GENERAL MOTORS COMPANY

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

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

<u>CERCLA PROGRESS REPORT</u> <u>JANUARY/FEBRUARY 2010</u>

March 12, 2010

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1.0 INTRODUCTION

This Progress Report is submitted in accordance with the ADMINISTRATIVE ORDER ON CONSENT (AOC) FOR REMOVAL ACTION Proceeding Under Sections 104, 106(a), 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. SS 9604, 9606(a), 9607, and 9622 (United States Environmental Protection Agency (U.S. EPA) Docket No.: V-W-'03-C-747) effective July 31, 2003, and with the reporting modification approved August 11, 2009, to submit CERCLA Progress Reports bi-monthly.

The next Progress Report, for the months of March/April 2010, will be submitted on or before May 15, 2010.

2.0 SIGNIFICANT DEVELOPMENTS IN THIS PERIOD

- Verification results are presented on Figures 1 through 3 to show progress as of this reporting period. Work completed in the parcels, as presented, is not complete as either additional excavation or statistical evaluation may be required to confirm that the cleanup objective is met. Verification figures for a given parcel are included in the progress report as new data become available until all cleanup criteria are met, whereupon the figure is presented with validated data. Final verification figures will be presented in the Downstream Parcels Construction Certification Report.
- In January 2010 the contractor, SES, mobilized to the Parcel 36 work area to continue excavation along the stream channel of Parcel 36 beneath the former water treatment plant adjacent to Bud Ikerd Road. Verification sampling was conducted on the following excavated parcel:
 - Parcel 36 on January 14, 2010 and February 24, 2010, as presented on Figures 1, 2, and 3.
- A total of 714 tons of <50 mg/kg PCB material was moved from Parcel 36 and placed in approved fill area (Area of Interest 15) within the East Plant Area in January/February 2010.
- A total of 136.1 tons of ≥50 mg/kg PCB soil material from Parcel 36 was disposed of at the Heritage Landfill near Roachdale, Indiana in January/February 2010.
- No <50 mg/kg PCB tree stump and associated soil material were disposed of at the Sycamore Ridge Landfill in Terra Haute, Indiana in January/February 2010.
- The summary of PCB soil disposal for January/February 2010 is presented in Table 1.1.
- Spring 018 water continues to be collected and treated by SES's on-Site water treatment systems. U.S. EPA has approved direct discharge of treated water from SES's treatment systems at the Parcel 216 Staging Area. Sample results from SES's water treatment system during January/February 2010 are provided on Table 2.1.

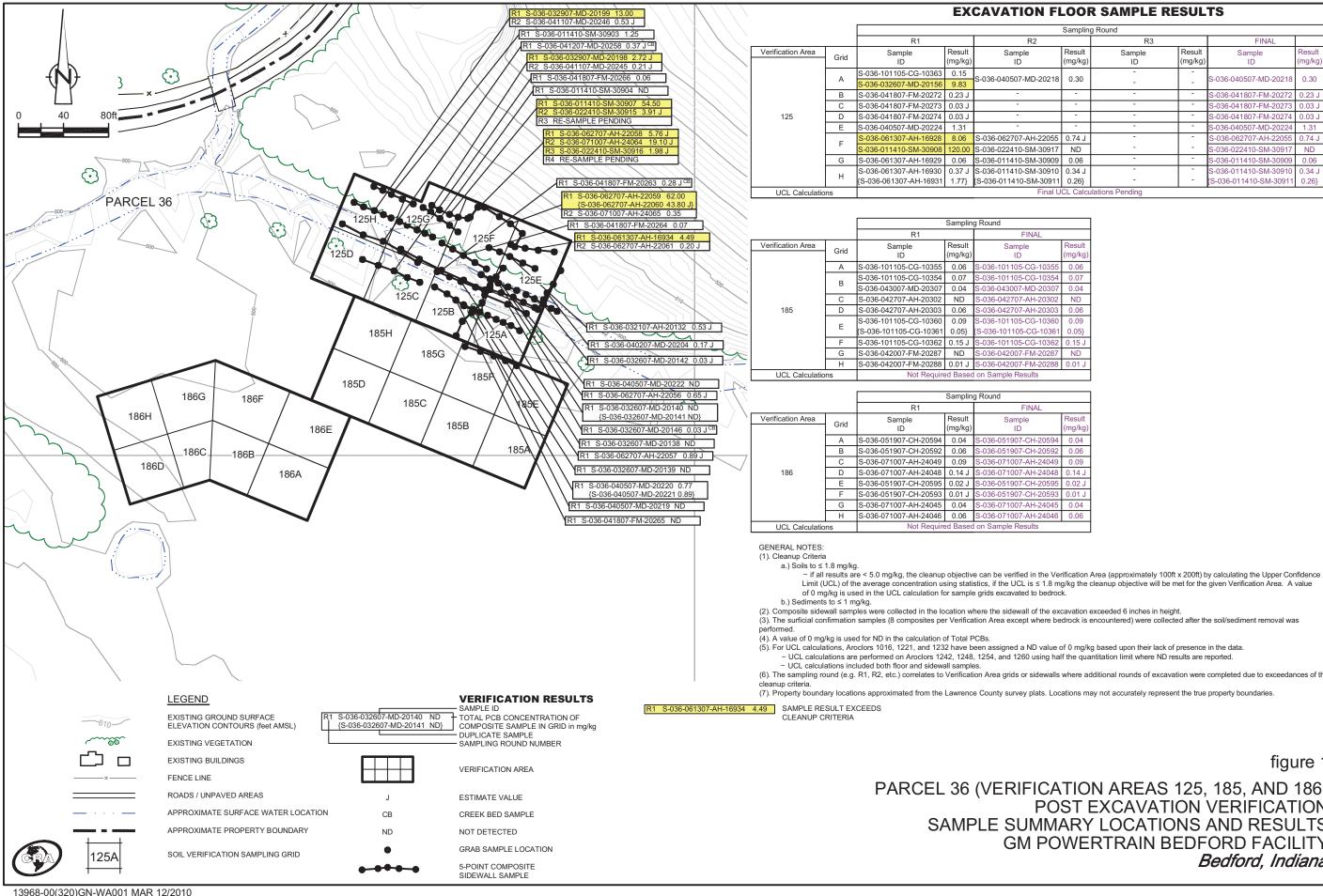
- Conference calls were held on January 7 and 25, and February 11 and 26 with U.S. EPA and the Indiana Department of Environmental Management (IDEM) to discuss items related to the RA and the design and construction of the East Plant Area Interim Measures (IM). Representatives for the Agency for Toxic Substance and Disease Registry (ATSDR), and U.S. Fish and Wildlife Service (USFWS) were also invited to the call.
- On-Site construction meetings for the reporting period have been held informally daily and formally as needed during the shut-down and maintenance period. Formal SES construction meetings were held on January 5, 12, 19, and 26 and on February 2, 9, 16, and 24.

3.0 SUMMARIES OF ALL ANTICIPATED PROBLEMS AND PLANNED RESOLUTIONS

- GM continues to discuss the remaining work under the Order on properties owned by MLC. Exposed fill areas not in use remain covered and secured both in the Creek area and the East Plant Area while these discussions continue. It is anticipated that an agreement will be completed with MLC in the first quarter of 2010.
- The excavation on Parcel 36 was conducted by directly loading an on-road haul truck which transported material directly to the East Plant Area. Samples from the excavated areas were collected on Thursday, January 14 following the completion of the excavation activities. Samples were processed on a rush turn around basis with preliminary, unvalidated results received on Saturday, January 16. Some of the verification sample results collected from the excavation on Parcel 36 exhibited concentrations in excess of 50 mg/kg for PCBs. The material from the areas with exceedences were all contained in one truck load of approximately 19 tons which had been placed in the grading fill area in Area of Interest (AOI) 15 on January 14. Upon receiving the preliminary verification results no further excavation on Parcel 36 was conducted until the \geq 50 mg/kg PCB soil could be removed. Potential ≥50 mg/kg PCB soil in AOI 15 was segregated in a bermed area and covered and the excavation on Parcel 36 was also covered with temporary liners. The ≥50 mg/kg PCB material from AOI 15 and the Creek were removed in February 2010 once weather conditions allowed for safe travel of transport trucks. Two truck loads of the soil were removed from AOI 15 and 5 truckloads of ≥50 mg/kg PCB material were removed from the Creek excavation for a total of 136.1 tons transported for disposal at the Heritage Landfill near Roachdale, Indiana. A 5-point composite sample was collected from the former stockpile location at AOI 15 to confirm that no $\geq 50 \text{ mg/kg PCB}$ material remained in the grading area. Post excavation verification samples from the Parcel 36 excavation confirmed that the $\geq 50 \text{ mg/kg}$ PCB soil had been removed from that impacted area.

4.0 PROJECTED WORK FOR THE NEXT REPORTING PERIOD

- The following is a list of anticipated work for the next reporting period:
 - Complete removal of soil on Parcel 36 from the area under the former ENTACT water treatment plant and transport to the East Plant Area.
 - Complete sediment removal and maintenance of the upper modutank for the SES water treatment plant on Parcel 216 and transport sediments to the East Plant Area for disposal. Operation of the water treatment plant will continue through this operation and the storage capacity of the lower modutank is anticipated to be sufficient however, the upper modutank can be brought back online in the treatment system until the work starts, should additional capacity be required.
 - Complete agreements with MLC for properties owned by MLC in order to conduct work on the MLC properties.
 - Maintain temporary liners over exposed fill areas as required.
 - Minimize erosion in areas not covered with temporary liners.
 - Manage and treat storm water as needed.
 - Continue to collect and treat Spring 018 water in the SES temporary treatment system.
 - GM, U.S. EPA and IDEM will hold the annual project meeting on April 21st, to review the past year and discuss the project plans for this year.



EXCAVATION FLOOR SAMPLE RESULTS

	Sampling	g Round			
R2		R3		FINAL	
ple)	Result (mg/kg)	Sample ID	Result (mg/kg)	Sample ID	Result (mg/kg)
7-MD-20218	0.30	-	-	S-036-040507-MD-20218	0.30
	-	-	-	S-036-041807-FM-20272	0.23 J
	-	-	-	S-036-041807-FM-20273	0.03 J
	-	-	-	S-036-041807-FM-20274	0.03 J
	-	-	-	S-036-040507-MD-20224	1.31
7-AH-22055	0.74 J	-	-	S-036-062707-AH-22055	0.74 J
)-SM-30917	ND	-	-	S-036-022410-SM-30917	ND
)-SM-30909	0.06	-	-	S-036-011410-SM-30909	0.06
)-SM-30910	0.34 J	-	-	S-036-011410-SM-30910	0.34 J
0-SM-30911	0.26}	-	-	(S-036-011410-SM-30911	0.26}
Final U	CL Calcu	lations Pending			

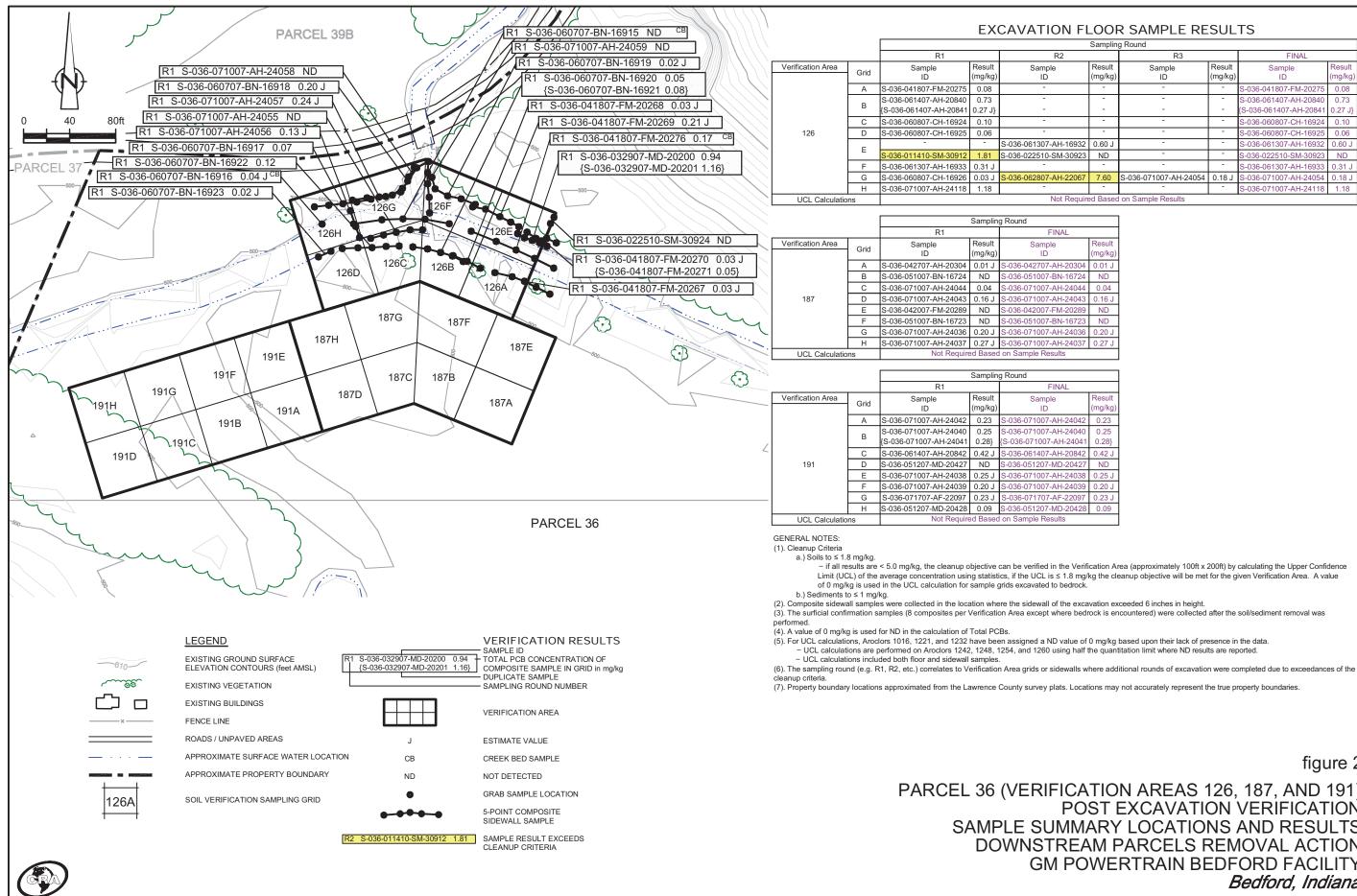
FINAL	
le	Result (mg/kg)
-CG-10355	0.06
-CG-10354	0.07
MD-20307	0.04
-AH-20302	ND
-AH-20303	0.06
-CG-10360	0.09
-CG-10361	0.05}
-CG-10362	0.15 J
-FM-20287	ND
-FM-20288	0.01 J
sults	

FINAL	
le	Result
	(mg/kg)
-CH-20594	0.04
-CH-20592	0.06
-AH-24049	0.09
-AH-24048	0.14 J
-CH-20595	0.02 J
-CH-20593	0.01 J
-AH-24045	0.04
-AH-24046	0.06
sults	

Limit (UCL) of the average concentration using statistics, if the UCL is < 1.8 mg/kg the cleanup objective will be met for the given Verification Area. A value

(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

figure 1 PARCEL 36 (VERIFICATION AREAS 125, 185, AND 186) POST EXCAVATION VERIFICATION SAMPLE SUMMARY LOCATIONS AND RESULTS **GM POWERTRAIN BEDFORD FACILITY** Bedford. Indiana



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EXCAVATION FLOOR SAMPLE RESULTS

Sampling Round					
R2		R3		FINAL	
ple)	Result (mg/kg)	Sample ID	Result (mg/kg)	Sample ID	Result (mg/kg)
	-	-	-	S-036-041807-FM-20275	0.08
	-	-		S-036-061407-AH-20840 {S-036-061407-AH-20841	0.73 0.27 J}
	-	-	-	S-036-060807-CH-16924	0.10
	-	-	-	S-036-060807-CH-16925	0.06
7-AH-16932	0.60 J	-	-	S-036-061307-AH-16932	0.60 J
)-SM-30923	ND	-	-	S-036-022510-SM-30923	ND
	-	-	-	S-036-061307-AH-16933	0.31 J
7-AH-22067	7.60	S-036-071007-AH-24054	0.18 J	S-036-071007-AH-24054	0.18 J
	-	-	-	S-036-071007-AH-24118	1.18
Not Required Record on Sample Reculto					

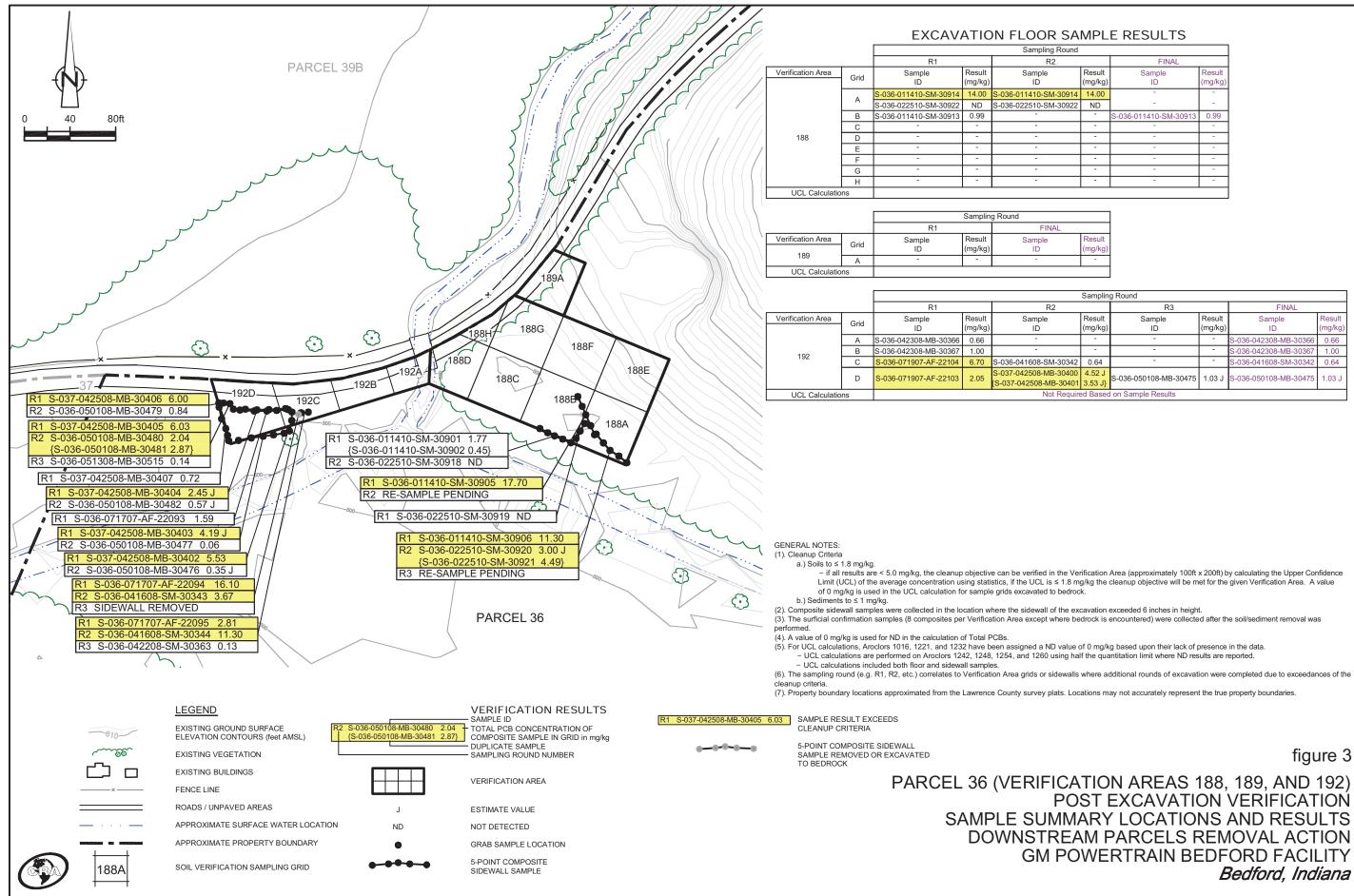
Not Required Based	on S	Sample	Result
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FINAL				
le	Result			
	(mg/kg)			
-AH-20304	0.01 J			
-BN-16724	ND			
-AH-24044	0.04			
-AH-24043	0.16 J			
-FM-20289	ND			
-BN-16723	ND			
-AH-24036	0.20 J			
-AH-24037	0.27 J			
sults				

FINAL	
le	Result
	(mg/kg)
-AH-24042	0.23
-AH-24040	0.25
-AH-24041	0.28}
-AH-20842	0.42 J
MD-20427	ND
-AH-24038	0.25 J
-AH-24039	0.20 J
-AF-22097	0.23 J
MD-20428	0.09
sults	

Limit (UCL) of the average concentration using statistics, if the UCL is < 1.8 mg/kg the cleanup objective will be met for the given Verification Area. A value

figure 2 PARCEL 36 (VERIFICATION AREAS 126, 187, AND 191) POST EXCAVATION VERIFICATION SAMPLE SUMMARY LOCATIONS AND RESULTS DOWNSTREAM PARCELS REMOVAL ACTION **GM POWERTRAIN BEDFORD FACILITY** Bedford. Indiana



13968-00(320)GN-WA003 MAR 12/2010

EXCAVATION FLOOR SAMPLE RESULTS

ling Round					
R2		FINAL			
le	Result (mg/kg)	Sample ID	Result (mg/kg)		
-SM-30914	14.00	-	-		
-SM-30922	ND	-	-		
	-	S-036-011410-SM-30913	0.99		
	-	-	-		
	-	-	-		
	-	-	-		
	-	-	-		
	-	-	-		
	-	-	-		

FINAL	
le	Result (mg/kg)
	-

	Sampling Round								
R2		R3	-	FINAL					
ple)	Result (mg/kg)	Sample ID	Result (mg/kg)	Sample ID	Result (mg/kg)				
	-	-	-	S-036-042308-MB-30366	0.66				
	-	-	-	S-036-042308-MB-30367	1.00				
3-SM-30342	0.64	-	-	S-036-041608-SM-30342	0.64				
8-MB-30400 8-MB-30401	4.52 J 3.53 J}	S-036-050108-MB-30475	1.03 J	S-036-050108-MB-30475	1.03 J				
Not Require	ed Based	on Sample Results							

- 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 ≤ 1.8 mg/kg the cleanup objective will be met for the given Verification Area. A value

figure 3 PARCEL 36 (VERIFICATION AREAS 188, 189, AND 192) POST EXCAVATION VERIFICATION SAMPLE SUMMARY LOCATIONS AND RESULTS DOWNSTREAM PARCELS REMOVAL ACTION **GM POWERTRAIN BEDFORD FACILITY** Bedford, Indiana

TABLE 1.1

DISPOSAL SUMMARY OF PCB WASTE MATERIAL - JANUARY/FEBRUARY 2010 GM POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

	Number of Trucks During Period	Total (tons)	Total to Date (tons)
Soil ≥50 mg/kg (Heritage Environmental Services)	7	136	319,912
Soil <50 mg/kg (Republic-Sycamore Ridge)	35	714 ⁽²⁾	55,666
Soil <50 mg/kg (East Plant Grading Areas)	-	0	1,187,160
Soil ≥50 mg/kg (East Plant Area Vault - RCRA sources) ⁽¹⁾	-	0	187,078
Soil <50 mg/kg (East Plant Area Vault - RCRA sources) ⁽¹⁾	-	0	1,456
Total Volume Disposed	-	850	1,751,273

Note:

(1) Estimated from volume calculated using pre- and post-filling surveys of the vault. Conversion factor used was 1.4 tons per cubic yard.

⁽²⁾ Based on estimated tonnage per truck

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SES TREATMENT SYSTEM #1 SAMPLING RESULTS - JANUARY/FEBRUARY 2010 GM POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

Analysis	Influent	After Sand Filter 1	After Sand Filter 2	Between Carbons 1 Between Carbons 2 & 3 & 4	Between Carbons 2 & 4	After Carbons	Effluent (after bag filters)
PCB (μg/L) Turbidity (NTU)	1 1	11	11	1 1	1 1	1 1	ND (0.10) 0.11
PCB (μg/L) Turbidity (NTU)	 11.70	1 1	1 1	1 1	 1.38	 0.03	ND (0.10) 1.30
PCB (µg/L) Turbidity (NTU)	0.19 3.03	0.13 2.80	0.13 3.77	ND (0.10) / ND (0.10) 0.09 / 0.09	ND (0.10) 0.46	ND (0.10) 0.95	ND (0.10) 0.00
PCB (μg/L) Turbidity (NTU)	0.51 16.30	1 1	1 1	1 1	ND (0.10) 3.58	ND (0.10) 1.30	ND (0.10) 1.14
PCB (µg/L) Turbidity (NTU)	0.25 2.83	1 1	1 1	1 1	ND (0.10) 0.00	ND (0.10) 0.00	ND (0.10) 0.00
PCB (μg/L) Turbidity (NTU)	0.16 8.10	1 1	1 1	1 1	ND (0.10) 0.00	ND (0.10) 0.35	ND (0.10) 0.00
PCB (μg/L) Turbidity (NTU)	0.16 1.71	1 1	1 1	1 1	ND (0.10) 0.00	ND (0.10) 0.35	ND (0.10) / ND (0.10) 1.30 / 0.00
PCB (µg/L) Turbidity (NTU)	1 1	1 1	1 1	1 1	1 1	1 1	ND (0.10) 0.13
PCB (µg/L) Turbidity (NTU)	0.20 15.50	0.14 2.74	0.17 5.07	ND (0.10) 1.74	ND (0.10) 1.19	ND (0.10) / ND (0.10) 0.00 / 0.00	1 1

CRA 013968 (320)

<u>Notes:</u> ND - Non detect "--" - Not Sampled

APPENDIX A

DELIVERABLES SUMMARY

	Status	complete	complete	complete	complete	complete		complete	complete	complete	submitted March 12, 2010	
	Deliverable Due Date	July 23, 2003	July 23, 2003	July 31, 2003		August 14, 2003		October 29, 2003	August 21, 2003	August 30, 2003	March 15, 2010	
DELLY ENABLES SUMMAN I	Deadline	Approved July 23, 2003	Approved July 23, 2003	CRA & McGuigan – Effective Date of Order Other contractors – 5 business days prior to commencement of work	before work is to begins	AOC VIII.34.c; VIII.37.a QAPP – 10 business days AED *	OMMP - 30 business days after completion of each portion of Work in Paragraph 34. Final OMMP due with Final Report	90 days AED	Approved November 11, 2003	1 st 30 days AED	$15^{ m th}$ of every other month thereafter	Within 90 days after required info is received and work completed
	Reference	AOC IV.23; VIII.34.a	AOC IV.25; VIII.34.b	AOC VII.30; VII.31	'U.S. EPA Approval Letter, July 23, 2003'	AOC VIII.34.c; VIII.37.a	AOC VIII.38	AOC VIII.34.d; VIII.35.a 90 days AED	AOC VIII.34.e; VIII.35.a	AOC VIII.39.a	U.S. EPA Approval Email, August 11, 2009	AOC VIII.40
	Deliverable	Final Parcel 22 Workplan	Final Upstream Workplan	Designation of Contractors and Project Coordinator	Contractor HASP	QAPP	OMMP	Downstream Workplan	Site Source Control Workplan		Progress Reports	Final Report

Note:

AED = After Effective Date of Administrative Order on Consent

APPENDIX A

PROGRESS REPORT - January/February 2010

GM Powertrain Bedford Facility

DELIVERABLES SUMMARY

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