLE RESULT EXCEEDS CLEANUP CRITERIA



figure 7.2

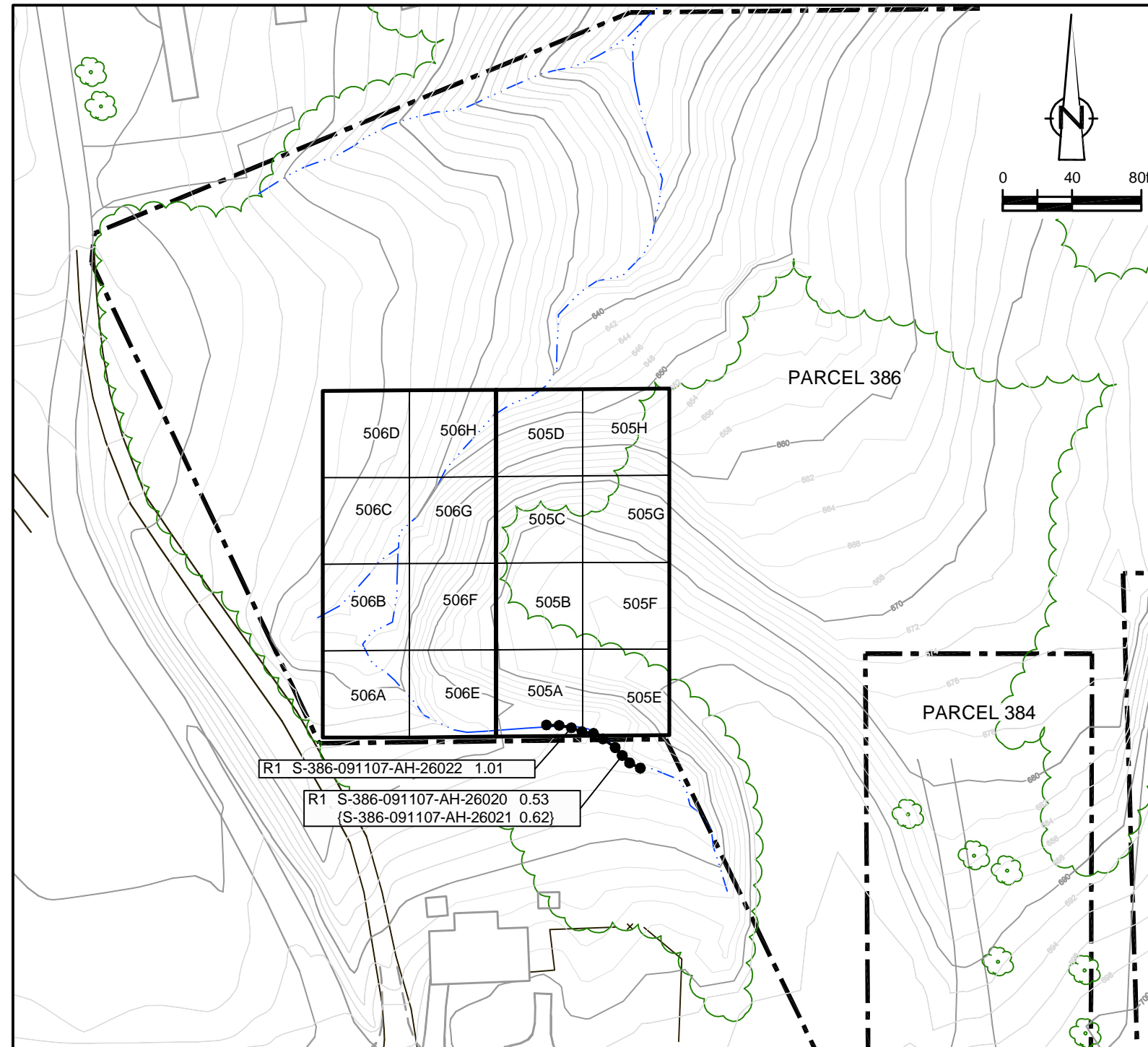
PARCELS 384 AND 386 (VERIFICATION AREAS 500, 503, AND 504)  
 FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS  
 POST - EXCAVATION SUMMARY  
 GM POWERTRAIN BEDFORD FACILITY  
 Bedford, Indiana

EXCAVATION FLOOR SAMPLE RESULTS

Verification Area	Grid	Sampling Round			
		R1		FINAL	
		Sample ID	Result (mg/kg)	Sample ID	Result (mg/kg)
505	A	S-386-091907-AH-26025	1.40	S-386-091907-AH-26025	1.40
	B	-	-	-	-
	C	-	-	-	-
	D	-	-	-	-
	E	-	-	-	-
	F	-	-	-	-
	G	-	-	-	-
	H	-	-	-	-
UCL Calculations					

Verification Area	Grid	Sampling Round			
		R1		FINAL	
		Sample ID	Result (mg/kg)	Sample ID	Result (mg/kg)
506	A	-	-	-	-
	B	-	-	-	-
	C	-	-	-	-
	D	-	-	-	-
	E	S-386-091907-AH-26026	0.90	S-386-091907-AH-26026	0.90
	F	-	-	-	-
	G	-	-	-	-
	H	-	-	-	-
UCL Calculations					

- GENERAL NOTES:
- Cleanup Criteria
    - Soils to  $\leq 1.8$  mg/kg.
      - if all results are  $< 5.0$  mg/kg, the cleanup objective can be verified in the Verification Area (approximately 100ft x 200ft) by calculating the Upper Confidence Limit (UCL) of the average concentration using statistics, if the UCL is  $\leq 1.8$  mg/kg the cleanup objective will be met for the given Verification Area. A value of 0 mg/kg is used in the UCL calculation for sample grids excavated to bedrock.
    - Sediments to  $\leq 1$  mg/kg.
  - Composite sidewall samples were collected in the location where the sidewall of the excavation exceeded 6 inches in height.
  - The surficial confirmation samples (8 composites per Verification Area except where bedrock is encountered) were collected after the soil/sediment removal was performed.
  - A value of 0 mg/kg is used for ND in the calculation of Total PCBs.
  - For UCL calculations, Aroclors 1016, 1221, and 1232 have been assigned a ND value of 0 mg/kg based upon their lack of presence in the data.
    - UCL calculations are performed on Aroclors 1242, 1248, 1254, and 1260 using the half the quantitation limit where ND results are reported.
    - UCL calculations included both floor and sidewall samples.
  - The sampling round (e.g. R1, R2, etc.) correlates to Verification Area grids or sidewalls where additional rounds of excavation were completed due to exceedances of the cleanup criteria.
  - Property boundary locations approximated from the Lawrence County survey plats. Locations may not accurately represent the true property boundaries.
  - The verification figure is presented to show progress for this reporting period. Excavation verification may not be complete as statistical analysis or further excavation may be required.



LEGEND

- EXISTING GROUND SURFACE ELEVATION CONTOURS (feet AMSL)
- EXISTING VEGETATION
- EXISTING BUILDINGS
- FENCE LINE
- ROADS / UNPAVED AREAS
- APPROXIMATE SURFACE WATER LOCATION
- APPROXIMATE PROPERTY BOUNDARY
- SOIL VERIFICATION SAMPLING GRID

VERIFICATION RESULTS

- SAMPLE ID
- TOTAL PCB CONCENTRATION OF COMPOSITE SAMPLE IN GRID in mg/kg
- DUPLICATE SAMPLE
- SAMPLING ROUND NUMBER
- VERIFICATION AREA
- ESTIMATE VALUE
- CREEK BED SAMPLE
- NOT DETECTED
- GRAB SAMPLE LOCATION
- 5-POINT COMPOSITE SIDEWALL SAMPLE

R1 S-037-052907-BN-16894 2.16 J SAMPLE RESULT EXCEEDS CLEANUP CRITERIA

figure 7.3  
 PARCELS 384 AND 386 (VERIFICATION AREAS 505 AND 506)  
 FINAL UNVALIDATED COMPOSITE SAMPLE RESULTS  
 POST - EXCAVATION SUMMARY  
 GM POWERTRAIN BEDFORD FACILITY  
 Bedford, Indiana



SUMMARY OF PCB AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
 GM POWERTRAIN BEDFORD FACILITY  
 BEDFORD, INDIANA

Unit_ID	STATION 1C PUF-16	STATION 22B PUF-18	STATION 23B PUF-2	STATION 29B PUF-5
<b>7/2/2007</b>				
Total Volume(m3)	NR	382	NR	NR
Total PCB Mass(ug)	NR	300	NR	NR
PCB Concentration(ug/m3)	NR	0.7853	NR	NR
Percent of Allowable(%)	NR	79	NR	NR
<b>7/9/2007</b>				
Total Volume(m3)	373	NR	NR	NR
Total PCB Mass(ug)	44	NR	NR	NR
PCB Concentration(ug/m3)	0.118	NR	NR	NR
Percent of Allowable(%)	12	NR	NR	NR
<b>7/16/2007</b>				
Total Volume(m3)	359	NR	NR	NR
Total PCB Mass(ug)	24	NR	NR	NR
PCB Concentration(ug/m3)	0.0669	NR	NR	NR
Percent of Allowable(%)	7	NR	NR	NR
<b>7/24/2007</b>				
Total Volume(m3)	NR	NR	NR	349
Total PCB Mass(ug)	NR	NR	NR	8.3
PCB Concentration(ug/m3)	NR	NR	NR	0.0238
Percent of Allowable(%)	NR	NR	NR	2
<b>7/30/2007</b>				
Total Volume(m3)	NR	NR	NR	356
Total PCB Mass(ug)	NR	NR	NR	8.5
PCB Concentration(ug/m3)	NR	NR	NR	0.0239
Percent of Allowable(%)	NR	NR	NR	2
<b>8/7/2007</b>				
Total Volume(m3)	NR	NR	362	NR
Total PCB Mass(ug)	NR	NR	37	NR
PCB Concentration(ug/m3)	NR	NR	0.1022	NR
Percent of Allowable(%)	NR	NR	10	NR

SUMMARY OF PCB AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
 GM POWERTRAIN BEDFORD FACILITY  
 BEDFORD, INDIANA

Unit_ID	STATION 1C PUF-16	STATION 22B PUF-18	STATION 23B PUF-2	STATION 29B PUF-5
<b>8/13/2007</b>				
Total Volume(m3)	NR	NR	NR	359
Total PCB Mass(ug)	NR	NR	NR	19
PCB Concentration(ug/m3)	NR	NR	NR	0.0529
Percent of Allowable(%)	NR	NR	NR	5
<b>8/20/2007</b>				
Total Volume(m3)	NR	NR	393	NR
Total PCB Mass(ug)	NR	NR	54	NR
PCB Concentration(ug/m3)	NR	NR	0.1374	NR
Percent of Allowable(%)	NR	NR	14	NR
<b>8/29/2007</b>				
Total Volume(m3)	NR	NR	408	NR
Total PCB Mass(ug)	NR	NR	28	NR
PCB Concentration(ug/m3)	NR	NR	0.0686	NR
Percent of Allowable(%)	NR	NR	7	NR
Notes:				
<b>9/5/2007</b>				
Total Volume(m3)	379	NR	NR	NR
Total PCB Mass(ug)	52	NR	NR	NR
PCB Concentration(ug/m3)	0.1372	NR	NR	NR
Percent of Allowable(%)	14	NR	NR	NR
<b>9/11/2007</b>				
Total Volume(m3)	432	NR	NR	NR
Total PCB Mass(ug)	5.6	NR	NR	NR
PCB Concentration(ug/m3)	0.013	NR	NR	NR
Percent of Allowable(%)	1	NR	NR	NR
<b>9/18/2007</b>				
Total Volume(m3)	442	NR	NR	NR
Total PCB Mass(ug)	48	NR	NR	NR
PCB Concentration(ug/m3)	0.1086	NR	NR	NR
Percent of Allowable(%)	11	NR	NR	NR

SUMMARY OF PCB AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
 GM POWERTRAIN BEDFORD FACILITY  
 BEDFORD, INDIANA

Unit_ID	STATION 1C PUF-16	STATION 22B PUF-18	STATION 23B PUF-2	STATION 29B PUF-5
<b>9/24/2007</b>				
Total Volume(m3)	447	NR	NR	NR
Total PCB Mass(ug)	38	NR	NR	NR
PCB Concentration(ug/m3)	0.085	NR	NR	NR
Percent of Allowable(%)	8	NR	NR	NR

Notes:

\* - Results not reported due to machine malfunction

NR - No result because machine was not setup

SUMMARY OF PUF AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
 GM POWERTRAIN BEDFORD FACILITY  
 BEDFORD, INDIANA

Unit_ID	STATION 36 PUF-22	STATION 37 PUF-23	STATION 38 PUF-12	STATION 39 PUF-17
<b>7/24/2007</b>				
Total Volume(m3)	1	232	420	350
Total PCB Mass(ug)	*	3.8	17	6.7
PCB Concentration(ug/m3)	*	0.0164	0.0405	0.0191
Percent of Allowable(%)	*	2	4	2
<b>7/25/2007</b>				
Total Volume(m3)	217	0	367	290
Total PCB Mass(ug)	4.2	*	28	21
PCB Concentration(ug/m3)	0.0194	*	0.0763	0.0724
Percent of Allowable(%)	2	*	8	7
<b>7/26/2007</b>				
Total Volume(m3)	238	202	366	295
Total PCB Mass(ug)	0.95	12	8.8	3.4
PCB Concentration(ug/m3)	0.004	0.0594	0.024	0.0115
Percent of Allowable(%)	0	6	2	1
<b>7/27/2007</b>				
Total Volume(m3)	78	NR	411	319
Total PCB Mass(ug)	*	NR	7.4	7.4
PCB Concentration(ug/m3)	*	NR	0.018	0.0232
Percent of Allowable(%)	*	NR	2	2
<b>7/28/2007</b>				
Total Volume(m3)	NR	53	NR	348
Total PCB Mass(ug)	NR	*	NR	14
PCB Concentration(ug/m3)	NR	*	NR	0.0402
Percent of Allowable(%)	NR	*	NR	4
<b>7/30/2007</b>				
Total Volume(m3)	265	0	355	314
Total PCB Mass(ug)	1.6	*	44	9.6
PCB Concentration(ug/m3)	0.006	*	0.1239	0.0306
Percent of Allowable(%)	1	*	12	3
<b>7/31/2007</b>				
Total Volume(m3)	NR	93	398	NR
Total PCB Mass(ug)	NR	*	110	NR
PCB Concentration(ug/m3)	NR	*	0.2764	NR
Percent of Allowable(%)	NR	*	28	NR

SUMMARY OF PUF AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
 GM POWERTRAIN BEDFORD FACILITY  
 BEDFORD, INDIANA

Unit_ID	STATION 36 PUF-22	STATION 37 PUF-23	STATION 38 PUF-12	STATION 39 PUF-17
<b>8/1/2007</b>				
Total Volume(m3)	288	NR	4(3)	320
Total PCB Mass(ug)	8	NR	*(*)	36
PCB Concentration(ug/m3)	0.0278	NR	*(*)	0.1125
Percent of Allowable(%)	3	NR	*(*)	11
<b>8/2/2007</b>				
Total Volume(m3)	169	445	394(381)	371
Total PCB Mass(ug)	*	22	120(120)	57
PCB Concentration(ug/m3)	*	0.0494	0.3046(0.315)	0.1536
Percent of Allowable(%)	*	5	30(32)	15
<b>8/3/2007</b>				
Total Volume(m3)	NR	406	433(432)	333
Total PCB Mass(ug)	NR	15	100(110)	45
PCB Concentration(ug/m3)	NR	0.0369	0.2309(0.2546)	0.1351
Percent of Allowable(%)	NR	4	23(25)	14
<b>8/6/2007</b>				
Total Volume(m3)	261	343	18(16)	308
Total PCB Mass(ug)	2.8	31	*(*)	36
PCB Concentration(ug/m3)	0.0107	0.0904	*(*)	0.1169
Percent of Allowable(%)	1	9	*(*)	12
<b>8/7/2007</b>				
Total Volume(m3)	275	365	NR(NR)	327
Total PCB Mass(ug)	2.3	29	NR(NR)	31
PCB Concentration(ug/m3)	0.0084	0.0795	NR(NR)	0.0948
Percent of Allowable(%)	1	8	NR(NR)	9
<b>8/8/2007</b>				
Total Volume(m3)	256	351	328(NR)	329
Total PCB Mass(ug)	7.2	29	22(NR)	16
PCB Concentration(ug/m3)	0.0281	0.0826	0.0671(NR)	0.0486
Percent of Allowable(%)	3	8	7(NR)	5

**SUMMARY OF PUF AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
GM POWERTRAIN BEDFORD FACILITY  
BEDFORD, INDIANA**

Unit_ID	STATION 36 PUF-22	STATION 37 PUF-23	STATION 38 PUF-12	STATION 39 PUF-17
<b>8/9/2007</b>				
Total Volume(m3)	255	359	331(NR)	330
Total PCB Mass(ug)	1	18	7.7(NR)	28
PCB Concentration(ug/m3)	0.0039	0.0501	0.0233(NR)	0.0848
Percent of Allowable(%)	0	5	2(NR)	8
<b>8/10/2007</b>				
Total Volume(m3)	273	401	392(NR)	393
Total PCB Mass(ug)	4.5	6.9	110(NR)	16
PCB Concentration(ug/m3)	0.0165	0.0172	0.2806(NR)	0.0407
Percent of Allowable(%)	2	2	28(NR)	4
<b>8/13/2007</b>				
Total Volume(m3)	270	362	359(NR)	372
Total PCB Mass(ug)	2.4	4.1	39(NR)	9
PCB Concentration(ug/m3)	0.0089	0.0113	0.1086(NR)	0.0242
Percent of Allowable(%)	1	1	11(NR)	2
<b>8/14/2007</b>				
Total Volume(m3)	239	323	304(NR)	284
Total PCB Mass(ug)	8.6	21	41(NR)	27
PCB Concentration(ug/m3)	0.036	0.065	0.1349(NR)	0.0951
Percent of Allowable(%)	4	6	13(NR)	10
<b>8/15/2007</b>				
Total Volume(m3)	268	355	1(1)	318
Total PCB Mass(ug)	4.2	62	*(*)	40
PCB Concentration(ug/m3)	0.0157	0.1746	*(*)	0.1258
Percent of Allowable(%)	2	17	*(*)	13
<b>8/16/2007</b>				
Total Volume(m3)	262	360	0(0)	359
Total PCB Mass(ug)	4.5	23	*(*)	30
PCB Concentration(ug/m3)	0.0172	0.0639	*(*)	0.0836
Percent of Allowable(%)	2	6	*(*)	8
<b>8/17/2007</b>				
Total Volume(m3)	289	406	NR(NR)	364
Total PCB Mass(ug)	3.6	14	NR(NR)	30
PCB Concentration(ug/m3)	0.0125	0.0345	NR(NR)	0.0824
Percent of Allowable(%)	1	3	NR(NR)	8

SUMMARY OF PUF AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
 GM POWERTRAIN BEDFORD FACILITY  
 BEDFORD, INDIANA

Unit_ID	STATION 36 PUF-22	STATION 37 PUF-23	STATION 38 PUF-12	STATION 39 PUF-17
<b>8/20/2007</b>				
Total Volume(m3)	276	375	3(2)	336
Total PCB Mass(ug)	1.5	17	*(*)	17
PCB Concentration(ug/m3)	0.0054	0.0453	*(*)	0.0506
Percent of Allowable(%)	1	5	*(*)	5
<b>8/21/2007</b>				
Total Volume(m3)	268	345	1(275)	335
Total PCB Mass(ug)	2	36	*(0)	27
PCB Concentration(ug/m3)	0.0075	0.1043	*(ND(0.0018))	0.0806
Percent of Allowable(%)	1	10	*(0)	8
<b>8/22/2007</b>				
Total Volume(m3)	242	295	331(4)	317
Total PCB Mass(ug)	1.8	37	0(*)	33
PCB Concentration(ug/m3)	0.0074	0.1254	ND(0.0015)(*)	0.1041
Percent of Allowable(%)	1	13	0(*)	10
<b>8/23/2007</b>				
Total Volume(m3)	259	247	340(3)	314
Total PCB Mass(ug)	1.7	19	0(*)	16
PCB Concentration(ug/m3)	0.0066	0.0769	ND(0.0015)(*)	0.051
Percent of Allowable(%)	1	8	0(*)	5
<b>8/24/2007</b>				
Total Volume(m3)	287	244	352(417)	356
Total PCB Mass(ug)	1.1	11	7(7.6)	18
PCB Concentration(ug/m3)	0.0038	0.0451	0.0199(0.0182)	0.0506
Percent of Allowable(%)	0	5	2(2)	5
<b>8/25/2007</b>				
Total Volume(m3)	315	315	366(453)	365
Total PCB Mass(ug)	0.8	3.9	16(13)	12
PCB Concentration(ug/m3)	0.0025	0.0124	0.0437(0.0287)	0.0329
Percent of Allowable(%)	0	1	4(3)	3

SUMMARY OF PUF AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
 GM POWERTRAIN BEDFORD FACILITY  
 BEDFORD, INDIANA

Unit_ID	STATION 36 PUF-22	STATION 37 PUF-23	STATION 38 PUF-12	STATION 39 PUF-17
<b>8/27/2007</b>				
Total Volume(m3)	310	457	388(421)	415
Total PCB Mass(ug)	5.8	13	32(31)	16
PCB Concentration(ug/m3)	0.0187	0.0284	0.0825(0.0736)	0.0386
Percent of Allowable(%)	2	3	8(7)	4
<b>8/28/2007</b>				
Total Volume(m3)	269	318	310(385)	298
Total PCB Mass(ug)	4.1	18	42(47)	30
PCB Concentration(ug/m3)	0.0152	0.0566	0.1355(0.1221)	0.1007
Percent of Allowable(%)	2	6	14(12)	10
<b>8/29/2007</b>				
Total Volume(m3)	279	390	349(426)	308
Total PCB Mass(ug)	0.7	7.6	8.1(6.5)	9.2
PCB Concentration(ug/m3)	0.0025	0.0195	0.0232(0.0153)	0.0299
Percent of Allowable(%)	0	2	2(2)	3
<b>8/30/2007</b>				
Total Volume(m3)	257	386	316(391)	320
Total PCB Mass(ug)	0.8	2.4	12(8.8)	7.7
PCB Concentration(ug/m3)	0.0031	0.0062	0.0380(0.0225)	0.0241
Percent of Allowable(%)	0	1	4(2)	2
<b>8/31/2007</b>				
Total Volume(m3)	282	424	351(449)	347
Total PCB Mass(ug)	0.7	1.5	18(23)	6
PCB Concentration(ug/m3)	0.0025	0.0035	0.0513(0.0512)	0.0173
Percent of Allowable(%)	0	0	5(5)	2
<b>9/4/2007</b>				
Total Volume(m3)	274	380	339(387)	314
Total PCB Mass(ug)	2.9	11	26(38)	23
PCB Concentration(ug/m3)	0.0106	0.0289	0.0767(0.0982)	0.0732
Percent of Allowable(%)	1	3	8(10)	7
<b>9/5/2007</b>				
Total Volume(m3)	258	374	334(395)	308
Total PCB Mass(ug)	7.2	17	31(35)	23
PCB Concentration(ug/m3)	0.0279	0.0455	0.0928(0.0886)	0.0747
Percent of Allowable(%)	3	5	9(9)	7



SUMMARY OF PUF AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
 GM POWERTRAIN BEDFORD FACILITY  
 BEDFORD, INDIANA

Unit_ID	STATION 36 PUF-22	STATION 37 PUF-23	STATION 38 PUF-12	STATION 39 PUF-17
<b>9/6/2007</b>				
Total Volume(m3)	258	382	340(387)	330
Total PCB Mass(ug)	1.5	14	3.1(3.6)	5.8
PCB Concentration(ug/m3)	0.0058	0.0366	0.0091(0.0093)	0.0176
Percent of Allowable(%)	1	4	1(1)	2
<b>9/7/2007</b>				
Total Volume(m3)	270	414	153(421)	339
Total PCB Mass(ug)	1.4	11	*(0.6)	5.8
PCB Concentration(ug/m3)	0.0052	0.0266	*(0.0014)	0.0171
Percent of Allowable(%)	1	3	*(0)	2
<b>9/8/2007</b>				
Total Volume(m3)	303	459	431(439)	131
Total PCB Mass(ug)	1.3	11	0.9(5.2)	*
PCB Concentration(ug/m3)	0.0043	0.024	0.0021(0.0118)	*
Percent of Allowable(%)	0	2	0(1)	*
<b>9/10/2007</b>				
Total Volume(m3)	269	367	353(430)	342
Total PCB Mass(ug)	1.6	12	6.2(7.2)	16
PCB Concentration(ug/m3)	0.0059	0.0327	0.0176(0.0167)	0.0468
Percent of Allowable(%)	1	3	2(2)	5
<b>9/11/2007</b>				
Total Volume(m3)	282	444	365(398)	352
Total PCB Mass(ug)	0.5	10	5.9(6.3)	12
PCB Concentration(ug/m3)	0.0018	0.0225	0.0162(0.0158)	0.0341
Percent of Allowable(%)	0	2	2(2)	3
<b>9/12/2007</b>				
Total Volume(m3)	299	445	358(408)	378
Total PCB Mass(ug)	1	5.2	18(19)	14
PCB Concentration(ug/m3)	0.0033	0.0117	0.0503(0.0466)	0.037
Percent of Allowable(%)	0	1	5(5)	4
<b>9/13/2007</b>				
Total Volume(m3)	281	424	366(429)	383
Total PCB Mass(ug)	2.5	5.4	18(21)	18
PCB Concentration(ug/m3)	0.0089	0.0127	0.0492(0.049)	0.047
Percent of Allowable(%)	1	1	5(5)	5
<b>9/14/2007</b>				
Total Volume(m3)	297	365	409(429)	353
Total PCB Mass(ug)	0	2.3	2.4(2.6)	5.1
PCB Concentration(ug/m3)	ND(0.0017)	0.0063	0.0059(0.0061)	0.0144
Percent of Allowable(%)	0	1	1(1)	1

**SUMMARY OF PUF AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
GM POWERTRAIN BEDFORD FACILITY  
BEDFORD, INDIANA**

Unit_ID	STATION 36 PUF-22	STATION 37 PUF-23	STATION 38 PUF-12	STATION 39 PUF-17
<b>9/15/2007</b>				
Total Volume(m3)	340	477	452(508)	421
Total PCB Mass(ug)	1.8	2.6	13(14)	7.6
PCB Concentration(ug/m3)	0.0053	0.0055	0.0288(0.0276)	0.0181
Percent of Allowable(%)	1	1	3(3)	2
<b>9/17/2007</b>				
Total Volume(m3)	290	414	387(421)	361
Total PCB Mass(ug)	8.7	12	15(15)	16
PCB Concentration(ug/m3)	0.03	0.029	0.0388(0.0356)	0.0443
Percent of Allowable(%)	3	3	4(4)	4
<b>9/18/2007</b>				
Total Volume(m3)	286	424	383(432)	369
Total PCB Mass(ug)	3.3	11	13(13)	11
PCB Concentration(ug/m3)	0.0115	0.0259	0.0339(0.0301)	0.0298
Percent of Allowable(%)	1	3	3(3)	3
<b>9/19/2007</b>				
Total Volume(m3)	289	452	390(442)	365
Total PCB Mass(ug)	3.4	14	24(26)	27
PCB Concentration(ug/m3)	0.0118	0.031	0.0615(0.0588)	0.074
Percent of Allowable(%)	1	3	6(6)	7
<b>9/20/2007</b>				
Total Volume(m3)	261	400	355(401)	318
Total PCB Mass(ug)	6.7	14	23(23)	30
PCB Concentration(ug/m3)	0.0257	0.035	0.0648(0.0574)	0.0943
Percent of Allowable(%)	3	4	6(6)	9
<b>9/21/2007</b>				
Total Volume(m3)	295	457	426(448)	354
Total PCB Mass(ug)	4	13	7.4(8.7)	8.8
PCB Concentration(ug/m3)	0.0136	0.0284	0.0174(0.0194)	0.0249
Percent of Allowable(%)	1	3	2(2)	2
<b>9/22/2007</b>				
Total Volume(m3)	NR	425	NR(NR)	NR
Total PCB Mass(ug)	NR	5.7	NR(NR)	NR
PCB Concentration(ug/m3)	NR	0.0134	NR(NR)	NR
Percent of Allowable(%)	NR	1	NR(NR)	NR
<b>9/24/2007</b>				
Total Volume(m3)	305	476	397(445)	397
Total PCB Mass(ug)	0.7	9.7	7(6.7)	6.7
PCB Concentration(ug/m3)	0.0023	0.0204	0.0176(0.0151)	0.0169
Percent of Allowable(%)	0	2	2(2)	2

**SUMMARY OF PUF AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007**  
**GM POWERTRAIN BEDFORD FACILITY**  
**BEDFORD, INDIANA**

Unit_ID	<i>STATION 36</i> <i>PUF-22</i>	<i>STATION 37</i> <i>PUF-23</i>	<i>STATION 38</i> <i>PUF-12</i>	<i>STATION 39</i> <i>PUF-17</i>
<b>9/25/2007</b>				
Total Volume(m3)	211	95	398(419)	345
Total PCB Mass(ug)	3.8	*	10(11)	15
PCB Concentration(ug/m3)	0.018	*	0.0251(0.0263)	0.0435
Percent of Allowable(%)	2	*	3(3)	4
<b>9/26/2007</b>				
Total Volume(m3)	129	NR	30(397)	NR
Total PCB Mass(ug)	*	NR	*(5.3)	NR
PCB Concentration(ug/m3)	*	NR	*(0.0134)	NR
Percent of Allowable(%)	*	NR	*(1)	NR
<b>9/28/2007</b>				
Total Volume(m3)	NR	434	405(458)	392
Total PCB Mass(ug)	NR	12	16(18)	18
PCB Concentration(ug/m3)	NR	0.0276	0.0395(0.0393)	0.0459
Percent of Allowable(%)	NR	3	4(4)	5

## Notes:

\* - Results not reported due to machine malfunction

NR - No result because machine was not setup

ND - Non-detect

**SUMMARY OF TSP AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
GM POWERTRAIN BEDFORD FACILITY  
BEDFORD, INDIANA**

Unit_ID	STATION 36 TSP-5	STATION 37 TSP-11	STATION 38 TSP-6	STATION 39 TSP-16
<b>7/24/2007</b>				
Total Volume(m3)	2	958	1172	1385
Average Flow(m3/min)	*	0.99	0.8	0.87
TSP Concentration(mg/m3)	*	0.0251	0.0478	0.0354
Percent of Allowable(%)	*	**	**	**
<b>7/25/2007</b>				
Total Volume(m3)	1076	0	1346	950
Average Flow(m3/min)	0.99	*	1	0.79
TSP Concentration(mg/m3)	0.0446	*	0.0468	0.0621
Percent of Allowable(%)	43	*	45	UPWIND
<b>7/26/2007</b>				
Total Volume(m3)	1123	967	1673	1031
Average Flow(m3/min)	0.94	1	1.24	0.77
TSP Concentration(mg/m3)	0.1006	0.0641	0.0747	0.1271
Percent of Allowable(%)	81	51	UPWIND	102 <sup>(1)</sup>
<b>7/27/2007</b>				
Total Volume(m3)	368	NR	1840	1117
Average Flow(m3/min)	*	NR	1.25	0.77
TSP Concentration(mg/m3)	*	NR	0.0196	0.0636
Percent of Allowable(%)	*	NR	**	**
<b>7/28/2007</b>				
Total Volume(m3)	NR	217	2024	1186
Average Flow(m3/min)	NR	*	1.25	0.75
TSP Concentration(mg/m3)	NR	*	0.0133	0.0261
Percent of Allowable(%)	NR	*	**	**
<b>7/30/2007</b>				
Total Volume(m3)	1300	2	1613	1130
Average Flow(m3/min)	0.98	*	1.18	0.79
TSP Concentration(mg/m3)	0.0177	*	0.0304	0.0319
Percent of Allowable(%)	UPWIND	*	103 <sup>(1)</sup>	108 <sup>(1)</sup>
<b>7/31/2007</b>				
Total Volume(m3)	1227	389	1055	1103
Average Flow(m3/min)	1	*	0.74	0.75
TSP Concentration(mg/m3)	0.0163	*	0.0635	0.049
Percent of Allowable(%)	UPWIND	*	233 <sup>(1)</sup>	180 <sup>(1)</sup>

**SUMMARY OF TSP AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
GM POWERTRAIN BEDFORD FACILITY  
BEDFORD, INDIANA**

Unit_ID	STATION 36 TSP-5	STATION 37 TSP-11	STATION 38 TSP-6	STATION 39 TSP-16
<b>8/1/2007</b>				
Total Volume(m3)	1202	NR	1033(9)	1026
Average Flow(m3/ min)	0.96	NR	0.74(*)	0.77
TSP Concentration(mg/m3)	0.0466	NR	0.0087(*)	0.0877
Percent of Allowable(%)	0	NR	0(*)	0
<b>8/2/2007</b>				
Total Volume(m3)	821	577	909(1211)	511
Average Flow(m3/ min)	*	0.35	0.69(0.92)	0.33
TSP Concentration(mg/m3)	*	0.1248	0.1298(0.0983)	0.0313
Percent of Allowable(%)	*	81	84(64)	20
<b>8/3/2007</b>				
Total Volume(m3)	NR	618	1144(1421)	1107
Average Flow(m3/ min)	NR	0.38	0.74(0.92)	0.73
TSP Concentration(mg/m3)	NR	0.089	0.1189(0.0922)	0.1102
Percent of Allowable(%)	NR	58	77(60)	71
<b>8/6/2007</b>				
Total Volume(m3)	1159	926	46(53)	1008
Average Flow(m3/ min)	0.93	0.62	*(*)	0.72
TSP Concentration(mg/m3)	0.0846	0.0983	*(*)	0.119
Percent of Allowable(%)	UPWIND	70	*(*)	84
<b>8/7/2007</b>				
Total Volume(m3)	1168	1459	NR(NR)	997
Average Flow(m3/ min)	0.93	0.96	NR(NR)	0.7
TSP Concentration(mg/m3)	0.0719	0.0706	NR(NR)	0.1314
Percent of Allowable(%)	UPWIND	59	NR(NR)	109 <sup>(2)</sup>
<b>8/8/2007</b>				
Total Volume(m3)	1191	1006	1328(NR)	759
Average Flow(m3/ min)	0.93	0.66	0.93(NR)	0.53
TSP Concentration(mg/m3)	0.0714	0.0984	0.0956(NR)	0.1739
Percent of Allowable(%)	45	62	UPWIND(NR)	109 <sup>(2)</sup>
<b>8/9/2007</b>				
Total Volume(m3)	1188	1500	892(NR)	1035
Average Flow(m3/ min)	0.93	0.96	0.62(NR)	0.72
TSP Concentration(mg/m3)	0.0606	0.0567	0.083(NR)	0.1101
Percent of Allowable(%)	UPWIND	56	82(NR)	109 <sup>(2)</sup>

**SUMMARY OF TSP AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
GM POWERTRAIN BEDFORD FACILITY  
BEDFORD, INDIANA**

Unit_ID	STATION 36 TSP-5	STATION 37 TSP-11	STATION 38 TSP-6	STATION 39 TSP-16
<b>8/10/2007</b>				
Total Volume(m3)	1366	1695	1063(NR)	1247
Average Flow(m3/min)	0.92	0.97	0.65(NR)	0.76
TSP Concentration(mg/m3)	0.0373	0.0212	0.0461(NR)	0.0377
Percent of Allowable(%)	UPWIND	34	74(NR)	61
<b>8/13/2007</b>				
Total Volume(m3)	1157	1030	1065(NR)	1059
Average Flow(m3/min)	0.9	0.68	0.74(NR)	0.71
TSP Concentration(mg/m3)	0.0424	0.0369	0.0789(NR)	0.05
Percent of Allowable(%)	UPWIND	52	111(NR)	71
<b>8/14/2007</b>				
Total Volume(m3)	1100	1379	987(NR)	903
Average Flow(m3/min)	0.92	0.98	0.81(NR)	0.73
TSP Concentration(mg/m3)	0.0564	0.0624	0.0709(NR)	0.268
Percent of Allowable(%)	13	14	16(NR)	UPWIND
<b>8/15/2007</b>				
Total Volume(m3)	1167	1438	4(4)	1043
Average Flow(m3/min)	0.91	0.93	*(*)	0.72
TSP Concentration(mg/m3)	0.0934	0.0967	*(*)	0.186
Percent of Allowable(%)	**	**	**(**)	**
<b>8/16/2007</b>				
Total Volume(m3)	1073	1522	0(0)	1062
Average Flow(m3/min)	0.86	0.97	*(*)	0.71
TSP Concentration(mg/m3)	0.0708	0.0506	*(*)	0.0989
Percent of Allowable(%)	UPWIND	43	*(*)	84
<b>8/17/2007</b>				
Total Volume(m3)	1253	1594	NR(NR)	1092
Average Flow(m3/min)	0.91	0.98	NR(NR)	0.72
TSP Concentration(mg/m3)	0.0391	0.0289	NR(NR)	0.0504
Percent of Allowable(%)	UPWIND	44	NR(NR)	77
<b>8/20/2007</b>				
Total Volume(m3)	1029	1006	8(6)	980
Average Flow(m3/min)	0.86	0.67	*(*)	0.7
TSP Concentration(mg/m3)	0.0884	0.1223	*(*)	0.0816
Percent of Allowable(%)	UPWIND	83	*(*)	55

**SUMMARY OF TSP AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007**  
**GM POWERTRAIN BEDFORD FACILITY**  
**BEDFORD, INDIANA**

Unit_ID	STATION 36 TSP-5	STATION 37 TSP-11	STATION 38 TSP-6	STATION 39 TSP-16
<b>8/21/2007</b>				
Total Volume(m3)	1199	1231	12(1113)	938
Average Flow(m3/ min)	0.94	0.82	*(0.97)	0.67
TSP Concentration(mg/ m3)	0.0259	0.0447	*(0.0602)	0.1205
Percent of Allowable(%)	26	44	*(UPWIND)	**120
<b>8/22/2007</b>				
Total Volume(m3)	1178	1210	886(4)	967
Average Flow(m3/ min)	0.97	0.82	0.64(*)	0.7
TSP Concentration(mg/ m3)	0.0008	0.0653	0.14(*)	0.1148
Percent of Allowable(%)	0	8	UPWIND(*)	14
<b>8/23/2007</b>				
Total Volume(m3)	1014	1291	868(11)	958
Average Flow(m3/ min)	0.82	0.89	0.64(*)	0.7
TSP Concentration(mg/ m3)	0.0375	0.072	0.1313(*)	0.1503
Percent of Allowable(%)	3	6	UPWIND(*)	12
<b>8/24/2007</b>				
Total Volume(m3)	1	1465	1203(1265)	997
Average Flow(m3/ min)	*	0.96	0.82(0.91)	0.7
TSP Concentration(mg/ m3)	*	0.0662	0.0615(0.0743)	0.1545
Percent of Allowable(%)	*	**	**(**)	**
<b>8/25/2007</b>				
Total Volume(m3)	1464	1226	1116(1492)	1170
Average Flow(m3/ min)	1.02	0.7	0.7(0.92)	0.71
TSP Concentration(mg/ m3)	0.002	0.0147	0.0385(0.0282)	0.0444
Percent of Allowable(%)	8	UPWIND	157(115) <sup>(1)</sup>	**181 <sup>(1)</sup>
<b>8/27/2007</b>				
Total Volume(m3)	NR	NR	NR(1342)	NR
Average Flow(m3/ min)	NR	NR	NR(0.89)	NR
TSP Concentration(mg/ m3)	NR	NR	NR(0.1259)	NR
Percent of Allowable(%)	NR	NR	NR(UPWIND)	NR
<b>8/28/2007</b>				
Total Volume(m3)	1238	1411	933(1321)	894
Average Flow(m3/ min)	1.01	1.02	0.69(0.96)	0.69
TSP Concentration(mg/ m3)	ND(0.0008)	0.0943	0.1586(0.1226)	0.1969
Percent of Allowable(%)	NR	46	UPWIND(UPWIND)	96

**SUMMARY OF TSP AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
GM POWERTRAIN BEDFORD FACILITY  
BEDFORD, INDIANA**

Unit_ID	STATION 36 TSP-5	STATION 37 TSP-11	STATION 38 TSP-6	STATION 39 TSP-16
<b>8/29/2007</b>				
Total Volume(m3)	1056	1456	909(0)	995
Average Flow(m3/min)	0.83	0.97	0.65(*)	0.71
TSP Concentration(mg/m3)	0.0341	0.1243	0.121(*)	0.2754
Percent of Allowable(%)	17	62	UPWIND(*)	136 <sup>(1)</sup>
<b>8/30/2007</b>				
Total Volume(m3)	992	1395	1154(1314)	947
Average Flow(m3/min)	0.91	0.94	0.84(1.07)	0.68
TSP Concentration(mg/m3)	0.0464	0.0315	0.0442(0.0472)	0.1943
Percent of Allowable(%)	UPWIND	41	57(61)	251 <sup>(1)</sup>
<b>8/31/2007</b>				
Total Volume(m3)	1270	1584	977(1599)	1237
Average Flow(m3/min)	0.9	0.97	0.64(1.03)	0.82
TSP Concentration(mg/m3)	0.0276	0.0391	0.0645(0.0407)	0.0986
Percent of Allowable(%)	UPWIND	85	140 <sup>(1)</sup> (88)	214 <sup>(1)</sup>
<b>9/4/2007</b>				
Total Volume(m3)	1126	1384	1511(890)	1187
Average Flow(m3/min)	0.86	0.91	1.07(0.62)	0.83
TSP Concentration(mg/m3)	0.0977	0.1055	0.0529(0.2236)	0.2005
Percent of Allowable(%)	26	28	UPWIND(UPWIND)	54
<b>9/5/2007</b>				
Total Volume(m3)	1087	1348	1101(877)	1134
Average Flow(m3/min)	0.84	0.9	0.79(0.62)	0.81
TSP Concentration(mg/m3)	0.1371	0.1944	0.1844(0.2577)	0.3051
Percent of Allowable(%)	32	45	UPWIND(UPWIND)	71
<b>9/6/2007</b>				
Total Volume(m3)	1009	1102	1320(898)	1144
Average Flow(m3/min)	0.86	0.75	0.97(0.65)	0.83
TSP Concentration(mg/m3)	0.0783	0.0989	0.0833(0.1203)	0.0927
Percent of Allowable(%)	39	49	UPWIND(UPWIND)	46
<b>9/7/2007</b>				
Total Volume(m3)	1176	1406	549(966)	1192
Average Flow(m3/min)	0.87	0.92	*(0.64)	0.81
TSP Concentration(mg/m3)	0.0527	0.1003	*(0.0973)	0.1342
Percent of Allowable(%)	32	62	*(UPWIND)	83



**SUMMARY OF TSP AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
GM POWERTRAIN BEDFORD FACILITY  
BEDFORD, INDIANA**

Unit_ID	STATION 36 TSP-5	STATION 37 TSP-11	STATION 38 TSP-6	STATION 39 TSP-16
<b>9/8/2007</b>				
Total Volume(m3)	1331	1053	1579(973)	475
Average Flow(m3/min)	0.93	0.62	0.99(0.6)	*
TSP Concentration(mg/m3)	0.0225	0.0598	0.0564(0.0421)	*
Percent of Allowable(%)	32	85	UPWIND(UPWIND)	*
<b>9/10/2007</b>				
Total Volume(m3)	1050	750	1356(847)	1084
Average Flow(m3/min)	0.82	0.49	0.96(0.59)	0.76
TSP Concentration(mg/m3)	0.0533	0.0027	0.0531(0.0874)	0.0738
Percent of Allowable(%)	UPWIND	3	60(98)	83
<b>9/11/2007</b>				
Total Volume(m3)	1114	0	1246(869)	1182
Average Flow(m3/min)	0.87	*	0.97(0.61)	0.84
TSP Concentration(mg/m3)	0.053	*	0.0457(0.0679)	0.077
Percent of Allowable(%)	UPWIND	*	52(77)	87
<b>9/12/2007</b>				
Total Volume(m3)	1106	0	1349(1005)	1208
Average Flow(m3/min)	0.85	*	0.94(0.69)	0.83
TSP Concentration(mg/m3)	0.0325	*	0.0082(0.0507)	0.0753
Percent of Allowable(%)	UPWIND	*	15(93)	139 <sup>(1)</sup>
<b>9/13/2007</b>				
Total Volume(m3)	1079	1382	1325(944)	1208
Average Flow(m3/min)	0.84	0.91	0.94(0.66)	0.85
TSP Concentration(mg/m3)	0.0927	0.0781	0.077(0.1133)	0.125
Percent of Allowable(%)	49	41	UPWIND(UPWIND)	66
<b>9/14/2007</b>				
Total Volume(m3)	1150	1409	1299(945)	1159
Average Flow(m3/min)	0.89	0.92	0.92(0.66)	0.82
TSP Concentration(mg/m3)	0.0713	0.0603	0.0639(0.1016)	0.1009
Percent of Allowable(%)	UPWIND	51	54(85)	85
<b>9/15/2007</b>				
Total Volume(m3)	1350	1640	1603(1085)	1379
Average Flow(m3/min)	0.91	0.96	0.99(0.66)	0.85
TSP Concentration(mg/m3)	0.0237	0.0268	0.0268(0.0396)	0.0406
Percent of Allowable(%)	UPWIND	68	68(100)	103 <sup>(1)</sup>

**SUMMARY OF TSP AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
GM POWERTRAIN BEDFORD FACILITY  
BEDFORD, INDIANA**

Unit_ID	STATION 36 TSP-5	STATION 37 TSP-11	STATION 38 TSP-6	STATION 39 TSP-16
<b>9/17/2007</b>				
Total Volume(m3)	1148	1361	1258(912)	1139
Average Flow(m3/ min)	0.91	0.92	0.91(0.65)	0.82
TSP Concentration(mg/m3)	0.0645	0.0625	0.101(0.1414)	0.1703
Percent of Allowable(%)	23	22	36(50)	UPWIND
<b>9/18/2007</b>				
Total Volume(m3)	1222	1396	1433(965)	1165
Average Flow(m3/ min)	0.94	0.92	1.01(0.67)	0.82
TSP Concentration(mg/m3)	0.072	0.116	0.067(0.1492)	0.2258
Percent of Allowable(%)	29	47	UPWIND(UPWIND)	91
<b>9/19/2007</b>				
Total Volume(m3)	1169	1447	1362(972)	1197
Average Flow(m3/ min)	0.89	0.93	0.94(0.66)	0.82
TSP Concentration(mg/m3)	0.1112	0.1196	0.0925(0.1667)	0.2097
Percent of Allowable(%)	40	43	UPWIND(UPWIND)	75
<b>9/20/2007</b>				
Total Volume(m3)	1070	1303	1225(886)	1046
Average Flow(m3/ min)	0.9	0.91	0.93(0.66)	0.79
TSP Concentration(mg/m3)	0.0944	0.0967	0.1273(0.1433)	0.2055
Percent of Allowable(%)	58	UPWIND	79(89)	127 <sup>(2)</sup>
<b>9/21/2007</b>				
Total Volume(m3)	1154	1432	1320(1008)	1197
Average Flow(m3/ min)	0.86	0.91	0.9(0.65)	0.81
TSP Concentration(mg/m3)	0.1118	0.0824	0.1205(0.002)	0.254
Percent of Allowable(%)	26	19	28(0)	UPWIND
<b>9/22/2007</b>				
Total Volume(m3)	NR	1371	NR(NR)	NR
Average Flow(m3/ min)	NR	0.9	NR(NR)	NR
TSP Concentration(mg/m3)	NR	0.0656	NR(NR)	NR
Percent of Allowable(%)	NR	**	NR(NR)	NR
<b>9/24/2007</b>				
Total Volume(m3)	1138	1412	1275(1)	1225
Average Flow(m3/ min)	0.82	0.86	0.9(*)	0.8
TSP Concentration(mg/m3)	0.0729	0.08	0.062(*)	0.1551
Percent of Allowable(%)	1	2	UPWIND(*)	3

**SUMMARY OF TSP AIR MONITORING ANALYTICAL RESULTS - JULY TO SEPTEMBER 2007  
GM POWERTRAIN BEDFORD FACILITY  
BEDFORD, INDIANA**

Unit_ID	STATION 36 TSP-5	STATION 37 TSP-11	STATION 38 TSP-6	STATION 39 TSP-16
<b>9/25/2007</b>				
Total Volume(m3)	1064	305	1323(715)	1120
Average Flow(m3/min)	0.89	*	0.93(0.61)	0.81
TSP Concentration(mg/m3)	0.0329	*	0.0393(0.0462)	0.0357
Percent of Allowable(%)	43	*	UPWIND(UPWIND)	46
<b>9/26/2007</b>				
Total Volume(m3)	573	NR	98(1253)	NR
Average Flow(m3/min)	*	NR	*(0.85)	NR
TSP Concentration(mg/m3)	*	NR	*(0.0239)	NR
Percent of Allowable(%)	*	NR	*(UPWIND)	NR
<b>9/28/2007</b>				
Total Volume(m3)	1265	1191	1307(1238)	1236
Average Flow(m3/min)	0.92	0.74	0.87(0.81)	0.82
TSP Concentration(mg/m3)	0.0253	0.0395	0.0566(0.0549)	0.0623
Percent of Allowable(%)	UPWIND	93	134(130) <sup>(1)</sup>	147 <sup>(1)</sup>

## Notes:

\* - Results not reported due to machine malfunction.

\*\* - UPWIND machine did not run, therefore % of allowable not calculable.

NR - No result because machine was not setup or generator malfunction.

<sup>(1)</sup> - Exceedence due to increased truck traffic and hot, dry conditions. Area is being wetted frequently to minimize dust.

<sup>(2)</sup> - Exceedence due to TSP unit downwind of generator and increased particulate from exhaust.

TABLE 7.1

**NORTHERN TRIBUTARY VALIDATED VERIFICATION  
SAMPLE ANALYTICAL RESULTS SUMMARY  
GM POWERTRAIN BEDFORD FACILITY  
BEDFORD, INDIANA**

Area		<i>P384</i>	<i>P384</i>	<i>P386</i>	<i>P386</i>	<i>P386</i>
Sample Location		<b>384-26000</b>	<b>384-26000</b>	<b>386-26002</b>	<b>386-26003</b>	<b>386-26004</b>
Sample Identification		<b>S-384-083107-AH-26000</b>	<b>S-384-083107-AH-26001</b>	<b>S-386-083107-AH-26002</b>	<b>S-386-083107-AH-26003</b>	<b>S-386-083107-AH-26004</b>
Sample Date		<b>8/31/2007</b>	<b>8/31/2007</b>	<b>8/31/2007</b>	<b>8/31/2007</b>	<b>8/31/2007</b>
Sample Depth		<b>0-0.33(ft)</b>	<b>0-0.33(ft)</b>	<b>0-0.33(ft)</b>	<b>0-0.33(ft)</b>	<b>0-0.33(ft)</b>
Sample Type			<i>Duplicate</i>			
	<i>Units</i>					
<i>PCBs</i>						
Aroclor-1016 (PCB-1016)	mg/kg	0.04 U	0.04 U	0.039 U	0.041 U	0.036 U
Aroclor-1221 (PCB-1221)	mg/kg	0.04 U	0.04 U	0.039 U	0.041 U	0.036 U
Aroclor-1232 (PCB-1232)	mg/kg	0.04 U	0.04 U	0.039 U	0.041 U	0.036 U
Aroclor-1242 (PCB-1242)	mg/kg	0.04 U	0.04 U	0.039 U	0.041 U	0.036 U
Aroclor-1248 (PCB-1248)	mg/kg	1	0.68	0.95	0.22	0.16
Aroclor-1254 (PCB-1254)	mg/kg	0.04 U	0.04 U	0.039 U	0.041 U	0.036 U
Aroclor-1260 (PCB-1260)	mg/kg	0.12	0.058	0.12	0.047	0.052
Total PCBs	mg/kg	1.12	0.738	1.07	0.267	0.212

U - Not present at or above the associated value

J - Estimated value

TABLE 7.1

NORTHERN TRIBUTARY VALIDATED VERIFICATION  
 SAMPLE ANALYTICAL RESULTS SUMMARY  
 GM POWERTRAIN BEDFORD FACILITY  
 BEDFORD, INDIANA

Area		P386	P386	P386	P386	P386
Sample Location		386-26005	386-26006	386-26007	386-26008	386-26009
Sample Identification		S-386-083107-AH-26005	S-386-083107-AH-26006	S-386-083107-AH-26007	S-386-083107-AH-26008	S-386-083107-AH-26009
Sample Date		8/31/2007	8/31/2007	8/31/2007	8/31/2007	8/31/2007
Sample Depth		0-0.33(ft)	0-0.33(ft)	0-0.33(ft)	0-0.33(ft)	0-0.33(ft)
Sample Type						
	<b>Units</b>					
<b>PCBs</b>						
Aroclor-1016 (PCB-1016)	mg/kg	0.034 U	0.037 U	0.037 U	1.8 U	0.72 U
Aroclor-1221 (PCB-1221)	mg/kg	0.034 U	0.037 U	0.037 U	1.8 U	0.72 U
Aroclor-1232 (PCB-1232)	mg/kg	0.034 U	0.037 U	0.037 U	1.8 U	0.72 U
Aroclor-1242 (PCB-1242)	mg/kg	0.034 U	0.037 U	0.037 U	1.8 U	0.72 U
Aroclor-1248 (PCB-1248)	mg/kg	0.13	0.075	0.14	26	11
Aroclor-1254 (PCB-1254)	mg/kg	0.034 U	0.037 U	0.037 U	1.8 U	0.72 U
Aroclor-1260 (PCB-1260)	mg/kg	0.047	0.04	0.039	5.6	1.9
Total PCBs	mg/kg	0.177	0.115	0.179	31.6	12.9

U - Not present at or above the associated value

J - Estimated value

TABLE 7.1

**NORTHERN TRIBUTARY VALIDATED VERIFICATION  
SAMPLE ANALYTICAL RESULTS SUMMARY  
GM POWERTRAIN BEDFORD FACILITY  
BEDFORD, INDIANA**

Area		<i>P386</i>	<i>P386</i>	<i>P386</i>	<i>P386</i>	<i>P386</i>
Sample Location		<b>386-26010</b>	<b>386-26010</b>	<b>386-26012</b>	<b>386-26013</b>	<b>386-26014</b>
Sample Identification		<b>S-386-083107-AH-26010</b>	<b>S-386-083107-AH-26011</b>	<b>S-386-083107-AH-26012</b>	<b>S-386-083107-AH-26013</b>	<b>S-386-091107-AH-26014</b>
Sample Date		<b>8/31/2007</b>	<b>8/31/2007</b>	<b>8/31/2007</b>	<b>8/31/2007</b>	<b>9/11/2007</b>
Sample Depth		<b>0-0.33(ft)</b>	<b>0-0.33(ft)</b>	<b>0-0.33(ft)</b>	<b>0-0.33(ft)</b>	<b>0-0.33(ft)</b>
Sample Type			<i>Duplicate</i>			
	<i>Units</i>					
<i>PCBs</i>						
Aroclor-1016 (PCB-1016)	mg/kg	0.038 U	0.039 U	0.036 U	0.72 U	0.042 U
Aroclor-1221 (PCB-1221)	mg/kg	0.038 U	0.039 U	0.036 U	0.72 U	0.042 U
Aroclor-1232 (PCB-1232)	mg/kg	0.038 U	0.039 U	0.036 U	0.72 U	0.042 U
Aroclor-1242 (PCB-1242)	mg/kg	0.038 U	0.039 U	0.036 U	0.72 U	0.042 U
Aroclor-1248 (PCB-1248)	mg/kg	0.043	0.047	0.041	13	0.13
Aroclor-1254 (PCB-1254)	mg/kg	0.038 U	0.039 U	0.036 U	0.72 U	0.042 U
Aroclor-1260 (PCB-1260)	mg/kg	0.023 J	0.021 J	0.036 U	2.5	0.024 J
Total PCBs	mg/kg	0.066 J	0.068 J	0.041	15.5	0.154 J

U - Not present at or above the associated value

J - Estimated value

TABLE 7.1

**NORTHERN TRIBUTARY VALIDATED VERIFICATION  
SAMPLE ANALYTICAL RESULTS SUMMARY  
GM POWERTRAIN BEDFORD FACILITY  
BEDFORD, INDIANA**

Area		<i>P386</i>	<i>P386</i>	<i>P386</i>	<i>P386</i>	<i>P386</i>
Sample Location		386-26015	386-26016	386-26017	386-26018	386-26019
Sample Identification		S-386-091107-AH-26015	S-386-091107-AH-26016	S-386-091107-AH-26017	S-386-091107-AH-26018	S-386-091107-AH-26019
Sample Date		9/11/2007	9/11/2007	9/11/2007	9/11/2007	9/11/2007
Sample Depth		0-0.33(ft)	0-0.33(ft)	0-0.33(ft)	0-0.33(ft)	0-0.33(ft)
Sample Type						
	<i>Units</i>					
<i>PCBs</i>						
Aroclor-1016 (PCB-1016)	mg/kg	0.04 U	0.039 U	0.042 U	0.041 U	0.04 U
Aroclor-1221 (PCB-1221)	mg/kg	0.04 U	0.039 U	0.042 U	0.041 U	0.04 U
Aroclor-1232 (PCB-1232)	mg/kg	0.04 U	0.039 U	0.042 U	0.041 U	0.04 U
Aroclor-1242 (PCB-1242)	mg/kg	0.04 U	0.039 U	0.042 U	0.041 U	0.04 U
Aroclor-1248 (PCB-1248)	mg/kg	1.1	0.13	0.092	0.028 J	0.091
Aroclor-1254 (PCB-1254)	mg/kg	0.04 U	0.039 U	0.042 U	0.041 U	0.04 U
Aroclor-1260 (PCB-1260)	mg/kg	0.16	0.047	0.034 J	0.041 U	0.025 J
Total PCBs	mg/kg	1.26	0.177	0.126 J	0.028 J	0.116 J

U - Not present at or above the associated value

J - Estimated value

TABLE 7.1

**NORTHERN TRIBUTARY VALIDATED VERIFICATION  
SAMPLE ANALYTICAL RESULTS SUMMARY  
GM POWERTRAIN BEDFORD FACILITY  
BEDFORD, INDIANA**

Area		<i>P386</i>	<i>P386</i>	<i>P386</i>	<i>P386</i>	<i>P386</i>
Sample Location		386-26020	386-26020	386-26022	386-26023	386-26024
Sample Identification		S-386-091107-AH-26020	S-386-091107-AH-26021	S-386-091107-AH-26022	S-386-091907-AH-26023	S-386-091907-AH-26024
Sample Date		9/11/2007	9/11/2007	9/11/2007	9/19/2007	9/19/2007
Sample Depth		0-0.33(ft)	0-0.33(ft)	0-0.33(ft)	0-0.33(ft)	0-0.33(ft)
Sample Type			Duplicate			
	<i>Units</i>					
<i>PCBs</i>						
Aroclor-1016 (PCB-1016)	mg/kg	0.039 U	0.04 U	0.041 U	0.037 U	0.039 U
Aroclor-1221 (PCB-1221)	mg/kg	0.039 U	0.04 U	0.041 U	0.037 U	0.039 U
Aroclor-1232 (PCB-1232)	mg/kg	0.039 U	0.04 U	0.041 U	0.037 U	0.039 U
Aroclor-1242 (PCB-1242)	mg/kg	0.039 U	0.04 U	0.041 U	0.037 U	0.039 U
Aroclor-1248 (PCB-1248)	mg/kg	0.4	0.47	0.79	0.46	0.27
Aroclor-1254 (PCB-1254)	mg/kg	0.039 U	0.04 U	0.041 U	0.037 U	0.039 U
Aroclor-1260 (PCB-1260)	mg/kg	0.13	0.15	0.22	0.073	0.085
Total PCBs	mg/kg	0.53	0.62	1.01	0.533	0.355

U - Not present at or above the associated value

J - Estimated value



**NORTHERN TRIBUTARY VALIDATED VERIFICATION  
SAMPLE ANALYTICAL RESULTS SUMMARY  
GM POWERTRAIN BEDFORD FACILITY  
BEDFORD, INDIANA**

Area		P386	P386
Sample Location		386-26025	386-26026
Sample Identification		S-386-091907-AH-26025	S-386-091907-AH-26026
Sample Date		9/19/2007	9/19/2007
Sample Depth		0-0.33(ft)	0-0.33(ft)
Sample Type			
	<i>Units</i>		
<b>PCBs</b>			
Aroclor-1016 (PCB-1016)	mg/kg	0.04 U	0.042 U
Aroclor-1221 (PCB-1221)	mg/kg	0.04 U	0.042 U
Aroclor-1232 (PCB-1232)	mg/kg	0.04 U	0.042 U
Aroclor-1242 (PCB-1242)	mg/kg	0.04 U	0.042 U
Aroclor-1248 (PCB-1248)	mg/kg	1.1	0.71
Aroclor-1254 (PCB-1254)	mg/kg	0.04 U	0.042 U
Aroclor-1260 (PCB-1260)	mg/kg	0.3	0.19
Total PCBs	mg/kg	1.4	0.9

U - Not present at or above the associated value

J - Estimated value

APPENDIX A

EAST PLANT AREA CONSTRUCTION MEETING MINUTES



## MEETING MINUTES

Reference No. 13968

PROJECT: GM Powertrain Removal Action Project

OWNER: General Motors CONTRACT NO.: 13968(41, 89)

RE: Construction Meeting

LOCATION: Bedford, Indiana DATE: July 3, 2007 TIME: 1:00 p.m.

**Participants:**

Terri Stewart; CRA	Earney Funderburg; ENTACT	John Cooper; ENTACT
Yelena Moskvina; CRA	Edgar Longstreet; ENTACT	Barbara Longstreet; ENTACT
Dan Nelson; CRA	Tim Hiltunen; ENTACT	

**Distribution:**

Cheryl Hiatt; GM	Ed Peterson; GM	Glenn Turchan; CRA
Jim McGuigan; CRA	Jeff Daniel; CRA	Katie Kamm; CRA
Terri Channing; CRA	Mary Kelly; CRA	Peter Ramanauskas; USEPA
Brad Stimple; USEPA	Jerry O'Callaghan; IDEM	Jean Greensley; USEPA

<i>Item</i>	<i>Description</i>	<i>Action By</i>
<b>1.0</b>	<b>HEALTH AND SAFETY</b>	
1.1	ENTACT continues to perform dust monitoring in East Plant work areas.	ENTACT
1.2	CRA requested 48 hours notification for fire line shutdown request. CRA advised ENTACT not to excavate within 5' of the pressurized line prior to the line being shut down.	ENTACT/CRA
<b>2.0</b>	<b>REQUEST FOR INFORMATION</b>	
2.1	No new information requests.	--
<b>3.0</b>	<b>GENERAL WORK ACTIVITIES</b>	
3.1	CRA continues to track all "Active" and "Inactive" and "Non-Billable" days. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT
3.2	ENTACT continues to place and compact fill.	ENTACT
3.3	ENTACT continues to place silt fence as work progresses. ENTACT was reminded to properly install/repair the silt fence so that the silt fence is able to serve its purpose as a sediment barrier. ENTACT will perform all necessary repairs.	ENTACT
3.4	CRA requested information on the construction and general use of ENTACT's new support area located at Bailey Scale Road entrance. CRA provided stipulations on road use and traffic restrictions.	ENTACT
3.5	The CRA East Plant field trailer will be relocated to the NW corner outside the perimeter of the Parking lot on 07-05-07.	ENTACT
<b>4.0</b>	<b>GRADING AREAS # 1, 2, 3 AND 4, FILL AREAS (FA-1A &amp; FA-1B)</b>	
4.1	Water management activities and site maintenance work were conducted as appropriate.	ENTACT



Item	Description	Action By
4.2	ENTACT continues to confirm tarping/mulching is complete prior to leaving at the end of the day. CRA continues to verify as acceptable.	ENTACT
<b>5.0</b>	<b>CAP/FILL PLACEMENT</b>	
5.1	ENTACT continues to receive <50-ppm material from the downstream parcels and from excavation areas within the East Plant cap area for placement. ENTACT continues to cover/mulch the fill placement area daily.	ENTACT
5.2	On 06-27-07 ENTACT called off fill placement activities for 6-28-07 due to weather forecast. No rain occurred until 3:20pm on 06-28-07.	ENTACT
5.3	ENTACT began extending the dump ramp off GA-2 on 07-03-07.	ENTACT
<b>6.0</b>	<b>VAULT AREA AOI7</b>	
6.1	SES continues to perform water management and site maintenance work as appropriate.	SES
6.2	Sevenson was advised the delivery of >50-ppm material (from the Northern Tributary) for placement into the vault may begin as soon as 07-23-07.	SES/ENTACT
<b>7.0</b>	<b>DRAINAGE DITCH EXCAVATION</b>	
7.1	ENTACT anticipates starting the construction of the perimeter drainage ditch East of GA-2 on 07-05-07. CRA requested the exclusion zone be delineated with orange construction fence.	ENTACT
<b>8.0</b>	<b>PARKING LOT RESTORATION</b>	
8.1	CRA will revise the grid chart requested by ENTACT for sub grade verification and clay placement within the East Plant parking lot.	ENTACT/CRA
8.2	SES relocated vault liner material from the East Plant Parking lot to east of GA-4 on 06-28-07.	SES
8.3	<p>CRA advised ENTACT the following must be followed when excavating around the Fire Line:</p> <ul style="list-style-type: none"> <li>• Do not dig within 5' of the fire line; stop if a visual of compacted sand layer is observed.</li> <li>• ENTACT must provide a minimum of 48 hours notice to excavate within the 5' mark of the fire line. CRA will then contact GM to have the fire line temporarily shut down. The time frame this line can be shut off is limited; ENTACT will need to plan their work accordingly.</li> <li>• CRA will survey all exposed fire line piping.</li> </ul>	ENTACT/CRA
<b>9.0</b>	<b>SITE STRUCTURES</b>	
9.1	The 8" HDPE pipe extending from WW#3 to the WTP was determined by CRA/GM to be damaged by ENTACT during the course of fill placement activities in the East Plant. CRA advised ENTACT on 07-02-07 to repair or replace (as per CRA design). ENTACT was provided a time frame of 2-weeks for completion.	ENTACT/CRA
9.2	North Headwall concrete results are pending 28-day test breaks.	CRA



<i>Item</i>	<i>Description</i>	<i>Action By</i>
<b>10.0</b>	<b>SURFACE &amp; STORM WATER CONTROLS</b>	
10.1	ENTACT continues to maintain berm/sump enclosures at the fill placement areas. ENTACT continues to obtain CRA authorization prior to pumping water to the SES modu tanks	ENTACT
10.2	Both contractors continue monitor WW#3.	ENTACT/SES
<b>11.0</b>	<b>WORK HOURS</b>	
11.1	ENTACT is working Monday through Saturday 7:00 a.m. to 5:30 p.m.	ENTACT
11.2	ENTACT/SES will not be working on 07-04-07 due to the Independence Day holiday. Water management crews will be on site as needed.	ENTACT/SES
11.3	SES is currently working M-T 10-hour days. Water management crews are on site as needed for storm water control.	SES
11.4	SES will have limited crew availability the week of 07-02-07 through 07-08-07.	SES
<b>12.0</b>	<b>SUB-CONTRACTORS ON-SITE</b>	
12.1	Bledsoe, Tapp & Guertazz – ENTACT Surveying	ENTACT

Attachments: \_\_\_\_\_

Prepared By:  Terri Stewart \_\_\_\_\_ Date Issued: July 11 \_\_\_\_\_, 2007

This confirms and records CRA's interpretation of the discussions that occurred and our understanding reached during this meeting. Unless notified in writing within 3 days of the date issued, we will assume that the following interpretation or description is complete and accurate.



## MEETING MINUTES

Reference No. 13968

PROJECT: GM Powertrain Removal Action Project  
 OWNER: General Motors CONTRACT NO.: 13968(41, 89)  
 RE: Construction Meeting  
 LOCATION: Bedford, Indiana DATE: July 10, 2007 TIME: 1:00 p.m.

Participants:

Terri Stewart; CRA	Earney Funderburg; ENTACT	John Cooper; ENTACT
Yelena Moskvina; CRA	Edgar Longstreet; ENTACT	Randy Campbell; SES
Rick Hoekstra; CRA	Tim Hiltunen; ENTACT	Chris Bement; SES
	Barbara Longstreet; ENTACT	

Distribution:

Cheryl Hiatt; GM	Ed Peterson; GM	Glenn Turchan; CRA
Jim McGuigan; CRA	Jeff Daniel; CRA	Katie Kamm; CRA
Terri Channing; CRA	Mary Kelly; CRA	Peter Ramanauskas; USEPA
Brad Stimple; USEPA	Jerry O'Callaghan; IDEM	Jean Greensley; USEPA

<i>Item</i>	<i>Description</i>	<i>Action By</i>
<b>1.0</b>	<b>HEALTH AND SAFETY</b>	
1.1	ENTACT continues to perform PDR (dust) monitoring in East Plant work areas.	ENTACT
1.2	ENTACT was reminded to be cautious when driving within the GM parking lot area due to the volume of traffic.	ENTACT
<b>2.0</b>	<b>REQUEST FOR INFORMATION</b>	
2.1	ENTACT requested information on the removal of the 3 X 18" GM storm pipes.	ENTACT
2.2	CRA requested ENTACT to provide June's month end QA/QC photos. ENTACT will provide the photos by 07-11-07.	ENTACT
<b>3.0</b>	<b>GENERAL WORK ACTIVITIES</b>	
3.1	CRA continues to track "Active" and "Inactive" and "Non-Billable" days. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT
3.2	ENTACT continues to place and compact fill.	ENTACT



<i>Item</i>	<i>Description</i>	<i>Action By</i>
3.3	ENTACT completed the Bailey Scale Road support area construction on 07-07-07.	ENTACT
3.4	ENTACT was asked on 07-06-07 to re-mulch surface areas that have deteriorated over time by 07-10-07.	ENTACT
3.5	ENTACT relocated the CRA trailer to the NW corner of the East Plant Parking Lot on 07-07-07.	ENTACT
<b>4.0</b>	<b>GRADING AREAS # 1, 2, 3 AND 4, FILL AREAS (FA-1A &amp; FA-1B)</b>	
4.1	Water management activities and site maintenance work were conducted as appropriate.	ENTACT
4.2	ENTACT continues to confirm tarping/mulching is complete prior to leaving at the end of the day. CRA continues to verify as acceptable.	ENTACT
<b>5.0</b>	<b>CAP/FILL PLACEMENT</b>	
5.1	ENTACT continues to receive <50-ppm material from the downstream parcels and from excavation areas within the East Plant Cap area for placement. ENTACT continues to cover/mulch the fill placement area daily.	ENTACT
5.2	ENTACT began placing clay in the East Plant parking lot area on 07-09-07.	ENTACT
<b>6.0</b>	<b>VAULT AREA AOI7</b>	
6.1	SES continues to perform water management and site maintenance work as appropriate.	SES
6.2	ENTACT has received approval to begin the Northern Tributary work. Severson was advised >50-ppm material will begin to be delivered to the vault as soon as 07-23-07.	SES/ENTACT
6.3	Severson will begin construction of the vault dump ramps on 07-16-07.	SES
<b>7.0</b>	<b>DRAINAGE DITCH EXCAVATION</b>	
7.1	ENTACT began excavation of the perimeter drainage ditch on the East Side of GA-2 on 07-06-07.	ENTACT
<b>8.0</b>	<b>PARKING LOT RESTORATION</b>	
8.1	The GM fire line was shut down on 07-06-07 and will be restored by 07-11-07. The shut down was necessary while clay was being compacted over the fire line location.	ENTACT/CRA
8.2	CRA continues to verify sub grade elevations are met.	SES
8.3	CRA provided East Plant parking lot grid verification drawings to ENTACT (for sub grade elevations) on 07-05-07. The remaining drawings will be provided 07-16-07.	ENTACT/CRA
8.4	CRA advised ENTACT of the tolerance for sub grade elevations to be +/-0.08' from design elevations.	CRA/ENTACT
<b>9.0</b>	<b>SITE STRUCTURES</b>	
9.1	The 8" HDPE pipe extending from WW#3 to the WTP was determined by CRA to be damaged by ENTACT during the course of fill placement activities in the East Plant. ENTACT was advised on 07-02-07 to repair or replace. ENTACT is developing a response.	ENTACT/CRA
9.2	North headwall concrete results 28-day test breaks passed.	--



<i>Item</i>	<i>Description</i>	<i>Action By</i>
<b>10.0</b>	<b>SURFACE &amp; STORM WATER CONTROLS</b>	
10.1	ENTACT continues to maintain berm/sump enclosures at the fill placement areas to contain surface water and continues to obtain CRA authorization prior to pumping water to the SES modu tanks.	ENTACT
10.2	Both contractors continue to maintain and inspect WW#3 pumps for operation.	ENTACT/SES
<b>11.0</b>	<b>WORK HOURS</b>	
11.1	ENTACT is working Monday through Saturday 7:00 a.m. to 5:30 p.m.	ENTACT
11.2	SES is currently working M-T 10-hour days; water management crews on site as needed for storm water control.	SES
<b>12.0</b>	<b>SUB-CONTRACTORS ON-SITE</b>	
12.1	Bledsoe, Tapp & Guertazz – ENTACT Surveying	ENTACT

Attachments: \_\_\_\_\_

Prepared By: <sup>PLF</sup> Terri Stewart \_\_\_\_\_ Date Issued: \_\_\_\_\_ August 13 , 2007

This confirms and records CRA's interpretation of the discussions that occurred and our understanding reached during this meeting. Unless notified in writing within 3 days of the date issued, we will assume that the following interpretation or description is complete and accurate.





## MEETING MINUTES

Reference No. 13968

PROJECT: GM Powertrain Removal Action Project  
 OWNER: General Motors CONTRACT NO.: 13968(41, 89)  
 RE: Construction Meeting  
 LOCATION: Bedford, Indiana DATE: July 18, 2007 TIME: 2:00 p.m.

Participants:

Terri Stewart; CRA	Earney Funderburg; ENTACT	Barbara Longstreet; ENTACT
Yelena Moskvina; CRA	Edgar Longstreet; ENTACT	John Cooper; ENTACT
Dan Nelson; CRA	Tim Hiltunen; ENTACT	Randy Campbell; SES

Distribution:

Cheryl Hiatt; GM	Ed Peterson; GM	Glenn Turchan; CRA
Jim McGuigan; CRA	Jeff Daniel; CRA	Katie Kamm; CRA
Terri Channing; CRA	Mary Kelly; CRA	Peter Ramanauskas; USEPA
Brad Stimple; USEPA	Jerry O'Callaghan; IDEM	Jean Greensley; USEPA

<i>Item</i>	<i>Description</i>	<i>Action By</i>
<b>1.0</b>	<b>HEALTH AND SAFETY</b>	
1.1	ENTACT continues to perform PDR (dust) monitoring in East Plant work areas.	ENTACT
1.2	ENTACT performs safety inspections daily on dump ramps.	ENTACT
1.3	Both contractors were requested to improve general housekeeping in the East Plant area.	ENTACT
<b>2.0</b>	<b>REQUEST FOR INFORMATION</b>	
2.1	ENTACT requested information on the removal of the 3 X 18" GM storm pipes.	ENTACT
2.2	CRA provided a complete set of revised drawings to ENTACT on 07-18-07.	ENTACT
2.3	CRA requested ENTACT to provide a POD (Plan of Day) in advance for every planned workday.	ENTACT
2.4	CRA requested ENTACT provide T&M daily sheets and the subcontractor invoice for the Outfall 003 work performed on 05-07-07.	ENTACT
<b>3.0</b>	<b>GENERAL WORK ACTIVITIES</b>	
3.1	CRA continues to track "Active" and "Inactive" and "Non-Billable" days. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT
3.2	ENTACT continues to place and compact fill.	ENTACT



Item	Description	Action By
3.3	ENTACT completed re-mulching of surface areas on 07-13-07.	ENTACT
3.4	ENTACT was advised on 07-13-07 that trucks hauling from the borrow source must have Test Pit identification signs in windshield of trucks prior to being loaded at borrow source. Trucks loaded/arriving without identification will not be permitted to off load material in the East Plant area.	ENTACT
3.5	CRA advised ENTACT of HIS's plans to move the mulch stockpile out of the Bailey Scales Road entrance by 07-23-07. ENTACT will leave clear access path for equipment.	ENTACT
4.0	<b>GRADING AREAS # 1, 2, 3 AND 4, FILL AREAS (FA-1A &amp; FA-1B)</b>	
4.1	Water management activities and site maintenance work were conducted as appropriate.	ENTACT
4.2	ENTACT continues to confirm tarping/mulching is complete prior to leaving at the end of the day. CRA continues to verify as acceptable.	ENTACT
5.0	<b>CAP/FILL PLACEMENT</b>	
5.1	ENTACT continues to receive <50-ppm material from the downstream parcels and is relocating <50-ppm material from the parking lot area. The work is estimated to be complete by 07-20-07. ENTACT continues to cover/mulch the fill placement area daily.	ENTACT
5.2	ENTACT completed the extension of the northeastern berm towards the existing basins on 07-17-07, increasing the fill placement area.	ENTACT
5.3	Fill placement activities were halted on 07-13-07 and 07-14-07 by ENTACT to allow for surface re-grading and construction of a new dump ramp. Hauling activities resumed on 07-16-07.	ENTACT
5.4	ENTACT capped and buried the collection sump "F" cleanout beneath the fill placement area on 07-16-07.	ENTACT
6.0	<b>VAULT AREA AOI7</b>	
6.1	SES continues to perform water management and site maintenance work as appropriate.	SES
6.2	SES completed the construction of a new dump ramp for fill placement activities into the vault on 07-17-07.	SES
6.3	SES plans to stockpile clean clay on the northwest side of the vault for the capping activities beginning on 07-24-07.	SES
6.4	SES requested ENTACT relocate their roll-off boxes for truck dumping access to the vault by 07-30-07.	SES/ENTACT
6.5	ENTACT advised SES the hauling of >50-ppm material to the vault from the Northern Tributary work is anticipated to begin on 07-24-07.	SES/ENTACT
7.0	<b>DRAINAGE DITCH EXCAVATION</b>	
7.1	ENTACT completed the temporary excavation of the perimeter drainage ditch on the East Side of GA-2 on 07-14-07. The area has been covered with tarps and is being used for storm water control.	ENTACT
7.2	ENTACT advised CRA the temporary perimeter ditches will be excavated according to design prior to requesting CRA's approval on subgrade for clay placement.	CRA



<i>Item</i>	<i>Description</i>	<i>Action By</i>
<b>8.0</b>	<b>PARKING LOT RESTORATION</b>	
8.1	The GM fire line was re-activated on 07-12-07 following the placement and compaction of 1' of clean clay material.	ENTACT/CRA
8.2	CRA continues to verify sub grade elevation is obtained prior to clay placement.	SES
8.3	ENTACT continues to place remaining clay and perform compaction testing. CRA continues to verify and monitor tests.	ENTACT/CRA
8.4	CRA appreciates ENTACT removing the guardrail at the NW corner of the GM Parking Lot allowing vehicle access and parking to the CRA field trailer.	ENTACT
<b>9.0</b>	<b>SITE STRUCTURES</b>	
9.1	ENTACT submitted a response to CRA/GM's request to repair or replace the damaged 8" HDPE pipe extending from WW#3. ENTACT will begin work once the fuse welder is available from the downstream operations with an anticipated start date of 7-19-07.	ENTACT/CRA
<b>10.0</b>	<b>SURFACE &amp; STORM WATER CONTROLS</b>	
10.1	ENTACT continues to maintain berm/sump enclosures at the fill placement areas to contain surface water and continues to obtain CRA authorization prior to pumping water to the SES modu tanks.	ENTACT
10.2	Both contractors continue to maintain and inspect WW#3 pumps for operation.	ENTACT/SES
<b>11.0</b>	<b>WORK HOURS</b>	
11.1	ENTACT is working Monday through Saturday 7:00 a.m. to 5:30 p.m.	ENTACT
11.2	ENTACT advised CRA they will be shutting down operations the 3 <sup>rd</sup> Saturday of each month as a rest day for employees. The first shutdown date will be 07-21-07.	
11.3	SES will begin working Monday through Friday 7:00 a.m. to 7:00 p.m. starting on 07-23-07: water management crews are on site as needed for storm water control.	SES
<b>12.0</b>	<b>SUB-CONTRACTORS ON-SITE</b>	
12.1	Bledsoe, Tapp & Guertazz – ENTACT surveying	ENTACT
12.2	PSI – ENTACT compaction testing.	ENTACT

Attachments: \_\_\_\_\_

Prepared By: <sup>PG. For</sup> Terri Stewart \_\_\_\_\_ Date Issued: August 13, 2007

This confirms and records CRA's interpretation of the discussions that occurred and our understanding reached during this meeting. Unless notified in writing within 3 days of the date issued, we will assume that the following interpretation or description is complete and accurate.



## MEETING MINUTES

Reference No. 13968

PROJECT: GM Powertrain Removal Action Project  
 OWNER: General Motors CONTRACT NO.: 13968(41, 89)  
 RE: Construction Meeting  
 LOCATION: Bedford, Indiana DATE: July 24, 2007 TIME: 1:00 p.m.

Participants:

Terri Stewart; CRA	Earney Funderburg; ENTACT	Barbara Longstreet; ENTACT
Yelena Moskvina; CRA	Edgar Longstreet; ENTACT	Randy Campbell; SES
Dan Nelson; CRA	Tim Hiltunen; ENTACT	

Distribution:

Cheryl Hiatt; GM	Ed Peterson; GM	Glenn Turchan; CRA
Jim McGuigan; CRA	Jeff Daniel; CRA	Katie Kamm; CRA
Terri Channing; CRA	Mary Kelly; CRA	Peter Ramanauskas; USEPA
Brad Stimple; USEPA	Jerry O'Callaghan; IDEM	Jean Greensley; USEPA

<i>Item</i>	<i>Description</i>	<i>Action By</i>
<b>1.0</b>	<b>HEALTH AND SAFETY</b>	
1.1	ENTACT continues to perform PDR (dust) monitoring in East Plant work areas.	ENTACT
1.2	ENTACT was requested to provide PAM reports for the month of June.	ENTACT
1.3	General housekeeping was discussed and both contractors will remind site workers to dispose of refuse in the appropriate receptacles.	ENTACT/SES
1.4	SES was requested to add PAM and PDR test results to their H&S daily reports.	SES
<b>2.0</b>	<b>REQUEST FOR INFORMATION</b>	
2.1	CRA requested ENTACT to provide a cost estimate for the removal of the two unused 18" GM storm pipes. The pipes will be cut into 50' sections and removed to storage at the RDNF lay down area. The remaining active pipe will be buried in place until abandoned. CRA will provide additional information for the remaining pipe abandonment at a later date.	ENTACT
2.2	CRA requested ENTACT to provide weekly reports in a timely manner.	ENTACT
<b>3.0</b>	<b>GENERAL WORK ACTIVITIES</b>	
3.1	CRA continues to track all "Active" and "Inactive" and "Non-Billable" days. The tracking log was reviewed and agreed to by ENTACT with one exception. Both parties agreed that 07-19-07 was an "Active Workday".	CRA/ENTACT
3.2	ENTACT continues to place and compact fill.	ENTACT



<i>Item</i>	<i>Description</i>	<i>Action By</i>
3.3	ENTACT completed the emergency repairs of the culvert under GM Drive by plugging the outlet with compacted clay and covering the creek bed with a liner. The liner was keyed into the clean banks and covered with riprap.	ENTACT
3.4	CRA appreciated ENTACT's assistance with the hauling of landscape materials for the GM Plant Boy Scout workshop on 07-20-07.	ENTACT
3.5	CRA advised ENTACT of HIS's plans to move the mulch stockpile out of ENTACT's support area as soon as 07-30-07. CRA will provide 24-hours notice to allow ENTACT to clear a safe access path for equipment.	ENTACT/CRA
3.6	CRA requested ENTACT to avoid scheduling PSI (for compaction testing) during site meetings to allow CRA QA/QC to attend both the meetings and the compaction testing.	ENTACT
3.7	ENTACT was told to protect the 8" HDPE vault sump line during active fill placement activities. This line is to remain active pending the installation of the force main to the WTP.	ENTACT
4.0	<b>GRADING AREAS # 1, 2, 3 AND 4, FILL AREAS (FA-1A &amp; FA-1B)</b>	
4.1	Water management activities and site maintenance work were conducted as appropriate.	ENTACT
4.2	ENTACT continues to confirm tarping/mulching is complete prior to leaving at the end of the day. CRA continues to verify as acceptable.	ENTACT
5.0	<b>CAP/FILL PLACEMENT</b>	
5.1	ENTACT continues to receive <50-ppm material from the downstream parcels. ENTACT completed relocating <50-ppm material from the parking lot area on 07-20-07. ENTACT continues to cover/mulch the fill placement area daily.	ENTACT
5.2	ENTACT completed the re-construction of the northeastern perimeter berm on 07-25-07.	ENTACT
5.3	ENTACT began construction of the storm water controls needed within the AOI-4 area for Northern Tributary soil stockpiling.	ENTACT
5.4	ENTACT advised CRA nearly all on-site fill has been relocated to the fill areas. Remaining material that will need to be relocated include soils from the AOI8 area and the HRC stockpiles.	ENTACT
6.0	<b>VAULT AREA AOI7</b>	
6.1	SES continues to perform water management and site maintenance work as appropriate.	SES
6.2	SES began re-working the vault material for final subgrade as per design on 07-23-07.	SES
6.3	SES plans to begin stockpiling clean clay on the northwest side of the vault on 07-26-07.	SES
6.4	ENTACT relocated their roll-off boxes as requested.	SES/ENTACT
6.5	ENTACT advised SES the hauling of >50-ppm material from the Northern Tributary to the vault is anticipated to begin on 07-25-07.	SES/ENTACT
6.6	SES's point of contact while Randy Campbell is off will be Norve Jones.	SES
6.7	SES requested ENTACT to provide 24 hr notice prior to hauling >50ppm material to the vault.	SES/ENTACT



<i>Item</i>	<i>Description</i>	<i>Action By</i>
<b>7.0</b>	<b>DRAINAGE DITCH EXCAVATION</b>	
7.1	No additional drainage ditch work performed during this reporting period.	
<b>8.0</b>	<b>PARKING LOT RESTORATION</b>	
8.1	CRA continues to verify sub grade elevations are obtained prior to clay placement.	ENTACT/CRA
8.2	Due to rain/wet conditions clay placement was not performed from 07-18-07 through 07-20-07. Work resumed on 07-23-07. East Plant parking lot clay placement is anticipated to be completed by 07-27-07.	ENTACT
8.3	ENTACT continues to perform compaction testing. CRA continues to monitor tests.	ENTACT/CRA
8.4	ENTACT was advised of revisions to the East Plant Parking lot power supply lighting. CRA will provide additional information on the electrical power supply from the WTP at a later date.	ENTACT/CRA
8.5	ENTACT will implement additional measures to control dust during clay placement activities.	ENTACT
8.6	ENTACT completed the excavations in the East Plant Parking lot. CRA has approved final sub-grades elevations have been obtained, with the exception of the eastern perimeter, which will be completed as work progresses.	ENTACT
<b>9.0</b>	<b>SITE STRUCTURES</b>	
9.1	Installation of the new 4" HDPE line from the WTP to WW#3 will begin following the availability of the fuse welder from the downstream work area. ENTACT anticipates starting the work by 07-27-07. CRA will provide additional clarifications on pipe installation by the end of the day.	ENTACT/CRA
<b>10.0</b>	<b>SURFACE &amp; STORM WATER CONTROLS</b>	
10.1	ENTACT continues to maintain berm/sump enclosures at the fill placement areas to contain all surface water and obtain CRA authorization prior to pumping water to the SES modu tanks.	ENTACT
10.2	Both contractors continue to maintain and inspect WW#3 pumps for operation.	ENTACT/SES
<b>11.0</b>	<b>WORK HOURS</b>	
11.1	ENTACT is working Monday through Saturday 7:00 a.m. to 5:30 p.m.	ENTACT
11.2	ENTACT advised CRA they will be shutting down all operations the 3 <sup>rd</sup> Saturday of each month as a rest day for employees. The next scheduled shutdown date will be 08-18-07.	
11.3	SES will begin working Monday through Friday 7:00 a.m. to 7:00 p.m. starting on 07-23-07: water management crews are on site as needed for storm water control.	SES
<b>12.0</b>	<b>SUB-CONTRACTORS ON-SITE</b>	
12.1	Bledsoe, Tapp & Guertazz – ENTACT surveying	ENTACT
12.2	PSI – ENTACT compaction testing.	ENTACT

Attachments: \_\_\_\_\_



Prepared By: <sup>pg. 122</sup> Terri Stewart \_\_\_\_\_ Date Issued: \_\_\_\_\_ August 13 , 2007

This confirms and records CRA's interpretation of the discussions that occurred and our understanding reached during this meeting. Unless notified in writing within 3 days of the date issued, we will assume that the following interpretation or description is complete and accurate.



## MEETING MINUTES

Reference No. 13968

PROJECT: GM Powertrain Removal Action Project

OWNER: General Motors CONTRACT NO.: 13968(41, 89)

RE: Construction Meeting

LOCATION: Bedford, Indiana DATE: July 31, 2007 TIME: 1:00 p.m.

Participants:

Katie Kamm; CRA	Earney Funderburg; ENTACT	Barbara Longstreet; ENTACT
Terri Stewart; CRA	Edgar Longstreet; ENTACT	Randy Campbell; SES
Yelena Moskvina; CRA	Tim Hiltunen; ENTACT	Chris Bement; SES
Dan Nelson; CRA	John Cooper; ENTACT	

Distribution:

Cheryl Hiatt; GM	Ed Peterson; GM	Glenn Turchan; CRA
Jim McGuigan; CRA	Jeff Daniel; CRA	Katie Kamm; CRA
Terri Channing; CRA	Mary Kelly; CRA	Peter Ramanauskas; USEPA
Brad Stimple; USEPA	Jerry O'Callaghan; IDEM	Jean Greensley; USEPA

Item	Description	Action By
<b>1.0</b>	<b>HEALTH AND SAFETY</b>	
1.1	ENTACT/SES continues to perform dust monitoring in East Plant work areas.	ENTACT/SES
1.2	Contractors were requested to remind site workers to use proper decon facilities when exiting the exclusion zones.	ENTACT
1.3	ENTACT advised CRA site workers have been reminded that site radios are for site related communications, unnecessary chatter and broadcasting of music over site radios will not be tolerated. ENTACT provided Katie a site radio for monitoring communications.	ENTACT
1.4	ENTACT was reminded by CRA to verify accuracy of their daily reports before submittal to CRA.	ENTACT
1.5	Contractors were reminded that site visitors must report to the appropriate contractor's main office location and are not permitted on site without prior authorization.	ENTACT/SES
<b>2.0</b>	<b>REQUEST FOR INFORMATION</b>	
2.1	No requests for information were addressed at this meeting.	
<b>3.0</b>	<b>GENERAL WORK ACTIVITIES</b>	
3.1	CRA continues to track "Active" and "Inactive" and "Non-Billable" days. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT
3.2	ENTACT requested that CRA track vault placement workdays documenting dates ENTACT hauled material to the vault.	
3.3	ENTACT continues to place and compact (6-8" lifts, four passes) all fill materials utilizing a Sheep's foot roller as specified.	ENTACT





Item	Description	Action By
3.4	ENTACT was reminded to plan accordingly when severe weather is forecasted, allowing adequate time to complete the end of day fill area and stockpile covering.	ENTACT
3.5	ENTACT advised SES of their plans to move the HRC soils; the frac tank contents and any >50 ppm Northern Tributary soils to the vault on 08-02-07.	ENTACT/SES
3.6	CRA advised ENTACT that HIS has indefinitely delayed their plans to move mulch from the stockpile out of the Bailey Scales support area.	ENTACT
3.7	ENTACT expressed concerns in protecting the 8" vault sump line during fill placement activities and requested a visual inspection of the exiting conditions be performed by CRA, ENTACT, and SES. The inspection was scheduled for 08-01-07 at 8:00 am.	ENTACT/SES/ CRA
4.0	<b>GRADING AREAS # 1, 2, 3 AND 4, FILL AREAS (FA-1A &amp; FA-1B)</b>	
4.1	Water management activities and site maintenance work were conducted as appropriate.	
4.2	ENTACT continues to confirm tarping/mulching is complete prior to leaving at the end of the day.	
5.0	<b>CAP/FILL PLACEMENT</b>	
5.1	ENTACT continues to receive <50-ppm material from the downstream parcels.	ENTACT
5.2	ENTACT began stockpiling Northern Tributary material in the AOI-4 area on 07-25-07. CRA continues to provide stockpile results for material placement in the fill area or relocation to the vault.	ENTACT
6.0	<b>VAULT AREA AOI7</b>	
6.1	SES continues to perform water management and site maintenance work as appropriate.	SES
6.2	SES completed the stockpiling of clean clay along the west side of the vault.	SES
6.3	ENTACT transported 14 loads of >50ppm material directly from the Northern Tributary to the vault. Any additional >50-ppm material from the Northern Tributary will be based on stockpile sampling results.	ENTACT/SES
6.4	SES continues to grade vault material to final grade elevations.	SES
6.5	CRA requested SES provide the panel layouts for the vault liner placement.	SES
7.0	<b>DRAINAGE DITCH EXCAVATION</b>	
7.1	ENTACT began extending the existing drainage ditch from the southeast corner of GA-2 to the southwest corner on 07-30-07.	ENTACT
8.0	<b>PARKING LOT RESTORATION</b>	
8.1	ENTACT's final sub-grade surveys on clean clay placement in the GM parking lot are anticipated by 07-31-07.	ENTACT
8.2	CRA advised ENTACT the revised drawings and specifications for the parking lot lighting and power supply are anticipated to be delivered by 08-17-07.	ENTACT/CRA
9.0	<b>SITE STRUCTURES</b>	
9.1	ENTACT, SES, and CRA will inspect the active 8" HDPE vault effluent line on 08-01-07 prior to ENTACT burying in place.	ENTACT/CRA /SES



Item	Description	Action By
9.2	ENTACT advised CRA the installation of the new 4" line to WW#3 began on 07-27-07. CRA provided ENTACT additional drawings delineating existing utilities east of the WTP and requested to be notified of any exposed utilities during excavation for survey purposes.	ENTACT/CRA
10.0	<b>SURFACE &amp; STORM WATER CONTROLS</b>	
10.1	ENTACT continues to maintain berm/sump enclosures at the fill placement areas to contain surface water and to obtain CRA authorization prior to pumping water to the SES modu tanks.	ENTACT
10.2	Both contractors continue to maintain and inspect WW#3.	ENTACT/SES
10.3	SES relocated their diesel pumps on 07-31-07, allowing ENTACT's excavation equipment access for connection of the new 4" force main to WW#3.	ENTACT/SES
11.0	<b>WORK HOURS</b>	
11.1	ENTACT is working Monday through Saturday 7:00 am to 5:30 pm.	ENTACT
11.2	ENTACT advised CRA they will be shutting down all operations the 3 <sup>rd</sup> Saturday of each month as a rest day for all employees. The next scheduled shutdown date will be 08-11-07.	
11.3	SES will begin working Monday through Friday 7:00 am to 5:30 pm starting on 07-23-07. Water management crews are on site as needed for storm water control.	SES
12.0	<b>SUB-CONTRACTORS ON-SITE</b>	
12.1	Bledsoe, Riggert & Guerrettaz – ENTACT Surveying	ENTACT

Attachments: None

Prepared By: Terri Stewart *TS*

Date Issued: Oct. 12, 2007

This confirms and records CRA's interpretation of the discussions that occurred and our understanding reached during this meeting. Unless notified in writing within 3 days of the date issued, we will assume that the following interpretation or description is complete and accurate.



## MEETING MINUTES

Reference No. 13968

PROJECT: GM Powertrain Removal Action Project  
 OWNER: General Motors CONTRACT NO.: 13968(41, 89)  
 RE: Construction Meeting  
 LOCATION: Bedford, Indiana DATE: August 8, 2007 TIME: 2:00 p.m.

Participants:

Katie Kamm; CRA	Earney Funderburg; ENTACT	Barbara Longstreet; ENTACT
Terri Stewart; CRA	Edgar Longstreet; ENTACT	Randy Campbell; SES
Yelena Moskvina; CRA	Tim Hiltunen; ENTACT	Chris Bement; SES
Dan Nelson; CRA	John Cooper; ENTACT	

Distribution:

Cheryl Hiatt; GM	Ed Peterson; GM	Glenn Turchan; CRA
Jim McGuigan; CRA	Jeff Daniel; CRA	Katie Kamm; CRA
Terri Channing; CRA	Mary Kelly; CRA	Peter Ramanauskas; USEPA
Brad Stimple; USEPA	Jerry O'Callaghan; IDEM	Jean Greensley; USEPA

<i>Item</i>	<i>Description</i>	<i>Action By</i>
<b>1.0</b>	<b>HEALTH AND SAFETY</b>	
1.1	ENTACT/SES continues to perform dust monitoring in East Plant work areas.	ENTACT/SES
1.2	Contractors are implementing added precautions to ensure workers safety during high heat conditions and continue to review heat stress issues with site workers.	ENTACT
1.3	ENTACT reduced personnel air monitoring readings to once per month as of August 2007.	ENTACT
<b>2.0</b>	<b>REQUEST FOR INFORMATION</b>	
2.1	No requests for information were addressed at this meeting.	
<b>3.0</b>	<b>GENERAL WORK ACTIVITIES</b>	
3.1	CRA continues to track "Active" and "Inactive" and "Non-Billable" days. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT
3.2	At ENTACT's request, CRA is tracking vault placement workdays documenting dates ENTACT hauled material to the vault. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT
3.3	ENTACT continues to place and compact grading fill.	ENTACT
<b>4.0</b>	<b>GRADING AREAS # 1, 2, 3 AND 4, FILL AREAS (FA-1A &amp; FA-1B)</b>	
4.1	Water management activities and site maintenance work were conducted as appropriate.	ENTACT
4.2	ENTACT continues to confirm tarping/mulching is complete prior to leaving at the end of the day.	ENTACT/CRA



Item	Description	Action By
<b>5.0</b>	<b>CAP/FILL PLACEMENT</b>	
5.1	ENTACT continues to receive <50ppm material from the downstream parcels for placement within the fill placement areas.	ENTACT
5.2	ENTACT continues to receive and stockpile material from the Northern Tributary. CRA continues to take samples and provide stockpile test results as received. >50ppm stockpiles to date have been relocated to the vault and <50ppm stockpiles are being distributed into the AOI-4 fill placement area.	ENTACT
<b>6.0</b>	<b>VAULT AREA AOI7</b>	
6.1	SES continues to perform water management and site maintenance work as appropriate.	SES
6.2	SES continues to grade vault material to final grade elevations. CRA advised SES the south side vault sub-grades are being revised to allow for additional fill placement.	SES/CRA
6.2	SES repaired the vault-receiving ramp on 08-07-07.	SES
6.3	ENTACT completed relocating the >50 ppm Northern Tributary stockpiles from the staging area to the vault on 08-06-07.	ENTACT/SES
6.4	ENTACT advised SES the HRC roll-off box would be transported and emptied into the vault on 08-10-07.	ENTACT/SES
6.5	ENTACT completed moving the HRC >50ppm soil stockpile from AOI-8 to the vault on 08-03-06.	ENTACT/SES
<b>7.0</b>	<b>DRAINAGE DITCH EXCAVATION</b>	
7.1	ENTACT encountered bedrock above required sub-grade elevations during construction of the drainage ditch south of GA-2.	ENTACT/CRA
<b>8.0</b>	<b>PARKING LOT RESTORATION</b>	
8.1	ENTACT completed clean clay placement in the east parking lot on 07-28-07. Sub-grade surveys are anticipated by 08-08-07.	ENTACT
8.2	CRA advised ENTACT the modified drawings and specifications for the parking lot lighting and power supply are pending.	ENTACT/CRA
<b>9.0</b>	<b>SITE STRUCTURES</b>	
9.1	ENTACT, SES, and CRA performed an inspection of the current conditions of the active 8" HDPE vault effluent line on 08-01-07. ENTACT expressed concerns to the burying of this line in its current condition.	ENTACT/CRA /SES
9.2	An additional riser for the MH east of the WTP is anticipated to placed on 08-09-07.	ENTACT
<b>10.0</b>	<b>SURFACE &amp; STORM WATER CONTROLS</b>	
10.1	ENTACT continues to maintain berm/sump enclosures at the fill placement areas to contain all surface water and obtain CRA authorization prior to pumping water to the SES modu tanks.	ENTACT
10.2	Both contractors continue to maintain and inspect WW#3 pumps.	ENTACT/SES
10.3	ENTACT was reminded to check and ensure proper connection of all lay flat hoses prior to use.	ENTACT
10.4	ENTACT connected and performed a passing pressure test on the new 4" line from the WTP to WW#3 on 08-06-07. Final connections to allow the transfer of water from WW#3 to the WTP are pending the delivery of additional parts.	ENTACT



Item	Description	Action By
10.5	ENTACT installed new sediment controls within the sump areas to help prevent sediment transfer to the SES modu tanks.	ENTACT
<b>11.0</b>	<b>WORK HOURS</b>	
11.1	ENTACT is working Monday through Saturday 7:00 am to 5:30 pm.	ENTACT
11.2	ENTACT advised CRA they will be shutting down all operations the 3 <sup>rd</sup> Saturday of each month as a rest day for all employees. The next scheduled shutdown date will be 08-11-07.	ENTACT
11.3	SES is working 6:00 am to 3:00 pm Monday through Friday. Water management crews on site as needed for storm water control. Authorization was granted to start their workday at 6:00 am due to continued high temperatures with heat indexes in the 100's.	SES
<b>12.0</b>	<b>SUB-CONTRACTORS ON-SITE</b>	
12.1	Bledsoe, Riggert & Guerrettaz – ENTACT Surveying	ENTACT

Attachments: None

Prepared By: Terri Stewart

Date Issued: 08.12, 2007

This confirms and records CRA's interpretation of the discussions that occurred and our understanding reached during this meeting. Unless notified in writing within 3 days of the date issued, we will assume that the following interpretation or description is complete and accurate.



## MEETING MINUTES

Reference No. 13968

PROJECT: GM Powertrain Removal Action Project  
 OWNER: General Motors CONTRACT NO.: 13968(41, 89)  
 RE: Construction Meeting  
 LOCATION: Bedford, Indiana DATE: August 14, 2007 TIME: 1:00 p.m.

Participants:

Terri Stewart; CRA	Earney Funderburg; ENTACT	John Cooper; ENTACT
Yelena Moskvina; CRA	Edgar Longstreet; ENTACT	Barbara Longstreet; ENTACT
Dan Nelson; CRA	Tim Hiltunen; ENTACT	Randy Campbell; SES

Distribution:

Cheryl Hiatt; GM	Ed Peterson; GM	Glenn Turchan; CRA
Jim McGuigan; CRA	Jeff Daniel; CRA	Katie Kamm; CRA
Terri Channing; CRA	Mary Kelly; CRA	Peter Ramanauskas; USEPA
Brad Stimple; USEPA	Jerry O'Callaghan; IDEM	Jean Greensley; USEPA

<i>Item</i>	<i>Description</i>	<i>Action By</i>
<b>1.0</b>	<b>HEALTH AND SAFETY</b>	
1.1	ENTACT/SES continues to perform dust monitoring in East Plant work areas.	ENTACT/SES
1.2	Contractors continue to monitor heat stress and work activities during high temperatures.	ENTACT/SES
1.3	CRA asked both contractors to remind site workers and truck drivers that schools are back in session.	ENTACT/SES
1.4	CRA reminded both contractors cell phones are not to be used while operating equipment.	ENTACT/SES
1.5	CRA advised both contractors to dispose of discarded PPE in the proper disposal containers.	ENTACT/CRA
<b>2.0</b>	<b>REQUEST FOR INFORMATION</b>	
2.1	No requests for information were addressed at this meeting.	
<b>3.0</b>	<b>GENERAL WORK ACTIVITIES</b>	
3.1	CRA continues to track "Active" and "Inactive" and "Non-Billable" days. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT
3.2	CRA continues to track vault placement workdays. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT
3.3	ENTACT continues to place and compact grading fill.	ENTACT
3.4	CRA requested ENTACT check containment berms and tarps to ensure surface water is contained.	ENTACT
3.5	CRA requested ENTACT replace the silt fence around the 24" twin pipes south of GA-2, which has deteriorated.	ENTACT



<i>Item</i>	<i>Description</i>	<i>Action By</i>
<b>4.0</b>	<b>GRADING AREAS # 1, 2, 3 AND 4, FILL AREAS (FA-1A &amp; FA-1B)</b>	
4.1	Water management activities and site maintenance work were conducted as appropriate.	ENTACT
4.2	ENTACT continues to confirm tarping/mulching is complete prior to leaving at the end of the day.	ENTACT/CRA
4.3	ENTACT began grading FA-1A east of GM parking lot on 08-13-07.	ENTACT
<b>5.0</b>	<b>CAP/FILL PLACEMENT</b>	
5.1	ENTACT continues to receive <50ppm material from the downstream parcels.	ENTACT
5.2	ENTACT continues to receive and stockpile material from the Northern Tributary. CRA continues to take samples and provide stockpile test results as received.	ENTACT
5.3	ENTACT has requested 25 additional Active Fill placement days due to new calculations showing that there is more room in East Plant for grading fill than originally estimated.	ENTACT
5.4	ENTACT has implemented additional procedures to clear material from dump ramps after grading fill has been dumped.	ENTACT
<b>6.0</b>	<b>VAULT AREA AOI7</b>	
6.1	SES continues to perform water management and site maintenance work as appropriate.	SES
6.2	SES continues to grade vault material to final grade elevations as received. The placement of additional material and re-grading of the south side of the vault began on 08-13-07.	SES
6.3	Vault panel layouts from AEG will be based on the final survey of the vault sub grade and will be provided following the completion of the vault re-grading.	SES
6.4	SES completed installation of additional risers on the leak and leachate sumps on 08-10-07.	SES
6.5	CRA inspected the interiors of the vault sumps following the riser placements ensuring both sumps were clean and free of debris.	CRA
6.6	SES advised CRA the leachate sump cleanout on the south side of the vault would be extended and capped by 08-17-07.	SES
<b>7.0</b>	<b>DRAINAGE DITCH EXCAVATION</b>	
7.1	ENTACT encountered bedrock above required sub-grade elevations during construction of the drainage ditch south of GA-2.	ENTACT/CRA
<b>8.0</b>	<b>PARKING LOT RESTORATION</b>	
8.1	ENTACT provided CRA the clean clay final sub-grade surveys of the interior parking lot area. Perimeter parking lot grids sub-grade surveys will be completed following grading of surrounding fill area and clean clay placement.	ENTACT/CRA
8.2	CRA advised ENTACT the revised drawings and specifications for the parking lot lighting and power supply are pending.	ENTACT/CRA
8.3	CRA reminded ENTACT of their responsibility to maintain the appropriate moisture within the clay cap following placement.	ENTACT/CRA



Item	Description	Action By
9.0	<b>SITE STRUCTURES</b>	
9.1	ENTACT/SES will employ procedures to ensure the vault sump line is shut off and drained before work is performed around the line. Both contractors will verify the line flow has been shut down and employ necessary precautions ( e.g. signs, orange fence, flags, etc.) as a reminder to contact CRA daily before any work begins involving this line. ENTACT will use due care in working with/around this line.	ENTACT/CRA /SES
9.2	ENTACT advised CRA and SES they plan to begin placing grading fill around the temporary vault sump line on 08-18-07. SES was requested by CRA to temporarily halt water flow to the 8" line by 7:00 AM on 08-15-07.	ENTACT/CRA /SES
9.3	ENTACT placed additional risers on the MH east of the WTP on 08-13-07.	ENTACT
9.4	ENTACT completed the new 4" line placement from the WTP to WW#3 on 08-13-07. SES will reverse the water flow on this line sending water from WW#3 to the WTP on 08-16-07. CRA, ENTACT, and SES will monitor this line closely following the reversal process to ensure no issues arise.	ENTACT/CRA /SES
9.5	ENTACT was reminded to check the gasket seal at WW#3, 4" pipe connection.	ENTACT
9.6	ENTACT was reminded to restore the insulation cover to its pre-existing condition at the WTP, where the 4" flange was connected to the existing pipe.	ENTACT
10.0	<b>SURFACE &amp; STORM WATER CONTROLS</b>	
10.1	ENTACT continues to maintain berm/sump enclosures at the fill placement areas to contain surface water and obtain CRA authorization prior to pumping water to the SES modu tanks.	ENTACT
10.2	Both contractors continue to maintain and inspect WW#3 pumps for operation.	ENTACT/SES
11.0	<b>WORK HOURS</b>	
11.1	ENTACT is working Monday through Saturday 7:00 am to 5:30 pm.	ENTACT
11.2	ENTACT will be shutting down all operations the 3 <sup>rd</sup> Saturday of each month. The next scheduled shutdown date will be 09-01-07.	ENTACT
11.3	SES working 7:00 am to 5:30 pm Monday through Friday. Water management crews on site as needed for storm water control.	SES
12.0	<b>SUB-CONTRACTORS ON-SITE</b>	
12.1	Bledsoe, Riggert & Guerrettaz – ENTACT Surveying	ENTACT

Attachments: None

Prepared By: Terri Stewart Date Issued: Oct. 12, 2007

This confirms and records CRA's interpretation of the discussions that occurred and our understanding reached during this meeting. Unless notified in writing within 3 days of the date issued, we will assume that the following interpretation or description is complete and accurate.





## MEETING MINUTES

Reference No. 13968

PROJECT: GM Powertrain Removal Action Project  
 OWNER: General Motors CONTRACT NO.: 13968(41, 89)  
 RE: Construction Meeting  
 LOCATION: Bedford, Indiana DATE: August 21, 2007 TIME: 1:00 p.m.

Participants:

Katie Kamm; CRA	Dan Nelson; CRA	Barbara Longstreet; ENTACT
Rick Hoekstra; CRA	Earney Funderburg; ENTACT	Randy Campbell; SES
Terri Stewart; CRA	Edgar Longstreet; ENTACT	
Yelena Moskvina; CRA	John Cooper; ENTACT	

Distribution:

Cheryl Hiatt; GM	Ed Peterson; GM	Glenn Turchan; CRA
Jim McGuigan; CRA	Jeff Daniel; CRA	Katie Kamm; CRA
Terri Channing; CRA	Mary Kelly; CRA	Peter Ramanauskas; USEPA
Brad Stimple; USEPA	Jerry O'Callaghan; IDEM	Jean Greensley; USEPA

Item	Description	Action By
<b>1.0</b>	<b>HEALTH AND SAFETY</b>	
1.1	ENTACT/SES continues to perform dust monitoring in East Plant work areas.	ENTACT/SES
1.2	Appropriate PPE (specific to the task) is to worn properly by site personnel, including sub-contractors, while on site.	ENTACT/SES
<b>2.0</b>	<b>REQUEST FOR INFORMATION</b>	
2.1	No requests for information were addressed at this meeting.	
<b>3.0</b>	<b>GENERAL WORK ACTIVITIES</b>	
3.1	CRA continues to track "Active" and "Inactive" and "Non-Billable" days. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT
3.2	CRA continues to track vault placement workdays. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT
3.3	ENTACT continues to place and compact grading fill.	ENTACT
3.4	ENTACT was reminded by CRA on 08-18-07 to maintain (re-mulch) fill areas on the east side of GA-2.	ENTACT
<b>4.0</b>	<b>GRADING AREAS # 1, 2, 3 AND 4, FILL AREAS (FA-1A &amp; FA-1B)</b>	
4.1	Water management activities and site maintenance work were conducted as appropriate.	ENTACT
4.2	ENTACT continues to confirm tarping/mulching is complete prior to leaving at the end of the day.	ENTACT/CRA



Item	Description	Action By
4.3	CRA reminded ENTACT to monitor the radar and weather forecast so ENTACT can secure the work areas prior to the weather hitting the site.	ENTACT
<b>5.0</b>	<b>CAP/FILL PLACEMENT</b>	
5.1	ENTACT continues to receive <50ppm material from the downstream parcels.	ENTACT
5.2	ENTACT continues to receive and stockpile material from the Northern Tributary. CRA continues to take samples and provide stockpile test results as received.	ENTACT
5.3	ENTACT continues relocating and grading material within the eastern parking lot perimeter grids and the FA-1B area.	ENTACT
5.4	ENTACT was reminded material coming from the downstream parcels must have sufficient moisture to prevent dust issues in the East Plant and to allow for sufficient compaction.	ENTACT
<b>6.0</b>	<b>VAULT AREA AOI7</b>	
6.1	SES continues to perform water management and site maintenance work as appropriate.	SES
6.2	SES completed grading the vault material on the south and southwestern slopes of the vault. Clay placement may begin as soon as 08-27-07.	SES
6.3	Vault panel layouts from AEG are pending CRA approval of south slope surveys.	SES
6.4	SES completed the extension and capping of the leachate sump cleanout on the south side of the vault on 08-15-07.	CRA
<b>7.0</b>	<b>DRAINAGE DITCH EXCAVATION</b>	
7.1	ENTACT encountered bedrock above required sub-grade elevations during construction of the drainage ditch south of GA-2 and plans to begin rock breaking as soon as 08-24-07.	ENTACT/CRA
7.2	ENTACT advised CRA the removal of the three HRC pipes is necessary to continue the drainage ditch line on the southwest side of GA-2.	ENTACT/CRA
<b>8.0</b>	<b>PARKING LOT RESTORATION</b>	
8.1	CRA anticipates the revised electrical drawings for the parking lot will be completed by 08-28-07.	CRA
<b>9.0</b>	<b>SITE STRUCTURES</b>	
9.1	ENTACT placed fill material over a portion of the vault sump line on 08-15-07 and 08-20-07 without incident. Both contractors continue to verify with CRA the vault sump line is shut off and drained before work is performed around this line.	ENTACT/CRA /SES
9.2	ENTACT replaced the gasket on the new 4" line from WW#3 to the WTP suspected to be damaged during weld repairs.	ENTACT/CRA /SES
9.3	ENTACT restored the weather insulation cover on the 4" flange connection at the WTP on 08-16-07.	ENTACT
9.4	WW#3 exterior and interior joints will be water sealed with non-shrink grout. The work is to be completed by 08-22-07.	ENTACT/CRA /SES



Item	Description	Action By
9.5	Contractors continue to monitor WW#3. On 08-17-07 the diesel pump was inadvertently shut off by an unknown person after 4:30 pm. SES' night crew restored the wet well pump at 6:00 pm. CRA advised both contractors to report any unauthorized persons in the area.	ENTACT/SES
9.6	SES attempted to reverse the water flow on the new 4" force main from the WTP to WW#3 on 08-16-07. A small leak was found in a weld at WW#3. Repairs were completed by ENTACT on 08-20-07.	ENTACT/SES
9.7	CRA will provide contractors with after hour's emergency contact numbers for the GM WTP.	CRA
<b>10.0</b>	<b>SURFACE &amp; STORM WATER CONTROLS</b>	
10.1	ENTACT continues to maintain berm/sump enclosures at the fill placement areas to contain surface water and to obtain CRA authorization prior to pumping water to the SES modu tanks.	ENTACT
10.2	Due to a fast approaching storm on 08-16-07 a stop work was called at 3:22 pm and mulching and tarping activities could not be completed until the following day.	ENTACT
<b>11.0</b>	<b>WORK HOURS</b>	
11.1	ENTACT is working Monday through Saturday 7:00 am to 5:30 pm	ENTACT
11.2	ENTACT will be shutting down all operations the 3 <sup>rd</sup> Saturday of each month. The next scheduled shutdown date will be 09-01-07.	ENTACT
11.3	SES working 7:00 am to 5:30 pm Monday through Friday. Water management crews on site as needed for storm water control.	SES
<b>12.0</b>	<b>SUB-CONTRACTORS ON-SITE</b>	
12.1	Bledsoe, Riggert & Guerrettaz - ENTACT Surveying	ENTACT

Attachments: None

Prepared By: Terri Stewart Date Issued: Oct 12, 2007

This confirms and records CRA's interpretation of the discussions that occurred and our understanding reached during this meeting. Unless notified in writing within 3 days of the date issued, we will assume that the following interpretation or description is complete and accurate.



## MEETING MINUTES

Reference No. 13968

PROJECT: GM Powertrain Removal Action Project  
 OWNER: General Motors CONTRACT NO.: 13968(41, 89)  
 RE: Construction Meeting  
 LOCATION: Bedford, Indiana DATE: August 28, 2007 TIME: 2:00 p.m.

Participants:

Terri Stewart; CRA	Earney Funderburg; ENTACT	John Cooper; ENTACT
Yelena Moskvina; CRA	Edgar Longstreet; ENTACT	Barbara Longstreet; ENTACT
Dan Nelson; CRA	Tim Hiltunen; ENTACT	Randy Campbell; SES

Distribution:

Cheryl Hiatt; GM	Ed Peterson; GM	Glenn Turchan; CRA
Jim McGuigan; CRA	Jeff Daniel; CRA	Katie Kamm; CRA
Terri Stewart; CRA	Mary Kelly; CRA	Peter Ramanauskas; USEPA
Brad Stimple; USEPA	Jerry O'Callaghan; IDEM	Jean Greensley; USEPA

Item	Description	Action By
1.0	<b>HEALTH AND SAFETY</b>	
1.1	ENTACT/SES continues to perform dust monitoring in East Plant work areas.	ENTACT/SES
1.2	CRA reminded contractors vehicles are not to be left running without an operator behind the wheel. Exceptions are vehicles that require the operator to exit the vehicle to perform duties. Wheels on these vehicles are to be chocked on the driver side front and back tires.	ENTACT/SES
1.3	CRA re-addressed road safety (i.e. 25-mph speed limit on public roads and 5-mph speed for all on site vehicle traffic).	ENTACT/SES
2.0	<b>REQUEST FOR INFORMATION</b>	
2.1	No requests for information were addressed at this meeting.	
3.0	<b>GENERAL WORK ACTIVITIES</b>	
3.1	CRA continues to track "Active" and "Inactive" and "Non-Billable" days. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT
3.2	CRA continues to track vault placement workdays. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT
3.3	ENTACT continues to place and compact grading fill.	ENTACT
3.4	CRA advised ENTACT the purpose of street watering is for dust control and light cleaning. Measures are to be taken to prevent material from the clean haul roads from being tracked onto public roads. Water truck operators are not to flood public roadways.	ENTACT
3.5	CRA requested ENTACT's POD (Plan of Day) be provided no later than 6:00 pm the day before forecasted activities.	ENTACT



Item	Description	Action By
3.6	CRA reminded ENTACT of the approved water truck schedule for the wetting of roadways (8:00 a.m. - 10:00 a.m. 1:00 p.m. - 2:00 p.m. and 4:00 p.m. to the end of day shift).	CRA/ENTACT
4.0	<b>GRADING AREAS # 1, 2, 3 AND 4, FILL AREAS (FA-1A &amp; FA-1B)</b>	
4.1	Water management activities and site maintenance work were conducted as appropriate.	ENTACT
4.2	ENTACT continues to confirm required tarping/mulching is complete prior to leaving at the end of the day.	ENTACT/CRA
5.0	<b>CAP/FILL PLACEMENT</b>	
5.1	ENTACT continues to receive <50ppm material from the downstream parcels.	ENTACT
5.2	ENTACT continues to receive and stockpile material from the Northern Tributary. CRA continues to take samples and provide stockpile test results as received.	ENTACT
5.3	ENTACT continues relocating and grading material within the eastern parking lot perimeter grids and the FA-1B area.	ENTACT
5.4	CRA reminded contractors tires are not to be placed into the fill area. Tires are to be decontaminated and stockpiled for off-site disposal.	ENTACT
5.5	ENTACT advised CRA the SES lay-down area for vault liner will need to be relocated due to work proceeding to the west in AOI-4. CRA advised ENTACT to work with SES in finding an adequate area for relocation while allowing SES sufficient space for materials and access to the vault for liner placement.	ENTACT/SES/ CRA
6.0	<b>VAULT AREA AOI7</b>	
6.1	SES continues to perform water management and site maintenance work as appropriate.	SES
6.2	SES continues to grade vault material to final grade elevations as material is received.	SES
6.3	SES advised CRA the additional material placement and the re-grading of the south slope is completed.	SES
6.4	SES noted the panel layouts from AEG will be completed following CRA approval of south slope surveys.	SES
6.5	SES anticipates clean clay placement on the south and southwest sides of the vault on 08-29-07.	SES
7.0	<b>DRAINAGE DITCH EXCAVATION</b>	
7.1	ENTACT completed the rock breaking in the southeastern corner of GA-2's perimeter ditch on 08-27-07 and will begin excavation of the southwestern corner working to the south on 08-29-07. ENTACT anticipates rock breaking in this area as well.	ENTACT
8.0	<b>PARKING LOT RESTORATION</b>	
8.1	Final grading and clay placement of the perimeter parking lots is pending the excavation and re-grading of the surrounding material and clay placement.	ENTACT/CRA
8.2	Drawing and specifications revisions for the parking lot lighting and power supply are pending.	CRA



Item	Description	Action By
<b>9.0</b>	<b>SITE STRUCTURES</b>	
9.1	SES completed the repairs to WW#3's exterior and interior joints on 08-24-07.	SES
9.2	SES replaced the existing diesel pump at WW#3 with a more efficient high head pump on 08-22-07.	SES
9.3	McIntyre is on site installing the new power supply to the WW#3 pumps.	CRA
<b>10.0</b>	<b>SURFACE &amp; STORM WATER CONTROLS</b>	
10.1	ENTACT continues to maintain berm/sump enclosures at the fill placement areas to contain surface water and obtain CRA authorization prior to pumping water to the SES modu tanks.	ENTACT
10.2	Contractors continue to monitor WW#3. CRA continues to track and monitor the water flow to the WTP via the new WW#3 forcemain.	ENTACT/SES/ CRA
<b>11.0</b>	<b>WORK HOURS</b>	
11.1	ENTACT is working Monday through Saturday 7:00 am to 5:30 pm.	ENTACT
11.2	ENTACT will be shutting down all operations every 3 <sup>rd</sup> Saturday. The next scheduled shutdown date will be 09-22-07.	ENTACT
11.3	SES working 7:00 am to 5:30 pm Monday through Friday. Water management crews on site as needed for storm water control.	SES
<b>12.0</b>	<b>SUB-CONTRACTORS ON-SITE</b>	
12.1	Bledsoe, Riggert & Guerrettaz – ENTACT Surveying	ENTACT

Attachments: None

Prepared By: Terri Stewart

Date Issued: Oct. 12, 2007

This confirms and records CRA's interpretation of the discussions that occurred and our understanding reached during this meeting. Unless notified in writing within 3 days of the date issued, we will assume that the following interpretation or description is complete and accurate.



## MEETING MINUTES

Reference No. 13968

PROJECT: GM Powertrain Removal Action Project  
 OWNER: General Motors CONTRACT NO.: 13968(41, 89)  
 RE: Construction Meeting  
 LOCATION: Bedford, Indiana DATE: September 5, 2007 TIME: 2:00 p.m.

**Participants:**

Terri Stewart; CRA	Earney Funderburg; ENTACT	John Cooper; ENTACT
Yelena Moskvina; CRA	Edgar Longstreet; ENTACT	Barbara Longstreet; ENTACT
Dan Nelson; CRA	Tim Hiltunen; ENTACT	Randy Campbell; SES

**Distribution:**

Cheryl Hiatt; GM	Ed Peterson; GM	Glenn Turchan; CRA
Jim McGuigan; CRA	Jeff Daniel; CRA	Katie Kamm; CRA
Terri Stewart; CRA	Mary Kelly; CRA	Peter Ramanauskas; USEPA
Brad Stimple; USEPA	Jerry O'Callaghan; IDEM	Jean Greensley; USEPA

<i>Item</i>	<i>Description</i>	<i>Action By</i>
<b>1.0</b>	<b>HEALTH AND SAFETY</b>	
1.1	ENTACT/SES continues to perform dust monitoring in East Plant work areas.	ENTACT/SES
1.2	ENTACT advised CRA the support area has been relocated to the north side of the haul road.	ENTACT
1.3	Appropriate PPE (specific to the task) is to be worn properly by personnel (including sub-contractors) while on site.	ENTACT
<b>2.0</b>	<b>REQUEST FOR INFORMATION</b>	
2.1	CRA requested ENTACT's POD (Plan of Day) be provided no later than 6:00 pm the day before forecasted activities.	ENTACT
<b>3.0</b>	<b>GENERAL WORK ACTIVITIES</b>	
3.1	CRA continues to track "Active" and "Inactive" and "Non-Billable" days. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT
3.2	CRA continues to track vault placement workdays. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT
3.3	ENTACT continues to place and compact grading fill.	ENTACT
3.4	ENTACT completed the removal of the HRC pipes on 09-04-07. Pipes were chipped and disposed of in the fill placement areas.	ENTACT
3.5	Duke Energy will be on site next week to relocate the power pole guy wire on the eastern perimeter of GA-2.	ENTACT
3.6	The next monthly meeting is scheduled for 09-12-07 at 2:00pm.	CRA/ENTACT



Item	Description	Action By
4.0	<b>GRADING AREAS # 1, 2, 3 AND 4, FILL AREAS (FA-1A &amp; FA-1B)</b>	
4.1	Water management activities and site maintenance work were conducted as appropriate.	ENTACT
4.2	ENTACT continues to confirm required tarping/ mulching is complete prior to leaving at the end of the day.	ENTACT/CRA
5.0	<b>CAP/FILL PLACEMENT</b>	
5.1	ENTACT advised CRA current work areas would only accommodate the estimated quantities remaining in the Northern Tributary excavations. ENTACT will continue to receive <50ppm material from the downstream parcels for placement within the fill placement areas until 09-07-07.	ENTACT
5.2	ENTACT continues to receive and stockpile material from the Northern Tributary. CRA continues to take samples and provide stockpile test results as received.	ENTACT
5.3	ENTACT continues relocating and grading material within the eastern parking lot perimeter grids and the FA-1B area.	ENTACT
6.0	<b>VAULT AREA AOI7</b>	
6.1	SES continues to perform water management and site maintenance work as appropriate.	SES
6.2	SES continues to grade vault material to final grade elevations as material is received.	SES
6.3	CRA approved the vault subgrade on the south and west sides of the vault. SES began placing the first 6" clay layer on 08-29-07.	SES
7.0	<b>DRAINAGE DITCH EXCAVATION</b>	
7.1	ENTACT completed the rock breaking in the southeastern corner of GA-2's perimeter ditch on 08-27-07. ENTACT plans to continue the ditch excavation (including rock breaking) to the south on 08-29-07.	ENTACT
8.0	<b>PARKING LOT RESTORATION</b>	
8.1	Final grading and clay placement of the perimeter parking lots is pending the excavation and re-grading of the surrounding material and clay placement.	ENTACT
8.2	Drawing and specifications revisions for the parking lot lighting and power supply are pending.	CRA
9.0	<b>SITE STRUCTURES</b>	
9.1	McIntyre is on site installing the power supply to WW#3.	CRA
10.0	<b>SURFACE &amp; STORM WATER CONTROLS</b>	
10.1	ENTACT continues to maintain berm/sump enclosures at the fill placement areas to contain surface water and to obtain CRA authorization prior to pumping water to the SES modu tanks.	ENTACT
10.2	Contractors continue to monitor WW#3. CRA continues to track and monitor the water flow to the WTP via the new WW#3 forcemain.	ENTACT/SES/ CRA
11.0	<b>WORK HOURS</b>	
11.1	ENTACT is working Monday through Saturday 7:00 am to 5:30 pm.	ENTACT





<i>Item</i>	<i>Description</i>	<i>Action By</i>
11.2	ENTACT will be shutting down all operations every 3 <sup>rd</sup> Saturday. The next scheduled shutdown date will be 09-22-07.	ENTACT
11.3	SES working 7:00 am to 5:30 pm Monday through Friday. Water management crews on site as needed for storm water control.	SES
<b>12.0</b>	<b>SUB-CONTRACTORS ON-SITE</b>	
12.1	Bledsoe, Riggert & Guerrettaz – ENTACT surveying	ENTACT
12.2	McIntyre –WW#3 power supply installation	CRA

Attachments: None

Prepared By: Terri Stewart Date Issued: Oct. 12, 2007

This confirms and records CRA's interpretation of the discussions that occurred and our understanding reached during this meeting. Unless notified in writing within 3 days of the date issued, we will assume that the following interpretation or description is complete and accurate.



## MEETING MINUTES

Reference No. 13968

PROJECT: GM Powertrain Removal Action Project  
 OWNER: General Motors CONTRACT NO.: 13968(41, 89)  
 RE: Construction Meeting  
 LOCATION: Bedford, Indiana DATE: September 11, 2007 TIME: 1:00 p.m.

Participants:

Katie Kamm; CRA	Dan Nelson; CRA	John Cooper; ENTACT
Rick, Hoekstra; CRA	Earney Funderburg; ENTACT	Barbara Longstreet; ENTACT
Terri Stewart; CRA	Edgar Longstreet; ENTACT	Randy Campbell; SES
Yelena Moskvina; CRA	Tim Hiltunen; ENTACT	

Distribution:

Cheryl Hiatt; GM	Ed Peterson; GM	Glenn Turchan; CRA
Jim McGuigan; CRA	Jeff Daniel; CRA	Katie Kamm; CRA
Terri Stewart; CRA	Mary Kelly; CRA	Peter Ramanauskas; USEPA
Brad Stimple; USEPA	Jerry O'Callaghan; IDEM	Jean Greensley; USEPA

Item	Description	Action By
<b>1.0</b>	<b>HEALTH AND SAFETY</b>	
1.1	ENTACT/SES continues to perform dust monitoring in East Plant work areas.	ENTACT/SES
1.2	During excavation activities east of the WTP building on 09-08-07 ENTACT unearthed a power line which was later verified as abandoned. ENTACT had performed private utility locates in the area. ENTACT advised CRA new locates along this line have been completed.	ENTACT
1.3	ENTACT advised CRA the fuel delivery service (Mullis) will no longer fuel equipment without an escort or laborer available.	ENTACT
<b>2.0</b>	<b>REQUEST FOR INFORMATION</b>	
2.1	CRA requested ENTACT to provide daily T&M charge outs for CRA review within 24 to 48 hours following the work being performed.	ENTACT
2.2	ENTACT requested CRA provide specifications for the depth and base requirements for light poles in the east plant parking lot.	ENTACT/CRA
<b>3.0</b>	<b>GENERAL WORK ACTIVITIES</b>	
3.1	CRA continues to track "Active" and "Inactive" and "Non-Billable" days. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT
3.2	CRA continues to track vault placement workdays. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT
3.3	ENTACT continues to place and compact grading fill.	ENTACT
3.4	Contractors were advised to thoroughly decon equipment tracks/wheels prior to crossing over clean haul roads.	ENTACT



Item	Description	Action By
3.5	On 09-06-07 ENTACT chose to haul during wet conditions without implementing added measures to keep GM Drive clean. CRA advised should this occur again, a tire wash would need to be installed at ENTACT's expense.	ENTACT
3.6	Test pit excavation in AOI-8 (to determine gravel depth) is anticipated to begin on 09-17-07.	CRA/ENTACT
3.7	Bedford City officials have requested local area residents to restrict their water use as a result of recent drought conditions. Both contractors are complying and limiting their water use on site.	ENTACT/SES
3.8	CRA advised the contractors that CRA is having a utility locate performed along the west side of GM Drive. The work will be performed on 09-12-07 to 09-13-07 along GM Drive.	CRA
4.0	<b>GRADING AREAS # 1, 2, 3 AND 4, FILL AREAS (FA-1A &amp; FA-1B)</b>	
4.1	Water management activities and site maintenance work were conducted as appropriate.	ENTACT
4.2	ENTACT continues to confirm required tarping/mulching is complete prior to leaving at the end of the day, CRA continues to verify as acceptable.	ENTACT/CRA
5.0	<b>CAP/FILL PLACEMENT</b>	
5.1	ENTACT temporarily stopped the transport of downstream sub grade material to the East Plant on 09-07-07 until additional fill areas can be established.	ENTACT
5.2	ENTACT continues to receive and stockpile material from the Northern Tributary. CRA continues to take samples and provide stockpile test results as received.	ENTACT
5.3	ENTACT advised CRA that tires unearthed during excavation are being deconned and stockpiled for off-site removal.	ENTACT
6.0	<b>VAULT AREA AOI7</b>	
6.1	SES continues to perform water management and site maintenance work as appropriate.	SES
6.2	SES continues to grade vault material to final grade elevations as material is received.	SES
6.3	SES received >50 material from the Northern Tributary stockpile on 09-07-07.	SES
6.4	SES continues to place and compact clean clay in 6" lifts on the south and southwest sides of the vault.	SES
6.5	SES performed compaction tests on the initial 1' compacted clay lift on the west side of the vault. Areas that failed compaction testing are being re-worked to meet specifications prior to additional lift placement.	SES
7.0	<b>DRAINAGE DITCH EXCAVATION</b>	
7.1	ENTACT advised CRA rock breaking would continue as needed on the drainage ditch line south of GA-2.	ENTACT
8.0	<b>PARKING LOT RESTORATION</b>	
8.1	Final grading and clay placement of the perimeter parking lots is pending the excavation and re-grading of the surrounding material and clay placement.	ENTACT



Item	Description	Action By
8.2	Drawing and specifications revisions for the parking lot lighting and power supply are pending.	CRA
8.3	On 09-10-07 CRA approved the western grids of the East Plant parking lot. A gravel base will be placed for public meeting parking.	ENTACT
<b>9.0</b>	<b>SITE STRUCTURES</b>	
9.1	On 09-08-07 ENTACT began burying portions of the 18" HRC pipe. On 09-10-07 during re-location of a portion of the pipe it was damaged. Repairs are to be complete on 09-11-07.	ENTACT
9.2	CRA advised ENTACT to clean the accidental overspray of mulch from the WTP building exterior.	ENTACT
9.3	Duke Energy anticipates the power pole guy wire relocation east of GA-2 to be completed by the end of the week.	ENTACT
<b>10.0</b>	<b>SURFACE &amp; STORM WATER CONTROLS</b>	
10.1	ENTACT continues to maintain berm/sump enclosures at the fill placement areas to contain surface water and to obtain CRA authorization prior to pumping water to the SES modu tanks.	ENTACT
10.2	Contractors continue to monitor WW#3. CRA continues to track and monitor the water flow to the WTP via the new WW#3 forcemain.	ENTACT/SES/ CRA
10.3	SES anticipates testing the WW#3 pumps immediately following the WW#3 power panel installation, which is anticipated to be completed later this week.	SES
<b>11.0</b>	<b>WORK HOURS</b>	
11.1	ENTACT is working Monday through Saturday 7:00 am to 5:30 pm.	ENTACT
11.2	ENTACT will be shutting down all operations every 3 <sup>rd</sup> Saturday. The next scheduled shutdown date will be 09-22-07.	ENTACT
11.3	SES working 7:00 am to 5:30 pm Monday through Friday. Water management crews on site as needed for storm water control.	SES
<b>12.0</b>	<b>SUB-CONTRACTORS ON-SITE</b>	
12.1	Bledsoe, Riggert & Guerrettaz – ENTACT surveying	ENTACT
12.2	McIntyre – CRA WW#3 power supply installation	CRA

Attachments:

Prepared By: Terr Stewart

Date Issued: Oct. 12, 2007

This confirms and records CRA's interpretation of the discussions that occurred and our understanding reached during this meeting. Unless notified in writing within 3 days of the date issued, we will assume that the following interpretation or description is complete and accurate.



## MEETING MINUTES

Reference No. 13968

PROJECT: GM Powertrain Removal Action Project

OWNER: General Motors CONTRACT NO.: 13968(41, 89)

RE: Construction Meeting

LOCATION: Bedford, Indiana DATE: September 18, 2007 TIME: 1:00 p.m.

Participants:

Terri Stewart; CRA	Earney Funderburg; ENTACT	Barbara Longstreet; ENTACT
Yelena Moskvina; CRA	Edgar Longstreet; ENTACT	Dave Hinton; ENTACT
Dan Nelson; CRA	Tim Hiltunen; ENTACT	Randy Campbell; SES
	John Cooper; ENTACT	Chris Bement; SES

Distribution:

Cheryl Hiatt; GM	Ed Peterson; GM	Glenn Turchan; CRA
Jim McGuigan; CRA	Jeff Daniel; CRA	Katie Kamm; CRA
Terri Stewart; CRA	Mary Kelly; CRA	Peter Ramanauskas; USEPA
Brad Stimple; USEPA	Jerry O'Callaghan; IDEM	Jean Greensley; USEPA

<i>Item</i>	<i>Description</i>	<i>Action By</i>
<b>1.0</b>	<b>HEALTH AND SAFETY</b>	
1.1	ENTACT/SES continues to perform dust monitoring in East Plant work areas.	ENTACT/SES
1.2	On 09-14-07 ENTACT damaged the telephone line west of the storm pond during excavation of the drainage ditch along the western perimeter of GA-2. ENTACT is making the necessary repairs.	ENTACT
1.3	Contractors will re-address road safety with sub-contractors and site personnel (i.e. speed, passing, narrow roads etc.) Truckers are to follow the site 25-mph speed restriction and allow safe passing for oncoming traffic. The on site speed limit is 5-mph.	ENTACT/SES
<b>2.0</b>	<b>REQUEST FOR INFORMATION</b>	
2.1	ENTACT requested CRA provide specifications for the depth and base requirements for light poles in the east plant parking lot.	ENTACT/CRA
2.2	ENTACT requested CRA provide additional survey points on fill placement area drawings.	ENTACT/CRA
2.3	ENTACT requested CRA provide information regarding Barlow lane fence removal.	ENTACT/CRA
2.4	SES requested CRA provide updated plans for vault construction.	SES/CRA
<b>3.0</b>	<b>GENERAL WORK ACTIVITIES</b>	
3.1	CRA will resume tracking "Active" and "Inactive" and "Non-Billable" days when ENTACT resumes hauling from the downstream work areas.	CRA/ENTACT
3.2	CRA continues to track vault placement workdays. The tracking log was reviewed and agreed to by ENTACT.	CRA/ENTACT




Item	Description	Action By
3.3	ENTACT continues to place and compact grading fill.	ENTACT
3.4	Test pit excavation to determine gravel depth in AOI8 is anticipated to begin on 09-17-07.	ENTACT
3.5	CRA requested contractors notify/include CRA in interactions involving project.	ENTACT
3.6	CRA advised both contractors the East Parking lot is reserved for public meeting parking only. Contractors are not to use the area for parking.	ENTACT/SES
3.7	ENTACT removed the fencing on GM Drive along the west side of GA-3 and installed the super silt fence and construction fencing.	ENTACT
3.8	CRA re-located air monitoring station 22B on 09-17-07 to the AOI-8 area. ENTACT subsequently relocated the power supply.	CRA/ENTACT
<b>4.0</b>	<b>GRADING AREAS # 1, 2, 3 AND 4, FILL AREAS (FA-1A &amp; FA-1B)</b>	
4.1	Water management activities and site maintenance work were conducted as appropriate.	ENTACT
<b>5.0</b>	<b>CAPFILL/CLAY PLACEMENT</b>	
5.1	ENTACT continues to receive and stockpile material from the Northern Tributary. CRA continues to take samples and provide stockpile test results as received.	ENTACT
5.2	CRA advised ENTACT grids southwest to southeast of GA-2 which were previously verified as acceptable are no longer valid due to cut and fill that occurred on 09-17-07 & 09-18-07. ENTACT advised CRA the areas in question are scheduled to be re-surveyed and re-submitted to CRA for approval.	ENTACT
5.3	ENTACT has placed the entire 1' clay barrier layer on the slope east of the GM parking lot and plans to perform compaction testing on 09-19-07. If passing compaction test are achieved at this time, but visible erosion occurs in this area prior to liner installation it may be necessary to re-work and re-test the affected areas.	ENTACT
<b>6.0</b>	<b>VAULT AREA AOI7</b>	
6.1	SES continues to perform water management and site maintenance work as appropriate.	SES
6.2	SES continues to grade vault material to final grade elevations as received.	SES
6.3	SES received >50 material from the Northern Tributary stockpile on 09-14-07.	SES
6.4	SES completed the placement of clay barrier lifts on the south and southwest sides of the vault. Compaction tests passed and have been approved by CRA. Additional clay placement is pending the completion of >50-ppm material placement within the vault.	SES
<b>7.0</b>	<b>DRAINAGE DITCH EXCAVATION</b>	
7.1	ENTACT advised CRA rock breaking would continue as needed on the drainage ditch line south of GA-2.	ENTACT
<b>8.0</b>	<b>PARKING LOT RESTORATION</b>	
8.1	Clay placement on the eastern perimeter of the GM parking lot began on 09-13-07. The GM parking lot is at final sub-grade, gravel and asphalt placement is pending electrical re-design and installation.	ENTACT/CRA



Item	Description	Action By
8.2	CRA advised drawing and specifications revisions for the parking lot lighting and power supply are pending.	CRA
<b>9.0</b>	<b>SITE STRUCTURES</b>	
9.1	CRA advised ENTACT to clean mulch off the WTP building exterior by 09-21-07.	ENTACT
9.2	ENTACT advised CRA that Duke Energy is anticipated to be back on site later this week to complete the power pole guy wire relocation east of GA-2.	ENTACT
<b>10.0</b>	<b>SURFACE &amp; STORM WATER CONTROLS</b>	
10.1	ENTACT continues to maintain berm/sump enclosures at the fill placement areas to contain surface water and obtain CRA authorization prior to pumping water to the SES modu tanks.	ENTACT
10.2	Contractors continue to monitor WW#3. CRA continues to track and monitor the water flow to the WTP via the new WW#3 force main.	ENTACT/SES/ CRA
10.3	Duke Energy and McIntyre completed the installation of power to WW#3 on 09-11-07. On 09-17-07, both the main pump and the backup pump were re-started and failed to pump water from the wet well to the WTP. SES plans to remove both pumps on 09-19-07 to inspect and repair.	SES
<b>11.0</b>	<b>WORK HOURS</b>	
11.1	ENTACT is working Monday through Saturday 7:00 am to 5:30 p.m.	ENTACT
11.2	ENTACT will be shutting down all operations every 3 <sup>rd</sup> Saturday. The next scheduled shutdown date will be 09-22-07.	ENTACT
11.3	SES working 7:00 am to 5:30 pm Monday through Friday. Water management crews on site as needed for storm water control.	SES
<b>12.0</b>	<b>SUB-CONTRACTORS ON-SITE</b>	
12.1	Bledsoe, Riggert & Guerrettaz – ENTACT surveying	ENTACT
12.2	PSI – SES compaction testing	SES
12.3	McIntyre – CRA WW#3 power supply installation	CRA

Attachments:

Prepared By:  Terri Stewart

Date Issued: Oct. 12, 2007

This confirms and records CRA's interpretation of the discussions that occurred and our understanding reached during this meeting. Unless notified in writing within 3 days of the date issued, we will assume that the following interpretation or description is complete and accurate.