

DESIGN REPORT

OVER 50 mg/kg PCB SOIL REMOVAL EAST PLANT AREA

GM POWERTRAIN FACILITY 105 GM DRIVE BEDFORD, INDIANA

U.S. EPA ID NO. IND 006036099

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TABLE OF CONTENTS

<u>Page</u>

1.0	INTRODUCTION								
	1.1	GENERAL							
	1.2	PURPOSE	1						
	1.3	SOURCE REMOVAL REPORT ORGANIZATION	2						
2.0	SUMMAR	RY OF CORRECTIVE ACTION	4						
3.0	SITE INFORMATION								
	31	SITE LOCATION AND DESCRIPTION	5						
	32	GEOLOGIC / HYDROGEOLOGIC / HYDROLOGIC CONDITIONS	5						
	3.2.1	REGIONAL PHYSIOGRAPHY AND TOPOGRAPHY	5						
	3.2.2	REGIONAL LAND USE	6						
	3.2.3	REGIONAL GEOLOGY	6						
	3.2.4	REGIONAL HYDROGEOLOGY	8						
	3.2.5	REGIONAL HYDROLOGY	8						
	3.3	EAST PLANT AREA SETTING	9						
	3.3.1	EAST PLANT AREA GEOLOGY	9						
	3.3.2	EAST PLANT AREA HYDROGEOLOGY	10						
	3.3.3	EAST PLANT AREA HYDROLOGY	10						
4.0	SOURCE EXCAVATION AND PLACEMENT OF PRESCRIBED								
	≥50 MG/H	KG PCB SOIL	12						
	4.1	LIMITS OF PRESCRIBED ≥50 MG/KG PCB SOIL REMOVAL	12						
	4.2	MATERIAL HANDLING	12						
	4.2.1	PHASING OF SOIL REMOVAL	14						
	4.2.2	LIMITATIONS ON SOIL REMOVAL DUE TO TECHNICAL							
		IMPRACTICABILITY	14						
	4.3	USE OF <50 MG/KG PCB SOIL FROM THE REMOVAL ACTION	14						
	4.4	STORMWATER CONTROL	15						
5.0	CONSTRI	ICTION SUPPORT FACILITIES	16						
0.0	51	SITE OFFICES	10						
	5.2	EMERGENCY FIRST AID FACILITIES	10						
	53	FIRE FIGHTING FOLIPMENT	10						
	5.4	DECONTAMINATION FACILITIES	10						
	55	PORTABLE SANITARY FACILITIES	16						
	5.6	UTILITIES	17						
	5.7	SITE COMMUNICATIONS							
	5.8	ACCESS ROADS	17						
	5.9	PARKING							
	~ • • •								

TABLE OF CONTENTS

6.0	INSTITUTIONAL CONTROLS AND MONITORING	18
7.0	PROJECT SCHEDULE	19
8.0	COMMUNITY RELATIONS	20
9.0	REFERENCES	21

LIST OF FIGURES (Following Text)

- FIGURE 1.1 FACILITY LOCATION
- FIGURE 1.2 FACILITY PLAN
- FIGURE 3.1 GLACIAL FEATURES OF SOUTH-CENTRAL INDIANA
- FIGURE 3.2 BEDROCK STRUCTURAL FEATURES OF INDIANA
- FIGURE 3.3 BEDROCK GEOLOGY OF INDIANA
- FIGURE 3.4 GENERALIZED STRATIGRAPHIC COLUMN FOR PALEOZOIC ROCKS IN INDIANA
- FIGURE 3.5 LOWER EAST FORK WHITE RIVER DRAINAGE BASIN
- FIGURE 3.6 EAST PLANT AREA AND AOI LOCATIONS
- FIGURE 3.7 OVERBURDEN AND SHALLOW BEDROCK CONCEPTUAL SITE MODEL FOR HISTORIC MIGRATION OF OIL AND SHALLOW GROUNDWATER FLOW
- FIGURE 3.8 BEDROCK TOPOGRAPHY
- FIGURE 3.9 APPROXIMATE BEDROCK FORMATION CONTACT LOCATIONS
- FIGURE 3.10 SHALLOW GROUNDWATER TABLE CONTOURS AND FLOW DIRECTIONS
- FIGURE 4.1 EAST PLANT AREA COREHOLE AND BOREHOLE LOCATIONS
- FIGURE 4.2 REVISIONS TO THE \geq 50 mg/kg PCB DELINEATION
- FIGURE 4.3 UPDATED \geq 50 mg/kg PCB DELINEATION
- FIGURE 4.4 REVISED AIR MONITORING STATION LOCATIONS

LIST OF TABLES (Following Text)

TABLE 4.1SUMMARY OF PCB SOIL DATA - EAST PLANT AREA

TABLE 4.2AIR MONITORING SUMMARY - 24-HOUR (LONG-TERM)

LIST OF DRAWINGS

DRAWING C-01 EXISTING CONDITIONS I

DRAWING C-02 EXISTING CONDITIONS II

DRAWING C-03 SITE WORKS I

DRAWING C-04 SITE WORKS II

DRAWING C-05 EXCAVATION PLAN II – 720-725 FT AMSL

DRAWING C-06 EXCAVATION PLAN II – 715-720 FT AMSL

DRAWING C-07 EXCAVATION PLAN II – 710-715 FT AMSL

DRAWING C-08 EXCAVATION PLAN II – 705-710 FT AMSL

DRAWING C-09 EXCAVATION PLAN II - 700-705 FT AMSL

DRAWING C-10 EXCAVATION PLAN II - 695-700 FT AMSL

DRAWING C-11 EXCAVATION PLAN II - 690-695 FT AMSL

DRAWING C-12 EXCAVATION PLAN II – 685-690 FT AMSL

DRAWING C-13 EXCAVATION PLAN II – 680-685 FT AMSL

DRAWING C-14 EXCAVATION PLAN II - FINAL ELEVATIONS

DRAWING C-15 EXCAVATION PLAN I – 695-700 FT AMSL

DRAWING C-16 EXCAVATION PLAN I - 690-695 FT AMSL

DRAWING C-17 EXCAVATION PLAN I – 685-690 FT AMSL

DRAWING C-18 EXCAVATION PLAN I – 680-685 FT AMSL

DRAWING C-19 EXCAVATION PLAN I - 675-680 FT AMSL

DRAWING C-20 EXCAVATION PLAN I – 670-675 FT AMSL

DRAWING C-21 EXCAVATION PLAN I – 665-670 FT AMSL

DRAWING C-22 EXCAVATION PLAN I – 660-665 FT AMSL

LIST OF DRAWINGS

DRAWING C-23 EXCAVATION PLAN I – 655-660 FT AMSL

DRAWING C-24 EXCAVATION PLAN I – 650-655 FT AMSL

DRAWING C-25 EXCAVATION PLAN I – 645-650 FT AMSL

DRAWING C-26 EXCAVATION PLAN I – 640-645 FT AMSL

DRAWING C-27 EXCAVATION PLAN I – 635-640 FT AMSL

DRAWING C-28 EXCAVATION PLAN I - 630-635 FT AMSL

DRAWING C-29 EXCAVATION PLAN I – 625-630 FT AMSL

DRAWING C-30 EXCAVATION PLAN I – 620-625 FT AMSL

DRAWING C-31 EXCAVATION PLAN I - 615-620 FT AMSL

DRAWING C-32 EXCAVATION PLAN I – FINAL ELEVATIONS

LIST OF APPENDICES

APPENDIX A DRUM HANDLING STANDARD OPERATING PROCEDURES

LIST OF ACRONYMS

AAQMP	- Ambient Air Quality Monitoring Plan
Agreement	- Performance Based Corrective Action Agreement
AMSL	- above mean sea level
AOI	- Area of Interest
bgs	- below ground surface
CA	- Corrective Action
CFR	- Code of Federal Regulations
CLP	- Community Liaison Panel
CRA	- Conestoga-Rovers & Associates, Inc.
cy	- cubic yards
Facility	- GM Powertrain Facility
ft	- feet
GM	- General Motors Corporation
HASP	- Health and Safety Plan
IM	- Interim Measure
mg/kg	- milligram per kilogram
РСВ	- Polychlorinated Biphenyl
QAPP	- Quality Assurance Project Plan
RA	- Removal Action
RCRA	- Resource Conservation and Recovery Act
Report	- Design Report, Over 50 mg/kg PCB Soil Removal, East Plant Area
RFI	- RCRA Facility Investigation
Site	- GM Powertrain Facility
TM	- Technical Memorandum
TSCA	- Toxic Substances Control Act
U.S. EPA	- United States Environmental Protection Agency

1.0 <u>INTRODUCTION</u>

This Design Report, Over 50 mg/kg PCB Soil Removal, East Plant Area (Report) for the General Motors Corporation (GM) Powertrain Facility (Facility or Site) located in Bedford, Indiana has been prepared, as part of the East Plant Area Interim Measure (IM), by Conestoga-Rovers & Associates, Inc. (CRA), on behalf of GM, as part of the Resource Conservation and Recovery Act (RCRA) Corrective Action (CA) activities being conducted under the Performance-Based CA Agreement (Agreement) (effective March 20, 2001, and amended on October 1, 2002) between United States Environmental Protection Agency (U.S. EPA) and GM for the Facility.

The Facility location and Facility plan are presented on Figures 1.1 and 1.2, respectively.

1.1 <u>GENERAL</u>

The Facility is located at 105 GM Drive in Bedford, Lawrence County, Indiana, 47421. The Facility produces aluminum casting products, such as transmission cases, pistons, and engine blocks. Major aluminum production processes include die casting and permanent molding. The Facility has been operating as an aluminum foundry since 1942, with major facility modifications completed in 1950, 1953, 1966, 1971, 1974, 1979, and 1980.

1.2 <u>PURPOSE</u>

The purpose of the East Plant Area Source Removal Report is to present an overview of the current conditions of the East Plant Area and to provide the details related to the implementation of the Source Removal for the East Plant Area. This report summarizes the information obtained during Site investigation activities conducted by GM, including:

- a review of regional geology, hydrogeology, and hydrology;
- a review of geological, hydrogeological, and hydrological conditions at the East Plant Area; and
- summary of existing conditions and information relating to the nature and extent of PCB impacts at the East Plant Area.

1.3 SOURCE REMOVAL REPORT ORGANIZATION

The Report consists of the following documents:

- Text;
- Figures;
- Tables;
- Construction Drawings; and
- Appendix.

All of the above-identified documents are submitted concurrently with this Report. The approved Ambient Air Quality Monitoring Plan (AAQMP) (CRA, May 2004), Quality Assurance Project Plan (QAPP) (CRA, December 21, 2004), and Consolidated Health and Safety Plan (HASP) (CRA, November 2004) will apply to the source removal activities.

This Report is organized as follows:

Section 2.0 - Summary of Corrective Action

This section provides an outline of the East Plant Area IM.

Section 3.0 - Site Information

This section provides background information related to Site land use, geology, hydrology, etc.

<u>Section 4.0 – Source Excavation and Placement of ≥50 mg/kg PCB Soil in the Vault</u> This section describes the material excavation rationale and the methodology of material

Section 5.0 - Construction Support Facilities

excavation and placement within the vault.

This section details the support facilities required for the Source Removal work.

Section 6.0 - Institutional Controls and Monitoring

This section presents institutional controls to be implemented and monitoring to be completed during the completion of excavation activities.

Section 7.0 - Project Schedule

This section presents the project schedule.

Section 8.0 - Community Relations

This section presents various means of community participation and awareness.

Section 9.0 - References

This section presents references cited in this Report.

2.0 <u>SUMMARY OF CORRECTIVE ACTION</u>

The selected IM to be implemented for the Site consists of the following major components:

- installation and long-term maintenance of an on-Site Toxic Substances Control Act (TSCA) compliant vault for placement of approximately 145,000 tons [105,000 cubic yards (cy)] of designated polychlorinated biphenyl (PCB) impacted soils with PCB concentrations ≥50 milligram per kilogram (mg/kg);
- ii) transportation of the excavated ≥50 mg/kg PCB soils related to the implementation of the ≥50 mg/kg PCB soil excavation to be placed in the on-Facility vault and permanent consolidation of the material in the vault;
- iii) construction of a perimeter groundwater collection system for the East Plant Area;
- iv) installation of a source removal system in Area of Interest (AOI) 8;
- v) construction of a low permeability East Plant Area cover system. This system will include placement of <50 mg/kg PCB soil from the Removal Action (RA) to provide backfill for ≥50 mg/kg PCB excavations and as grading fill;
- vi) installation, operation and maintenance of a water treatment system for treatment of potentially contaminated waters generated during construction and filling of the vault, perimeter groundwater collection system and existing systems. The waters generated from the vault will include:
 - a) water from decontamination of equipment and other materials;
 - b) precipitation contacting waste materials at the vault;
 - c) water removed from the leachate collection and/or leak detection systems; and
 - d) water generated from the underdrain system;
- vii) implementation of access/deed restrictions; and
- viii) implementation of operation and maintenance and monitoring programs.

This report provides a summary of existing conditions and information relating to the nature and extent of PCB levels in soils in the East Plant Area and provides details related to the implementation of the Source Removal.

3.0 SITE INFORMATION

3.1 SITE LOCATION AND DESCRIPTION

The Facility lies on approximately 152.5 acres of land on either side of GM Drive and extends north along Bailey Scales Road. The East Plant Area represents a portion of the Facility and is located to the east of GM Drive and west of Bailey Scales Road (see Figure 1.2).

Currently, the Facility is bordered by residential and undeveloped areas to the north; to the south by the Canadian and Pacific Railway, and IMCO (a Kaiser aluminum recycling facility), to the east by residential and undeveloped areas; and to the west by the railway, industrial and residential properties and a cemetery. The Facility property boundaries, buildings, and support facilities are presented on Figures 1.1 and 1.2.

The Facility is currently zoned and utilized for industrial purposes. The reasonably foreseeable future land use is industrial.

The proposed vault will be constructed in the East Plant Area, east of GM Drive, west of the Stormwater Lagoon, and between the Zipp Trucking parking lot and Salary Parking Lot. The proposed vault design volume is approximately 105,000 cy. This will accommodate the prescribed quantity of PCB contaminated material requiring excavation (105,000 cy). The maximum capacity of the vault using the proposed footprint and maximum 4:1 side slopes is approximately 125,000 cy. Over 50 mg/kg PCB soil is distributed throughout various areas and elevations in the East Plant Area.

3.2 <u>GEOLOGIC/HYDROGEOLOGIC/HYDROLOGIC CONDITIONS</u>

3.2.1 <u>REGIONAL PHYSIOGRAPHY AND TOPOGRAPHY</u>

The State of Indiana covers an area of approximately 36,300 square miles. The state's topography ranges from 324 to 1,257 feet (ft) above mean sea level (AMSL). The lowest point of elevation is in the southwest corner of Indiana, where the Wabash River flows into the Ohio River. The highest point is in Wayne County in east central Indiana.

3.2.2 <u>REGIONAL LAND USE</u>

Regional land use in this area is mixed, consisting of industrial, commercial, residential and agricultural. The primary crops are corn, soybeans, feed grains, and hay. Raising livestock is common throughout the area. Industrial and commercial uses are also important, especially near urban areas. Oil and gas (in the east central section) was discovered in 1889, however, this resource was depleted by 1912. There are several oil and natural gas fields located in the southwestern portion of Indiana.

3.2.3 <u>REGIONAL GEOLOGY</u>

The Facility lies within an area of Indiana that was not glaciated (driftless area) during the last glacial period on the North American continent. The maximum progression of the Illinoian Glacial advance (the furthest advance of the Laurentide Ice Sheet) lies to the west, north, and east of the immediate region surrounding the Facility (Figure 3.1). Consequently, the surficial geology of the area generally consists of a relatively thin layer of unconsolidated deposits of sand, clay, and fragments of chert produced by the weathering of limestone bedrock and wind-deposited silty material, known as loess. Thicker deposits of proglacial outwash, lake sediment, and recent colluvium occurs along the major stream valleys (Figure 3.2). The surficial deposits range in thickness from zero ft along bedrock outcrops to approximately 100 ft thick along Salt Creek and the East Fork of the White River (Gray, 1974).

The bedrock within the region is near the eastern margin of a structure known as the Illinois Basin. The bedrock formations in this area generally dip to the west at approximately 20 to 25 ft per mile. The Cincinnati Arch lies to the east of the Illinois Basin and covers much of Indiana (Figure 3.2) (Indiana Geological Survey, 2001).

Two regional structures are within the vicinity of the Facility, the Leesward Anticline and the Mt. Carmel fault (Figure 3.2). The Leesward Anticline is located to the north and east of Bedford and plunges to the south-southeast. The Mt. Carmel fault is a normal fault with the downthrown side located to the west of the fault. This fault is located to the north and east of the Facility and truncates the Leesward Anticline on its western side. The Mt. Carmel fault generally acts as a hinge line, with gentler dips to the west of the fault and slightly steeper dips to the east (Melhorn and Smith, 1959).

Bedrock within the immediate vicinity of the Facility (Figure 3.3) consists of the lower beds of the Middle Mississippian St. Louis Limestone (the oldest formation within the Blue River Group) and is only approximately 25 ft thick in the immediate vicinity of the Facility (Melhorn and Smith, 1959). Immediately underlying the St. Louis Limestone, and outcropping to the east of the Facility, are the Salem Limestone and the Harrodsburg Limestone formations, respectively. These two Mississippian formations make up most of the Sanders Group. The Salem Limestone formation is approximately 70 to 80 ft thick, where fully preserved, and the Harrodsburg Limestone formation is approximately 80 to 90 ft thick in the area (Melhorn and Smith, 1959). Figure 3.4 presents a generalized stratigraphic column for Paleozoic formations in Indiana.

The Borden Group, which underlies the Sanders Group and outcrops further to the east, consists of approximately 500 to 800 ft of siltstone and shale, interbedded with some sandstone and minor limestone. The New Providence Shale formation makes up the bottom of the Borden Group, and is approximately 200 ft thick.

The Sanders and Blue River Groups have been described to consist mostly of carbonates, with minor amounts of chert, shale, siltstone, anhydrite, gypsum, and calcareous sandstone. A thin bed of brown dolomitic limestone commonly marks the bottom of the St. Louis Limestone. The Salem Limestone, which is more massively bedded limestone, is also known as the Indiana Limestone, the Bedford Limestone, or the Oolitic Limestone and is quarried as fine building stone. However, some horizons may contain geodes, joints and solution fractures, which render the formation less suitable for quarrying (Fenelon and Bobay, 1994).

Numerous joints and fractures are present in these formations with master sets trending east-west within the St. Louis Limestone, with minor sets 90 degrees to the master sets (Powell, 1976 and 2001). Karst topography is present near the top of the St. Louis Limestone. Numerous sinkholes can be observed on the USGS topographic quadrangles approximately 5 to 10 miles to the west of the Facility. Several caverns have been mapped in Lawrence County, including one of the largest mapped caverns in the United States, the Blue Springs Cavern, located approximately five miles southwest of the City of Bedford. Other mapped caverns in the area include the Shiloh Cave, the No Sweat Cave, the Dog Hill Cave, the Donnehue Cave, and the Salt Creek Cave. Other unmapped caverns within close proximity to the Facility include: Mouse Hole Cave, located one mile east-northeast; Eighteenth Street Cave, located one and one-half miles to the west-southwest (Etzel, 1982).

The near surface regional geology is characterized by karst topography. Several geomorphic features, such as sinkholes, are present near Bedford. This is especially prominent along the western portion of Lawrence County, with much less surface expression through the mid and eastern portions of the county. The City of Bedford lies

within the physiographic province known as the Mitchell Plain, or Plateau (karst plain). The Mitchell Plain extends from near Bloomington south to the Ohio River within the State of Indiana.

3.2.4 <u>REGIONAL HYDROGEOLOGY</u>

Groundwater resources are found in Lawrence County along the valleys of the major rivers or streams and within the thick Mississippian carbonate aquifer system (within the western portion of Lawrence County) and the Silurian-Devonian carbonate bedrock aquifer (within the eastern portion of Lawrence County).

There are two basic types of aquifers: unconfined and confined. Unconfined aquifers in Lawrence County generally occur along the Salt Creek and the East Fork of the White River within the proglacial outwash deposits, glaciolacustrine deposits, and recent alluvium. The tops of unconsolidated aquifers are often exposed to the surface or have a very thin covering of non-aquifer material, generally comprised of silt and clay (Fenelon and Bobay, 1994).

Groundwater flow within the confined (carbonate) aquifers takes place along the joints, fractures, and bedding planes that eventually may become enlarged by solution to cave passages or karst features. Recharge to a karst system occurs through surface openings that vary in scale from narrow, solutionally widened joints to large sinkholes. Discharge typically occurs through springs, which are solutionally widened joints or bedding planes, but may be enlarged, to sizable cave openings. Most groundwater within this aquifer system discharges to surficial water bodies, to underground water bodies, and to springs (Etzel, 1982).

3.2.5 <u>REGIONAL HYDROLOGY</u>

Most of the rivers in the East Fork White River Basin drain to the southwest. According to USGS Water Resources Division, the current stream flow recorded at the East Fork White River gauging station, located 7.8 miles southeast of Bedford in Lawrence County, is 4,210 cubic ft per second (cfs).

Major tributaries to the East Fork White River include the Muscatatuck River, Salt Creek, Driftwood River, Flatrock River, and the Big Blue River. Drainages in the East Fork White River Basin include the Lost River, Sugar Creek, Graham Creek, Clifty Creek, Big Creek, Indian Creek, White Creek, Brandywine Creek, and the Little Blur River. Rivers in the eastern half of the East Fork White River Basin have a subparallel drainage. Those rivers include the Sugar Creek, Big Blue River, Little Blur River, Flatrock River, Clifty Creek, Sand Creek, Vernon Forth, Graham Creek, and the East Fork White River from Medora to Jonesville (see Figure 3.5 for the Lower East Fork White River Drainage Map).

Drainage of the Mitchell Plain in central Lawrence County (west of the Facility), northeast Orange County, and Monroe County is different from the rest of the East Fork White River Basin. In the streams that flow across the Mitchell Plain, surface water may be intercepted by swallow holes and diverted underground into the groundwater system or subterranean channels.

3.3 EAST PLANT AREA SETTING

The East Plant Area is located on the portion of the Facility to the east of GM Drive and west of Bailey Scales Road. It is bordered to the west by GM Drive and the main plant operations, to the north and west by residential properties Parcels 401 through 406, to the east by residential properties Parcels 203, 204, 3, 207, 412, 413, 414, 415, 416, 214, and 15, to the northeast by Bailey Scales Road, and to the north by Parcels 217 and 21.

3.3.1 EAST PLANT AREA GEOLOGY

The natural soil in the immediate vicinity of the Facility is known as Crider. Crider soil is a fine-grained, silt loam to silty clay loam. Crider soil develops on 20 inches to 45 inches of silty loess over clayey material derived from limestone (USDA, 1985).

The overburden materials at the East Plant Area consist of fill materials, clay, and silt. The thickness of the overburden materials varies considerably across the East Plant Area. Overburden in the East Plant Area is generally thickest in AOIs 4, 5, 6, and 7, (Figure 3.6) where foundry sand placement and other filling activities are known to have occurred historically.

The overburden within the East Plant Area is underlain by the St. Louis and Salem Limestone Formations. The St. Louis Limestone Formation has been identified to be highly weathered and fractured near surface. Fracture density appears to decrease with depth. The highly weathered and fractured St. Louis Limestone is underlain by the Salem Limestone (also known as the Indiana, Bedford, or Oolitic Limestone) which is the

limestone formation utilized by local quarries for fine building stone. The Salem Limestone is also somewhat weathered and fractured at the erosional rock surface but is generally more massive and less weathered and fractured than the St. Louis Limestone. The Salem Limestone becomes more massive with depth.

Additional information on the East Plant Area geology has been previously presented in the Soil Technical Memorandum (TM) (CRA, April 2004) and RCRA Facility Investigation (RFI) Work Plan (CRA, October 2001).

3.3.2 <u>EAST PLANT AREA HYDROGEOLOGY</u>

The Conceptual Site Model for fill/overburden and shallow bedrock groundwater flow is presented on Figure 3.7. This Conceptual Site Model describes the shallow groundwater flow (i.e., unconfined water table) through the unconsolidated overburden and upper fractured/weathered bedrock at the Facility. Recharge to the aquifer occurs through the overburden materials and directly into bedrock, where exposed. Discharge of the shallow bedrock groundwater occurs through springs and seeps in topographically low areas (e.g., creeks and ditches). The results of groundwater sampling across the Facility and the results of the dye trace testing completed in September 2004 support the Conceptual Site Model of the shallow groundwater flow at the Facility. Available bedrock topographic information is presented on Figure 3.8. The location of St. Louis and Salem Limestone outcropping into the ravines (or contacts) surrounding the East Plant Area are presented on Figure 3.9. Water table contours are presented on Figure 3.10. The water table generally occurs at depths of 5 to 15 ft below ground surface (bgs) depending upon location.

3.3.3 EAST PLANT AREA HYDROLOGY

The Facility is situated on a topographic ridge, such that the Facility is drained by surface runoff primarily to the east and northeast in small valleys, which are tributaries of Bailey's Branch of Pleasant Run Creek. According to Facility personnel, surface water runoff from the Facility to the west of the Facility is minimal. The ridge top is approximately 150 ft to 185 ft higher than the valley bottom, located approximately one-half mile northeast of the Facility.

Stormwater from the manufacturing portions (e.g., improved surfaces) of the Facility is currently collected in the Stormwater Lagoon (this water is used as makeup water for plant operations). Stormwater from non-operational portions of the Facility (i.e., property located north and east of the Stormwater Lagoon) drains directly to several unnamed ditches and eventually to Bailey's Branch of Pleasant Run Creek.

4.0 SOURCE EXCAVATION AND PLACEMENT OF PRESCRIBED ≥50 MG/KG PCB SOIL

4.1 LIMITS OF PRESCRIBED ≥50 MG/KG PCB SOIL REMOVAL

In order to remove PCB mass from the environment as part of the East Plant Area IM, impacted fill material or impacted overburden soil within the East Plant Area, which contains \geq 50 mg/kg PCBs at any depth and, which is practical to remove, will be excavated and placed in the vault. Delineation of the \geq 50 mg/kg PCB soil is based on the investigations completed during the various phases of the RFI as well as data obtained during the implementation of the Removal action for the Area North of AOI 4. This data was presented in an April 18, 2005 letter to Mr. Peter Ramanauskas. U.S. EPA subsequently requested additional delineation be completed. The additional investigative locations are identified on Figure 4.1. The data utilized in the delineation is also presented in Table 4.1.

The data obtained through the completion of the investigations in the East Plant area, including the additional delineation, was divided into 5-foot intervals for the purpose of defining the limits of material removal. Elevation intervals ranged from 615 – 620 ft AMSL through 720 – 725 ft AMSL. For each of these intervals, the limit of \geq 50 mg/kg PCB soil was determined. This information is presented on Drawings C-05 through C-32. For each interval, the limit of <50 mg/kg PCB soil which requires removal to reach \geq 50 mg/kg PCB soil at lower elevation intervals, was also determined and is identified on the same drawings. The previously defined limits of \geq 50 mg/kg PCB soil [presented in the Interim Measures Evaluation Report – East Plant Area (CRA, April 13, 2005) (East Plant Area IM Report)], were also revised to reflect the limits of material removed as part of RA activities. Figure 4.2 presents a plan view of the final definition of the prescribed excavation limits and identifies the basis for that delineation, described in the East Plant Area IM Report. Figure 4.3 presents these areas which will be excavated as part of this prescribed \geq 50 mg/kg PCB soil excavation.

4.2 <u>MATERIAL HANDLING</u>

In general, the following procedures will be utilized for each 5-foot elevation interval during the excavation of \geq 50 mg/kg PCB soil:

• Environmental controls (silt fencing, surface water diversions, and air monitoring) will be put in place prior to any intrusive activities. Air monitoring activities will be completed in accordance with the air monitoring procedures identified in the

approved Ambient Air Quality Monitoring Plan (AAQMP). The monitoring requirements are summarized in Table 4.2 and the air monitoring locations are presented on Figure 4.4;

- Overlying soil/fill prescribed as <50 mg/kg PCB soil will be removed, and placed and compacted as backfill in a previously excavated area or within the footprint of the cover system;
- The top of the \geq 50 mg/kg PCB soil will be surveyed;
- Prescribed areas of ≥50 mg/kg PCB soil (Figure 4.3) will be excavated with vertical to near-vertical (as close to vertical possible) sidewalls. Excavated material will be placed and compacted in the vault;
- The excavation will be surveyed to ensure the limits of removal have been as close to vertical as possibly reached;
- Any prescribed <50 mg/kg PCB soil, which needs to be removed to access material at lower elevations, will be removed, placed and compacted in a previously excavated area or within the footprint of the cover system;
- Spray-on paper mulch will be used to provide an effective additional control for both dust and vapor phase PCBs emissions. The entire waste surface will be mulched, except for the working face during active periods. The working face will then be mulched at the conclusion of each day;
- Additional <50 mg/kg PCB soil fill from the RA will be imported and placed/compacted to bring excavated areas to grade; and
- Disturbed areas designated to receive additional grading fill and/or cover system placement, if subsequent work will not commence within 30 days.

If DNAPL is encountered during the \geq 50 mg/kg PCB soil excavation, it will be placed into a tank for temporary storage. Once a sufficient volume of oil/water has been collected and characterized, the water will be transported for disposal in the wastewater treatment facility, and collected oil disposed at an approved off-Site facility.

All transport, storage, and disposal methods outlined in the Waste Management Plan (WMP) provided in the Downstream Parcels Removal Action Work Plan (CRA, 2004) will be followed for collected DNAPL. Solids/debris will be removed, as necessary, characterized, and properly disposed of in accordance with the WMP.

Should buried containers be found during excavation, containers will be handled in accordance with the standard operation procedures for drum handling provided in Appendix A. Contents inside the container will be sampled, and transported to a secure

staging area on GMPT property pending characterization and proper disposal of the waste.

4.2.1 PHASING OF SOIL REMOVAL

A portion of the prescribed \geq 50 mg/kg PCB soil which is adjacent to the proposed vault will need to be excavated and temporarily staged pending completion of the vault liner. This material will be staged, as necessary, utilizing the existing staging pads on AOI 4. If additional space is required, an additional staging area will be constructed. The quantity of material required to be staged will be minimized. This material is anticipated to be staged for approximately 45-75 days. If an unanticipated delay results in staging beyond the 180-day time frame identified in the TSCA regulations, an extension will be requested. Wherever practical, prescribed \geq 50 mg/kg PCB soil will be directly excavated and placed into the vault.

During the initial stages of excavation, a portion of the <50 mg/kg PCB soil will need to be temporarily staged until a sufficient amount of $\geq 50 \text{ mg/kg}$ PCB soil has been removed to begin backfilling. It is estimated that approximately 10,000 cy of <50 mg/kg PCB soil will be temporarily stockpiled.

4.2.2 LIMITATIONS ON SOIL REMOVAL DUE TO TECHNICAL IMPRACTICABILITY

Portions of the prescribed \geq 50 mg/kg PCB soil within or adjacent to the AOI 8 and AOI 10 areas were identified, in the East Plant Area IM Report, as impractical to remove. In the AOI 8 area, numerous underground utilities and structures, combined with the depth of the impacted material, makes excavation of soil in this area impractical. In areas adjacent to AOI 10 slope stability concerns next to the storm pond make portions of the \geq 50 mg/kg PCB soil impractical to excavate. These areas are identified on Figure 4.2, and on Drawings C-03 and C-04.

4.3 USE OF <50 MG/KG PCB SOIL FROM THE REMOVAL ACTION

A significant volume of backfill material will be required to be placed to backfill excavations of \geq 50 mg/kg PCB soil, and to grade the East Plant Area surface to optimized cover system grades. Suitable material for use as backfill under the low permeability cover is available from the RA. The RA soils to be utilized are those soil

materials containing <50 mg/kg PCBs. During placement the backfill material will be compacted to control differential settlement of the East Plant Area cover system, once constructed.

All <50 mg/kg PCB soil will be managed to mitigate runoff, ensure any potentially contaminated runoff is collected, and to ensure dust/air emissions are controlled. The controls will include silt fences and hay bales enclosing the stockpiles as well as along drainage pathways. Stockpiles not in use will be covered. All water that contacts <50 mg/kg PCB soil will be contained and directed to collection sumps. Water will be collected from these sumps and treated prior to discharge. The quantity of water requiring treatment will be minimized by the placement of tarps during inactive grading fill placement periods to minimize contact of precipitation with the grading fill.

4.4 <u>STORMWATER CONTROL</u>

Stormwater controls, including check dams, diversion dikes and drainage swales to control run-on from adjacent areas, will be constructed prior to initiating significant excavation. Within the work area, any water which collects will be considered to be impacted and will be collected for treatment prior to discharge. Construction of stormwater controls prior to initiating excavation will control the potential for off-Site releases and minimize the amount of stormwater that contacts contaminated material.

The contractor will be required to control stormwater runoff in order to meet the following requirements:

- i) prevent surface water runoff from flowing from contaminated areas to clean areas;
- ii) minimize stormwater entering a work zone from adjacent areas and ponding on-Site in excavated areas through use of temporary berms/swales, proper grading, and by expediting backfilling of excavations;
- iii) ensure that IM activities do not impact stormwater runoff; and
- iv) create a low area within each excavation (sump) to collect and remove water from the excavation. Excavations will be maintained dewatered to the extent practical.

This stormwater will be transferred from the sump(s) to the wastewater treatment facility for treatment prior to discharge.

5.0 <u>CONSTRUCTION SUPPORT FACILITIES</u>

The following sections present descriptions of the construction support facilities required for the source removal and filling.

5.1 <u>SITE OFFICES</u>

Site offices will be established, as needed, for the source removal activities.

5.2 <u>EMERGENCY FIRST AID FACILITIES</u>

The Contractor will be required to supply and maintain first aid facilities at each major work area. The first aid supplies must comply with the requirements of 29 CFR 1910.141.

5.3 <u>FIRE FIGHTING EQUIPMENT</u>

The Contractor will be required to provide fire fighting equipment to ensure the safety of Site personnel. Details regarding the fire fighting equipment will be proposed by the Contractor in the Contractor's Site-specific HASP. Coordination will be established with the local Fire Department and emergency responders.

5.4 DECONTAMINATION FACILITIES

Prior to commencing work in an Exclusion Zone at the Site, the Contractor will be required to supply and operate a personnel hygiene/decontamination facility. The Contractor will also construct and maintain equipment decontamination pads at the Site, as required.

Wastewater from the personnel hygiene/ decontamination facility will be pumped to designated storage tanks for on-Site treatment.

5.5 <u>PORTABLE SANITARY FACILITIES</u>

Portable toilet facilities will be provided and maintained by the Contractor in an area outside the Exclusion Zone. Sanitary wastes will be removed and disposed of off Site,

on a periodic basis, in accordance with applicable laws and regulations, or will be disposed of directly to the sanitary sewer.

5.6 <u>UTILITIES</u>

The Contractor will be responsible for providing electrical power, potable water, telephone service, and other utilities, as required, for the construction support facilities.

5.7 <u>SITE COMMUNICATIONS</u>

Portable two-way radios will be available for Site communications, during vault construction and filling, and for any operations in which direct visual and verbal contact is not feasible. The Contractor will be required to provide two-way radios for use by the Engineer, the Site Safety Officer, and the security personnel, as necessary. Suitable warning signals such as horns or whistles shall be designated for emergencies and identified in the Contractor's Site-specific HASP.

5.8 <u>ACCESS ROADS</u>

On-Site access roads will be constructed or improved, as necessary. All imported granular materials used for the construction of access roads, which contact contaminated soils during the course of the construction, will be placed within the vault as part of the grading fill for the East Plant Area cover system.

5.9 <u>PARKING</u>

Sufficient space for parking for Site personnel will be established by the Contractor at suitable on-Site locations. In the event an established parking area becomes encumbered by specific Site-related operations, temporary alternate space shall be provided.

6.0 INSTITUTIONAL CONTROLS AND MONITORING

Security measures to restrict access into source areas for the duration of vault construction and filling activities will include Site perimeter fencing with locking gates to completely enclose the work area and the ongoing presence of plant security (present 24-hours per day).

Following the completion of excavation and vault construction and filling, the need for permanent institutional controls and deed restrictions to restrict access, land use, and development will be evaluated. Where institutional controls are no longer required, the temporary fencing will be removed.

7.0 **PROJECT SCHEDULE**

A detailed project schedule identifying the proposed phasing and duration of excavation and material placement activities will be developed and submitted by the Contractor. The overall implementation of the vault construction, prescribed \geq 50 mg/kg PCB soil material excavation, filling of the vault, and backfilling with prescribed <50 mg/kg PCB soils is anticipated to require approximately 5 months to complete.

Following mobilization, the contractor will commence excavation of \geq 50 mg/kg and <50 mg/kg PCB material from excavation area 2 (Drawing C-05). After removal of the initial >50 mg/kg PCB material for placement in the vault, the adjacent <50 mg/kg PCB material (approximately 10,000 c.y.) will be staged in an existing grading area or within a separately approved staging pad (This temporary staging of <50 mg/kg PCB materials will only be required until enough space becomes available in the >50 mg/kgPCB material excavations to allow <50 mg/kg PCB material removed from adjacent excavations to be placed directly as backfill). Once the prescribed >50 mg/kg PCB area is exposed beneath the previously excavated <50 mg/kg PCB material, the >50 mg/kgPCB material will be excavated and placed directly in the vault. Upon completion of removal of the >50 mg/kg PCB material, the staged <50 mg/kg material will be replaced and compacted in the excavation. (If the excavated <50 mg/kg PCB material is placed in an adjacent grading area (instead of the temporary staging area), other <50 mg/kg PCB material from the off-Site RA activities may be used to backfill the excavation). The excavation of material in excavation area 2 has been estimated to take 23 days. Removal of prescribed material in excavation area 1 will be completed in a similar fashion once the excavation of <50 mg/kg material in excavation area 2 is completed, although a temporary stockpile will not be required as the excavated material from excavation area 1 will be used to fill up excavation area 2. The excavation of material in excavation area 1 will take approximately 30 days. The total time for completion of the excavation areas is estimated as 40 days.

Final cap placement over the vault is weather dependent and may be completed in 2006, should suitable weather conditions not exist at the completion of filling.

8.0 <u>COMMUNITY RELATIONS</u>

Community relations activities and community participation in the review of the East Plant Area IM, including the prescribed \geq 50 mg/kg PCB soil removal includes:

- project fact sheets specific to the East Plant Area IM activities, including the vault design and construction and soil removal activities;
- project web site;
- GM organized community meetings for neighbors and the general public; and
- Community Liaison Panel (CLP) involvement.

9.0 <u>REFERENCES</u>

- Conestoga-Rovers & Associates, Inc., Pre-Final (95%) Design East Plant Area Vault (Draft for Review), June 2005.
- Conestoga-Rovers & Associates, Inc., Interim Measures Alternatives Review Report, East Plant Area, April 2005.
- Conestoga-Rovers & Associates, Inc., Ambient Air Quality Monitoring Plan (AAQMP), May 2004.
- Conestoga-Rovers & Associates, Inc., Consolidated Health and Safety Plan (HASP), November 2004.
- Conestoga-Rovers & Associates, Inc., Quality Assurance Project Plan (QAPP) Rev. 1.0, August 13, 2003.
- Conestoga-Rovers & Associates, Inc., Quality Assurance Project Plan (QAPP) Addendum No. 1 (Rev. 1.1), December 21, 2004.
- Conestoga-Rovers & Associates, Inc., Technical Memorandum, RCRA Facility Investigation (RFI), Soil; Sediment; Surface Water; Wipe Sampling (Soil TM), April 14, 2004.
- Conestoga-Rovers & Associates, Inc., RCRA Facility Investigation Work Plan (RFI Work Plan), October 29, 2001.
- Etzel, J.E., 1982, Geological History of Bedford Plant Site Area, unpublished report provided to General Motors.
- Fenelon, J.M., K.E. Bobay, et. al, 1994, Hydrogeologic Atlas of Aquifers in Indiana, U.S. Geological Survey, Water Resources Investigations Report 92-4142.
- Gray, H.H., 1974, Glacial Lake Sediments in Salt Creek Valley near Bedford, Indiana, Department of Natural Resources, Geological Survey Occasional Paper 1,
- Indiana Geological Survey, 2001, website (http://www.adamite.igs.indiana.edu/ index.htm, 2001).
- Melhorn, W.N., and N.M. Smith, 1959, The Mt. Carmel Fault and Related Structural Features in South-Central Indiana, Indiana Department of Conservation, Geological Survey, Report of Progress No. 16.
- Powell, R.L., 2001, Personal Communication.
- Powell, R.L., 1976, Some Geomorphic and Hydrologic Implications of Jointing in Carbonate Strata of Mississippian Age in South-Central Indiana, Ph.D. thesis, Purdue University.
- U.S. Department of Agriculture, 1985, Soil Survey of Lawrence County, Indiana, Soil Conservation Service.

U.S. EPA, 1989d, Requirements for hazardous waste landfill design, construction and closure. EPA/625/4-89/022. U.S. Environmental Protection Agency, Washington, DC.



13968-00(162)GN-WA022 APR 04/2006





13968-00(162)GN-WA023 MAY 26/2008



figure 3.1

GLACIAL FEATURES OF SOUTH-CENTRAL INDIANA OVER 50 mg/kg PCB SOIL REMOVAL GM POWERTRAIN BEDFORD FACILITY *Bedford, Indiana*

SOURCE: GRAY, 1974



BEDROCK STRUCTURAL FEATURES OF INDIANA OVER 50 mg/kg PCB SOIL REMOVAL GM POWERTRAIN BEDFORD FACILITY Bedford, Indiana

13968-00(162)GN-WA026 APR 04/2006

SOURCE: RUPP, 1991



		00	ROCK UNIT						OG	ROCK UNIT						
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-	Ŧ				Beech	Creek Ls.		<u> </u>		0 to				SW. IND.	+	
s	0	100 to 260			Reelsville Ls. Sample Beaver Bend Ls. Bethel		West Baden	R 0	ANADIAN	0 to 2000			Shako	pee Dol.	Prairie du Chien	x Supergr.
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figure 3.4

GENERALIZED STRATIGRAPHIC COLUMN FOR PALEOZOIC ROCKS IN INDIANA OVER 50 mg/kg PCB SOIL REMOVAL GM POWERTRAIN BEDFORD FACILITY Bedford, Indiana

SOURCE: HILL, UNDATED


13968-00(162)GN-WA038 MAY 26/2006



¹³⁹⁶⁸⁻⁰⁰⁽¹⁶²⁾GN-WA030 APR 04/2006



figure 3.6

EAST PLANT AREA AND AOI LOCATIONS OVER 50 mg/kg PCB SOIL REMOVAL GM POWERTRAIN BEDFORD FACILITY *Bedford, Indiana*



13968-00(162)GN-WA031 APR 04/2006



1 '''	- Revision	Date	The date			4						
				THIS BAR MEASURES 1" ON ORIGIN	AL. ADJUST SCALE ACCORDINGLY.	GM POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA	CONESTOGA-ROVERS & ASSOCIATES					
				Approved		,,						
							Source Reference:					
]		OVER 50 mg/kg PCB SOIL REMOVAL	BASE MAP COMPLETED BY AIR-LAND SURVEYS. FLINT, M. APRIL 2001.					
]			-					
				1			Project Manager	Reviewed By:	Date:			
]		BEDROCK	J.M.	D.C.	МА	1 2006		
						TOPOODADUN	Carla	Denie et M.O.	Report Nº.	Drawles N.S.		
						I I I UPUGRAPHY	AS SHOWN	10000 00	100	r oo		
]			Jie Showin	13968-00	162	figure 3.8		

13968-00(162)GN-WA032 MAY 26/200



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				THIS BAR MEASURES 1" ON ORIGIN	AL. ADJUST SCALE ACCORDINGLY.	GM POWERTRAIN BEDFORD FACILITY						
						BEDFORD, INDIANA						
				Approved		,						
-						OVER 50 mg/kg PCB SOIL REMOVAL	Source Reference: BASE MAP COMPLETED BY AIR LAND SURVEYS, FLINT, M, APRIL 2001.					
				1								
]			Project Manager	Reviewed By:	Date:			
						APPROXIMATE BEDROCK	J.M.	D.C.	MA	Y 2006		
				1		FORMATION CONTACT LOCATIONS	Scale:	Project N ²	Report Nº:	Drawing N º:		
							AS SHOWN	13968-00	162	figure 3.9		

13968-00(162)GN-WA033 MAY 26/200



	LUGLIND
610	EXISTING GROUND SURFACE ELEVATION CONTOURS (feet AMSL)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	EXISTING VEGETATION
	EXISTING BUILDINGS
<u> </u>	FENCE LINE
	RAILROAD TRACKS
====	DIRT ROADS
	ROADS / PAVED AREAS
	APPROXIMATE SURFACE WATER LOCATION
	APPROXIMATE GM PROPERTY BOUNDARY
	APPROXIMATE PROPERTY BOUNDARY
	AOI BOUNDARY
	EAST PLANT AREA
670	WATER TABLE ELEVATION CONTOUR (# AMSL) NOVEMBER 22, 2004

#### AOI SUMMARY

 
 AOI ID
 Description

 AOI 3
 PCB Storage Areas

 AOI 4
 Former North Disposal Area

 AOI 5
 Former Stadge Disposal and Fire Training Area

 AOI 6
 Former Nudge Disposal and Fire Training Area

 AOI 7
 Former Nudge Disposal and Fire Training Area

 AOI 7
 Former Studt Bagcons and Outfall 001

 AOI 10
 Existing Stormwater Lagoon and Outfall 002

 AOI 10
 Existing Stormwater Lagoon and Outfall 003

 AOI 11
 Aboveground Storage Tanks

 AOI 23
 Area Affected by the 1996 Wastewater Treatment Filter Cake Release

NOTE: PROPERTY BOUNDARY LOCATIONS APPROXIMATED FROM THE LAWRENCE COUNTY SURVEY PLATS, LOCATIONS MAY NOT ACCURATELY REPRESENT THE TRUE BOUNDARIES

NΩ	Revision	Date	Initial	SCALE VEF	RIFICATION							
				THIS BAR MEASURES 1" ON ORIGIN	IAL. ADJUST SCALE ACCORDINGLY.	GM POWERTRAIN BEDFORD FACILITY						
H				Approved		BEDI OND, INDIANA						
						OVER 50 mg/kg PCB SOIL REMOVAL	BASE MAP COMP	L 2001.				
						SHALLOW GROUNDWATER TABLE	Project Manager J.M.	Reviewed By: D.C.	Date: MA	Y 2006		
						CONTOURS AND FLOW DIRECTIONS	Scale: AS SHOWN	Project N ² : 13968-00	Report Nº: 162	^{Drawing №} figure 3.10		

13968-00(162)GN-WA034 MAY 26/2006





#### LEGEND EXISTING GROUND SURFACE ELEVATION CONTOURS (feet AMSL) EXISTING VEGETATION

610

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EXISTING BUILDINGS FENCE LINE

RAILRÓAD TRACKS

DIRT ROADS

ROADS / PAVED AREAS

APPROXIMATE SURFACE WATER

APPROXIMATE GM PROPERTY BOUNDARY

APPROXIMATE PROPERTY BOUNDARY

AOI BOUNDARY EAST PLANT AREA

REMOVAL ACTION EXCAVATION AREA NOT INCLUDED IN EAST PLANT AREA IM

ABANDONED COREHOLE LOCATION

COREHOLE AND BOREHOLE LOCATION

#### AOI SUMMARY

 AOI D. Description_

 AOI 3
 PCB Storage Areas

 AOI 4
 Former North Disposal Area

 AOI 5
 Former Stadge Disposal and Fire Training Area

 AOI 6
 Former North Lagoon and Outfall 001

 AOI 7
 Former Studge Disposal and Clifel 001

 AOI 8
 Former South Lagoon and Outfall 002

 AOI 10
 Existing Stormwater Lagoon and Outfall 003

 AOI 11
 Aboveground Storage Tanks

 AOI 23
 Area Affected by the 1996 Wastewater Treatment Filter Cake Release

NOTE: PROPERTY BOUNDARY LOCATIONS APPROXIMATED FROM THE LAWRENCE COUNTY SURVEY PLATS, LOCATIONS MAY NOT ACCURATELY REPRESENT THE TRUE BOUNDARIES

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				THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.	GM POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA	CONESTOGA-ROVERS & ASSOCIATES					
_				Approved	,	Source Beference					
					OVER 50 mg/kg PCB SOIL REMOVAL	BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, M, APRIL 2001.					
						Project Manager	Reviewed By:	Date:			
					EAST PLANT AREA COREHOLE AND	J.M.	J.S.	MA' Report NS-	Y 2006		
					BOREHOLE LOCATIONS	AS SHOWN	13968-00	162	figure 4.1		

13968-00(162)GN-WA005 MAY 26/2006





#### AOI SUMMARY

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 AOI ID
 Description

 AOI 3
 PCB Storage Areas

 AOI 4
 Former North Disposal Area

 AOI 5
 Former East Sand Olisposal Area

 AOI 6
 Former Sutdige Disposal and Fire Training Area

 AOI 7
 Former Nudge Disposal and Fire Training Area

 AOI 7
 Former Sutdige Disposal and Cutfal 001

 AOI 8
 Former South Lagoons and Outfal 002

 AOI 10
 Existing Stormwater Lagoon and Outfal 003

 AOI 11
 Aborground Storage Tanks

 AOI 23
 Area Affected by the 1996 Wastewater Treatment

 Filter Cake Release
 Filter Cake Release

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

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						BEDFORD, INDIANA						
				Approved								
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				1		OVER 50 mg/kg 1 OB OOIE NEMOVAE	BASE MAP COMPLETED BY AIK-LAND SURVEYS, FLINT, MI, APRIL 2001					
				]			Project Manager	Reviewed By	Date:			
				4		REVISIONS TO THE ≥ 50 mg/kg	J.M.	J.S.	МА	Y 2006		
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				1			AS SHOWN	13968-00	162	figure 4.2		

13968-00(162)GN-WA003 MAY 26/2006





#### EXISTING GROUND SURFACE ELEVATION CONTOURS (feet AMSL) EXISTING VEGETATION EXISTING BUILDINGS

FENCE LINE RAILRÓAD TRACKS -----

610

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==== DIRT ROADS

ROADS / PAVED AREAS

APPROXIMATE SURFACE WATER

APPROXIMATE GM PROPERTY BOUNDARY

APPROXIMATE PROPERTY BOUNDARY

AOI BOUNDARY EAST PLANT AREA

APPROXIMATE AREAS OF ≥ 50 mg/kg PCBs TO BE EXCAVATED

# AOI SUMMARY

 AOI D. Description_

 AOI 3
 PCB Storage Areas

 AOI 4
 Former North Disposal Area

 AOI 5
 Former Stadge Disposal Area

 AOI 6
 Former Studge Disposal Area

 AOI 7
 Former North Lagoon and Outfall 001

 AOI 8
 Former South Lagoon and Outfall 002

 AOI 10
 Existing Stormwater Lagoon and Outfall 003

 AOI 11
 Aboveground Storage Tanks

 AOI 23
 Area Affected by the 1996 Wastewater Treatment Filter Cake Release

NOTE: PROPERTY BOUNDARY LOCATIONS APPROXIMATED FROM THE LAWRENCE COUNTY SURVEY PLATS, LOCATIONS MAY NOT ACCURATELY REPRESENT THE TRUE BOUNDARIES

N⊇	Revision	Date	Initial	SCALE VER	RIFICATION							
				THIS BAR MEASURES 1" ON ORIGIN	VAL. ADJUST SCALE ACCORDINGLY.			CONESTOGA-ROVERS & ASSOCIATES				
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				-		OVER 50 mg/kg PCB SOIL REMOVAL	BASE MAP COMPL	BASE MAP COMPLETED BY AIR-LAND SURVEYS. FLINT, ML APRIL 2001.				
							Project Manager	Reviewed By	D-1-1			
							J.M.	J.S.	Date.	¥ 2006		
							Caster	Designed by 9-	Report NIS-	Drawing N 9		
						PCB DELINEATION	AS SHOWN	13968-00	162	figure 4.3		
								100000	102	inguie 4.5		

13968-00(162)GN-WA036 MAY 26/2006





APPROXIMATE PROPERTY BOUNDARY APPROXIMATE AREAS OF ≥ 50 mg/kg PCBs TO BE EXCAVATED EXISTING AIR MONITORING STATION LOCATION PROPOSED ADDITIONAL AIR MONITORING STATION LOCATION

#### AOI SUMMARY

AOI SU	JMMARY
AOLID	Description
AOI 3	PCB Storage Areas
AOI 4	Former North Disposal Area

- AO13
   PCB Storage Areas

   AO14
   Former North Disposal Area

   AO15
   Former East Sand Disposal Area

   AO16
   Former Studge Disposal and Fire Training Area

   AO17
   Former North Lagoon and Outfall 001

   AO18
   Former South Lagoon and Outfall 002

   AO110
   Existing Stormwater Lagoon and Outfall 003

   AO111
   Abovergound Storage Tanks

   AO115
   Former Equipment Storage Area

   AO123
   Area Affected by the 1996 Wastewater Treatment

   Filter Cake Release
   Filter Cake Release
   Filter Cake Release

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

2. AIR MONITORING STATIONS WILL BE RELOCATED AS NECESSARY TO ENSURE STATIONS SURROUND THE ACTIVE WORK AREAS

NՉ	Revision	Date	Initial	SCALE VERIFICA	CATION							
				THIS BAR MEASURES 1" ON ORIGINAL. AD	ADJUST SCALE ACCORDINGLY.	GM POWERTRAIN BEDFORD FACILITY	CONESTOGA-ROVERS & ASSOCIATES					
				Approved		BEDFORD, INDIANA						
						OVER 50 mg/kg PCB SOIL REMOVAL	Source Reference: BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MLAPRIL 2001.					
							Project Manager	Reviewed By	Date:			
			-			REVISED AIR MONITORING	J.M.	J.S.	MA	Y 2006		
						STATION LOCATIONS	Scale: AS SHOWN	Project N º: 13968-00	Report Nº: 162	Drawing N ° ficture 4.4		
								10000 00	102	liguro 4.4		

13968-00(162)GN-WA037 MAY 25/2006

May 26, 2006 Page 1 of 100

#### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P003 P200(GM) 003-148 S-04-011502-LM-148 1/15/2002 (0-0.33) ft	P003 P200(GM) 003-148 S-04-011502-LM-148A 1/15/2002 (0-0.33) ft Duplicate	GMPT GMPT_west 604 S-00-012102-LM-604 1/21/2002 (0-0.33) ft	GMPT GMPT_west 605 S-00-012102-LM-605 1/21/2002 (0-0.33) ft	GMPT GMPT_west 608 S-00-012102-LM-608 1/21/2002 (0-0.33) ft	GMPT GMPT_west 609 S-00-012102-LM-609 1/21/2002 (0-0.33) ft	GMPT GMPT_west 612 S-00-012102-LM-612 1/21/2002 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (4200) U	ND (8300) U	ND (49) U	ND (430) UJ	ND (1100) U	ND (99) U	ND (53) UJ
Aroclor-1221 (PCB-1221)	µg∕kg	ND (4200) U	ND (8300) U	ND (49) U	ND (430) UJ	ND (1100) U	ND (99) U	ND (53) UJ
Aroclor-1232 (PCB-1232)	µg∕kg	ND (4200) U	ND (8300) U	ND (49) U	ND (430) UJ	ND (1100) U	ND (99) U	ND (53) UJ
Aroclor-1242 (PCB-1242)	µg∕kg	ND (4200) U	ND (8300) U	ND (49) U	ND (430) UJ	ND (1100) U	ND (99) U	200 J
Aroclor-1248 (PCB-1248)	µg∕kg	69000	150000	310	3700 J	5200	360	ND (53) UJ
Aroclor-1254 (PCB-1254)	µg∕kg	ND (4200) U	ND (8300) U	ND (49) U	ND (430) UJ	ND (1100) U	ND (99) U	ND (53) UJ
Aroclor-1260 (PCB-1260)	µg∕kg_	ND (4200) U	7700 J	160	610 J	2100	130	110 J
Total PCBs	µg∕kg	69000	157700	470	4310	7300	490	310

#### Notes:

U - Not present at or above the associated value.

J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as estimate

May 26, 2006 Page 2 of 100

#### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT GMPT_west 612 S-00-012102-LM-612A 1/21/2002 (0-0.33) ft Duplicate	GMPT GMPT_west 615 S-00-012102-LM-615 1/21/2002 (0-0.33) ft	GMPT GMPT_west 616 S-00-012102-LM-616 1/21/2002 (0-0.33) ft	GMPT GMPT_west 616 S-00-012102-LM-616A 1/21/2002 (0.33-2) ft	GMPT GMPT_west 619 S-00-012102-LM-619 1/21/2002 (0-0.33) ft	GMPT GMPT_west 619 S-00-012102-LM-619A 1/21/2002 (0.33-2) ft	GMPT GMPT_west 620 S-00-012102-LM-620A 1/21/2002 (0.33-2) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242)	µg/kg µg/kg µg/kg µg/kg	ND (54) U ND (54) U ND (54) U ND (54) U	ND (47) UJ ND (47) UJ ND (47) UJ ND (47) UJ	ND (49) UJ ND (49) UJ ND (49) UJ 110 J	ND (44) U ND (44) U ND (44) U ND (44) U ND (44) U	ND (47) U ND (47) U ND (47) U ND (47) U	ND (42) U ND (42) U ND (42) U ND (42) U	ND (44) U ND (44) U ND (44) U ND (44) U
Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260) Total PCBs	µg/kg µg/kg µg/kg µg/kg	79 ND (54) U <u>41 J</u> 120	ND (47) UJ 41 J ND (47) UJ 41	ND (49) UJ ND (49) UJ <u>41 J</u> 151	ND (44) U ND (44) U <u>14 J</u> 14	ND (47) U 100 ND (47) U 100	ND (42) U ND (42) U ND (42) U 0	ND (44) U 190 ND (44) U 190

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 3 of 100

#### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT GMPT_west 620 S-00-LM620 1/21/2002 (0-0.33) ft	GMPT GMPT_west 622 S-00-012102-LM-622 1/21/2002 (0-0.33) ft	GMPT GMPT_west 623 S-00-012102-LM-623 1/21/2002 (0-0.33) ft	GMPT GMPT_west 624 S-00-012102-LM-624 1/21/2002 (0-0.33) ft	GMPT GMPT_west 627 S-00-012102-LM-627 1/21/2002 (0-0.33) ft	GMPT GMPT_west 628 S-00-012102-LM-628 1/21/2002 (0-0.33) ft	GMPT GMPT_west 629 S-00-012102-LM-629 1/21/2002 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (45) U	ND (930) U	ND (48) U	ND (51) U	ND (4400) U	ND (48) U	ND (48) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (45) U	ND (930) U	ND (48) U	ND (51) U	ND (4400) U	ND (48) U	ND (48) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (45) U	ND (930) U	ND (48) U	ND (51) U	ND (4400) U	ND (48) U	ND (48) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (45) U	ND (930) U	ND (48) U	ND (51) U	ND (4400) U	ND (48) U	ND (48) U
Aroclor-1248 (PCB-1248)	µg∕kg	150	11000	29 J	34 J	38000	35 J	63
Aroclor-1254 (PCB-1254)	µg∕kg	ND (45) U	ND (930) U	ND (48) U	ND (51) U	ND (4400) U	ND (48) U	ND (48) U
Aroclor-1260 (PCB-1260)	µg∕kg	150	2800	32 J	29 J	9400	38 J	58
Total PCBs	µg∕kg	300	13800	61	63	47400	73	121

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 4 of 100

#### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P216(GM) P216_west 632 S-00-012102-LM-632 1/21/2002 (0-0.33) ft	P216(GM) P216_west 633 S-00-012102-LM-633 1/21/2002 (0-0.33) ft	P216(GM) P216_west 634 S-00-012102-LM-634 1/21/2002 (0-0.33) ft	P216(GM) P216_west 634 S-00-012102-LM-634A 1/21/2002 (0.33-2) ft	P216(GM) P216_west 635 S-00-012102-LM-635 1/21/2002 (0-0.33) ft	P216(GM) P216_west 635 S-00-012102-LM-635A 1/21/2002 (0.33-2) ft	P216(GM) P216_west 638 S-00-012102-LM-638 1/21/2002 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (4400) U	ND (46) U	ND (6200) U	ND (8900) U	ND (1900) U	ND (3800) UJ	ND (44) UJ
Aroclor-1221 (PCB-1221)	µg∕kg	ND (4400) U	ND (46) U	ND (6200) U	ND (8900) U	ND (1900) U	ND (3800) UJ	ND (44) UJ
Aroclor-1232 (PCB-1232)	µg∕kg	ND (4400) U	ND (46) U	ND (6200) U	ND (8900) U	ND (1900) U	ND (3800) UJ	ND (44) UJ
Aroclor-1242 (PCB-1242)	µg∕kg	ND (4400) U	ND (46) U	ND (6200) U	ND (8900) U	ND (1900) U	ND (3800) UJ	51 J
Aroclor-1248 (PCB-1248)	µg∕kg	49000	9.7 J	120000	180000	31000	42000 J	ND (44) UJ
Aroclor-1254 (PCB-1254)	µg∕kg	ND (4400) U	ND (46) U	ND (6200) U	ND (8900) U	ND (1900) U	ND (3800) UJ	ND (44) UJ
Aroclor-1260 (PCB-1260)	µg∕kg	8700	ND (46) U	21000	43000	7100	14000 J	20 J
Total PCBs	µg∕kg	57700	9.7	141000	223000	38100	56000	71

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 5 of 100

#### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P216(GM) P216_west 638 S-00-012102-LM-638A 1/21/2002 (0.33-2) ft	P201(GM) 201(GM)-1089 S-00-022502-JW-1089 2/25/2002 (0-0.33) ft	P003 P200(GM) 003/200-1094 S-00-022502-GS-1094 2/25/2002 (0-0.33) ft	P003 P200(GM) 003/200-1095 S-00-022502-CH-1095 2/25/2002 (0-0.33) ft	P216(GM) P216_west 1121 S-00-022502-GS-1121 2/25/2002 (0-0.33) ft	P215(GM) P415 P215_area 215-1242 S-00-030702-MD-1242 3/7/2002 (0-0.33) ft	P215(GM) P415 P215_area 215-1247 S-00-030702-MD-1247 3/7/2002 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (43) U	ND (110) U	ND (44) U	ND (230) U	ND (47) U	ND (48) U	ND (46) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (43) U	ND (110) U	ND (44) U	ND (230) U	ND (47) U	ND (48) U	ND (46) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (43) U	ND (110) U	ND (44) U	ND (230) U	ND (47) U	ND (48) U	ND (46) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (43) U	ND (110) U	ND (44) U	ND (230) U	ND (47) U	ND (48) U	ND (46) U
Aroclor-1248 (PCB-1248)	µg∕kg	ND (43) U	1600	16 J	960	19 J	ND (48) U	ND (46) U
Aroclor-1254 (PCB-1254)	µg∕kg	ND (43) U	ND (110) U	ND (44) U	ND (230) U	ND (47) U	ND (48) U	ND (46) U
Aroclor-1260 (PCB-1260)	µg∕kg	ND (43) U	320	ND (44) U	99 J	23 J	ND (48) U	ND (46) U
Total PCBs	µg∕kg	0	1920	16	1059	42	0	0

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 6 of 100

#### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT GMPT_south 1267 S-00-030802-JW-1267 3/8/2002 (0-0.33) ft	GMPT GMPT_south 1267 S-00-030802-JW-1267A 3/8/2002 (0-0.33) ft Duplicate	GMPT GMPT_south 1270 S-00-030802-JW-1270 3/8/2002 (0-0.33) ft	GMPT GMPT_south 1276 S-00-030802-JW-1276 3/8/2002 (0-0.33) ft	P215(GM) P215_area 215(GM)-1277 S-00-030802-JW-1277 3/8/2002 (0-0.33) ft	P215(GM) P215_area 215(GM)-1277 S-00-030802-JW-1277A 3/8/2002 (0-0.33) ft Duplicate	GMPT GMPT_south 1280 S-00-030802-JW-1280 3/8/2002 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (220) U	ND (88) U	ND (83) U	ND (420) U	ND (23000) U	ND (24000) U	ND (49) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (220) U	ND (88) U	ND (83) U	ND (420) U	ND (23000) U	ND (24000) U	ND (49) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (220) U	ND (88) U	ND (83) U	ND (420) U	ND (23000) U	ND (24000) U	ND (49) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (220) U	ND (88) U	ND (83) U	ND (420) U	ND (23000) UJ	ND (24000) UJ	ND (49) U
Aroclor-1248 (PCB-1248)	µg∕kg	1700	830	810	3000	92000	210000	43 J
Aroclor-1254 (PCB-1254)	µg∕kg	ND (220) U	ND (88) U	ND (83) U	ND (420) U	ND (23000) U	ND (24000) U	ND (49) U
Aroclor-1260 (PCB-1260)	µg∕kg_	330	230	70 J	530	11000 J	21000 J	18 J
Total PCBs	µg∕kg	2030	1060	880	3530	103000	231000	61

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 7 of 100

#### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P215(GM) P215_area 215-1285 S-00-031102-JW-1285 3/11/2002 (0-0.33) ft	P215(GM) P215_area 215-1285 S-00-031102-JW-1285A 3/11/2002 (0-0.33) ft Duplicate	P215(GM) P215_area 215-1285 S-00-031102-JW-1285B 3/11/2002 (0.33-2) ft	P215(GM) P215_area 215-1286 S-00-031102-JW-1286 3/11/2002 (0-0.33) ft	P215(GM) P215_area 215-1286 S-00-031102-JW-1286A 3/11/2002 (0.33-2) ft	P215(GM) P215_area 215-1289 S-00-031102-JW-1289 3/11/2002 (0-0.33) ft	P215(GM) P215_area 215(GM)-1290 S-00-031102-JW-1290 3/11/2002 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (230) U	ND (220) U	ND (4500) U	ND (500) U	ND (43) U	ND (470) U	ND (90) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (230) U	ND (220) U	ND (4500) U	ND (500) U	ND (43) U	ND (470) U	ND (90) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (230) U	ND (220) U	ND (4500) U	ND (500) U	ND (43) U	ND (470) U	ND (90) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (230) U	ND (220) U	ND (4500) U	ND (500) U	49	ND (470) U	ND (90) U
Aroclor-1248 (PCB-1248)	µg∕kg	860	1400	5000	7000	ND (43) U	5700	860
Aroclor-1254 (PCB-1254)	µg∕kg	ND (230) U	ND (220) U	ND (4500) U	ND (500) U	ND (43) U	ND (470) U	ND (90) U
Aroclor-1260 (PCB-1260)	µg∕kg_	ND (230) U	ND (220) U	ND (4500) U	ND (500) U	ND (43) U	510	86 J
Total PCBs	µg∕kg	860	1400	5000	7000	49	6210	946

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 8 of 100

#### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P215(GM) P215_area 215(GM)-1403 S-00-031102-GS-1403 3/11/2002 (0-0.33) ft	P215(GM) P215_area 215(GM)-1403 S-00-031102-JW-1403A 3/11/2002 (0-0.33) ft Duplicate	P216(GM) P216_west 1407 S-00-031102-GS-1407 3/11/2002 (0-0.33) ft	P401 GMPT GMPT_west 401-1505 S-00-032602-GS-1505 3/26/2002 (0-0.33) ft	P401 GMPT GMPT_west 401-1515 S-00-032602-GS-1515 3/26/2002 (0-0.33) ft	P401 GMPT GMPT_west 401-1516 S-00-032602-GS-1516 3/26/2002 (0-0.33) ft	P401 GMPT GMPT_west 401-1517 S-00-032602-GS-1517 3/26/2002 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (50) U	ND (45) U	ND (48) U	ND (48) U	ND (460) U	ND (69) U	ND (46) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (50) U	ND (45) U	ND (48) U	ND (48) U	ND (460) U	ND (69) U	ND (46) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (50) U	ND (45) U	ND (48) U	ND (48) U	ND (460) U	ND (69) U	ND (46) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (50) U	ND (45) U	ND (48) U	ND (48) U	ND (460) U	ND (69) U	ND (46) U
Aroclor-1248 (PCB-1248)	µg∕kg	ND (50) U	ND (45) U	ND (48) U	ND (48) U	3000	770	130
Aroclor-1254 (PCB-1254)	µg∕kg	130	110	ND (48) U	ND (48) U	ND (460) U	ND (69) U	ND (46) U
Aroclor-1260 (PCB-1260)	µg∕kg_	ND (50) U	ND (45) U	ND (48) U	ND (48) U	820	180	47
Total PCBs	µg∕kg	130	110	0	0	3820	950	177

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 9 of 100

#### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P215(GM) P416 P215_area 215(GM)/416-1659 S-00-041002-GS-1659 4/10/2002 (0-0.33) ft	GMPT GMPT_west 1928 S-061002-GS-1928 6/10/2002 (0-0.33) ft	GMPT GMPT_west 1928 S-061002-GS-1928A 6/10/2002 (0-0.33) ft Duplicate	GMPT GMPT_west 1929 S-061002-JW-1929 6/10/2002 (0-0.33) ft	GMPT GMPT_west 1940 S-061002-JW-1940 6/10/2002 (0-0.33) ft	P216(GM) P216_west 1977 S-072202-JW-1977 7/22/2002 (0-0.33) ft	P216(GM) P216_west 1979 S-072202-JW-1979 7/22/2002 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (48) U	ND (83) U	ND (82) U	ND (4300) U	ND (500) U	R	ND (2000) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (48) U	ND (83) U	ND (82) U	ND (4300) U	ND (500) U	R	ND (2000) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (48) U	ND (83) U	ND (82) U	ND (4300) U	ND (500) U	R	ND (2000) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (48) U	ND (83) U	ND (82) U	ND (4300) U	ND (500) U	R	ND (2000) U
Aroclor-1248 (PCB-1248)	µg∕kg	ND (48) U	360	420	27000	1700	R	14000
Aroclor-1254 (PCB-1254)	µg∕kg	ND (48) U	ND (83) U	ND (82) U	ND (4300) U	ND (500) U	67 J	ND (2000) U
Aroclor-1260 (PCB-1260)	µg∕kg	ND (48) U	82 J	110	2800 J	270 J	R	ND (2000) U
Total PCBs	µg∕kg	0	442	530	29800	1970	67	14000

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 10 of 100

#### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P216(GM) P216_west 1980 S-072202-JW-1980 7/22/2002 (0-0.33) ft	P216(GM) P216_west 1982 S-072202-JW-1982 7/22/2002 (0-0.33) ft	GMPT GMPT_south 1983 S-072202-JW-1983 7/22/2002 (0-0.33) ft	P216(GM) GMPT_west 2070 S-073102-BT-2070 7/31/2002 (0-0.33) ft	P216(GM) GMPT_west 2070 S-073102-BT-2070A 7/31/2002 (0-0.33) ft Duplicate	P216(GM) GMPT_west 2070 S-073102-BT-2070B 7/31/2002 (0.33-1) ft	P216(GM) GMPT_west 2070 S-073102-BT-2070C 7/31/2002 (1-1.5) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (35) U	ND (43) U	ND (4300) U	ND (82) U	ND (210) U	ND (40) U	ND (43) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (35) U	ND (43) U	ND (4300) U	ND (82) U	ND (210) U	ND (40) U	ND (43) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (35) U	ND (43) U	ND (4300) U	ND (82) U	ND (210) U	ND (40) U	ND (43) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (35) U	ND (43) U	ND (4300) U	ND (82) U	ND (210) U	ND (40) U	ND (43) U
Aroclor-1248 (PCB-1248)	µg∕kg	ND (35) U	ND (43) U	35000	320	540	23 J	71
Aroclor-1254 (PCB-1254)	µg∕kg	220	ND (43) U	ND (4300) U	ND (82) U	ND (210) U	ND (40) U	ND (43) U
Aroclor-1260 (PCB-1260)	µg∕kg_	ND (35) U	ND (43) U	ND (4300) U	180	250	11 J	27 J
Total PCBs	µg∕kg	220	0	35000	500	790	34	98

#### Notes:

U - Not present at or above the as:

J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 11 of 100

### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P216(GM) GMPT_west 2070 S-073102-BT-2070D 7/31/2002 (1.5-2) ft	GMPT GMPT_south 2206 S-071703-JM-2206 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2207 S-071703-JM-2207 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2208 S-071703-JM-2208 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2208 S-071703-JM-2208A 7/17/2003 (0-0.33) ft Duplicate	GMPT GMPT_south 2209 S-071703-JM-2209 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2210 S-071703-JM-2210 7/17/2003 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (42) U	ND (47) U	ND (220) U	ND (8900) U	ND (4400) U	ND (49) U	ND (45) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (42) U	ND (47) U	ND (220) U	ND (8900) U	ND (4400) U	ND (49) U	ND (45) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (42) U	ND (47) U	ND (220) U	ND (8900) U	ND (4400) U	ND (49) U	ND (45) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (42) U	ND (47) U	ND (220) U	ND (8900) U	ND (4400) U	ND (49) U	ND (45) U
Aroclor-1248 (PCB-1248)	µg∕kg	ND (42) U	33 J	3100	47000	67000	110	170
Aroclor-1254 (PCB-1254)	µg∕kg	ND (42) U	ND (47) U	ND (220) U	ND (8900) U	ND (4400) U	ND (49) U	ND (45) U
Aroclor-1260 (PCB-1260)	µg∕kg_	ND (42) U	ND (47) U	ND (220) U	ND (8900) U	ND (4400) U	32 J	25 J
Total PCBs	µg∕kg	0	33	3100	47000	67000	142	195

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 12 of 100

### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT GMPT_south 2211 S-071703-JM-2211 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2212 S-071703-JM-2212 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2213 S-071703-JM-2213 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2214 S-071703-JM-2214 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2215 S-072103-JM-2215 7/21/2003 (0-0.33) ft	GMPT GMPT_south 2215 S-072103-JM-2215A 7/21/2003 (1-1.33) ft	GMPT GMPT_south 2215 S-072103-JM-2215B 7/21/2003 (1-1.33) ft Duplicate
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (44) U	ND (8700) U	ND (450) U	ND (870) U	ND (4700) U	ND (430) U	ND (420) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (44) U	ND (8700) U	ND (450) U	ND (870) U	ND (4700) U	ND (430) U	ND (420) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (44) U	ND (8700) U	ND (450) U	ND (870) U	ND (4700) U	ND (430) U	ND (420) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (44) U	ND (8700) U	ND (450) U	ND (870) U	ND (4700) U	ND (430) U	ND (420) U
Aroclor-1248 (PCB-1248)	µg∕kg	190	75000	ND (450) U	2200	36000	2200	2000
Aroclor-1254 (PCB-1254)	µg∕kg	ND (44) U	ND (8700) U	ND (450) U	ND (870) U	ND (4700) U	ND (430) U	ND (420) U
Aroclor-1260 (PCB-1260)	µg∕kg_	49	ND (8700) U	ND (450) U	ND (870) U	ND (4700) U	ND (430) U	ND (420) U
Total PCBs	µg∕kg	239	75000	0	2200	36000	2200	2000

#### Notes:

U - Not present at or above the ass J - Estimated

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May 26, 2006 Page 13 of 100

### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT GMPT_south 2216 S-072103-JM-2216 7/21/2003 (0-0.33) ft	GMPT GMPT_south 2216 S-072103-JM-2216A 7/21/2003 (1-1.33) ft	GMPT GMPT_south 2217 S-071703-JM-2217 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2218 S-071703-JM-2218 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2219 S-071703-JM-2219 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2220 S-071703-JM-2220 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2221 S-072103-JM-2221 7/21/2003 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260)	µg/kg µg/kg µg/kg µg/kg µg/kg µg/kg µg/kg	ND (970) U ND (970) UJ ND (970) U ND (970) U ND (970) U 13000 ND (970) U	ND (44) U ND (44) U ND (44) U ND (44) U ND (44) U 260 ND (44) U	ND (2200) U ND (2200) U ND (2200) U ND (2200) U ND (2200) U 10000 ND (2200) U	ND (430) U ND (430) U ND (430) U ND (430) U 1600 ND (430) U ND (430) U	ND (44) U ND (44) U ND (44) U ND (44) U 100 ND (44) U 20 J	ND (43) U ND (43) U ND (43) U ND (43) U ND (43) U 310 ND (43) U	ND (47) U ND (47) U ND (47) U ND (47) U 39 J ND (47) U ND (47) U
Total PCBs	µg∕kg	13000	260	10000	1600	120	310	39

#### Notes:

U - Not present at or above the as: J - Estimated

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May 26, 2006 Page 14 of 100

### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT GMPT_south 2221 S-072103-JM-2221A 7/21/2003 (1-1.33) ft	GMPT GMPT_south 2222 S-072103-JM-2222 7/21/2003 (0-0.33) ft	GMPT GMPT_south 2222 S-072103-JM-2222A 7/21/2003 (1-1.33) ft	GMPT GMPT_south 2223 S-071703-JM-2223 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2226 S-071703-JM-2226 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2227 S-071703-JM-2227 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2228 S-071703-JM-2228 7/17/2003 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	ug/kg	ND (42) U	ND (48) U	ND (43) U	ND (49) U	ND (9200) U	ND (46) U	ND (410) U
Aroclor-1221 (PCB-1221)	µg/kg	ND (42) U	ND (48) U	ND (43) U	ND (49) U	ND (9200) U	ND (46) U	ND (410) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (42) U	ND (48) U	ND (43) U	ND (49) U	ND (9200) U	ND (46) U	ND (410) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (42) U	ND (48) U	ND (43) U	ND (49) U	ND (9200) U	ND (46) U	ND (410) U
Aroclor-1248 (PCB-1248)	µg∕kg	ND (42) U	110	9.2 J	29 J	ND (9200) U	59	6200
Aroclor-1254 (PCB-1254)	µg∕kg	ND (42) U	ND (48) U	ND (43) U	ND (49) U	110000	ND (46) U	ND (410) U
Aroclor-1260 (PCB-1260)	µg∕kg	ND (42) U	ND (48) U	ND (43) U	ND (49) U	ND (9200) U	30 J	600
Total PCBs	µg∕kg	0	110	9.2	29	110000	89	6800

#### Notes:

U - Not present at or above the as: J - Estimated

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UJ - Quantitation limit qualifed as

May 26, 2006 Page 15 of 100

### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT GMPT_south 2229 S-071703-JM-2229 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2230 S-071703-JM-2230 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2231 S-071703-JM-2231 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2232 S-071703-JM-2232 7/17/2003 (0-0.33) ft	GMPT GMPT_south 2235 S-072103-JM-2235 7/21/2003 (0-0.33) ft	GMPT GMPT_south 2235 S-072103-JM-2235A 7/21/2003 (1-1.33) ft	GMPT P215_area 2237 S-072103-JM-2237 7/21/2003 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (870) U	ND (450) U	ND (850) U	ND (290) U	ND (91) U	ND (44) U	ND (48) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (870) U	ND (450) U	ND (850) U	ND (290) U	ND (91) U	ND (44) U	ND (48) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (870) U	ND (450) U	ND (850) U	ND (290) U	ND (91) U	ND (44) U	ND (48) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (870) U	ND (450) U	ND (850) U	ND (290) U	ND (91) U	ND (44) U	ND (48) U
Aroclor-1248 (PCB-1248)	µg∕kg	12000	5600	8100	1000	590	28 J	ND (48) U
Aroclor-1254 (PCB-1254)	µg∕kg	ND (870) U	ND (450) U	ND (850) U	ND (290) U	ND (91) U	ND (44) U	85
Aroclor-1260 (PCB-1260)	µg∕kg	1200	820	590 J	270 J	ND (91) U	ND (44) U	ND (48) U
Total PCBs	µg∕kg	13200	6420	8690	1270	590	28	85

#### Notes:

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J - Estimated

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UJ - Quantitation limit qualifed as

May 26, 2006 Page 16 of 100

### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT P215_area 2237 S-072103-JM-2237A 7/21/2003 (1-1.33) ft	GMPT P215_area 2240 S-071803-JM-2240 7/18/2003 (0-0.33) ft	GMPT P215_area 2240 S-071803-JM-2240A 7/18/2003 (0-0.33) ft Duplicate	GMPT P215_area 2243 S-072103-JM-2243 7/21/2003 (0-0.33) ft	GMPT P215_area 2243 S-072103-JM-2243A 7/21/2003 (1-1.33) ft	GMPT P215_area 2244 S-072103-JM-2244 7/21/2003 (0-0.33) ft	GMPT P215_area 2244 S-072103-JM-2244A 7/21/2003 (1-1.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (44) U	ND (47) U	ND (46) U	ND (48) U	ND (42) U	ND (45) U	ND (46) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (44) U	ND (47) U	ND (46) U	ND (48) U	ND (42) U	ND (45) U	ND (46) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (44) U	ND (47) U	ND (46) U	ND (48) U	ND (42) U	ND (45) U	ND (46) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (44) U	ND (47) U	ND (46) U	ND (48) U	ND (42) U	ND (45) U	ND (46) U
Aroclor-1248 (PCB-1248)	µg∕kg	ND (44) U	140	170	160	ND (42) U	150	ND (46) U
Aroclor-1254 (PCB-1254)	µg∕kg	ND (44) U	ND (47) U	ND (46) U	ND (48) U	ND (42) U	ND (45) U	ND (46) U
Aroclor-1260 (PCB-1260)	µg∕kg	ND (44) U	16 J	19 J	ND (48) U	ND (42) U	ND (45) U	ND (46) U
Total PCBs	µg∕kg	0	156	189	160	0	150	0

#### Notes:

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May 26, 2006 Page 17 of 100

### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT P215_area 2246 S-072103-JM-2246 7/21/2003 (0-0.33) ft	GMPT P215_area 2246 S-072103-JM-2246A 7/21/2003 (0-0.33) ft Duplicate	GMPT P215_area 2246 S-072103-JM-2246B 7/21/2003 (1-1.33) ft	GMPT P215_area 2247 S-071803-JM-2247 7/18/2003 (0-0.33) ft	GMPT P215_area 2248 S-072203-JM-2248 7/22/2003 (0-0.33) ft	GMPT P215_area 2248 S-072203-JM-2248A 7/22/2003 (1-1.33) ft	GMPT P215_area 2249 S-071803-JM-2249 7/18/2003 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (44) U	ND (46) U	ND (43) U	ND (49) U	ND (31000) U	ND (2400) U	ND (470) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (44) UJ	ND (46) UJ	ND (43) UJ	ND (49) U	ND (31000) U	ND (2400) U	ND (470) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (44) U	ND (46) U	ND (43) U	ND (49) U	ND (31000) U	ND (2400) U	ND (470) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (44) U	ND (46) U	ND (43) U	ND (49) U	ND (31000) U	ND (2400) U	ND (470) U
Aroclor-1248 (PCB-1248)	µg∕kg	140	ND (46) U	ND (43) U	100	370000	16000	2900
Aroclor-1254 (PCB-1254)	µg∕kg	ND (44) U	140	ND (43) U	ND (49) U	ND (31000) U	ND (2400) U	ND (470) U
Aroclor-1260 (PCB-1260)	µg∕kg	ND (44) U	ND (46) U	ND (43) U	19 J	ND (31000) U	ND (2400) U	180 J
Total PCBs	µg∕kg	140	140	0	119	370000	16000	3080

#### Notes:

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UJ - Quantitation limit qualifed as

May 26, 2006 Page 18 of 100

### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT GMPT_south 2250 S-071803-JM-2250 7/18/2003 (0-0.33) ft	GMPT GMPT_south 2250 S-071803-JM-2250A 7/18/2003 (0-0.33) ft Duplicate	GMPT GMPT_south 2251 S-071803-JM-2251 7/18/2003 (0-0.33) ft	GMPT P215_area 2252 S-071803-JM-2252 7/18/2003 (0-0.33) ft	GMPT P215_area 2253 S-071803-JM-2254 7/18/2003 (0-0.33) ft	GMPT P216_west 2254 S-071603-JM-2254 7/16/2003 (0-0.33) ft	GMPT P216_west 2255 S-071603-JM-2255 7/16/2003 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (2400) U	ND (970) U	ND (27000) U	ND (44) U	ND (48) U	ND (10000) U	ND (87) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (2400) U	ND (970) U	ND (27000) U	ND (44) U	ND (48) U	ND (10000) U	ND (87) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (2400) U	ND (970) U	ND (27000) U	ND (44) U	ND (48) U	ND (10000) U	ND (87) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (2400) U	ND (970) U	ND (27000) U	ND (44) U	ND (48) U	ND (10000) U	ND (87) U
Aroclor-1248 (PCB-1248)	µg∕kg	15000	10000	240000	56	66	55000	280
Aroclor-1254 (PCB-1254)	µg∕kg	ND (2400) U	ND (970) U	ND (27000) U	ND (44) U	ND (48) U	ND (10000) U	ND (87) U
Aroclor-1260 (PCB-1260)	µg∕kg	800 J	900 J	19000 J	ND (44) U	ND (48) U	ND (10000) U	99
Total PCBs	µg∕kg	15800	10900	259000	56	66	55000	379

#### Notes:

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J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 19 of 100

### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT P215_area 2258 S-071603-JM-2258 7/16/2003 (0-0.33) ft	GMPT P215_area 2259 S-071603-JM-2259 7/16/2003 (0-0.33) ft	GMPT P215_area 2260 S-071603-JM-2260 7/16/2003 (0-0.33) ft	GMPT P215_area 2261 S-071603-JM-2261 7/16/2003 (0-0.33) ft	GMPT P215_area 2261 S-071603-JM-2261A 7/16/2003 (0-0.33) ft Duplicate	GMPT P215_area 2262 S-072203-JM-2262 7/22/2003 (0-0.33) ft	GMPT P215_area 2262 S-072203-JM-2262A 7/22/2003 (1-1.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg/kg	ND (47) U	ND (490) U	ND (44) U	ND (44) U	ND (44) U	ND (480) U	ND (45) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (47) U	ND (490) U	ND (44) U	ND (44) U	ND (44) U	ND (480) U	ND (45) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (47) U	ND (490) U	ND (44) U	ND (44) U	ND (44) U	ND (480) U	ND (45) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (47) U	ND (490) U	ND (44) U	ND (44) U	ND (44) U	ND (480) U	ND (45) U
Aroclor-1248 (PCB-1248)	µg∕kg	100	2900	27 J	28 J	28 J	2400	150
Aroclor-1254 (PCB-1254)	µg∕kg	ND (47) U	ND (490) U	ND (44) U	ND (44) U	ND (44) U	ND (480) U	ND (45) U
Aroclor-1260 (PCB-1260)	µg∕kg	38 J	710	14 J	17 J	19 J	ND (480) U	ND (45) U
Total PCBs	µg∕kg	138	3610	41	45	47	2400	150

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 20 of 100

### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT P216_west 2263 S-071603-JM-2263 7/16/2003 (0-0.33) ft	GMPT P216_west 2264 S-071603-JM-2264 7/16/2003 (0-0.33) ft	GMPT P216_west 2265 S-071603-JM-2265 7/16/2003 (0-0.33) ft	GMPT P215_area 2269 S-072203-JM-2269 7/22/2003 (0-0.33) ft	GMPT P215_area 2269 S-072203-JM-2269A 7/22/2003 (1-1.33) ft	GMPT P215_area 2270 S-071603-JM-2270 7/16/2003 (0-0.33) ft	GMPT P215_area 2272 S-071603-JM-2272 7/16/2003 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (27000) U	ND (100) U	ND (52) U	ND (44) U	ND (46) U	ND (46) U	ND (44) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (27000) U	ND (100) U	ND (52) U	ND (44) U	ND (46) U	ND (46) U	ND (44) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (27000) U	ND (100) U	ND (52) U	ND (44) U	ND (46) U	ND (46) U	ND (44) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (27000) U	ND (100) U	ND (52) U	ND (44) U	ND (46) U	ND (46) U	ND (44) U
Aroclor-1248 (PCB-1248)	µg∕kg	140000	550	63	20 J	ND (46) U	15 J	28 J
Aroclor-1254 (PCB-1254)	µg∕kg	ND (27000) U	ND (100) U	ND (52) U	ND (44) U	ND (46) U	ND (46) U	ND (44) U
Aroclor-1260 (PCB-1260)	µg∕kg	ND (27000) U	ND (100) U	ND (52) U	ND (44) U	ND (46) U	5.8 J	7.0 J
Total PCBs	µg∕kg	140000	550	63	20	0	20.8	35

#### Notes:

U - Not present at or above the ass J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 21 of 100

### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT P215_area 2273 S-071603-JM-2273 7/16/2003 (0-0.33) ft	GMPT P216_west 2290 S-071403-JM-2290 7/14/2003 (0-0.33) ft	GMPT P216_west 2293 S-072303-JM-2293 7/23/2003 (0-0.33) ft	GMPT P216_west 2293 S-072303-JM-2293A 7/23/2003 (1-1.33) ft	GMPT P216_west 2295 S-071403-JM-2295 7/14/2003 (0-0.33) ft	GMPT P216_west 2296 S-071403-JM-2296 7/14/2003 (0-0.33) ft	GMPT P216_west 2298 S-072303-JM-2298 7/23/2003 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254)	µg/kg µg/kg µg/kg µg/kg µg/kg µg/kg	ND (46) U ND (46) U ND (46) U ND (46) U 33 J ND (46) U	ND (50) U ND (50) U ND (50) U ND (50) U 160 ND (50) U	ND (41) U ND (41) U ND (41) U ND (41) U ND (41) U ND (41) U ND (41) U	ND (42) U ND (42) U ND (42) U ND (42) U 14 J ND (42) U	ND (2100) U ND (2100) U ND (2100) U ND (2100) U 8200 ND (2100) U	ND (420) U ND (420) U ND (420) U ND (420) U 1800 ND (420) U	ND (45) U ND (45) U ND (45) U ND (45) U 53 ND (45) U
Aroclor-1260 (PCB-1260) Total PCBs	µg∕kg µg∕kg	16 J 49	75 235	21 J 21	6.5 J 20.5	1600 J 9800	230 J 2030	42 J 95

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 22 of 100

### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT P216_west 2298 S-072303-JM-2298A 7/23/2003 (1-1.33) ft	GMPT P216_west 2305 S-071403-JM-2305 7/14/2003 (0-0.33) ft	GMPT GMPT_west 2306 S-071603-JM-2306 7/16/2003 (0-0.33) ft	GMPT GMPT_west 2307 S-071103-JM-2307 7/11/2003 (0-0.33) ft	GMPT GMPT_west 2308 S-071103-JM-2308 7/11/2003 (0-0.33) ft	GMPT GMPT_west 2309 S-071103-JM-2309 7/11/2003 (0-0.33) ft	GMPT GMPT_west 2310 S-071103-JM-2310 7/11/2003 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	ug/kg	ND (42) U	ND (45) U	ND (46) U	ND (62) U	ND (44) U	ND (46) U	ND (280) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (42) U	ND (45) U	ND (46) U	ND (62) U	ND (44) U	ND (46) U	ND (280) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (42) U	ND (45) U	ND (46) U	ND (62) U	ND (44) U	ND (46) U	ND (280) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (42) U	ND (45) U	ND (46) U	ND (62) U	ND (44) U	ND (46) U	ND (280) U
Aroclor-1248 (PCB-1248)	µg∕kg	ND (42) U	160	28 J	230 J	110 J	66	1900
Aroclor-1254 (PCB-1254)	µg∕kg	ND (42) U	ND (45) U	ND (46) U	ND (62) U	ND (44) U	ND (46) U	ND (280) U
Aroclor-1260 (PCB-1260)	µg∕kg	ND (42) U	100	65	74 J	45 J	55	ND (280) U
Total PCBs	µg∕kg	0	260	93	304	155	121	1900

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 23 of 100

### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT GMPT_west 2311 S-071103-JM-2311 7/11/2003 (0-0.33) ft	GMPT GMPT_west 2311 S-071103-JM-2311A 7/11/2003 (0-0.33) ft Duplicate	GMPT GMPT_west 2312 S-071103-JM-2312 7/11/2003 (0-0.33) ft	GMPT GMPT_west 2313 S-071103-JM-2313 7/11/2003 (0-0.33) ft	GMPT GMPT_west 2314 S-071103-JM-2314 7/11/2003 (0-0.33) ft	GMPT P216_west 2315 S-072303-JM-2315 7/23/2003 (0-0.33) ft	GMPT P216_west 2315 S-072303-JM-2315A 7/23/2003 (0-0.33) ft Duplicate
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (88) U	ND (46) U	ND (47) U	ND (800) U	ND (200) U	ND (3900) U	ND (4000) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (88) U	ND (46) U	ND (47) U	ND (800) U	ND (200) U	ND (3900) U	ND (4000) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (88) U	ND (46) U	ND (47) U	ND (800) U	ND (200) U	ND (3900) U	ND (4000) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (88) U	ND (46) U	ND (47) U	ND (800) U	ND (200) U	ND (3900) U	ND (4000) U
Aroclor-1248 (PCB-1248)	µg∕kg	390	310	23 J	5300	1600	30000	26000
Aroclor-1254 (PCB-1254)	µg∕kg	ND (88) U	ND (46) U	ND (47) U	ND (800) U	ND (200) U	ND (3900) U	ND (4000) U
Aroclor-1260 (PCB-1260)	µg∕kg	86 J	70	ND (47) U	ND (800) U	ND (200) U	6300	5300
Total PCBs	µg∕kg	476	380	23	5300	1600	36300	31300

#### Notes:

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UJ - Quantitation limit qualifed as

May 26, 2006 Page 24 of 100

### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT P216_west 2315 S-072303-JM-2315B 7/23/2003 (1-1.33) ft	GMPT P216_west 2316 S-072303-JM-2316 7/23/2003 (0-0.33) ft	GMPT P216_west 2316 S-072303-JM-2316A 7/23/2003 (1-1.33) ft	GMPT GMPT_west 2317 S-071603-JM-2317 7/16/2003 (0-0.33) ft	GMPT GMPT_west 2318 S-072303-JM-2318 7/23/2003 (0-0.33) ft	GMPT GMPT_west 2318 S-072303-JM-2318A 7/23/2003 (1-1.33) ft	GMPT GMPT_west 2319 S-072203-JM-2319 7/22/2003 (0-0.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (800) U	ND (4900) U	ND (430) U	ND (48) U	ND (4300) U	ND (420) U	ND (2000) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (800) U	ND (4900) U	ND (430) U	ND (48) U	ND (4300) U	ND (420) U	ND (2000) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (800) U	ND (4900) U	ND (430) U	ND (48) U	ND (4300) U	ND (420) U	ND (2000) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (800) U	ND (4900) U	ND (430) U	ND (48) U	ND (4300) U	ND (420) U	ND (2000) U
Aroclor-1248 (PCB-1248)	µg∕kg	10000	44000	5000	ND (48) U	30000	5200	16000
Aroclor-1254 (PCB-1254)	µg∕kg	ND (800) U	ND (4900) U	ND (430) U	85	ND (4300) U	ND (420) U	ND (2000) U
Aroclor-1260 (PCB-1260)	µg∕kg	2000	11000	1100	ND (48) U	8200	1300	6000
Total PCBs	µg∕kg	12000	55000	6100	85	38200	6500	22000

#### Notes:

U - Not present at or above the ass J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 25 of 100

### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area:		GMPT GMPT_west	GMPT GMPT_west	GMPT GMPT_west	GMPT GMPT_west	GMPT GMPT_west	GMPT GMPT_west	GMPT GMPT_west
Sample Location:		2319	2321	2322	2322	2323	2324	2324
Sample ID:		S-072203-JM-2319A	S-071603-JM-2321	S-072203-JM-2322	S-072203-JM-2322A	S-071603-JM-2323	S-072203-JM-2324	S-072203-JM-2324A
Sample Date:		7/22/2003	7/16/2003	7/22/2003	7/22/2003	7/16/2003	7/22/2003	7/22/2003
Sample Depth:		(1-1.33) ft	(0-0.33) ft	(0-0.33) ft	(1-1.33) ft	(0-0.33) ft	(0-0.33) ft	(1-1.33) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg/kg	ND (88) U	ND (52) U	ND (3900) U	ND (8800) U	ND (46) U	ND (850) U	ND (430) U
Aroclor-1221 (PCB-1221)	µg/kg	ND (88) U	ND (52) U	ND (3900) U	ND (8800) U	ND (46) U	ND (850) U	ND (430) U
Aroclor-1232 (PCB-1232)	µg/kg	ND (88) U	ND (52) U	ND (3900) U	ND (8800) U	ND (46) U	ND (850) U	ND (430) U
Aroclor-1242 (PCB-1242)	µg/kg	ND (88) U	ND (52) U	ND (3900) U	ND (8800) U	ND (46) U	ND (850) U	ND (430) U
Aroclor-1248 (PCB-1248)	µg/kg	200	ND (52) U	21000	78000	43 J	7200	4200
Aroclor-1254 (PCB-1254)	µg/kg	ND (88) U	25 I	ND (3900) U	ND (8800) U	ND (46) U	ND (850) U	ND (430) U
Aroclor-1260 (PCB-1260)	µg/kg	63 J	ND (52) U	5100	<u>20000</u>	ND (46) U	<u>1900</u>	970
Total PCBs	µg/kg	263	25	26100	98000	43	9100	5170

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 26 of 100

### TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		GMPT GMPT_west 2325 S-071603-JM-2325 7/16/2003 (0-0.33) ft	P003 003-4087 S-003-101503-NZ-4087 10/15/2003 (0-0.33) ft	P003 003-4115 S-003-102003-NZ-4115 10/20/2003 (0-1.5) ft	P205 205-4139 S-205-011304-CH-4139 1/13/2004 (0-0.5) ft	P205 205-4150 S-205-011304-CH-4150 1/13/2004 (0-0.5) ft	P205 205-4165 S-205-011304-CH-4165 1/14/2004 (0-0.5) ft	P205 205-4183 S-205-011304-CH-4183 1/14/2004 (0-0.5) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (45) U	130000	ND (44) U	ND (88) U	ND (220) U	ND (860) U	ND (450) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (45) U	ND (47000) U	ND (44) U	ND (88) U	ND (220) U	ND (860) U	ND (450) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (45) U	ND (47000) U	ND (44) U	ND (88) U	ND (220) U	ND (860) U	ND (450) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (45) U	ND (47000) U	ND (44) U	ND (88) U	ND (220) U	ND (860) U	ND (450) U
Aroclor-1248 (PCB-1248)	µg∕kg	ND (45) U	ND (47000) U	590	380	ND (220) U	ND (860) U	ND (450) U
Aroclor-1254 (PCB-1254)	µg∕kg	42 J	ND (47000) U	ND (44) U	ND (88) U	1000	4400	2600
Aroclor-1260 (PCB-1260)	µg∕kg_	ND (45) U	ND (47000) U	ND (44) U	ND (88) U	ND (220) U	ND (860) U	ND (450) U
Total PCBs	µg∕kg	42	130000	590	380	1000	4400	2600

#### Notes:

U - Not present at or above the ass J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as
May 26, 2006 Page 27 of 100

### TABLE 4.1

# SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P205 205-4183 S-205-011304-CH-4184 1/14/2004 (0-0.5) ft Duplicate	East Plant Area 401-5005 S-401-091803-KB-5005 9/18/2003 (0-0.33) ft	P401 401-5082 S-401-021704-CH-5082 2/17/2004 (0-0.5) ft	P217 B-809012-1 S-809-040802-MG-001 4/8/2002 (0-2) ft	P217 B-809012-1 S-809-040802-MG-002 4/8/2002 (6-8) ft	P217 B-809012-1 S-809-040802-MG-003 4/8/2002 (16-17) ft	P217 B-809012-2 S-809-040802-MG-004 4/8/2002 (0-2) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (450) U	ND (860) U	ND (9400) U	ND (41) U	ND (42) U	ND (42) U	ND (42) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (450) U	ND (860) U	ND (9400) U	ND (41) U	ND (42) U	ND (42) U	ND (42) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (450) U	ND (860) U	ND (9400) U	ND (41) U	ND (42) U	ND (42) U	ND (42) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (450) U	ND (860) U	ND (9400) U	ND (41) U	ND (42) U	ND (42) U	ND (42) U
Aroclor-1248 (PCB-1248)	µg∕kg	ND (450) U	10000	ND (9400) U	ND (41) U	ND (42) U	ND (42) U	ND (42) U
Aroclor-1254 (PCB-1254)	µg∕kg	5400	ND (860) U	69000	ND (41) U	ND (42) U	ND (42) U	ND (42) U
Aroclor-1260 (PCB-1260)	µg∕kg_	ND (450) U	1400	ND (9400) U	ND (41) U	ND (42) U	ND (42) U	ND (42) U
Total PCBs	µg∕kg	5400	11400	69000	0	0	0	0

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 28 of 100

### TABLE 4.1

# SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P217 B-809012-2 S-809-040802-MG-005 4/8/2002 (6-8) ft	P217 B-809012-2 S-809-040802-MG-006 4/8/2002 (10.5-11.5) ft	P217 B-809012-9 S-809-041002-MG-024 4/10/2002 (0-2) ft	P217 B-809012-9 S-809-041002-MG-025 4/10/2002 (0-2) ft Duplicate	P217 B-809012-9 S-809-041002-MG-026 4/10/2002 (2-3.5) ft	P217 P216_west B-809012-23 S-809-090602-CLM-015 9%/2002 (0-2) ft	P217 P216_west B-809012-23 S-809-090602-CLM-016 9/6/2002 (6-7) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (42) U	ND (42) U	ND (42) U	ND (42) U	ND (47) U	ND (40) U	ND (42) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (42) U	ND (42) U	ND (42) U	ND (42) U	ND (47) U	ND (40) U	ND (42) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (42) U	ND (42) U	ND (42) U	ND (42) U	ND (47) U	ND (40) U	ND (42) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (42) U	ND (42) U	ND (42) U	ND (42) U	ND (47) U	ND (40) U	ND (42) U
Aroclor-1248 (PCB-1248)	µg∕kg	ND (42) U	ND (42) U	ND (42) U	ND (42) U	ND (47) U	ND (40) U	ND (42) U
Aroclor-1254 (PCB-1254)	µg∕kg	ND (42) U	ND (42) U	ND (42) U	ND (42) U	ND (47) U	ND (40) U	ND (42) U
Aroclor-1260 (PCB-1260)	µg∕kg_	ND (42) U	ND (42) U	ND (42) U	ND (42) U	ND (47) U	ND (40) U	ND (42) U
Total PCBs	µg∕kg	0	0	0	0	0	0	0

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 29 of 100

## TABLE 4.1

# SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		Background GMPT_west BK-X142Y263 S-012402-MO-004 1/24/2002 (0-2) ft	Background BK-X199Y347 S-060602-MG-225 6/6/2002 (0-2) ft	Background BK-X199Y347 S-060602-MG-226 6/6/2002 (2-4) ft	P201 Background BK-X212Y042 S-010223-MO-002 1/23/2002 (0-2) ft	Background P216_west BK-X281Y296 S-010223-MO-001 1/23/2002 (0-2) ft	Background P216_west BK-X281Y296 S-010223-MO-005 1/23/2002 (0-2) ft Duplicate	A015 B-X148Y233 S-022202-KMV-532 2/22/2002 (0-2) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (44) U	ND (42) U	ND (43) U	ND (42) U	ND (42) U	ND (42) U	ND (3700) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (44) U	ND (42) U	ND (43) U	ND (42) U	ND (42) U	ND (42) U	ND (3700) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (44) U	ND (42) U	ND (43) U	ND (42) U	ND (42) U	ND (42) U	ND (3700) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (44) U	ND (42) U	ND (43) U	ND (42) U	ND (42) U	ND (42) U	ND (3700) U
Aroclor-1248 (PCB-1248)	µg∕kg	ND (44) U	ND (42) U	ND (43) U	ND (42) U	ND (42) U	ND (42) U	48000
Aroclor-1254 (PCB-1254)	µg∕kg	ND (44) U	ND (42) U	ND (43) U	ND (42) U	ND (42) U	ND (42) U	ND (3700) U
Aroclor-1260 (PCB-1260)	µg∕kg	ND (44) U	ND (42) UJ	ND (43) UJ	ND (42) U	ND (42) U	ND (42) U	4700
Total PCBs	µg/kg	0	0	0	0	0	0	52700

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 30 of 100

### TABLE 4.1

# SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A015 B-X148Y233 S-022202-KMV-533 2/22/2002 (0-2) ft Duplicate	A015 B-X148Y233 S-022202-KMV-534 2/22/2002 (6-8) ft	A015 B-X148Y233 S-022202-KMV-535 2/22/2002 (12-14) ft	A007 B-X158Y207 S-030602-MG-161 3/6/2002 (0-2) ft	A007 B-X158Y207 S-030602-MG-162 3/6/2002 (6-8) ft	A007 B-X158Y207 S-030602-MG-163 3/6/2002 (22-24) ft	A005 B-X165Y179 S-010902-MG-021 1/9/2002 (0-2) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (360) U	ND (43) U	ND (46) U	ND (41) U	ND (43) U	ND (41) U	ND (42) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (360) U	ND (43) U	ND (46) U	ND (41) U	ND (43) U	ND (41) U	ND (42) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (360) U	ND (43) U	ND (46) U	ND (41) U	ND (43) U	ND (41) U	ND (42) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (360) U	ND (43) U	ND (46) U	ND (41) U	ND (43) U	ND (41) U	ND (42) U
Aroclor-1248 (PCB-1248)	µg∕kg	3300	7.1 J	ND (46) U	88	ND (43) U	ND (41) U	10 J
Aroclor-1254 (PCB-1254)	µg∕kg	ND (360) U	ND (43) U	ND (46) U	ND (41) U	ND (43) U	ND (41) U	ND (42) U
Aroclor-1260 (PCB-1260)	µg∕kg	310 J	ND (43) U	ND (46) U	ND (41) U	ND (43) UJ	ND (41) UJ	ND (42) U
Total PCBs	µg∕kg	3610	7.1	0	88	0	0	10

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 31 of 100

### TABLE 4.1

# SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A005 B-X165Y179 S-010902-MG-022 1/9/2002 (6-8) ft	A005 B-X165Y179 S-010902-MG-023 1/9/2002 (16-18) ft	A015 B-X169Y248 S-022102-KMV-528 2/21/2002 (0-2) ft	A015 B-X169Y248 S-022102-KMV-529 2/21/2002 (0-2) ft Duplicate	A015 B-X169Y248 S-022102-KMV-530 2/21/2002 (6-8) ft	A015 B-X169Y248 S-022102-KMV-531 2/21/2002 (22-24) ft	A006 B-X170Y134 S-060302-MG-216 6/3/2002 (0-2) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (44) U	ND (44) U	ND (690) U	ND (710) U	ND (730) U	ND (40) U	ND (200) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (44) U	ND (44) U	ND (690) U	ND (710) U	ND (730) U	ND (40) U	ND (200) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (44) U	ND (44) U	ND (690) U	ND (710) U	ND (730) U	ND (40) U	ND (200) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (44) U	ND (44) U	ND (690) U	ND (710) U	ND (730) U	ND (40) U	ND (200) U
Aroclor-1248 (PCB-1248)	µg∕kg	ND (44) U	6.4 J	4900	5100	ND (730) U	ND (40) U	1300
Aroclor-1254 (PCB-1254)	µg∕kg	ND (44) U	ND (44) U	ND (690) U	ND (710) U	9100	62	ND (200) U
Aroclor-1260 (PCB-1260)	µg∕kg	ND (44) U	ND (44) U	570 J	650 J	ND (730) U	ND (40) U	170 J
Total PCBs	µg∕kg	0	6.4	5470	5750	9100	62	1470

#### Notes:

U - Not present at or above the ass J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 32 of 100

### TABLE 4.1

# SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A006 B-X170Y134 S-060302-MG-217 6/3/2002 (4-6) ft	A006 B-X170Y134 S-060302-MG-218 6/3/2002 (4-6) ft Duplicate	A005 B-X170Y143 S-032102-MG-203 3/21/2002 (0-2) ft	A005 B-X170Y143 S-032102-MG-204 3/21/2002 (6-8) ft	A005 B-X170Y143 S-032102-MG-205 3/21/2002 (19.5-21.5) ft	A007 B-X170Y211 S-030602-MG-158 3/6/2002 (0-2) ft	A007 B-X170Y211 S-030602-MG-159 3/6/2002 (6-8) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (43) U	ND (48) U	ND (180) U	ND (77) U	ND (44) U	ND (39) U	ND (43) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (43) U	ND (48) U	ND (180) U	ND (77) U	ND (44) U	ND (39) U	ND (43) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (43) U	ND (48) U	ND (180) U	ND (77) U	ND (44) U	ND (39) U	ND (43) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (43) U	ND (48) U	ND (180) U	ND (77) U	93	ND (39) U	ND (43) U
Aroclor-1248 (PCB-1248)	µg∕kg	ND (43) U	ND (48) U	ND (180) U	ND (77) U	ND (44) U	ND (39) U	ND (43) U
Aroclor-1254 (PCB-1254)	µg∕kg	ND (43) U	ND (48) U	910	550	ND (44) U	ND (39) U	ND (43) U
Aroclor-1260 (PCB-1260)	µg∕kg	ND (43) U	ND (48) U	ND (180) U	ND (77) U	ND (44) U	ND (39) U	ND (43) U
Total PCBs	µg∕kg	0	0	910	550	93	0	0

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 33 of 100

### TABLE 4.1

# SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 B-X170Y211 S-030602-MG-160 3/6/2002 (26-28) ft	A005 B-X171Y157 S-032202-MG-206 3/22/2002 (0-2) ft	A005 B-X171Y157 S-032202-MG-207 3/22/2002 (6-8) ft	A005 B-X171Y157 S-032202-MG-208 3/22/2002 (18-20) ft	A005 B-X171Y157 S-032202-MG-209 3/22/2002 (18-20) ft Duplicate	A006 P200 B-X173Y125 S-060302-MG-219 6/3/2002 (0-2) ft	A006 P200 B-X173Y125 S-060302-MG-220 6/3/2002 (4-6) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (42) U	ND (43) U	ND (41) U	ND (41) U	ND (40) U	ND (38) U	ND (42) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (42) U	ND (43) U	ND (41) U	ND (41) U	ND (40) U	ND (38) U	ND (42) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (42) U	ND (43) U	ND (41) U	ND (41) U	ND (40) U	ND (38) U	ND (42) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (42) U	ND (43) U	130	ND (41) U	ND (40) U	ND (38) U	ND (42) U
Aroclor-1248 (PCB-1248)	µg∕kg	ND (42) U	ND (43) U	ND (41) U	ND (41) U	ND (40) U	220	120
Aroclor-1254 (PCB-1254)	µg∕kg	ND (42) U	ND (43) U	ND (41) U	ND (41) U	ND (40) U	ND (38) U	ND (42) U
Aroclor-1260 (PCB-1260)	µg∕kg	ND (42) U	ND (43) U	ND (41) U	ND (41) U	ND (40) U	45	24 J
Total PCBs	µg∕kg	0	0	130	0	0	265	144

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 34 of 100

### TABLE 4.1

# SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A006 B-X173Y131 S-031402-MG-181 3/14/2002 (0-2) ft	A006 B-X173Y131 S-031402-MG-182 3/14/2002 (6-8) ft	A006 B-X173Y131 S-031402-MG-183 3/14/2002 (18-20) ft	A006 B-X173Y134 S-060302-MG-214 6/3/2002 (2-4) ft	A006 B-X173Y134 S-060302-MG-215 6/3/2002 (4-6) ft	A005 B-X176Y143 S-010902-MG-017 1/9/2002 (0-2) ft	A005 B-X176Y143 S-010902-MG-018 1/9/2002 (6-8) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (190000) U	ND (41) U	ND (43) U	ND (42) U	ND (42) U	ND (1900) U	ND (19000) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (190000) U	ND (41) U	ND (43) U	ND (42) U	ND (42) U	ND (1900) U	ND (19000) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (190000) U	ND (41) U	ND (43) U	ND (42) U	ND (42) U	ND (1900) U	ND (19000) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (190000) U	ND (41) U	ND (43) U	ND (42) U	ND (42) U	ND (1900) U	210000
Aroclor-1248 (PCB-1248)	µg∕kg	1100000	24 J	39 J	590	ND (42) U	7200	ND (19000) U
Aroclor-1254 (PCB-1254)	µg∕kg	ND (190000) U	ND (41) U	ND (43) U	ND (42) U	ND (42) U	ND (1900) U	ND (19000) U
Aroclor-1260 (PCB-1260)	µg∕kg	260000	ND (41) U	ND (43) U	66	ND (42) U	5900	29000
Total PCBs	µg∕kg	1360000	24	39	656	0	13100	239000

#### Notes:

U - Not present at or above the ass J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 35 of 100

## TABLE 4.1

# SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY **BEDFORD, INDIANA**

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A005 B-X176Y143 S-010902-MG-019 1/9/2002 (21-23) ft	A005 B-X176Y143 S-010902-MG-020 1/9/2002 (21-23) ft Duplicate	A005 B-X176Y179 S-022202-MG-128 2/22/2002 (3.5-5) ft	A005 B-X176Y179 S-022202-MG-129 2/22/2002 (6-8) ft	A005 B-X176Y179 S-022202-MG-130 2/22/2002 (24-26) ft	A005 B-X176Y187 S-022102-MG-122 2/21/2002 (0-2) ft	A005 B-X176Y187 S-022102-MG-123 2/21/2002 (0-2) ft Duplicate
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	µg∕kg	ND (40) U	ND (42) U	ND (77) U	ND (190) U	ND (44) U	ND (83) U	ND (83) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (40) U	ND (42) U	ND (77) U	ND (190) U	ND (44) U	ND (83) U	ND (83) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (40) U	ND (42) U	ND (77) U	ND (190) U	ND (44) U	ND (83) U	ND (83) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (40) U	ND (42) U	ND (77) U	ND (190) U	ND (44) U	ND (83) U	ND (83) U
Aroclor-1248 (PCB-1248)	µg∕kg	5.8 J	ND (42) U	900	ND (190) U	ND (44) U	730	580
Aroclor-1254 (PCB-1254)	µg∕kg	ND (40) U	ND (42) U	ND (77) U	1400	ND (44) U	ND (83) U	ND (83) U
Aroclor-1260 (PCB-1260)	µg∕kg	ND (40) U	ND (42) U	430	ND (190) U	ND (44) UJ	66 J	32 J
Total PCBs	µg∕kg	5.8	0	1330	1400	0	796	612

#### Notes:

U - Not present at or above the as: J - Estimated

R - Rejected

UJ - Quantitation limit qualifed as

May 26, 2006 Page 36 of 100

## TABLE 4.1

# SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A005 B-X176Y187 S-022102-MG-124 2/21/2002 (8-10) ft	A005 B-X176Y187 S-022102-MG-125 2/21/2002 (36-38) ft	A004 B-X177Y252D S-022003-MG-240 2/20/2003 (0-2) ft
Parameters	Units			
PCBs				
Aroclor-1016 (PCB-1016)	µg∕kg	ND (40) U	ND (44) U	ND (43) U
Aroclor-1221 (PCB-1221)	µg∕kg	ND (40) U	ND (44) U	ND (43) U
Aroclor-1232 (PCB-1232)	µg∕kg	ND (40) U	ND (44) U	ND (43) U
Aroclor-1242 (PCB-1242)	µg∕kg	ND (40) U	ND (44) U	ND (43) U
Aroclor-1248 (PCB-1248)	µg∕kg	ND (40) U	ND (44) U	ND (43) U
Aroclor-1254 (PCB-1254)	µg∕kg	500	ND (44) U	ND (43) U
Aroclor-1260 (PCB-1260)	µg∕kg_	ND (40) U	ND (44) U	ND (43) U
Total PCBs	µg∕kg	500	0	0

#### Notes:

U - Not present at or above the as: J - Estimated R - Rejected UJ - Quantitation limit qualifed as µg/kg - Micrograms per kilogram

May 26, 2006 Page 37 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A004 B-X177Y252D S-022003-MG-241 2/20/2003 (6-8) ft	A004 B-X177Y252D S-022003-MG-242 2/20/2003 (6-8) ft Duplicate	A004 B-X177Y252D S-022003-MG-243 2/20/2003 (18-20) ft	A004 B-X177Y252D S-022003-MG-244 2/20/2003 (24-25) ft	A006 B-X183Y133 S-011102-MG-039 1/11/2002 (0-2) ft	A006 B-X183Y133 S-011102-MG-040 1/11/2002 (3.5-4.5) ft	A006 B-X183Y133 S-011102-MG-041 1/11/2002 (6-8) ft	A006 B-X183Y133 S-011102-MG-042 1/11/2002 (6-8) ft Duplicate
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (720) U ND (720) U ND (720) U ND (720) U 4100 ND (720) U 580 J	ND (1800) U ND (1800) U ND (1800) U ND (1800) U 7700 ND (1800) U 2100	ND (740) U ND (740) U ND (740) U ND (740) U 3100 ND (740) U 720 J	ND (42) U ND (42) U ND (42) U ND (42) U 150 ND (42) U 36 J	ND (39000) U ND (39000) U ND (39000) U ND (39000) U ND (39000) U ND (39000) U ND (39000) U	ND (43000) U ND (43000) U ND (43000) U 670000 ND (43000) U ND (43000) U 95000	ND (42) U ND (42) U ND (42) U ND (42) U 230 ND (42) U 33 J	ND (42) U ND (42) U
Total PCBs	ug/kg	4680	9800	3820	186	0	765000	263	0

May 26, 2006 Page 38 of 100

#### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A006 B-X183Y133 S-011102-MG-043 1/11/2002 (18-19) ft	A005 B-X185Y185 S-011002-MG-024 1/10/2002 (0-2) ft	A005 B-X185Y185 S-011002-MG-025 1/10/2002 (6-8) ft	A005 B-X185Y185 S-011002-MG-026 1/10/2002 (14-15) ft	A005 B-X185Y185 S-011002-MG-027 1/10/2002 (33.5-35.5) ft	A007 B-X185Y195 S-031502-MG-186 3/15/2002 (0-2) ft	A007 B-X185Y195 S-031502-MG-187 3/15/2002 (6-8) ft	A007 B-X185Y195 S-031502-MG-188 3/15/2002 (11-12.5) ft
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1256 (PCB-1254)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (43) U ND (43) U ND (43) U 26 J ND (43) U ND (43) U ND (43) U ND (43) U	ND (44) U ND (44) U ND (44) U ND (44) U 690 ND (44) U ND (44) U	ND (380) U ND (380) U ND (380) U ND (380) U 2400 ND (380) U ND (380) U	ND (2000) U ND (2000) U ND (2000) U ND (2000) U 10000 ND (2000) U ND (2000) U	ND (41) U ND (41) U	ND (42) U ND (42) U	ND (42) U ND (42) U	ND (48) U ND (48) U ND (48) U ND (48) U ND (48) U ND (48) U ND (48) U
Total PCBs	ug/kg	26	690	2400	10000	0	0	0	0

May 26, 2006 Page 39 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A005 B-X186Y159 S-032002-MG-195 3/20/2002 (1-3) ft	A005 B-X186Y159 S-032002-MG-196 3/20/2002 (1-3) ft Duplicate	A005 B-X186Y159 S-032002-MG-197 3/20/2002 (6-8) ft	A005 B-X186Y159 S-032002-MG-198 3/20/2002 (18-20) ft	A005 B-X186Y159 S-032002-MG-199 3/20/2002 (21-23) ft	A005 B-X186Y180 S-032102-MG-200 3/21/2002 (0-2) ft	A005 B-X186Y180 S-032102-MG-201 3/21/2002 (6-8) ft	A005 B-X186Y180 S-032102-MG-202 3/21/2002 (20-22) ft
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016)	ug/kg	ND (2000) U	ND (2000) U	ND (8000) U	ND (210000) U	ND (180000) U	ND (190000) U	ND (1100000) U	ND (41) U
Aroclor-1221 (PCB-1221) Aroclor 1232 (PCB-1232)	ug/kg	ND (2000) U ND (2000) U	ND (2000) U ND (2000) U	ND (8000) U ND (8000) U	ND (210000) U ND (210000) U	ND (180000) U 2300000	ND (190000) U ND (190000) U	ND (1100000) U ND (1100000) U	ND (41) U ND (41) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (2000) U	ND (2000) U	82000	3200000	ND (180000) U	2300000	8600000	29 J
Aroclor-1248 (PCB-1248)	ug/kg	26000	19000	ND (8000) U	ND (210000) U	ND (180000) U	ND (190000) U	ND (1100000) U	ND (41) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (2000) U	ND (2000) U	ND (8000) U	ND (210000) U	ND (180000) U	ND (190000) U	ND (1100000) U	ND (41) U
Aroclor-1260 (PCB-1260)	ug/kg	1300 J	1300 J	20000	73000 J	ND (180000) U	ND (190000) U	ND (1100000) U	ND (41) U
Total PCBs	ug/kg	27300	20300	102000	3273000	2300000	2300000	8600000	29

May 26, 2006 Page 40 of 100

#### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A004 B-X187Y217 S-030602-MG-156 3/6/2002 (0-2) ft	A004 B-X187Y217 S-030602-MG-157 3/6/2002 (6-8) ft	A006 P200 B-X189Y122 S-011502-MG-054 1/15/2002 (0-2) ft	A006 P200 B-X189Y122 S-011502-MG-055 1/15/2002 (6-8) ft	A006 P200 B-X189Y122 S-011502-MG-056 1/15/2002 (8-10) ft	A004 B-X192Y234 S-030502-MG-153 3/5/2002 (0-2) ft	A004 B-X192Y234 S-030502-MG-154 3/5/2002 (6-8) ft	A004 B-X192Y234 S-030502-MG-155 3/5/2002 (20-22) ft
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1256 (PCB-1254)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (41) U ND (41) U ND (41) U ND (41) U 170 ND (41) U 27 J	ND (43) U ND (43) U ND (43) U ND (43) U 25 J ND (43) U ND (43) U	ND (81) U ND (81) U ND (81) U ND (81) U 1400 ND (81) U 120	ND (430) U ND (430) U ND (430) U ND (430) U 2700 ND (430) U ND (430) U	ND (220) U ND (220) U ND (220) U 530 ND (220) U ND (220) U ND (220) U ND (220) U	ND (44) U ND (44) U ND (44) U ND (44) U 11 J ND (44) U ND (44) U ND (44) U	ND (180) U ND (180) U ND (180) U ND (180) U 1600 ND (180) U 100 J	ND (38) U ND (38) U ND (38) U ND (38) U ND (38) U 190 ND (38) U
Total PCBs	ug/kg	197	25	1520	2700	530	11	1700	190

May 26, 2006 Page 41 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A008 P200 B-X193Y098 S-010702-MG-004 1/7/2002 (0-2) ft	A008 P200 B-X193Y098 S-010702-MG-005 1/7/2002 (6-8) ft	A008 P200 B-X193Y098 S-010702-MG-006 1/7/2002 (12-13) ft	A008 P200 B-X193Y098 S-010702-MG-007 1/7/2002 (13-14) ft	A005 B-X193Y172 S-031802-MG-191 3/18/2002 (0-2) ft	A005 B-X193Y172 S-031802-MG-192 3/18/2002 (6-8) ft	A005 B-X193Y172 S-031802-MG-193 3/18/2002 (25-27) ft	A005 B-X193Y172 S-031802-MG-194 3/18/2002 (31-33) ft
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1256 (PCB-1254)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (41) U ND (41) U	ND (47) U ND (47) U	ND (85000) U ND (85000) U 760000 ND (85000) U ND (85000) U ND (85000) U ND (85000) U	ND (170000) U ND (170000) U 1700000 ND (170000) U ND (170000) U ND (170000) U ND (170000) U	ND (44) U ND (44) U ND (44) U ND (44) U 140 ND (44) U ND (44) U ND (44) U	ND (370) U ND (370) U ND (370) U 2400 ND (370) U ND (370) U ND (370) U	ND (41) U ND (41) U ND (41) U ND (41) U 93 ND (41) U ND (41) U	ND (48) U ND (48) U ND (48) U ND (48) U ND (48) U ND (48) U ND (48) U
Total PCBs	ug/kg	0	0	760000	1700000	140	2400	93	0

May 26, 2006 Page 42 of 100

#### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A005 B-X193Y194 S-022102-MG-126 2/21/2002 (0-2) ft	A005 B-X193Y194 S-022102-MG-127 2/21/2002 (5-7) ft	A004 B-X193Y251 S-030402-MG-146 3/4/2002 (0-2) ft	A004 B-X193Y251 S-030402-MG-147 3/4/2002 (0-2) ft Duplicate	A004 B-X193Y251 S-030402-MG-148 3/4/2002 (6-8) ft	A004 B-X193Y251 S-030402-MG-149 3/4/2002 (26-28) ft	A006 B-X195Y133 S-031102-MG-175 3/11/2002 (0-2) ft	A006 B-X195Y133 S-031102-MG-176 3/11/2002 (6-8) ft
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1256 (PCB-1254)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (43) U ND (43) U ND (43) U ND (43) U 15J ND (43) U ND (43) U	ND (45) U ND (45) U ND (45) U ND (45) U ND (45) U ND (45) U ND (45) U	ND (43) U ND (43) U ND (43) U ND (43) U ND (43) U ND (43) U ND (43) U	ND (42) U ND (42) U ND (42) U ND (42) U 8.1 J ND (42) U ND (42) U	ND (3500) U ND (3500) U ND (3500) U ND (3500) U 69000 ND (3500) U 13000	ND (19000) U ND (19000) U ND (19000) U ND (19000) U ND (19000) U 280000 ND (19000) U	ND (40) U ND (40) U ND (40) U ND (40) U 34 J ND (40) U ND (40) U	ND (41) U ND (41) U ND (41) U ND (41) U ND (41) U ND (41) U ND (41) U
Total PCBs	ug/kg	15	0	0	8.1	82000	280000	34	0

May 26, 2006 Page 43 of 100

#### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A006 B-X195Y133 S-031102-MG-177 3/11/2002 (15-17) ft	A005 SS-X195Y161 S-060302-MG-222 6/3/2002 (0-2) ft	A005 SS-X200Y156 S-060302-MG-221 6/3/2002 (0-2) ft	A005 B-X200Y161 S-011002-MG-028 1/10/2002 (0-2) ft	A005 B-X200Y161 S-011002-MG-029 1/10/2002 (0-2) ft Duplicate	A005 B-X200Y161 S-011002-MG-030 1/10/2002 (6-8) ft	A005 B-X200Y161 S-011002-MG-031 1/10/2002 (9-11) ft	A005 SS-X200Y166 S-060302-MG-223 6/3/2002 (0-2) ft
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016)	ug/kg	ND (43) U	ND (42) U	ND (41) U	ND (78000) U	ND (2000) U	ND (70) U	ND (20000) U	ND (40) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (43) U	ND (42) U	ND (41) U	ND (78000) U	ND (2000) U	ND (70) U	ND (20000) U	ND (40) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (43) U	ND (42) U	ND (41) U	ND (78000) U	ND (2000) U	ND (70) U	ND (20000) U	ND (40) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (43) U	ND (42) U	ND (41) U	ND (78000) U	ND (2000) U	ND (70) U	ND (20000) U	ND (40) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (43) U	60	380	1000000	10000	880	300000	ND (40) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (43) U	ND (42) U	ND (41) U	ND (78000) U	ND (2000) U	ND (70) U	ND (20000) U	ND (40) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (43) U	ND (42) U	16 J	25000 J	ND (2000) U	ND (70) U	8000 J	ND (40) U
Total PCBs	ug/kg	0	60	396	1025000	10000	880	308000	0

May 26, 2006 Page 44 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A011 P200 B-X204Y111C S-010802-MG-016 1/8/2002 (6.5-7.5) ft	A006 B-X204Y132 S-011102-MG-044 1/11/2002 (0-2) ft	A006 B-X204Y132 S-011102-MG-045 1/11/2002 (6-8) ft	A006 B-X204Y132 S-011102-MG-046 1/11/2002 (14-15.5) ft	A006 B-X204Y149 S-011002-MG-032 1/10/2002 (0-2) ft	A006 B-X204Y149 S-011002-MG-033 1/10/2002 (6-8) ft	A006 B-X204Y149 S-011002-MG-034 1/10/2002 (15-16) ft	A005 SS-X205Y161 S-060302-MG-224 6/3/2002 (0-2) ft
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1256 (PCB-1254) Aroclor-1260 (PCB-1260)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (190) U ND (190) U ND (190) U ND (190) U 1100 ND (190) U ND (190) U	ND (81000) U ND (81000) U ND (81000) U 1300000 ND (81000) U ND (81000) U ND (81000) U	ND (82) U ND (82) U ND (82) U 490 ND (82) U ND (82) U ND (82) U	ND (41) U ND (41) U 24 J ND (41) U 24 J ND (41) U ND (41) U ND (41) U	ND (400) U ND (400) U ND (400) U ND (400) U 4300 ND (400) U 460	ND (830) U ND (830) U ND (830) U ND (830) U 13000 ND (830) U ND (830) U	ND (41) U ND (41) U ND (41) U 120 ND (41) U 120 ND (41) U ND (41) U	ND (41) U ND (41) U ND (41) U ND (41) U 120 ND (41) U ND (41) U
Total PCBs	ug/kg	1100	1300000	490	24	4760	13000	120	120

May 26, 2006 Page 45 of 100

#### TABLE 4.1

Sample Area:		A008 P200						
Sample Location:		B-X209Y078A	B-X209Y078A	B-X209Y078A	B-X209Y078A	B-X209Y078B	B-X209Y078B	B-X209Y078B
Sample ID:		S-071602-CLM-004	S-071602-CLM-005	S-071602-CLM-006	S-071602-CLM-007	S-071602-CLM-001	S-071602-CLM-002	S-071602-CLM-003
Sample Date:		7/16/2002	7/16/2002	7/16/2002	7/16/2002	7/16/2002	7/16/2002	7/16/2002
Sample Depth:		(2-4) ft	(6-8) ft	(10-12) ft	(11.5-13.5) ft	(6-8) ft	(10-12) ft	(10.5-12.5) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	ug/kg	ND (42) U	ND (36) U	ND (200) U	ND (240) U	ND (36) U	ND (44) U	ND (44) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (42) U	ND (36) U	ND (200) U	ND (240) U	ND (36) U	ND (44) U	ND (44) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (42) U	ND (36) U	ND (200) U	ND (240) U	ND (36) U	ND (44) U	ND (44) U
Aroclor-1242 (PCB-1242)	ug/kg	40 J	ND (36) U	860	750	ND (36) U	ND (44) U	ND (44) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (42) U	ND (36) U	ND (200) U	ND (240) U	ND (36) U	ND (44) U	ND (44) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (42) U	ND (36) U	ND (200) U	ND (240) U	ND (36) U	ND (44) U	ND (44) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (42) U	ND (36) U	ND (200) U	ND (240) U	ND (36) U	ND (44) U	ND (44) U
Total PCBs	ug/kg	40	0	860	750	0	0	0

May 26, 2006 Page 46 of 100

#### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A008 P200 B-X209Y078B S-071602-CLM-008 7/16/2002 (2-4) ft	A008 P200 B-X209Y078B S-071602-CLM-013 7/16/2002 (10-12) ft Duplicate	A008 P200 B-X209Y078C S-071602-CLM-009 7/16/2002 (2-4) ft	A008 P200 B-X209Y078C S-071602-CLM-010 7/16/2002 (6-8) ft	A008 P200 B-X209Y078C S-071602-CLM-011 7/16/2002 (10-12) ft	A008 P200 B-X209Y078C S-071602-CLM-012 7/16/2002 (10.5-12.5) ft	A005 B-X209Y177 S-031402-MG-184 3/14/2002 (0-2) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (41) U ND (41) U ND (41) U 37 J ND (41) U ND (41) U ND (41) U	ND (41) U ND (41) U ND (41) U ND (41) U ND (41) U ND (41) U ND (41) U	ND (42) U ND (42) U	ND (35) U ND (35) U ND (35) U ND (35) U ND (35) U ND (35) U ND (35) U	ND (200) U ND (200) U ND (200) U 1200 ND (200) U ND (200) U ND (200) U	ND (400) U ND (400) U ND (400) U 2800 ND (400) U ND (400) U ND (400) U	ND (43) U ND (43) U ND (43) U ND (43) U 57 ND (43) U ND (43) U
Total PCBs	ug/kg	37	0	0	0	1200	2800	57

May 26, 2006 Page 47 of 100

## TABLE 4.1

	A005 B-X209Y177 S-031402-MG-185 3/14/2002 (2-4) ft	A006 B-X211Y169 S-011402-MG-050 1/14/2002 (0-2) ft	A006 B-X211Y169 S-011402-MG-051 1/14/2002 (6-8) ft	A006 B-X211Y169 S-011402-MG-052 1/14/2002 (10-11) ft	A006 B-X211Y169 S-011402-MG-053 1/14/2002 (12-12.5) ft	A006 P200 B-X213Y125 S-022502-MG-131 2/25/2002 (0-2) ft	A006 P200 B-X213Y125 S-022502-MG-132 2/25/2002 (6-8) ft	A006 P200 B-X213Y125 S-022502-MG-133 2/25/2002 (10-11.5) ft
Units								
ıg∕kg	ND (4400) U	ND (1800) U	ND (7600) U	ND (110000) U	ND (45000) U	ND (40) U	ND (41) U	ND (43) U
ıg∕kg	ND (4400) U	ND (1800) U	ND (7600) U	ND (110000) U	ND (45000) U	ND (40) U	ND (41) U	ND (43) U
lg∕kg vg/kg	ND (4400) U ND (4400) U	ND (1800) U	ND (7600) U	ND (110000) U	ND (45000) U	ND (40) U ND (40) U	ND (41) U	ND (43) U
ig∕kg ig/kg	ND (4400) U 22000	18000	56000	1200000 ND (110000) IJ	400000 ND (45000) U	ND (40) U	ND (41) U	ND (43) U
ig/kg	52000 ND (4400) U	18000 ND (1800) U	ND (7600) U	ND (110000) U	ND (45000) U	ND (40) U	ND (41) U	ND (43) U
ig∕ ng ig/hg	2600 I	1100 I	2000 I	ND (110000) U	ND (45000) U	ND $(40)$ U	$\frac{1}{1} \frac{1}{1} \frac{1}$	ND (43) U
us/ng	2000 J	1100 J	2000 J	1100000) U	1 (4J000) U	1ND (40) UJ	1ND (41) UJ	11D (43) U
	U <b>nits</b> 1g/kg 1g/kg 1g/kg 1g/kg 1g/kg 1g/kg	A005 B-X209Y177 S-031402-MG-185 3/14/2002 (2-4) ft Units Units ug/kg ND (4400) U ug/kg ND (4400) U	A005 A006   B-X209Y177 B-X211Y169   S-031402-MG-185 S-011402-MG-050   3/14/2002 1/14/2002   (2-4) ft (0-2) ft	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	A005 A006 B-X211Y169 S-011402-MG-053 S-011402-MG-053 S-011402-MG-052 S-011402-MG-053 S-011402-MG-053 S-011402-MG-053 S-011402-MG-053 S-011402-MG-052 S-011402-MG-053 S-011402-MG-053 S-011402-MG-053 S-011402-MG-053 S-011402-MG-053 S-011402-MG-053 S-011402-MG-052 S-011402-MG-053 S-011402-MG-053 S-011402-MG-052 S-011402-MG-053 S-011402-MG-053 S-011402-MG-052 S-011402-MG-053 S-011402-MG-052 S-011402-MG-053 S-011402-MG-052 S-011402-MG-053 S-011402-MG-052 S-011402-MG-053 S-011402-MG-052 S-011402-MG-052 S-011402-MG-052 S-011402-MG-053 S-011402-MG-052 S-011402-MG-052 S-011402-MG-052 S-011402-MG-052 S-011402-MG-052 S-011402-MG-052 S-011402-MG-052 S-011402-MG-052 S-011402-MG-052	A005 A006 B-2200 B-2211Y169 B-2213Y125 B-2213Y125 S-031402-MG-053 S-011402-MG-050 S-011402-MG-051 S-011402-MG-052 S-011402-MG-053 S-022502-MG-131 S-02202-MG-131 S-02202-MG-131 S-02202-MG-131 S-02102-MG-052 S-011402-MG-053 S-022502-MG-131 S-02102-MG-052 S-011402-MG-053 S-022502-MG-131 S-02202-MG-131 S-02102-MG-052 S-011402-MG-053 S-022502-MG-131 S-011402-MG-053 S-022502-MG-131 S-011402-MG-053 S-022502-MG-131 S-011402-MG-053 S-022502-MG-131 S-011402-MG-053 S-02102-MG-053 S-02102-MG-053 S-02102-MG-053 S-02102-MG-053 S-02102-MG-053 S-02102-MG-053 S-011402-MG-053 S-011402-MG-05	A005 A006 A006 A006 A006 A006 A006 A006 A006 Pack and

May 26, 2006 Page 48 of 100

#### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A006 P200 B-X213Y125 S-022502-MG-134 2/25/2002 (5-6) ft	A006 B-X217Y131 S-031505-KMV-1117 3/15/2005 (0-2) ft	A006 B-X217Y131 S-031505-KMV-1118 3/15/2005 (0-2) ft Duplicate	A006 B-X217Y131 S-031505-KMV-1119 3/15/2005 (6-8) ft	A006 B-X217Y131 S-031505-KMV-1120 3/15/2005 (13-15) ft	A006 B-X217Y159 S-022702-MG-141 2/27/2002 (0-2) ft	A006 B-X217Y159 S-022702-MG-142 2/27/2002 (6-7) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1248) Aroclor-1254 (PCB-1254)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (40) U ND (40) U ND (40) U ND (40) U ND (40) U ND (40) U ND (40) U	ND (390000) U ND (390000) U ND (390000) U ND (390000) U 530000 ND (390000) U ND (390000) U	ND (390000) U ND (390000) U ND (390000) U ND (390000) U 1500000 ND (390000) U ND (390000) U	ND (9000000) U ND (9000000) U 8300000 J ND (9000000) U ND (9000000) U ND (9000000) U ND (9000000) U	ND (430000) U ND (430000) U ND (430000) U 1600000 ND (430000) U ND (430000) U ND (430000) U ND (430000) U	ND (40) U ND (40) U ND (40) U ND (40) U ND (40) U ND (40) U ND (40) U	ND (44) U ND (44) U
Total PCBs	ug/kg	0	530000	1500000	8300000	1600000	0	0

May 26, 2006 Page 49 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A006 B-X218Y141 S-011102-MG-035 1/11/2002 (0-2) ft	A006 B-X218Y141 S-011102-MG-036 1/11/2002 (6-8) ft	A006 B-X218Y141 S-011102-MG-037 1/11/2002 (8-10) ft	A006 B-X218Y141 S-011102-MG-038 1/11/2002 (14-15.5) ft	A011 P200 B-X219Y095 S-010802-MG-008 1/8/2002 (0-2) ft	A011 P200 B-X219Y095 S-010802-MG-009 1/8/2002 (0-2) ft Duplicate	A011 P200 B-X219Y095 S-010802-MG-010 1/8/2002 (6-8) ft	A011 P200 B-X219Y095 S-010802-MG-011 1/8/2002 (8-9) ft
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016)	ug/kg	ND (400) U	ND (410000) U	6900000	ND (43000) U	ND (82) U	ND (82) U	ND (420) U	ND (39000) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (400) U	ND (410000) U	ND (4100000) U	ND (43000) U	ND (82) U	ND (82) U	2400	380000
Aroclor-1232 (PCB-1232)	ug/kg	ND (400) U	ND (410000) U	ND (4100000) U	ND (43000) U	ND (82) U	ND (82) U	ND (420) U	ND (39000) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (400) U	5100000	8600000	580000	1000	670	ND (420) U	290000
Aroclor-1248 (PCB-1248)	ug/kg	2000	ND (410000) U	ND (4100000) U	ND (43000) U	ND (82) U	ND (82) U	620	ND (39000) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (400) U	ND (410000) U	ND (4100000) U	ND (43000) U	ND (82) U	ND (82) U	ND (420) U	ND (39000) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (400) U	ND (410000) U	ND (4100000) U	ND (43000) U	ND (82) U	ND (82) U	ND (420) U	ND (39000) U
Total PCBs	ug/kg	2000	5100000	15500000	580000	1000	670	3020	670000

May 26, 2006 Page 50 of 100

#### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A011 P200 B-X219Y095 S-010802-MG-012 1/8/2002 (13-14) ft	A004 B-X219Y249 S-022502-KMV-536 2/25/2002 (0-2) ft	A004 B-X219Y249 S-022502-KMV-537 2/25/2002 (0-2) ft Duplicate	A004 B-X219Y249 S-022602-KMV-538 2/26/2002 (6-8) ft	A004 B-X219Y249 S-022602-KMV-539 2/26/2002 (22-23) ft	A006 B-X221Y169 S-022702-MG-139 2/27/2002 (0-2) ft	A006 B-X221Y169 S-022702-MG-140 2/27/2002 (4-5) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	ug/kg	ND (7300) U	ND (41) U	ND (39) U	ND (1900) U	ND (390) U	ND (44) U	ND (44) U
Aroclor-1221 (PCB-1221)	ug/kg	49000	ND (41) U	ND (39) U	ND (1900) U	ND (390) U	ND (44) U	ND (44) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (7300) U	ND (41) U	ND (39) U	ND (1900) U	ND (390) U	ND (44) U	ND (44) U
Aroclor-1242 (PCB-1242)	ug/kg	98000	ND (41) U	ND (39) U	ND (1900) U	ND (390) U	ND (44) U	ND (44) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (7300) U	ND (41) U	ND (39) U	19000	3100	32 J	ND (44) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (7300) U	ND (41) U	ND (39) U	ND (1900) U	ND (390) U	ND (44) U	ND (44) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (7300) U	ND (41) U	ND (39) U	3000	290 J	ND (44) U	ND (44) U
Total PCBs	ug/kg	147000	0	0	22000	3390	32	0

May 26, 2006 Page 51 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A011 P200 B-X223Y097A S-010802-MG-013 1/8/2002 (0-2) ft	A011 P200 B-X223Y097A S-010802-MG-014 1/8/2002 (6-8) ft	A011 P200 B-X223Y097B S-010802-MG-015 1/8/2002 (5-6) ft	A006 P200 B-X223Y124 S-011402-MG-047 1/14/2002 (0-2) ft	A006 P200 B-X223Y124 S-011402-MG-048 1/14/2002 (6-8) ft	A006 P200 B-X223Y124 S-011402-MG-049 1/14/2002 (14-15) ft	A006 B-X223Y150B S-022702-MG-143 2/27/2002 (3-4) ft	A006 B-X223Y150B S-022702-MG-144 2/27/2002 (6-8) ft
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1250 (PCB-1250)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (41) U ND (41) U ND (41) U ND (41) U 290 ND (41) U ND (41) U	ND (10000) U 61000 ND (10000) U 120000 ND (10000) U ND (10000) U ND (10000) U	ND (230) U 1200 ND (230) U 1400 ND (230) U ND (230) U ND (230) U	ND (41) U ND (41) U ND (41) U ND (41) U 23 J ND (41) U ND (41) U	ND (42) U ND (42) U	ND (43) U ND (43) U ND (43) U ND (43) U ND (43) U ND (43) U ND (43) U	ND (8300) U ND (8300) U ND (8300) U 110000 ND (8300) U ND (8300) U ND (8300) U	ND (4200) U ND (4200) U ND (4200) U 32000 ND (4200) U ND (4200) U ND (4200) U
Total PCBs	ug/kg	290	181000	2600	23	0	0	110000	32000

May 26, 2006 Page 52 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A006 B-X223Y150B S-022702-MG-145 2/27/2002 (10-12) ft	A004 B-X223Y247D S-012203-MG-236 1/22/2003 (0-2) ft	A004 B-X223Y247D S-012203-MG-237 1/22/2003 (8-10) ft	A004 B-X223Y247D S-012203-MG-238 1/22/2003 (22-24) ft	A004 B-X223Y247D S-012303-MG-239 1/23/2003 (34-35) ft	A006 B-X224Y138A S-022502-MG-135 2/25/2002 (0-2) ft	A006 B-X224Y138B S-022502-MG-136 2/25/2002 (0-2) ft	A006 B-X224Y138B S-022502-MG-137 2/25/2002 (6-8) ft
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1256 (PCB-1254)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (45) U ND (45) U ND (45) U 320 ND (45) U ND (45) U ND (45) U	ND (41) U ND (41) U ND (41) U ND (41) U ND (41) U ND (41) U ND (41) U	ND (760) U ND (760) U ND (760) U ND (760) U 3700 ND (760) U ND (760) U	ND (210000) U ND (210000) U ND (210000) U 1100000 ND (210000) U ND (210000) U ND (210000) U	ND (2200) U ND (2200) U ND (2200) U 14000 ND (2200) U ND (2200) U ND (2200) U	ND (43) U ND (43) U ND (43) U ND (43) U 19 J ND (43) U ND (43) U	ND (42) U ND (42) U ND (42) U ND (42) U 240 ND (42) U ND (42) U	ND (40) U ND (40) U ND (40) U ND (40) U ND (40) U ND (40) U ND (40) U
Total PCBs	ug/kg	320	0	3700	1100000	14000	19	240	0

May 26, 2006 Page 53 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A006 B-X224Y138B S-022502-MG-138 2/25/2002 (14-16) ft	A011 P200 B-X225Y077 S-010402-MG-001 1/4/2002 (0-2) ft	A011 P200 B-X225Y077 S-010402-MG-002 1/4/2002 (6-8) ft	A011 P200 B-X225Y077 S-010402-MG-003 1/4/2002 (13-15) ft	A006 B-X232Y180 S-031802-MG-189 3/18/2002 (0-2) ft	A006 B-X232Y180 S-031802-MG-190 3/18/2002 (4.5-6.5) ft	A004 B-X243Y257 S-030502-MG-150 3/5/2002 (0-2) ft	A004 B-X2431257 S-030502-MG-151 3/5/2002 (6-8) ft
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016)	ug/kg	ND (47) U	ND (43) U	ND (34) U	ND (42) U	ND (41) U	ND (41) U	ND (43) U	ND (15000) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (47) U	ND (43) U	ND (34) U	ND (42) U	ND (41) U	ND (41) U	ND (43) U	ND (15000) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (47) U	ND (43) U	ND (34) U	ND (42) U	ND (41) U	ND (41) U	ND (43) U	ND (15000) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (47) U	ND (43) U	ND (34) U	ND (42) U	ND (41) U	ND (41) U	ND (43) U	170000
Aroclor-1248 (PCB-1248)	ug/kg	ND (47) U	95	ND (34) U	ND (42) U	8 J	ND (41) U	62	ND (15000) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (47) U	ND (43) U	ND (34) U	ND (42) U	ND (41) U	ND (41) U	ND (43) U	ND (15000) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (47) U	180	ND (34) U	ND (42) U	ND (41) U	ND (41) U	ND (43) U	ND (15000) U
Total PCBs	ug/kg	0	275	0	0	8	0	62	170000

May 26, 2006 Page 54 of 100

#### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A004 B-X243Y257 S-030502-MG-152 3/5/2002 (14-16) ft	A014 P216_west B-X253Y329H S-012202-MG-063 1/22/2002 (10-11) ft	A014 P216_west B-X254Y336 S-012202-MG-064 1/22/2002 (3-3.5) ft	RFI Boundary P216_west B-X261Y356 S-011102-KMV-506 1/11/2002 (0-2) ft	RFI Boundary P216_west B-X261Y356 S-011102-KMV-507 1/11/2002 (0-2) ft Duplicate	RFI Boundary P216_west B-X261Y356 S-011102-KMV-508 1/11/2002 (6-8) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (41) U	ND (45) U	ND (44) U	ND (44) U	ND (42) U	ND (40) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (41) U	ND (45) U	ND (44) U	ND (44) U	ND (42) U	ND (40) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (41) U	ND (45) U	ND (44) U	ND (44) U	ND (42) U	ND (40) U
Aroclor-1242 (PCB-1242)	ug/kg	24 J	ND (45) U	ND (44) U	ND (44) U	ND (42) U	ND (40) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (41) U	84	ND (44) U	ND (44) U	ND (42) U	380
Aroclor-1254 (PCB-1254)	ug/kg	ND (41) U	ND (45) U	ND (44) U	ND (44) U	ND (42) U	ND (40) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (41) U	ND (45) U	ND (44) U	ND (44) U	ND (42) U	49
Total PCBs	ug/kg	24	84	0	0	0	429

May 26, 2006 Page 55 of 100

#### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		RFI Boundary P216_west B-X261Y356 S-011102-KMV-509 1/11/2002 (16-18) ft	A007 East Plant Area CH-1 S-032905-DD-785 3/29/2005 (4-6) ft	A007 East Plant Area CH-2 S-033005-KMV-1138 3/30/2005 (0-2) ft	A007 East Plant Area CH-2 S-033005-KMV-1139 3/30/2005 (4-6) ft	A007 East Plant Area CH-2 S-033005-KMV-1140 330/2005 (10-11.5) ft	A007 East Plant Area CH-3 S-042005-KMV-1179 4/20/2005 (0-2) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (50) U	ND (44) UJ	ND (43) U	ND (42) UJ	ND (46) U	ND (41) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (50) U	ND (44) UJ	ND (43) U	ND (42) UJ	ND (46) U	ND (41) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (50) U	ND (44) UJ	ND (43) U	ND (42) UJ	ND (46) U	ND (41) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (50) U	ND (44) UJ	ND (43) U	ND (42) UJ	ND (46) U	ND (41) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (50) U	150 J	100	ND (42) UJ	ND (46) U	37 J
Aroclor-1254 (PCB-1254)	ug/kg	ND (50) U	ND (44) UJ	ND (43) U	ND (42) UJ	ND (46) U	ND (41) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (50) U	ND (44) UJ	17 J	ND (42) UJ	ND (46) U	ND (41) U
Total PCBs	ug/kg	0	150	117	0	0	37

May 26, 2006 Page 56 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-3 S-042005-KMV-1180 4/20/2005 (3.5-3.5) ft	A007 East Plant Area CH-5 S-040705-JL-1134 4/7/2005 (0-2) ft	A007 East Plant Area CH-5 S-040705-JL-1135 4/7/2005 (5-7) ft	A007 East Plant Area CH-5 S-040705-JL-1136 4/7/2005 (10-12) ft	A007 East Plant Area CH-5 S-040705-JL-1137 4/7/2005 (15-17) ft	A007 East Plant Area CH-5 S-040705-JL-1138 4/7/2005 (17-18.5) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (45) U	ND (45) U	ND (860) U	ND (4100) U	ND (2200) U	ND (21000) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (45) U	ND (45) U	ND (860) U	ND (4100) U	ND (2200) U	ND (21000) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (45) U	ND (45) U	ND (860) U	ND (4100) U	ND (2200) U	ND (21000) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (45) U	ND (45) U	ND (860) U	26000	10000	87000
Aroclor-1248 (PCB-1248)	ug/kg	ND (45) U	74	4200	ND (4100) U	ND (2200) U	ND (21000) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (45) U	ND (45) U	ND (860) U	ND (4100) U	ND (2200) U	ND (21000) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (45) U	ND (45) U	ND (860) U	ND (4100) U	ND (2200) U	ND (21000) U
Total PCBs	ug/kg	0	74	4200	26000	10000	87000

May 26, 2006 Page 57 of 100

#### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-6 S-040405-DD-786 4/4/2005 (0-2) ft	A007 East Plant Area CH-6 S-040405-DD-787 4/4/2005 (5-7) ft	A007 East Plant Area CH-6 S-040405-DD-788 4/4/2005 (10-12) ft	A007 East Plant Area CH-6 S-040505-DD-791 4/5/2005 (14.5-16.5) ft	A007 East Plant Area CH-7 S-040605-DD-792 4/6/2005 (0-2) ft	A007 East Plant Area CH-7 S-040605-DD-793 4/6/2005 (5-7) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (830) U	ND (880) U	ND (43) U	ND (2100) U	ND (210) U	ND (43) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (830) U	ND (880) U	ND (43) U	ND (2100) U	ND (210) U	ND (43) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (830) U	ND (880) U	ND (43) U	ND (2100) U	ND (210) U	ND (43) U
Aroclor-1242 (PCB-1242)	ug∕kg	ND (830) U	3700	66	8200	ND (210) U	140
Aroclor-1248 (PCB-1248)	ug/kg	5100	ND (880) U	ND (43) U	ND (2100) U	620	ND (43) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (830) U	ND (880) U	ND (43) U	ND (2100) U	ND (210) U	ND (43) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (830) U	ND (880) U	ND (43) U	ND (2100) U	ND (210) U	ND (43) U
Total PCBs	ug/kg	5100	3700	66	8200	620	140

May 26, 2006 Page 58 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-7 S-040605-DD-794 4/6/2005 (10-12) ft	A007 East Plant Area CH-7 S-040605-DD-795 4/6/2005 (10-12) ft Duplicate	A007 East Plant Area CH-7 S-040605-DD-796 4/6/2005 (15-17) ft	A007 East Plant Area CH-8 S-040705-JL-1130 4/7/2005 (0-2) ft	A007 East Plant Area CH-8 S-040705-JL-1131 4/7/2005 (0-2) ft Duplicate	A007 East Plant Area CH-8 S-040705-JL-1132 4/7/2005 (5-6) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (45) U	ND (42) U	ND (85) U	ND (410) U	ND (8400) U	ND (41) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (45) U	ND (42) U	ND (85) U	ND (410) U	ND (8400) U	ND (41) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (45) U	ND (42) U	ND (85) U	ND (410) U	ND (8400) U	ND (41) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (45) U	ND (42) U	340 J	ND (410) U	49000	ND (41) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (45) U	ND (42) U	ND (85) U	2500	ND (8400) U	370
Aroclor-1254 (PCB-1254)	ug/kg	ND (45) U	ND (42) U	ND (85) U	ND (410) U	ND (8400) U	ND (41) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (45) U	ND (42) U	ND (85) U	ND (410) U	ND (8400) U	ND (41) U
Total PCBs	ug/kg	0	0	340	2500	49000	370

May 26, 2006 Page 59 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-8 S-040705-JL-1133 4/7/2005 (6-7) ft	A007 East Plant Area CH-9 S-040705-JL-1139 4/7/2005 (0-2) ft	A007 East Plant Area CH-9 S-040705-JL-1140 4/7/2005 (5-7) ft	A007 East Plant Area CH-9 S-040705-JL-1141 4/7/2005 (9-10) ft	A007 East Plant Area CH-10 S-041905-KMV-1159 4/19/2005 (4-6) ft	A007 East Plant Area CH-10 S-041905-KMV-1160 4/19/2005 (9.5-9.5) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1250 (PCB-1254)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (42) U ND (42) U ND (42) U ND (42) U 63 ND (42) U ND (42) U	ND (86) U ND (86) U ND (86) U ND (86) U 240 ND (86) U ND (86) U	ND (41) U ND (41) U ND (41) U 38 J ND (41) U ND (41) U ND (41) U ND (41) U	ND (38) U ND (38) U 20 J ND (38) U ND (38) U ND (38) U ND (38) U	ND (47) U ND (47) U ND (47) U ND (47) U ND (47) U ND (47) U ND (47) U	ND (38) U ND (38) U 12 J ND (38) U 10 (38) U ND (38) U ND (38) U
Total PCBs	ug/kg	63	240	38	20	0	12

May 26, 2006 Page 60 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-11 S-041105-JL-1142 4/11/2005 (0-2) ft	A007 East Plant Area CH-12 S-040805-KMV-1150 4/8/2005 (0-2) ft	A007 East Plant Area CH-13 S-032905-KMV-1137 3/29/2005 (0-2) ft	A007 East Plant Area CH-14 S-033105-KMV-1141 3/31/2005 (0-2) ft	A007 East Plant Area CH-14 S-033105-KMV-1142 3/31/2005 (2-4) ft	A007 East Plant Area CH-15 S-040505-DD-789 4/5/2005 (0-2) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (47) U	ND (43) U	ND (45) U	ND (43) U	ND (43) U	ND (42) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (47) U	ND (43) U	ND (45) U	ND (43) U	ND (43) U	ND (42) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (47) U	ND (43) U	ND (45) U	ND (43) U	ND (43) U	ND (42) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (47) U	ND (43) U	ND (45) U	ND (43) U	ND (43) U	18 J
Aroclor-1248 (PCB-1248)	ug/kg	31 J	ND (43) U	33 J	ND (43) U	32 J	ND (42) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (47) U	ND (43) U	ND (45) U	ND (43) U	ND (43) U	ND (42) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (47) U	ND (43) U	ND (45) U	ND (43) U	ND (43) U	ND (42) U
Total PCBs	ug/kg	31	0	33	0	32	18

May 26, 2006 Page 61 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-15 S-040505-DD-790 4/5/2005 (2.5-4.5) ft	A007 East Plant Area CH-16 S-040605-KMV-1143 4/6/2005 (0-2) ft	A007 East Plant Area CH-16 S-040605-KMV-1144 4/6/2005 (5-7) ft	A007 East Plant Area CH-16 S-040605-KMV-1145 4/6/2005 (10-12) ft	A007 East Plant Area CH-16 S-040605-KMV-1146 4/6/2005 (13-14) ft	A007 East Plant Area CH-17 S-040705-KMV-1147 4/7/2005 (0-2) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (91) U	ND (210) U	ND (420) U	ND (900) U	ND (4400) U	ND (41) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (91) U	ND (210) U	ND (420) U	ND (900) U	ND (4400) U	ND (41) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (91) U	ND (210) U	ND (420) U	ND (900) U	ND (4400) U	ND (41) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (91) U	1000	2400	6000	26000	ND (41) U
Aroclor-1248 (PCB-1248)	ug/kg	680	ND (210) U	ND (420) U	ND (900) U	ND (4400) U	39 J
Aroclor-1254 (PCB-1254)	ug/kg	ND (91) U	ND (210) U	ND (420) U	ND (900) U	ND (4400) U	ND (41) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (91) U	ND (210) U	ND (420) U	ND (900) U	ND (4400) U	ND (41) U
Total PCBs	ug/kg	680	1000	2400	6000	26000	39

May 26, 2006 Page 62 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-17 S-040705-KMV-1148 4/7/2005 (0-2) ft Duplicate	A007 East Plant Area CH-17 S-040705-KMV-1149 4/7/2005 (6-8) ft	A007 East Plant Area CH-18 S-041405-KMV-1138 4/14/2005 (0-2) ft	A007 East Plant Area CH-18 S-041405-KMV-1139 4/14/2005 (5-7) ft	A007 East Plant Area CH-18 S-041405-KMV-1140 4/14/2005 (10-12) ft	A007 East Plant Area CH-18 S-041405-KMV-1141 4/14/2005 (15-17) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (41) U	ND (45) U	ND (41) U	ND (42) U	ND (42) U	ND (44) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (41) U	ND (45) U	ND (41) U	ND (42) U	ND (42) U	ND (44) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (41) U	ND (45) U	ND (41) U	ND (42) U	ND (42) U	ND (44) U
Aroclor-1242 (PCB-1242)	ug/kg	44	ND (45) U	ND (41) U	ND (42) U	59	270
Aroclor-1248 (PCB-1248)	ug/kg	ND (41) U	15 J	ND (41) U	ND (42) U	ND (42) U	ND (44) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (41) U	ND (45) UJ	ND (41) U	ND (42) U	ND (42) U	ND (44) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (41) U	ND (45) UJ	ND (41) U	ND (42) U	ND (42) U	ND (44) U
Total PCBs	ug/kg	44	15	0	0	59	270
May 26, 2006 Page 63 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-19 S-041805-KMV-1157 4/18/2005 (0-2) ft	A007 East Plant Area CH-19 S-041805-KMV-1158 4/18/2005 (5-7) ft	A007 East Plant Area CH-20 S-041905-KMV-1161 4/19/2005 (0-2) ft	A007 East Plant Area CH-20 S-041905-KMV-1162 4/19/2005 (5-7) ft	A007 East Plant Area CH-20 S-041905-KMV-1163 4/19/2005 (10-12) ft	A007 East Plant Area CH-20 S-041905-KMV-1164 4/19/2005 (13.5-13.5) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1256 (PCB-1254)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (41) U ND (41) U	ND (42) U ND (42) U	ND (40) U ND (40) U ND (40) U ND (40) U ND (40) U ND (40) U ND (40) U	ND (45) U ND (45) U ND (45) U 26 J ND (45) U ND (45) U ND (45) U ND (45) U	ND (46) U ND (46) U ND (46) U ND (46) U ND (46) U ND (46) U ND (46) U	ND (45) U ND (45) U
Total PCBs	ug/kg	0	0	0	26	0	0

May 26, 2006 Page 64 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-20 S-041905-KMV-1165 4/19/2005 (10-12) ft Duplicate	A007 East Plant Area CH-21 S-042005-JL-1170 4/20/2005 (0-2) ft	A007 East Plant Area CH-21 S-042005JL-1171 4/20/2005 (5-7) ft	A007 East Plant Area CH-21 S-042005-JL-1172 4/20/2005 (10-11.5) ft	A007 East Plant Area CH-22 S-042005-KMV-1181 4/20/2005 (0-2) ft	A007 East Plant Area CH-22 S-042005-KMV-1182 4/20/2005 (5-7) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (45) U	ND (42) U	ND (41) U	ND (44) U	ND (41) U	ND (43) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (45) U	ND (42) U	ND (41) U	ND (44) U	ND (41) U	ND (43) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (45) U	ND (42) U	ND (41) U	ND (44) U	ND (41) U	ND (43) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (45) U	ND (42) U	ND (41) U	ND (44) U	ND (41) U	ND (43) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (45) U	340	ND (41) U	ND (44) U	ND (41) U	50
Aroclor-1254 (PCB-1254)	ug/kg	ND (45) U	ND (42) U	ND (41) U	ND (44) U	ND (41) U	ND (43) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (45) U	ND (42) U	ND (41) U	ND (44) U	ND (41) U	ND (43) U
Total PCBs	ug/kg	0	340	0	0	0	50

May 26, 2006 Page 65 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-22 S-042005-KMV-1183 4/20/2005 (9-9) ft	A007 East Plant Area CH-23 S-042105-JL-1173 4/21/2005 (0-2) ft	A007 East Plant Area CH-24 S-042105-JL-1174 4/21/2005 (0-2) ft	A007 East Plant Area CH-24 S-042105-JL-1175 4/21/2005 (5-7) ft	A007 East Plant Area CH-24 S-042105-JL-1176 4/21/2005 (5-7) ft Duplicate	A007 East Plant Area CH-24 S-042105-JL-1177 4/21/2005 (9-9.5) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (43) U	ND (42) U	ND (41) U	ND (44) U	ND (44) U	ND (40) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (43) U	ND (42) U	ND (41) U	ND (44) U	ND (44) U	ND (40) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (43) U	ND (42) U	ND (41) U	ND (44) U	ND (44) U	ND (40) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (43) U	ND (42) U	ND (41) U	ND (44) U	ND (44) U	ND (40) U
Aroclor-1248 (PCB-1248)	ug/kg	12 J	ND (42) U	400	41 J	ND (44) U	7.0 J
Aroclor-1254 (PCB-1254)	ug/kg	ND (43) U	ND (42) U	ND (41) U	ND (44) U	ND (44) U	ND (40) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (43) U	ND (42) U	130	ND (44) U	ND (44) U	ND (40) U
Total PCBs	ug/kg	12	0	530	41	0	7

May 26, 2006 Page 66 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-25 S-042105-JL-1178 4/21/2005 (0-2) ft	A007 East Plant Area CH-25 S-042105-JL-1179 4/21/2005 (5-7) ft	A007 East Plant Area CH-25 S-042105-JL-1180 4/21/2005 (10-12) ft	A007 East Plant Area CH-25 S-04210-JL-1181 4/21/2005 (14-16) ft	A007 East Plant Area CH-26 S-042105-JL-1182 4/21/2005 (0-2) ft	A007 East Plant Area CH-26 S-042105-JL-1183 4/21/2005 (4-5) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1256 (PCB-1254)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (43) UJ ND (43) UJ ND (43) UJ ND (43) UJ 13 J ND (43) UJ ND (43) UJ	ND (42) U ND (42) U	ND (40) U ND (40) U	ND (43) U ND (43) U	ND (41) U ND (41) U ND (41) U ND (41) U 84 ND (41) U 30 J	ND (43) U ND (43) U
Total PCBs	ug/kg	13	0	0	0	114	0

May 26, 2006 Page 67 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-27 S-042205-JL-1184 4/22/2005 (0-2) ft	A007 East Plant Area CH-28 S-042205-JL-1185 4/22/2005 (0-1) ft	A007 East Plant Area CH-29 S-042505-JL-1186 4/25/2005 (0-2) ft	A007 East Plant Area CH-30 S-042505-JL-1187 4/25/2005 (0-2) ft	A007 East Plant Area CH-31 S-042505-JL-1188 4/25/2005 (0-2) ft	A007 East Plant Area CH-31 S-042505-JL-1189 4/25/2005 (5-7) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (43) U	ND (44) U	ND (8700) U	ND (4000) U	ND (40) U	ND (1900) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (43) U	ND (44) U	ND (8700) U	ND (4000) U	ND (40) U	ND (1900) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (43) U	ND (44) U	ND (8700) U	ND (4000) U	ND (40) U	ND (1900) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (43) U	ND (44) U	100000	ND (4000) U	ND (40) U	ND (1900) U
Aroclor-1248 (PCB-1248)	ug/kg	47	10 J	ND (8700) U	19000	9.6 J	8800
Aroclor-1254 (PCB-1254)	ug/kg	ND (43) U	ND (44) U	ND (8700) U	ND (4000) U	ND (40) U	ND (1900) U
Aroclor-1260 (PCB-1260)	ug/kg	13 J	ND (44) U	19000	ND (4000) U	ND (40) U	ND (1900) U
Total PCBs	ug/kg	60	10	119000	19000	9.6	8800

May 26, 2006 Page 68 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-32 S-042505-JL-1190 4/25/2005 (0-2) ft	A007 East Plant Area CH-32 S-042505-JL-1191 4/25/2005 (5-5.5) ft	A007 East Plant Area CH-33 S-042505-JL-1192 4/25/2005 (0-2) ft	A007 East Plant Area CH-34 S-040505-JL-1110 4/5/2005 (0-2) ft	A007 East Plant Area CH-34 S-040505-JL-1111 4/5/2005 (5-7) ft	A007 East Plant Area CH-34 S-040505-JL-1112 4/5/2005 (10-12) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (210000) U	ND (43) U	ND (210) U	ND (44) U	ND (430) U	ND (450) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (210000) U	ND (43) U	ND (210) U	ND (44) U	ND (430) U	ND (450) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (210000) U	ND (43) U	ND (210) U	ND (44) U	ND (430) U	ND (450) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (210000) U	ND (43) U	ND (210) U	69	1600	1400
Aroclor-1248 (PCB-1248)	ug/kg	840000	190	1400	ND (44) U	ND (430) U	ND (450) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (210000) U	ND (43) U	ND (210) U	ND (44) U	ND (430) U	ND (450) U
Aroclor-1260 (PCB-1260)	ug/kg	140000 J	33 J	ND (210) U	ND (44) U	ND (430) U	ND (450) U
Total PCBs	ug/kg	980000	223	1400	69	1600	1400

May 26, 2006 Page 69 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-34 S-0405-JL-1113 4/5/2005 (14-15) ft	A007 East Plant Area CH-35 S-04045-JL-1107 4/4/2005 (0-2) ft	A007 East Plant Area CH-35 S-040405-JL-1108 4/4/2005 (5-7) ft	A007 East Plant Area CH-35 S-040405-JL-1109 4/4/2005 (7-7) ft	A007 East Plant Area CH-36 S-04045-JL-1099 4/4/2005 (0-2) ft	A007 East Plant Area CH-36 S-04045-JL-1100 4/4/2005 (5-7) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016) Aroclor 1221 (PCB 1221)	ug/kg	ND (40) U	ND (46) U	ND (43) U	ND (42) U	ND (43) U	ND (43) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (40) U	ND (46) U	ND (43) U	ND (42) U	ND (43) U	ND (43) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (40) U	ND (46) U	ND (43) U	ND (42) U	ND (43) U	ND (43) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (40) U	26 J	ND (43) U	ND (42) U	ND (43) U	ND (43) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (40) U	ND (46) U	ND (43) U	ND (42) U	ND (43) U	ND (43) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (40) U	ND (46) U	ND (43) U	ND (42) U	ND (43) U	ND (43) U
Total PCBs	ug/kg	0	26	0	0	0	0

May 26, 2006 Page 70 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-36 S-040405-JL-1101 4/4/2005 (10-12) ft	A007 East Plant Area CH-36 S-040405-JL-1102 4/4/2005 (15-17) ft	A007 East Plant Area CH-36 S-040405-JL-1103 4/4/2005 (15-17) ft Duplicate	A007 East Plant Area CH-36 S-040405-JL-1104 4/4/2005 (20-22) ft	A007 East Plant Area CH-36 S-040405-JL-1105 4/4/2005 (25-27) ft	A007 East Plant Area CH-36 S-040405-JL-1106 4/4/2005 (27-28) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (42) U	ND (42) U	ND (43) U	ND (43) U	ND (43) U	ND (460) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (42) U	ND (42) U	ND (43) U	ND (43) U	ND (43) U	ND (460) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (42) U	ND (42) U	ND (43) U	ND (43) U	ND (43) U	ND (460) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (42) U	ND (42) U	ND (43) U	ND (43) U	ND (43) U	ND (460) U
Aroclor-1248 (PCB-1248)	ug/kg	40 J	ND (42) U	ND (43) U	ND (43) U	ND (43) U	2500
Aroclor-1254 (PCB-1254)	ug/kg	ND (42) U	ND (42) U	ND (43) U	ND (43) U	ND (43) U	ND (460) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (42) U	ND (42) U	ND (43) U	ND (43) U	ND (43) U	ND (460) U
Total PCBs	ug/kg	40	0	0	0	0	2500

May 26, 2006 Page 71 of 100

# TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-37 S-040405-JL-1093 4/4/2005 (0-2) ft	A007 East Plant Area CH-37 S-04045-JL-1094 4/4/2005 (5-7) ft	A007 East Plant Area CH-37 S-04045-JL-1095 4/4/2005 (10-12) ft	A007 East Plant Area CH-37 S-040405-JL-1096 4/4/2005 (15-17) ft	A007 East Plant Area CH-37 S-04040-JL-1097 4/4/2005 (20-22) ft	A007 East Plant Area CH-37 S-04040-JL-1098 4/4/2005 (22-23) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (41) U	ND (42) U	ND (43) U	ND (44) U	ND (43) U	ND (42) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (41) U	ND (42) U	ND (43) U	ND (44) U	ND (43) U	ND (42) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (41) U	ND (42) U	ND (43) U	ND (44) U	ND (43) U	ND (42) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (41) U	ND (42) U	ND (43) U	ND (44) U	ND (43) U	20 J
Aroclor-1248 (PCB-1248)	ug/kg	ND (41) U	ND (42) U	ND (43) U	ND (44) U	ND (43) U	ND (42) U
Aroclor-1254 (PCB-1254)	ug/kg	6.0 J	ND (42) U	ND (43) U	ND (44) U	ND (43) U	ND (42) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (41) U	ND (42) U	ND (43) U	ND (44) U	ND (43) U	ND (42) U
Total PCBs	ug/kg	6	0	0	0	0	20

May 26, 2006 Page 72 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-38 S-040505-JL-1114 4/5/2005 (0-2) ft	A007 East Plant Area CH-38 S-040505-JL-1115 4/5/2005 (5-7) ft	A007 East Plant Area CH-38 S-040505-JL-1116 4/5/2005 (10-12) ft	A007 East Plant Area CH-38 S-040505-JL-1117 4/5/2005 (14-15) ft	A007 East Plant Area CH-39 S-040605-JL-1118 4/6/2005 (0-2) ft	A007 East Plant Area CH-39 S-040605-JL-1119 4/6/2005 (5-7) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (43) U	ND (43) U	ND (43) U	ND (40) U	ND (81) U	ND (41) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (43) U	ND (43) U	ND (43) U	ND (40) U	ND (81) U	ND (41) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (43) U	ND (43) U	ND (43) U	ND (40) U	ND (81) U	ND (41) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (43) U	ND (43) U	ND (43) U	ND (40) U	ND (81) U	ND (41) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (43) U	ND (43) U	ND (43) U	ND (40) U	ND (81) U	27 J
Aroclor-1254 (PCB-1254)	ug/kg	ND (43) U	ND (43) U	ND (43) U	ND (40) U	300	ND (41) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (43) U	ND (43) U	ND (43) U	ND (40) U	ND (81) U	ND (41) U
Total PCBs	ug/kg	0	0	0	0	300	27

May 26, 2006 Page 73 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-39 S-040605-JL-1120 4/6/2005 (10-12) ft	A007 East Plant Area CH-39 S-040605-JL-1121 466/2005 (15-17) ft
Parameters	Units		
PCBs			
Aroclor-1016 (PCB-1016)	ug/kg	ND (18000) U	ND (6900) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (18000) U	ND (6900) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (18000) U	ND (6900) U
Aroclor-1242 (PCB-1242)	ug/kg	130000	48000
Aroclor-1248 (PCB-1248)	ug/kg	ND (18000) U	ND (6900) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (18000) U	ND (6900) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (18000) U	4700 J
Total PCBs	ug/kg	130000	52700

May 26, 2006 Page 74 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-39 S-040605-JL-1122 4/6/2005 (20-22) ft	A007 East Plant Area CH-39 S-040605-JL-1123 4/6/2005 (25-27) ft	A007 East Plant Area CH-39 S-040605-JL-1124 4/6/2005 (27-28) ft	A007 East Plant Area CH-40 S-040605-JL-1127 4/6/2005 (0-2) ft	A007 East Plant Area CH-40 S-040605-JL-1128 4/6/2005 (5-7) ft	A007 East Plant Area CH-40 S-040605-JL-1129 4/6/2005 (7-8) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (1700) U	ND (1700) U	ND (3600) U	ND (39) U	ND (42000) U	ND (22000) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (1700) U	ND (1700) U	ND (3600) U	ND (39) U	ND (42000) U	ND (22000) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (1700) U	ND (1700) U	ND (3600) U	ND (39) U	ND (42000) U	ND (22000) U
Aroclor-1242 (PCB-1242)	ug/kg	18000	13000	29000	ND (39) U	180000	130000
Aroclor-1248 (PCB-1248)	ug/kg	ND (1700) U	ND (1700) U	ND (3600) U	8.3 J	ND (42000) U	ND (22000) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (1700) U	ND (1700) U	ND (3600) U	ND (39) U	ND (42000) U	ND (22000) U
Aroclor-1260 (PCB-1260)	ug/kg	2900	1100 J	3200 J	ND (39) U	19000 J	ND (22000) U
Total PCBs	ug/kg	20900	14100	32200	8.3	199000	130000

May 26, 2006 Page 75 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A007 East Plant Area CH-41 S-040605-JL-1125 4/6/2005 (0-2) ft	A007 East Plant Area CH-41 S-040605-JL-1126 4/6/2005 (2-3) ft	A015 Monitoring_Well MW-X143Y245D S-010702-KMV-501 1/7/2002 (0-2) ft	A015 Monitoring. Well MW-X143Y245D S-010702-KMV-502 1/7/2002 (0-2) ft Duplicate	A015 Monitoring Well MW-X143Y245D S-010702-KMV-503 1/7/2002 (6-8) ft	ANAOI4 GMPT_west MW-X204Y288 S-052404-KMV-585 5/24/2004 (0-2) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (87) U	ND (200) U	ND (3900) U	ND (3700) U	ND (46) U	ND (43) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (87) U	ND (200) U	ND (3900) U	ND (3700) U	ND (46) U	ND (43) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (87) U	ND (200) U	ND (3900) U	ND (3700) U	ND (46) U	ND (43) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (87) U	ND (200) U	ND (3900) U	ND (3700) U	ND (46) U	ND (43) U
Aroclor-1248 (PCB-1248)	ug/kg	270	840	30000	36000	87	ND (43) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (87) U	ND (200) U	ND (3900) U	ND (3700) U	ND (46) U	ND (43) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (87) U	ND (200) U	ND (3900) U	ND (3700) U	ND (46) U	ND (43) U
Total PCBs	ug/kg	270	840	30000	36000	87	0

May 26, 2006 Page 76 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A008 MW-X233Y071A S-051904-DD-019 5/19/2004 (0-2) ft	A008 MW-X233Y071A S-051904-DD-020 5/19/2004 (6-8) ft	A008 MW-X233Y071A S-051904-DD-021 5/19/2004 (14-16) ft	A008 P200 MW-X233Y105A S-041503-KMV-569 4/15/2003 (0-2) ft	A008 P200 MW-X233Y110A S-041503-KMV-570 4/15/2003 (0-2) ft	A008 P200 MW-X233Y115A S-041603-KMV-571 4/16/2003 (0-2) ft	A008 P200 MW-X233Y115A S-041603-KMV-572 4/16/2003 (6-7) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1256 (PCB-1254)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (42) U ND (42) U ND (42) U ND (42) U 11 J ND (42) U ND (42) U ND (42) U	ND (42) U ND (42) U ND (42) U ND (42) U 22 J ND (42) U ND (42) U ND (42) U	ND (400) U ND (400) U 1200 ND (400) U ND (400) U ND (400) U ND (400) U	ND (210) U ND (210) U ND (210) U ND (210) U 2400 ND (210) U ND (210) U	ND (45) U ND (45) U ND (45) U ND (45) U 51 ND (45) U ND (45) U	ND (200) U ND (200) U ND (200) U ND (200) U 1200 ND (200) U ND (200) U	ND (42) U ND (42) U
Total PCBs	ug/kg	11	22	1200	2400	51	1200	0

May 26, 2006 Page 77 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A008 P200 MW-X233Y120A S-042203-JM-1000 4/22/2003 (0-2) ft	A008 P200 MW-X233Y120A S-042203-JM-1001 4/22/2003 (0-2) ft Duplicate	A008 P200 MW-X233Y120A S-042203-JM-1002 4/22/2003 (6-8) ft	A008 P200 MW-X233Y120A S-042203-JM-1003 4/22/2003 (8-10) ft	A008 P200 MW-X233Y125A S-042203-JM-1004 4/22/2003 (0-2) ft	A008 P200 MW-X233Y125A S-042203-JM-1005 4/22/2003 (6-8) ft	A008 P200 MW-X233Y125A S-042203-JM-1006 4/22/2003 (12-14) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260) Total PCPs	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (41) U ND (41) U	ND (42) U ND (42) U	ND (43) U ND (43) U	ND (37) U ND (37) U	ND (83) U ND (83) U ND (83) U ND (83) U 540 ND (83) U ND (83) U 540	ND (40) U ND (40) U ND (40) U ND (40) U 37 J ND (40) U ND (40) U 27 J	ND (40) U ND (40) U

May 26, 2006 Page 78 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		Monitoring_Well Plant_Property RFI_Boundary MW-X234Y157D S-012502-KMV-514 1/25/2002 (0-2) ft	Monitoring_Well Plant_Property RFI_Boundary MW-X234Y157D S-012502-KMV-515 1/25/2002 (0-2) ft Duplicate	Monitoring_Well Plant_Property RFI_Boundary MW-X234Y157D S-012502-KMV-516 1/25/2002 (4-6) ft
Parameters	Units			
PCBs				
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (4100) U ND (4100) U ND (4100) U ND (4100) U 14000 ND (4100) U 1100 J	ND (4200) U ND (4200) U ND (4200) U ND (4200) U 12000 ND (4200) U ND (4200) U	ND (44) U ND (44) U ND (44) U ND (44) U 30 J ND (44) U ND (44) U
Total PCBs	ug/kg	15100	12000	30

May 26, 2006 Page 79 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P200 Former South Lagoons and Outfall 002 - A008 MW-X242Y060S S-051904-DD-022 5/19/2004 (0-2) ft	P200 Former South Lagoons and Outfall 002 - A008 MW-X242Y060S S-051904-DD-023 5/19/2004 (6-8) ft	Background RFI Boundary P216_west MW-X261Y356D S-012102-KMV-509 1/21/2002 (0-2) ft
Parameters	Units			
PCBs				
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242)	ug/kg ug/kg ug/kg ug/kg	ND (43) U ND (43) U ND (43) U ND (43) U	ND (43) U ND (43) U ND (43) U ND (43) U	ND (42) U ND (42) U ND (42) U ND (42) U ND (42) U
Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260) Total PCBs	ug/kg ug/kg ug/kg ug/kg	ND (43) U 16 J ND (43) U 16	ND (43) U ND (43) U ND (43) U 0	ND (42) U ND (42) U ND (42) U 0

May 26, 2006 Page 80 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		Background RFI Boundary P216_west MW-X261Y356D S-012102-KMV-510 1/21/2002 (0-2) ft Duplicate	Monitoring_Well Plant_Property RFI_Boundary MW-X269Y201D S-012202-KMV-511 1/22/2002 (0-2) ft	Monitoring_Well Plant_Property RFI_Boundary MW-X269Y201D S-012202-KMV-512 1/22/2002 (0-2) ft Duplicate
Parameters	Units			
PCBs				
Aroclor-1016 (PCB-1016)	ug/kg	ND (43) U	ND (42) U	ND (40) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (43) U	ND (42) U	ND (40) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (43) U	ND (42) U	ND (40) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (43) U	ND (42) U	ND (40) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (43) U	18 J	ND (40) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (43) U	ND (42) U	ND (40) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (43) U	ND (42) U	ND (40) U
Total PCBs	ug/kg	0	18	0

May 26, 2006 Page 81 of 100

# TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		Monitoring_Well Plant_Property RFI_Boundary MW-X269Y201D S-012202-KMV-513 1/22/2002 (7-9) ft	East Plant Area PS-1A S-032205-JC-1029 3/22/2005 (0-2) ft	East Plant Area PS-1A S-032205-JC-1030 3/22/2005 (0-2) ft Duplicate	East Plant Area PS-2A S-032205-JC-1032 3/22/2005 (0-2) ft	East Plant Area PS-2B S-032205-JC-1027 3/22/2005 (0-2) ft	East Plant Area PS-3A S-031605-JC-952 3/16/2005 (0-2) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1232) Aroclor-1248 (PCB-1248) Aroclor-1248 (PCB-1248) Aroclor-1260 (PCB-1254) Aroclor-1260 (PCB-1260)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (43) U ND (43) U ND (43) U ND (43) U 16 J ND (43) U ND (43) U ND (43) U	ND (43) U ND (43) U ND (43) U ND (43) U 60 ND (43) U ND (43) U ND (43) U	ND (45) U ND (45) U ND (45) U ND (45) U 50 ND (45) U ND (45) U	ND (42) U ND (42) U	ND (46) U ND (46) U ND (46) U ND (46) U ND (46) U ND (46) U ND (46) U	ND (2100) U ND (2100) U ND (2100) U ND (2100) U 6200 ND (2100) U ND (2100) U ND (2100) U
Total PCBs	ug∕kg	16	60	50	0	0	6200

May 26, 2006 Page 82 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		East Plant Area PS-3B S-031605-JC-954 3/16/2005 (0-2) ft	East Plant Area PS-3B S-031605-JC-955 3/16/2005 (0-2) ft Duplicate	East Plant Area PS-4A S-031605-JC-957 3/16/2005 (0-2) ft	East Plant Area PS-4B S-032205-JC-1025 3/22/2005 (0-2) ft	East Plant Area PS-5A S-031605-JC-959 3/16/2005 (0-2) ft	East Plant Area PS-5B S-032205-JC-1023 3/22/2005 (0-2) ft	East Plant Area PS-6A S-031605-JC-961 3/16/2005 (0-2) ft	East Plant Area PS-6B S-031605-JC-963 3/16/2005 (0-2) ft
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016)	ug/kg	ND (41) U	ND (42) U	ND (440) U	ND (44) U	ND (41) U	ND (42) U	ND (43) U	ND (43) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (41) U ND (41) U	ND (42) U ND (42) U	ND (440) U ND (440) U	ND (44) U ND (44) U	ND (41) U ND (41) U	ND (42) U ND (42) U	ND (43) U ND (42) U	ND (43) U ND (42) U
Aroclor-1232 (PCB-1232)	ug/kg ug/kg	ND (41) U	30 I	ND (440) U ND (440) U	ND (44) U	ND (41) U	ND (42) U	ND (43) U	ND (43) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (41) U	ND (42) U	2400	ND (44) U	ND (41) U	26 J	ND (43) U	ND (43) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (41) U	ND (42) U	ND (440) U	ND (44) U	ND (41) U	ND (42) U	ND (43) U	ND (43) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (41) U	ND (42) U	ND (440) U	ND (44) U	ND (41) U	ND (42) U	ND (43) U	ND (43) U
Total PCBs	ug/kg	0	30	2400	0	0	26	0	0

May 26, 2006 Page 83 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		East Plant Area PS-7A S-031705-JC-965 3/17/2005 (0-2) ft	East Plant Area PS-7B S-031705-JC-967 3/17/2005 (0-2) ft	East Plant Area PS-7B S-031705-JC-968 3/17/2005 (0-2) ft Duplicate	East Plant Area PS-8A S-031705-JC-970 3/17/2005 (0-2) ft	East Plant Area PS-8B S-031705-JC-972 3/17/2005 (0-2) ft	East Plant Area PS-8B S-031705-JC-973 3/17/2005 (0-2) ft Duplicate	East Plant Area PS-9A S-031705-JC-975 3/17/2005 (0-2) ft	East Plant Area PS-9B S-032105-JC-1016 3/21/2005 (0-2) ft
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260) Total PCBs	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (44) U ND (44) U ND (44) U ND (44) U 18 J ND (44) U ND (44) U 18	ND (42) U ND (42) U ND (42) U ND (42) U ND (42) U ND (42) U ND (42) U 0	ND (42) U ND (42) U ND (42) U ND (42) U ND (42) U ND (42) U ND (42) U 0	ND (41) U ND (41) U ND (41) U ND (41) U ND (41) U ND (41) U ND (41) U 0	ND (42) U ND (42) U ND (42) U ND (42) U 13J ND (42) U ND (42) U 13	ND (44) U ND (44) U ND (44) U ND (44) U ND (44) U ND (44) U ND (44) U 0	ND (44) U ND (44) U ND (44) U ND (44) U ND (44) U ND (44) U ND (44) U 0	ND (2100) U ND (2100) U ND (2100) U ND (2100) U 16000 ND (2100) U ND (2100) U 16000

May 26, 2006 Page 84 of 100

#### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		East Plant Area PS-9B S-032105-JC-1017 3/21/2005 (2-4) ft	East Plant Area PS-10A S-031705-JC-977 3/17/2005 (0-2) ft	East Plant Area PS-10B S-031805-JC-979 3/18/2005 (0-2) ft	East Plant Area PS-11A S-032105-JC-1014 3/21/2005 (0-2) ft	East Plant Area PS-11B S-032105-JC-1010 3/21/2005 (0-2) ft	East Plant Area PS-12A S-032105-JC-1012 3/21/2005 (0-2) ft	East Plant Area PS-12B S-032105-JC-1008 3/21/2005 (0-2) ft	East Plant Area PS-13A S-032105-JC-994 3/21/2005 (0-2) ft
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016)	ug/kg	ND (210) U	ND (42) U	ND (41) U	ND (43) U	ND (41) U	ND (380) U	ND (41) U	ND (42) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (210) U	ND (42) U	ND (41) U	ND (43) U	ND (41) U	ND (380) U	ND (41) U	ND (42) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (210) U	ND (42) U	ND (41) U	ND (43) U	ND (41) U	ND (380) U	ND (41) U	ND (42) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (210) U	ND (42) U	ND (41) U	ND (43) U	ND (41) U	ND (380) U	ND (41) U	ND (42) U
Aroclor-1248 (PCB-1248)	ug/kg	910	22 J	ND (41) U	ND (43) U	ND (41) U	870	8.0 J	ND (42) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (210) U	ND (42) U	ND (41) U	ND (43) U	ND (41) U	ND (380) U	ND (41) U	ND (42) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (210) U	ND (42) U	ND (41) U	ND (43) U	ND (41) U	180 J	ND (41) U	ND (42) U
Total PCBs	ug/kg	910	22	0	0	0	1050	8	0

May 26, 2006 Page 85 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		East Plant Area PS-13A S-032105-JC-995 3/21/2005 (0-2) ft Duplicate	East Plant Area PS-13B S-032105-JC-997 3/21/2005 (0-2) ft	East Plant Area PS-14A S-032105-JC-1005 3/21/2005 (0-2) ft	East Plant Area PS-14A S-032105-JC-1006 3/21/2005 (0-2) ft Duplicate	East Plant Area PS-14A S-032105-JC-1007 3/21/2005 (2-4) ft	East Plant Area PS-14B S-032105-JC-1003 3/21/2005 (0-2) ft	East Plant Area PS-15A S-032105-JC-999 3/21/2005 (0-2) ft	East Plant Area PS-15B S-032105-JC-1001 3/21/2005 (0-2) ft
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (43) U ND (43) U	ND (42) U ND (42) U ND (42) U ND (42) U 56 ND (42) U 17 J	ND (8000) U ND (8000) U ND (8000) U ND (8000) U 31000 ND (8000) U 10000	ND (8900) U ND (8900) U ND (8900) U ND (8900) U 48000 ND (8900) U 15000	ND (40) U ND (40) U ND (40) U ND (40) U ND (40) U 14 J ND (40) U	ND (42) U ND (42) U	ND (42) U ND (42) U	ND (45) U ND (45) U ND (45) U ND (45) U ND (45) U ND (45) U ND (45) U
Total PCBs	ug/kg	0	73	41000	63000	14	0	0	0

May 26, 2006 Page 86 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		East Plant Area PS-16A S-032105-JC-992 3/21/2005 (0-2) ft	East Plant Area PS-16B S-031805-JC-990 3/18/2005 (0-2) ft	East Plant Area PS-17A S-031805-JC-986 3/18/2005 (0-2) ft	East Plant Area PS-17B S-031805-JC-988 3/18/2005 (0-2) ft	East Plant Area PS-18A S-032205-JC-1018 3/22/2005 (0-2) ft	East Plant Area PS-18A S-032205-JC-1019 3/22/2005 (0-2) ft Duplicate	East Plant Area PS-18A S-032205-JC-1020 3/22/2005 (2-4) ft	East Plant Area PS-18B S-031805-JC-983 3/18/2005 (0-2) ft
Parameters	Units								
PCBs									
Aroclor-1016 (PCB-1016)	ug/kg	ND (42) U	ND (40) U	ND (43) U	ND (43) U	ND (840) U	ND (3900) U	ND (3400) U	ND (41) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (42) U	ND (40) U	ND (43) U	ND (43) U	ND (840) U	ND (3900) U	ND (3400) U	ND (41) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (42) U	ND (40) U	ND (43) U	ND (43) U	ND (840) U	ND (3900) U	ND (3400) U	ND (41) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (42) U	ND (40) U	ND (43) U	ND (43) U	ND (840) U	ND (3900) U	ND (3400) U	ND (41) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (42) U	19 J	25 J	ND (43) U	5800	26000	22000	ND (41) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (42) U	ND (40) U	ND (43) U	ND (43) U	ND (840) U	ND (3900) U	ND (3400) U	ND (41) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (42) U	ND (40) U	ND (43) U	ND (43) U	ND (840) U	ND (3900) U	ND (3400) U	ND (41) U
Total PCBs	ug/kg	0	19	25	0	5800	26000	22000	0

May 26, 2006 Page 87 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		East Plant Area PS-18B S-031805-JC-984 3/18/2005 (0-2) ft Duplicate	East Plant Area PS-19A S-031805-JC-981 3/18/2005 (0-2) ft	East Plant Area PS-19B S-032205-JC-1021 3/22/2005 (0-2) ft	A004 GMPT_west SD-X196Y272 S-031402-JW-1429 3/14/2002 (0-0.33) ft	A005 SS-X187Y177 S-071802-CLM-001 7/18/2002 (0-2) ft	A005 SS-X189Y169 S-071802-CLM-002 7/18/2002 (0-2) ft	A005 SS-X189Y169 S-071802-CLM-005 7/18/2002 (0-2) ft Duplicate
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016)	ug/kg	ND (41) U	ND (41) U	ND (39) U	ND (42) U	ND (41) U	ND (41) U	ND (39) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (41) U ND (41) U	ND (41) U ND (41) U	ND (39) U	ND (42) U	ND (41) U ND (41) U	ND (41) U ND (41) U	ND (39) U
Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242)	ug/Kg ug/kg	ND (41) U ND (41) U	ND (41) U ND (41) U	ND (39) U	ND (42) U ND (42) U	ND(41)U ND(41)U	ND (41) U ND (41) U	ND (39) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (41) U	ND (41) U	ND (39) U	490	42	39 J	210
Aroclor-1254 (PCB-1254)	ug/kg	ND (41) U	ND (41) U	ND (39) U	ND (42) U	ND (41) U	ND (41) U	ND (39) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (41) U	ND (41) U	ND (39) U	84	ND (41) U	ND (41) U	ND (39) U
Total PCBs	ug/kg	0	0	0	574	42	39	210

May 26, 2006 Page 88 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A005 SS-X193Y160 S-071802-CLM-003 7/18/2002 (0-2) ft	A005 SS-X194Y152 S-071802-CLM-004 7/18/2002 (0-2) ft	A005 SS-X200Y161 S-082702-JW-006 8/27/2002 (0-2) ft	A023 P200 SS-X203Y066 SS-010902-MG-001 1/9/2002 (2-4) ft	A008 P200 TMW-X225Y080 S-080802-JN-001 8/8/2002 (0-2) ft	A008 P200 TMW-X225Y080 S-080802-JN-002 8/8/2002 (6-8) ft	A008 P200 TMW-X225Y080 S-080802-JN-003 8/8/2002 (12-14) ft
Parameters	Units							
PCBs								
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1250 (PCB-1250)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (81) U ND (81) U ND (81) U ND (81) U 390 ND (81) U ND (81) U	ND (370) U ND (370) U ND (370) U ND (370) U 4000 ND (370) U ND (370) U	ND (38) U ND (38) U ND (38) U ND (38) U 180 ND (38) U 27 J	ND (410) U ND (410) U ND (410) U ND (410) U 3300 ND (410) U ND (410) U	ND (81) U ND (81) U ND (81) U 84 ND (81) U ND (81) U 810	ND (84) U ND (84) U ND (84) U 360 ND (84) U ND (84) U 530	ND (72) U ND (72) U ND (72) U ND (72) U 750 ND (72) U 350
Total PCBs	ug/kg	390	4000	207	3300	894	890	1100

May 26, 2006 Page 89 of 100

## TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A004 TP-1 S-TP-1-061604-JC-131 6/16/2004 (12-12) ft	A004 TP-1 S-TP-1-061604-JC-132 6/16/2004 (10-12) ft	A004 TP-2 S-TP-2-061404-JC-117 6/14/2004 (12-12) ft	A004 TP-2 S-TP-2-061404-JC-118 6/14/2004 (10-12) ft	A004 TP-3 S-TP-3-061604-JC-133 6/16/2004 (12-12) ft	A004 TP-3 S-TP-3-061604-JC-134 6/16/2004 (10-12) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (37) U	ND (750) U	ND (69) U	ND (710) U	ND (3500) U	ND (3400) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (37) U	ND (750) U	ND (69) U	ND (710) U	ND (3500) U	ND (3400) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (37) U	ND (750) U	ND (69) U	ND (710) U	ND (3500) U	ND (3400) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (37) U	ND (750) U	ND (69) U	ND (710) U	ND (3500) U	ND (3400) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (37) U	4400 J	430	5600	22000	23000
Aroclor-1254 (PCB-1254)	ug/kg	220	ND (750) U	ND (69) U	ND (710) U	ND (3500) U	ND (3400) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (37) U	650 J	220	800	4000	3100 J
Total PCBs	ug/kg	220	5050	650	6400	26000	26100

May 26, 2006 Page 90 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A004 TP-5 S-TP-5-061604-JC-137 6/16/2004 (10-10) ft	A004 TP-5 S-TP-5-061604-JC-138 6/16/2004 (10-10) ft Duplicate	A004 TP-5 S-TP-5-061604-JC-139 6/16/2004 (8-10) ft	A004 TP-6 S-TP-6-061504-JC-124 6/15/2004 (9-9) ft	A004 TP-6 S-TP-6-061504-JC-125 6/15/2004 (7-9) ft	A004 TP-7 S-TP-7-061604-JC-135 6/16/2004 (9-9) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (180) U	ND (350) U	ND (1700) U	ND (7700) U	ND (1800) U	ND (19000) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (180) U	ND (350) U	ND (1700) U	ND (7700) U	ND (1800) U	ND (19000) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (180) U	ND (350) U	ND (1700) U	ND (7700) U	ND (1800) U	ND (19000) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (180) U	ND (350) U	ND (1700) U	ND (7700) U	ND (1800) U	78000
Aroclor-1248 (PCB-1248)	ug/kg	930	2000	11000	73000	18000	ND (19000) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (180) U	ND (350) U	ND (1700) U	ND (7700) U	ND (1800) U	ND (19000) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (180) U	ND (350) U	ND (1700) U	5800 J	1500 J	ND (19000) U
Total PCBs	ug/kg	930	2000	11000	78800	19500	78000

May 26, 2006 Page 91 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A004 TP-7 S-TP-7-061604-JC-136 6/16/2004 (7-9) ft	A004 TP-9 S-TP-9-061504-JC-122 6/15/2004 (12-12) ft	A004 TP-9 S-TP-9-061504-JC-123 6/15/2004 (10-12) ft	A004 TP-10 S-TP-10-061504-JC-119 6/15/2004 (11.5-11.5) ft	A004 TP-10 S-TP-10-061504-JC-120 6/15/2004 (9.5-11.5) ft	A004 TP-10 S-TP-10-061504-JC-121 6/15/2004 (9.5-11.5) ft Duplicate
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (2000) U	ND (71000) U	ND (74000) U	ND (7600) U	ND (18000) U	ND (18000) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (2000) U	ND (71000) U	ND (74000) U	ND (7600) U	ND (18000) U	ND (18000) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (2000) U	ND (71000) U	ND (74000) U	ND (7600) U	ND (18000) U	ND (18000) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (2000) U	240000	660000	ND (7600) U	100000	91000
Aroclor-1248 (PCB-1248)	ug/kg	19000	ND (71000) U	ND (74000) U	54000	ND (18000) U	ND (18000) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (2000) U	ND (71000) U	ND (74000) U	ND (7600) U	ND (18000) U	ND (18000) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (2000) U	ND (71000) U	ND (74000) U	5300 J	6600 J	ND (18000) U
Total PCBs	ug/kg	19000	240000	660000	59300	106600	91000

May 26, 2006 Page 92 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A004 TP-11 S-TP-11-061604-JC-140 6/16/2004 (3-3) ft	A004 TP-11 S-TP-11-061604-JC-141 6/16/2004 (1-3) ft	A004 TP-12 S-TP-12-061504-JC-129 6/15/2004 (12-12) ft	A004 TP-12 S-TP-12-061504-JC-130 6/15/2004 (10-12) ft	A004 TP-13 S-TP-13-061504-JC-126 6/15/2004 (12-12) ft	A004 TP-13 S-TP-13-061504-JC-127 6/15/2004 (12-12) ft Duplicate
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (1800) U	ND (220) U	ND (39000) U	ND (8000) U	ND (83000) U	ND (41000) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (1800) U	ND (220) U	ND (39000) U	ND (8000) U	ND (83000) U	ND (41000) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (1800) U	ND (220) U	ND (39000) U	ND (8000) U	ND (83000) U	ND (41000) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (1800) U	ND (220) U	130000	52000	500000	340000
Aroclor-1248 (PCB-1248)	ug/kg	14000	1500	ND (39000) U	ND (8000) U	ND (83000) U	ND (41000) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (1800) U	ND (220) U	ND (39000) U	ND (8000) U	ND (83000) U	ND (41000) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (1800) U	ND (220) U	ND (39000) U	7000 J	ND (83000) U	ND (41000) U
Total PCBs	ug/kg	14000	1500	130000	59000	500000	340000

May 26, 2006 Page 93 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A004 TP-13 S-TP-13-061504-JC-128 6/15/2004 (10-12) ft	A004 TP-15 S-TP-15-061704-JC-144 6/17/2004 (9-9) ft	A004 TP-15 S-TP-15-061704-JC-145 6/17/2004 (9-9) ft	A004 TP-17 S-TP-17-070104-JC-198 7/1/2004 (9-9) ft	A004 TP-17 S-TP-17-070104-JC-199 7/1/2004 (9-9) ft Duplicate	A004 TP-17 S-TP-17-070104-JC-200 7/1/2004 (7-9) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (20000) U	ND (830) U	ND (410) U	ND (940) U	ND (460) U	ND (19000) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (20000) U	ND (830) U	ND (410) U	ND (940) U	ND (460) U	ND (19000) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (20000) U	ND (830) U	ND (410) U	ND (940) U	ND (460) U	ND (19000) U
Aroclor-1242 (PCB-1242)	ug/kg	120000	ND (830) U	ND (410) U	ND (940) U	ND (460) U	ND (19000) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (20000) U	8700	3400	14000	6200	250000
Aroclor-1254 (PCB-1254)	ug/kg	ND (20000) U	ND (830) U	ND (410) U	ND (940) U	ND (460) U	ND (19000) U
Aroclor-1260 (PCB-1260)	ug/kg	5000 J	ND (830) U	ND (410) U	ND (940) U	ND (460) U	ND (19000) U
Total PCBs	ug/kg	125000	8700	3400	14000	6200	250000

May 26, 2006 Page 94 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A004 TP-18 S-TP-18-061704-JC-142 6/17/2004 (5-5) ft	A004 TP-18 S-TP-18-061704-JC-143 6/17/2004 (5-5) ft	A005 TP-19 S-TP-19-062304-JC-166 6/23/2004 (8-8) ft	A005 TP-19 S-TP-19-062304-JC-167 6/23/2004 (6-8) ft	A005 TP-20 S-TP-20-062204-JC-160 6/22/2004 (4-4) ft	A005 TP-20 S-TP-20-062204-JC-161 6/22/2004 (2-4) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1232) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (50) U ND (50) U ND (50) U ND (50) U ND (50) U 130 J ND (50) U	ND (43) U ND (43) U ND (43) U ND (43) U 140 J ND (43) U ND (43) U ND (43) U	ND (82000) U ND (82000) U ND (82000) U ND (82000) U 210000 ND (82000) U ND (82000) U ND (82000) U	ND (79000) U ND (79000) U ND (79000) U 1100000 ND (79000) U ND (79000) U ND (79000) U	ND (200) U ND (200) U ND (200) U ND (200) U 770 ND (200) U 67 J	ND (770) U ND (770) U ND (770) U ND (770) U 6800 ND (770) U 460 J
Total PCBs	ug/kg	130	140	210000	1100000	837	7260

May 26, 2006 Page 95 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A005 TP-21 S-TP-21-062104-JC-153 6/21/2004 (8-8) ft	A005 TP-21 S-TP-21-062104-JC-154 6/21/2004 (6-8) ft	A005 TP-22 S-TP-22-062104-JC-157 6/21/2004 (12-12) ft	A005 TP-22 S-TP-22-062104-JC-158 6/21/2004 (10-12) ft	A005 TP-22 S-TP-22-062104-JC-159 6/21/2004 (10-12) ft Duplicate	A006 TP-23 S-TP-23-061704-JC-146 6/17/2004 (12-12) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1256 (PCB-1250)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (19000) U ND (19000) U ND (19000) U ND (19000) U 150000 ND (19000) U ND (19000) U	ND (7200) U ND (7200) U ND (7200) U ND (7200) U 60000 ND (7200) U ND (7200) U	ND (20000) U ND (20000) U ND (20000) U 340000 ND (20000) U ND (20000) U ND (20000) U	ND (2000) U ND (2000) U ND (2000) U ND (2000) U 19000 ND (2000) U ND (2000) U	ND (4200) U ND (4200) U ND (4200) U ND (4200) U 35000 ND (4200) U ND (4200) U	ND (39000) U ND (39000) U ND (39000) U 330000 ND (39000) U ND (39000) U ND (39000) U
Total PCBs	ug/kg	150000	60000	340000	19000	35000	330000

May 26, 2006 Page 96 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A006 TP-23 S-TP-23-061704-JC-147 6/17/2004 (12-12) ft	A006 TP-24 S-TP-24-061704-JC-148 6/17/2004 (10-10) ft	A006 TP-24 S-TP-24-061704-JC-149 6/17/2004 (10-10) ft Duplicate	A006 TP-24 S-TP-24-061704-JC-150 6/17/2004 (10-10) ft	A006 TP-25 S-TP-25-062104-JC-151 6/21/2004 (3.5-3.5) ft	A006 TP-25 S-TP-25-062104-JC-152 6/21/2004 (1.5-3.5) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1232) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1248) Aroclor-1256 (PCB-1254) Aroclor-1260 (PCB-1260)	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	ND (3700) U ND (3700) U ND (3700) U 24000 ND (3700) U ND (3700) U ND (3700) U ND (3700) U	ND (7400) U ND (7400) U ND (7400) U 71000 ND (7400) U ND (7400) U ND (7400) U ND (7400) U	ND (3700) U ND (3700) U ND (3700) U 37000 ND (3700) U ND (3700) U ND (3700) U	ND (700) U ND (700) U ND (700) U ND (700) U 5300 ND (700) U ND (700) U	ND (2100) U ND (2100) U ND (2100) U ND (2100) U 23000 J ND (2100) U ND (2100) U ND (2000) U	ND (2000) U ND (2000) U ND (2000) U ND (2000) U 15000 ND (2000) U ND (2000) U
Total PCBs	ug/kg	24000	71000	37000	5300	23000	15000

May 26, 2006 Page 97 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A006 TP-26 S-TP-26-062104-JC-155 6/21/2004 (12-12) ft	A006 TP-26 S-TP-26-062104-JC-156 6/21/2004 (10-12) ft	A006 TP-28 S-TP-28-062304-JC-173 6/23/2004 (12-12) ft	A006 TP-28 S-TP-28-062304-JC-174 6/23/2004 (10-12) ft	A006 TP-29 S-TP-29-062304-JC-169 6/23/2004 (12-12) ft	A006 TP-29 S-TP-29-062304-JC-170 6/23/2004 (12-12) ft Duplicate
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (220) U	ND (360) U	ND (41) U	ND (210) U	ND (41) U	ND (41) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (220) U	ND (360) U	ND (41) U	ND (210) U	ND (41) U	ND (41) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (220) U	ND (360) U	ND (41) U	ND (210) U	ND (41) U	ND (41) U
Aroclor-1242 (PCB-1242)	ug/kg	ND (220) U	ND (360) U	57	630	ND (41) U	260
Aroclor-1248 (PCB-1248)	ug/kg	ND (220) U	2000	ND (41) U	ND (210) U	61	ND (41) U
Aroclor-1254 (PCB-1254)	ug/kg	ND (220) U	ND (360) U	ND (41) U	ND (210) U	ND (41) U	ND (41) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (220) U	ND (360) U	ND (41) U	ND (210) U	ND (41) U	ND (41) U
Total PCBs	ug/kg	0	2000	57	630	61	260

May 26, 2006 Page 98 of 100

### TABLE 4.1

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A006 TP-29 S-TP-29-062304-JC-171 6/23/2004 (10-12) ft	A006 TP-30 S-TP-30-062204-JC-162 6/22/2004 (12-12) ft	A006 TP-30 S-TP-30-062204-JC-163 6/22/2004 (10-12) ft	A006 TP-30 S-TP-30-062204-JC-164 6/22/2004 (1-3) ft	A006 TP-31 S-TP-31-062404-JC-181 6/24/2004 (12-12) ft	A006 TP-31 S-TP-31-062404-JC-182 6/24/2004 (10-12) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (420) U	ND (82) U	ND (210000) U	ND (950000) U	ND (22000) U	ND (840) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (420) U	ND (82) U	ND (210000) U	ND (950000) U	ND (22000) U	ND (840) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (420) U	ND (82) U	ND (210000) U	ND (950000) U	ND (22000) U	ND (840) U
Aroclor-1242 (PCB-1242)	ug/kg	2000	340	1800000	7500000	180000	ND (840) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (420) U	ND (82) U	ND (210000) U	ND (950000) U	ND (22000) U	15000
Aroclor-1254 (PCB-1254)	ug/kg	ND (420) U	ND (82) U	ND (210000) U	ND (950000) U	ND (22000) U	ND (840) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (420) U	ND (82) U	ND (210000) U	ND (950000) U	ND (22000) U	ND (840) U
Total PCBs	ug/kg	2000	340	1800000	7500000	180000	15000
May 26, 2006 Page 99 of 100

## TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		A006 TP-32 S-TP-32-062404-JC-178 6/24/2004 (12-12) ft	A006 TP-32 S-TP-32-062404-JC-179 6/24/2004 (10-12) ft	A006 TP-33 S-TP-33-062304-JC-176 6/23/2004 (12-12) ft	A006 TP-33 S-TP-33-062304-JC-177 6/23/2004 (10-12) ft	A006 TP-34 S-TP-34-062504-JC-186 6/25/2004 (5.5-5.5) ft	A006 TP-34 S-TP-34-062504-JC-187 6/25/2004 (3.5-5.5) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (4700000) U	ND (43000) U	ND (81) U	ND (770) U	ND (410) U	ND (420) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (4700000) U	ND (43000) U	ND (81) U	ND (770) U	ND (410) U	ND (420) U
Aroclor-1232 (PCB-1232)	ug/kg	ND (4700000) U	ND (43000) U	ND (81) U	ND (770) U	ND (410) U	ND (420) U
Aroclor-1242 (PCB-1242)	ug/kg	21000000	850000	560	ND (770) U	ND (410) U	ND (420) U
Aroclor-1248 (PCB-1248)	ug/kg	ND (4700000) U	ND (43000) U	ND (81) U	7800	3100	3500
Aroclor-1254 (PCB-1254)	ug/kg	ND (4700000) U	ND (43000) U	ND (81) U	ND (770) U	ND (410) U	ND (420) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (4700000) U	ND (43000) U	ND (81) U	ND (770) U	510	580
Total PCBs	ug/kg	21000000	850000	560	7800	3610	4080

May 26, 2006 Page 100 of 100

## TABLE 4.1

## SUMMARY OF PCB SOIL DATA EAST PLANT AREA GENERAL MOTORS POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

Sample Area:		A006	A006	A006	A006	A007	A007
Sample Location:		TP-35	TP-35	TP-36	TP-36	TP-37	TP-37
Sample ID:		S-TP-35-062504-JC-189	S-TP-35-062504-JC-190	S-TP-36-062404-JC-184	S-TP-36-062404-JC-185	S-TP-37-070104-JC-196	S-TP-37-070104-JC-197
Sample Date:		6/25/2004	6/25/2004	6/24/2004	6/24/2004	7/1/2004	7/1/2004
Sample Depth:		(12-12) ft	(4-6) ft	(12-12) ft	(10-12) ft	(12-12) ft	(10-12) ft
Parameters	Units						
PCBs							
Aroclor-1016 (PCB-1016)	ug/kg	ND (45) UJ	ND (9000) U	ND (39) U	ND (43) UJ	ND (42) U	ND (43) U
Aroclor-1221 (PCB-1221)	ug/kg	ND (45) UJ	ND (9000) U	ND (39) U	ND (43) UJ	ND (42) U	ND (43) U
Aroclor-1232 (PCB-1232)		ND (45) UJ	ND (9000) U	ND (39) U	ND (43) UJ	ND (42) U	ND (43) U
Aroclor-1242 (PCB-1242)	ug/kg	IND (45) UJ	110000 U	ND (39) U	ND (43) UJ	ND (42) U	ND (43) U
Aroclor-1248 (PCB-1248)	ug/kg	19 J		7.3 J	7.9 J	ND (42) U	38 J
Aroclor-1254 (PCB-1254)	ug/kg	ND (45) UJ	ND (9000) U	ND (39) U	ND (43) UJ	ND (42) U	ND (43) U
Aroclor-1260 (PCB-1260)	ug/kg	ND (45) UJ	22000	ND (39) U	ND (43) UJ	ND (42) U	ND (43) U
Total PCBs	ug/kg	19	132000	7.3	7.9	0	38

## TABLE 4.2

## AIR MONITORING SUMMARY - 24-HOUR (LONG TERM) EAST PLANT AREA SOIL REMOVAL GENERAL MOTORS POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

Excavation Areas	Parameters	Duration of Monitoring	Air Monitoring Locations	Air Monitoring Frequency
Soil Removal Area	Compound Specific PCBs	Duration of the over 50 mg/kg PCB soil removal portion of the IM	Seven locations around perimeter of the East Plant Area	Daily
Soil Removal Area	Compound Specific TSPs	Duration of the over 50 mg/kg PCB soil removal portion of the IM	Seven locations around perimeter of the East Plant Area	Daily

Notes:

1) PCB air monitoring program will be re-evaluated after one month of data is collected.

2) TSP samples will be collected with high volume samplers or real-time monitoring units as specified in the March 9, 2006 proposed modification to the AAQMP letter to U.S. EPA.

3) Both the Soil Removal Area and East Plant Area Vault may be encompassed by the same air monitoring stations.

PCBs - Polychlorinated Biphenyls

TSPs - Total Suspended Particulates



## DRAWING INDEX

DWG. No.	REV. No.	DATE	TITLE
C-01	0	APRIL 2006	EXISTING CONDITIONS I
C-02	0	APRIL 2006	EXISTING CONDITIONS II
C-03	0	APRIL 2006	SITE WORKS I
C-04	0	APRIL 2006	SITE WORKS II
C-05	0	APRIL 2006	EXCAVATION PLAN II - ELEVATIONS 720 - 725 AMSL
C-06	0	APRIL 2006	EXCAVATION PLAN II - ELEVATIONS 715 - 720 AMSL
C-07	0	APRIL 2006	EXCAVATION PLAN II - ELEVATIONS 710 - 715 AMSL
C-08	0	APRIL 2006	EXCAVATION PLAN II - ELEVATIONS 705 - 710 AMSL
C-09	0	APRIL 2006	EXCAVATION PLAN II - ELEVATIONS 700 - 705 AMSL
C-10	0	APRIL 2006	EXCAVATION PLAN II - ELEVATIONS 695 - 700 AMSL
C-11	0	APRIL 2006	EXCAVATION PLAN II - ELEVATIONS 690 - 695 AMSL
C-12	0	APRIL 2006	EXCAVATION PLAN II - ELEVATIONS 685 - 690 AMSL
C-13	0	APRIL 2006	EXCAVATION PLAN II - ELEVATIONS 680 - 685 AMSL
C-14	0	APRIL 2006	EXCAVATION PLAN II - FINAL ELEVATIONS
C-15	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 695 - 700 AMSL
C-16	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 690 - 695 AMSL
C-17	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 685 - 690 AMSL
C-18	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 680 - 685 AMSL
C-19	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 675 - 680 AMSL
C-20	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 670 - 675 AMSL
C-21	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 665 - 670 AMSL
C-22	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 660 - 665 AMSL
C-23	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 655 - 660 AMSL
C-24	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 650 - 655 AMSL
C-25	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 645 - 650 AMSL
C-26	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 640 - 645 AMSL
C-27	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 635 - 640 AMSL
C-28	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 630 - 635 AMSL
C-29	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 625 - 630 AMSL
C-30	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 620 - 625 AMSL
C-31	0	APRIL 2006	EXCAVATION PLAN I - ELEVATIONS 615 - 620 AMSL
C-32	0	APRIL 2006	EXCAVATION PLAN I - FINAL ELEVATIONS

# **DESIGN REPORT**

# OVER 50 mg/kg PCB SOIL REMOVAL

## EAST PLANT AREA

# **GM POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA**



CONESTOGA-ROVERS & ASSOCIATES





## AOI SUMMARY

- AOI ID DESCRIPTION

- AOI 3 AOI 4 AOI 5 AOI 6 AOI 7 AOI 8 AOI 10 AOI 11 AOI 15 AOI 23
- DESCRIPTION PCB STORAGE AREAS FORMER NORTH DISPOSAL AREA FORMER EAST SAND DISPOSAL AREA FORMER SLUDGE DISPOSAL AND FIRE TRAINING AREA FORMER SUDITH LAGOON AND OUTFALL 001 FORMER SOUTH LAGOON AND OUTFALL 002 EXISTING STORMWATER LAGOON AND OUTFALL 003 ABOVEGROUND STORAGE TANKS FORMER EQUIPMENT STORAGE AREA AREA AFFECTED BY THE 1996 WASTEWATER TREATMENT FILTER CAKE RELEASE

## NOTE:

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

NՉ	Revision	Date	Initial	SCALE VER	RIFICATION						
				THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.		GM POWERTRAIN BEDFORD FACILITY	CONESTOGA-ROVERS & ASSOCIATES				
				Approved		BEDFORD, INDIANA	Source Reference:				
						OVER 50 mg/kg PCB SOIL REMOVAL	BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI, APRIL 2001.		RIL 2001.		
-							Project Manager:	Reviewed By:	Date:		
						EXISTING CONDITIONS I	J.M.	C.R.H.	API	RIL 2006	
							Scale: 1" = 100'	Project Nº:	Report Nº:	Drawing Nº:	
							1 - 100	13968-00	162	C-01	

13968-00(162)CI-WA001 APR 04/2006





## AOI SUMMARY

- AOI ID DESCRIPTION

- DESCRIPTION PCB STORAGE AREAS FORMER NORTH DISPOSAL AREA FORMER EAST SAND DISPOSAL AREA FORMER SLUDGE DISPOSAL AND FIRE TRAINING AREA FORMER SUDITH LAGOON AND OUTFALL 001 FORMER SOUTH LAGOON AND OUTFALL 002 EXISTING STORMWATER LAGOON AND OUTFALL 003 ABOVEGROUND STORAGE TANKS FORMER EQUIPMENT STORAGE AREA AREA AFFECTED BY THE 1996 WASTEWATER TREATMENT FILTER CAKE RELEASE AOI 3 AOI 4 AOI 5 AOI 6 AOI 7 AOI 8 AOI 10 AOI 11 AOI 15 AOI 23

## NOTE:

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

Nº	Revision	Date	Initial	SCALE VEF	RIFICATION						
				THIS BAR MEASURES 1" ON ORIGIN	AL. ADJUST SCALE ACCORDINGLY.	GM POWERTRAIN BEDFORD FACILITY		CONFSTORA-RON		SOCIATES	
						BEDFORD, INDIANA	COMESTOGA-ROVERS & ASSOCIATES				
				Approved		- /					
						OVER 50 mg/kg PCB SOIL REMOVAL	BASE MAI	COMPLETED BY AIR-LAND SURV	EYS. FLINT, MI, AP	BIL 2001.	
							Project Manager:	Reviewed By:	Data		
						EXISTING CONDITIONS II	J.M.	C.R.H.	AP	RIL 2006	
-							Scale:	Project Nº:	Report Nº:	Drawing Nº:	
							1 = 100	13968-00	162	C-02	

13968-00(162)CI-WA001 APR 04/2006



## LEGEND EXISTING GROUND SURFACE ELEVATION CONTOURS (feet AMSL) REMOVAL ACTION EXCAVATION AREA NOT INCLUDED IN EAST PLANT AREA IM EXISTING VEGETATION - - EXISTING FORCEMAIN TO TREATMENT FACILITY - - STM - EXISTING STORM SEWER FENCE LINE RAILROAD TRACKS DIRT ROADS ROADS / PAVED AREAS EXISTING SSC GRAVITY DRAIN RAILROAD TRACKS DIRT ROADS EXISTING SEG DATE SUPPORT ROADS / PAVED AREAS O CO. EXISTING CLEANOUT APPROXIMATE SURFACE WATER LOCATION APPROXIMATE GM PROPERTY BOUNDARY APPROXIMATE PROPERTY BOUNDARY _ _ _ _ _ _ _ _ DIRT ROADS

EAST PLANT AREA

EXISTING SSC EXTRACTION TRENCH
 EXISTING SSC EXTRACTION TRENCH
 EXISTING SSC SUMP STRUCTURE
 O C.O. EXISTING CLEANOUT
 SEEP SAMPLE LOCATION
 SPRING SAMPLE LOCATION

## AOI SUMMARY

- AOI ID DESCRIPTION

- DESCRIPTION POB STORAGE AREAS FORMER NORTH DISPOSAL AREA FORMER SLUDGE DISPOSAL AND FIRE TRAINING AREA FORMER SULDGE DISPOSAL AND FIRE TRAINING AREA FORMER SOUTH LAGOON AND OUTFALL 001 FORMER SOUTH LAGOON AND OUTFALL 002 EXISTING STORMWATER LAGOON AND OUTFALL 003 ABOVEGROUND STORAGE TANKS FORMER EQUIPMENT STORAGE AREA AREA AFFECTED BY THE 1996 WASTEWATER TREATMENT FILTER CAKE RELEASE AOI 3 AOI 4 AOI 5 AOI 6 AOI 7 AOI 8 AOI 10 AOI 11 AOI 15 AOI 23

## NOTE:

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

NՉ	Revision	Date	Initial	SCALE VEF	RIFICATION						
				THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.		GM POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA	CONESTOGA-ROVERS & ASSOCIATES				
				Approved		,	Source Reference:				
						OVER 50 mg/kg PCB SOIL REMOVAL	BASE MAP COMPL	ETED BY AIR-LAND SURVE	YS, FLINT, MI, APF	RIL 2001.	
							Project Manager:	Reviewed By:	Date:		
<u> </u>						SITE WORKS I	J.M.	C.R.H.	APF	RIL 2006	
							Scale: 1" = 100'	Project №: 13968-00	Report №: 162	Drawing Nº: C-03	
										0.00	

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## AOI SUMMARY

- AOI ID DESCRIPTION

- DESCRIPTION POB STORAGE AREAS FORMER NORTH DISPOSAL AREA FORMER SLUDGE DISPOSAL AND FIRE TRAINING AREA FORMER SULDGE DISPOSAL AND FIRE TRAINING AREA FORMER SOUTH LAGOON AND OUTFALL 001 FORMER SOUTH LAGOON AND OUTFALL 002 EXISTING STORMWATER LAGOON AND OUTFALL 003 ABOVEGROUND STORAGE TANKS FORMER EQUIPMENT STORAGE AREA AREA AFFECTED BY THE 1996 WASTEWATER TREATMENT FILTER CAKE RELEASE AOI 3 AOI 4 AOI 5 AOI 6 AOI 7 AOI 8 AOI 10 AOI 11 AOI 15 AOI 23

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NΩ	Revision	Date	Initial	SCALE VERIFICATION							
				THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.		GM POWERTRAIN BEDFORD FACILITY	CONESTOGA-ROVERS & ASSOCIATES				
				Approved			Source Reference:				
					OVER 50 mg/kg PCB SOIL REMOVAL BASE MAP COMPLET		ETED BY AIR-LAND SURVEYS, FLINT, MI, APRIL 2001.				
						SITE WORKS II	Project Manager: J.M.	Reviewed By: C.R.H.	Date:	RIL 2006	
							Scale: 1" = 100'	Project Nº: 13968-00	Report №: 162	Drawing №: C-04	

13968-00(162)CI-WA002 APR 04/2006









































13968-00(162)CI-WA008 APR 04/2006



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13968-00(162)CI-WA024 APR 04/2006



13968-00(162)CI-WA025 APR 04/2006
APPENDIX A

# DRUM HANDLING STANDARD OPERATING PROCEDURES

#### TABLE OF CONTENTS

DRUM HANDLING......1 1.0DRUM HANDLING......1 SITE PREPARATION.....1 1.1 1.2 2.0 2.1 2.2 2.3 SHOCK-SENSITIVE, AIR REACTIVE, OR WATER REACTIVE WASTE ......4 3.0 3.1 3.2 4.04.1 4.2 4.3 5.0 OPENING CONTAINERS......7 REMOTELY CONTROLLED OPENING DEVICES......7 5.1 5.2 5.3 HYDRAULIC DRUM PIERCER......7 PNEUMATIC BUNG REMOVER ......7 5.4 5.5 5.6 5.7 5.8

2866 (1) PART 2 - Drum Handling Rev. 0 - 09/15/99

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#### Page

#### **DRUM HANDLING**

#### 1.0 DRUM HANDLING

Although buried containers are not expected to be encountered during the excavation, should buried containers be found, containers will be handled in accordance with the standard operation procedures outlined below. Cleanup operations involving drums and containers must be carried out safely. This means that the handling, sampling, testing, staging, transport, decontamination, evacuation, excavation, and bulking of drums and containers must be carried out with minimal risk. When new containers are used, they must meet minimum standards according to Department of Transportation (DOT), Occupational Safety and Health Act (OSHA), and United States Environmental Protection Agency (USEPA) regulations.

#### 1.1 <u>SITE PREPARATION</u>

Before commencing site activities involving the handling of drummed waste, the area must be prepared to facilitate operations and eliminate obvious physical hazards. Roadways, work areas, and storage areas should be constructed to provide ease of access and a sound roadbed for heavy equipment and vehicles. Security fences or barricades should be erected. Work areas should be cleared and physical hazards should be eliminated as much as possible. Physical hazards to consider include:

- Ignition sources in flammable areas such as drum opening and bulking areas.
- Exposed and/or underground electrical wiring and low overhead wires which may be cut or entangled in equipment resulting in electrical shock, short circuits, and possible fires.
- Sharp, protruding edges such as torn metal, glass, nails, and other objects which can puncture or tear protective clothing or equipment.
- Unsecured railings, loose steps or flooring, holes, slippery surfaces, debris, and other obstacles that can cause slips, trips, and falls.
- Protruding objects which can cause slips, trips, and falls.
- Weeds and debris which obstruct visibility.

037386(01) APP D - Drum Handling

13968 (162)

1

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Weeds and debris can be removed, walking surfaces can be cleared and repaired, skid resistant strips can be installed on slippery surfaces, railings can be repaired or installed, stairs and ladders can be secured, electrical wiring can be repaired or relocated, and sharp objects and protruding edges which cannot be removed can be covered or properly guarded. Staging areas can be constructed to facilitate safe and effective operations.

### 1.2 <u>GENERAL RULES</u>

- Drums and containers used must meet minimum DOT regulations.
- If practical, drums and containers will be inspected to insure their integrity prior to being moved. If drums or containers are stored or stacked so that inspection is impossible, they should be moved to an accessible location for inspection prior to further handling.
- Unlabeled drums and containers will be assumed to contain hazardous substances and treated accordingly until contents are positively characterized.
- Site operations shall be organized so as to minimize the amount of drum or container movement required.
- All employees exposed to transfer operations shall be warned of potential hazards associated with contents of any drums or containers involved.
- DOT specified salvage drums or containers and suitable sorbent materials shall be available in areas where spills may occur.
- Where major spills are possible, a spill containment program shall be implemented as part of the site Health and Safety Plan (HASP). The spill containment program shall allow for the containment and isolation of the entire volume being transferred.
- Drums and containers that can not be moved without rupture or leakage will be emptied into a sound container.
- Some type of detection system (such as ground-penetrating radar) shall be used to estimate the location and depth of buried drums or containers.
- Buried drums shall be excavated carefully to prevent rupture.
- Suitable fire extinguishing equipment will be kept on hand and ready for use.

^{13968 (162)} 037386(01) APP D - Drum Handling

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### 2.0 OPENING DRUMS AND CONTAINERS

These procedures are to be followed in areas where drums or containers are being opened:

- The buddy system is to be utilized at all times during drum opening operations.
- Level B is mandatory if the drum contents are unknown.
- If airline respirators are used, air cylinder connections must be protected from contamination and the entire system shall be protected from physical damage.
- Employees who must work near drums or containers being opened must be provided protective shielding in case of explosion.
- Employees not directly involved in the opening procedures will be kept at a safe distance.
- Controls for opening equipment, monitoring equipment, and fire suppression equipment shall be located behind the shield.
- Non-sparking tools and equipment will be used when flammable atmospheres are a reasonable possibility.
- Drums and containers shall be opened so as to safely relieve excess pressure. Either relieve the pressure from a remote location or place appropriate shielding between the employee and the drums or containers.
- Employees shall not stand on or work from drums or containers.

## 2.1 <u>MATERIAL HANDLING EQUIPMENT</u>

Material handling equipment shall be selected, located, and operated so as to prevent ignition of vapors released during opening procedures. There are hazards associated with gas or electrically powered units.

# 2.2 <u>RADIOACTIVE WASTES</u>

If a drum exhibits radiation levels above background (approximately >2 mrem/hr), immediately contact the Health and Safety Office (HSO). Do not handle any drums that

13968 (162) 037386(01) APP D - Drum Handling

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<u>are determined to be radioactive.</u> A special contractor will be brought in to further characterize and process the drum(s).

### 2.3 SHOCK-SENSITIVE, AIR REACTIVE, OR WATER REACTIVE WASTE

When handling drums containing or suspected of containing shock-sensitive or reactive wastes, the following special precautions should be followed:

- All non-essential employees shall be removed from the area of transfer.
- Material handling equipment shall be fitted with explosion containment devices or protective shields to protect operators.
- An alarm system will be used to signal the beginning and end of the procedure.
- Continuous communications will be maintained between the employee in charge of the operation and the HSO during the operation.
- Pressurized drums shall not be moved until the cause of the excessive pressure is determined and appropriate measures are implemented.
- Work will proceed in clear, dry weather.

4

### 3.0 SHIPPING AND TRANSPORT

Drums and containers shall be identified and classified prior to packaging for shipment. Staging areas shall be kept to the minimum number necessary and shall be provided adequate entrance and exit routes. Bulking of wastes shall be permitted only after a thorough characterization has been completed.

### 3.1 <u>CONTAINER HANDLING</u>

Waste containers of various types on a site may need to be handled during sampling, characterization, or preparation of material for disposal, in addition to other reasons.

### 3.2 <u>VISUAL INSPECTION</u>

Prior to handling, visually inspect the containers for the following to determine if the containers might show whether the materials may be radioactive, explosive, corrosive, toxic, flammable, or lab-packed:

- Symbols, words, or markings.
- Signs of deterioration such as corrosion, rust, or leaks.
- Indications the container is under pressure, such as swelling or bulging.
- Drum type.
- Configuration of drumhead.
- Conditions in the immediate vicinity of the container. Crystalline material on or around the containers could indicate shock-sensitive material. In addition, there may be other material leaked or spilled from the containers onto the ground which might give a clue as to what may be in the drum.

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#### 4.0 <u>MONITORING</u>

Before any moving or opening of containers takes place, direct reading instruments should be used to detect the presence of organic vapors, combustible gases, or above-background levels of radiation.

### 4.1 <u>SUBSURFACE INVESTIGATION</u>

If there is any reason to suspect the presence of buried containers, some type of non-destructive ground penetrating system should be used to determine the approximate location and depth of such containers.

### 4.2 PRELIMINARY CLASSIFICATION

As a precautionary measure, any unlabeled containers should be assumed hazardous until it is learned otherwise. Using the information gathered by visual inspection, monitoring and subsurface investigations, preliminarily classify any containers thought to be radioactive, leaking/deteriorated, under pressure, explosive/shock-sensitive, or buried.

## 4.3 <u>PLANNING</u>

Based on inspection and preliminary classification, decide if any hazards are present and the appropriate response activity. Determine which drums need to be moved in order to be opened and/or sampled. A preliminary handling plan should be developed dealing with the extent of any necessary container moving or handling and the most appropriate procedures based on the particular hazards revealed during preliminary inspection. The handling plan should be revised as new information comes to light during site operations.

13968 (162) 037386(01) APP D - Drum Handling

6

### 5.0 **OPENING CONTAINERS**

If supplied air respiratory protection is used, place a bank of air cylinders outside the work area and supply air to the operators via airlines and escape SCBAs. Keep personnel at a safe distance from the drums being opened. If possible, monitor for radiation, combustibles, and toxics during opening. Use the buddy system.

## 5.1 <u>REMOTELY CONTROLLED OPENING DEVICES</u>

If possible, use remotely controlled devices for opening drums. This procedure must be explored first, prior to deciding to open drums manually.

## 5.2 <u>BACKHOE SPIKE</u>

The backhoe spike is a metal (bronze) spike attached or welded to a backhoe bucket. It is efficient and advisable for large-scale operations. The drums should be in rows with adequate aisle space to allow ease of backhoe movement. Once in rows, drums can be quickly opened by punching holes in the drum tops with the spike. To prevent cross contamination, the spike should be decontaminated after each drum is opened.

## 5.3 <u>HYDRAULIC DRUM PIERCER</u>

A hydraulically operated drum piercer consists of a manually operated pump which pressurizes oil through a hydraulic line. A piercing device with a spark-proof metal point is attached to the end of the line and pushed into the drum by the hydraulic pressure. The piercing device can be attached so that the hole is made in the side or top of the drum.

### 5.4 <u>PNEUMATIC BUNG REMOVER</u>

Operates by means of compressed air delivered through a high-pressure airline to a pneumatic drill which is adapted to turn a bung fitting. An adjustable bracket has to be attached to the drum before the drill can be operated and must be removed before the sample can be taken.

037386(01) APP D - Drum Handling

13968 (162)

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### 5.5 MANUALLY OPERATED OPENING DEVICES

The risks are greater when manually opening drums than when using remotely operated means. When using manual devices, the drums must be positioned to allow easy worker access to the drums.

#### 5.6 <u>BUNG WRENCH</u>

A bung wrench and other hand tools must be of the non-sparking kind and should be marked as such. Although a non-sparking wrench will prevent sparking between the wrench and drum, it will not prevent sparking between the bung and the threads on the drum. The bung should be turned very slowly to allow pressure to dissipate and reduce the chance of sparking. The small bung should be opened first, as a pressure release. Avoid leaning on the drum while opening.

### 5.7 DRUM DEHEADER

A drum deheader can be used when the bung is not removable with a bung wrench. It can be used only with closed-head drums, not on open-top drums. It is used by first positioning the cutting edge just inside the top chime and then tightening the adjustment screw so the deheader is held against the side of the drum.

#### 5.8 HAND PICKS, PICKAXES, AND SPIKES

Hand picks, pickaxes, and spikes are not recommended for opening drums because the drum must be struck with too much force, creating great potential for spraying and splashing. Also, drums cannot be opened slowly enough with this method, so any over-pressure can be dangerous. In addition, there is a great hazard using this method on drums with shock-sensitive materials. Use of chisels and firearms as an opening tool is prohibited.

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