INTERIM REMOVAL AND CLOSURE REPORT FOR FORMER ELECTRICAL TRANSFORMER AREAS FORMER YORK NAVAL ORDNANCE PLANT

SAIC Project 2603100069

Prepared for:

Harley-Davidson
Motor Company Operations, Inc.
York, PA

June 2012

SAIC Energy, Environment & Infrastructure, LLC
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By:

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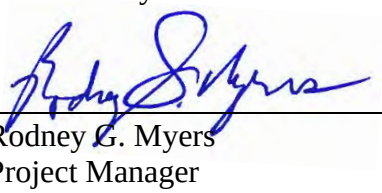
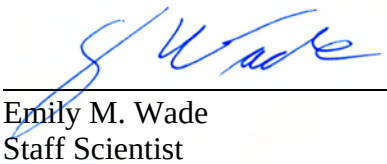


Rodney G. Myers
Project Manager

Respectfully submitted,



Emily M. Wade
Staff Scientist

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CWM	Chemical Waste Management
CY	cubic yard
EI	Environmental Inspector
EPA	United States Environmental Protection Agency
ETAs	Electrical Transformer Areas
fYNOP	former York Naval Ordnance Plant
Harley-Davidson	Harley-Davidson Motor Company Operations, Inc.
HASP	Health and Safety Plan
Hazwoper	Hazardous Waste Operations and Emergency Response
KVA	kilovolt amperes
mg/kg	milligrams per kilogram
MSC	Medium Specific Concentrations
OSHA	Occupational Safety and Health Administration
PADEP	Pennsylvania Department of Environmental Protection
PCBs	polychlorinated biphenyls
RI	Remedial Investigation
SAIC	Energy, Environment & Infrastructure, LLC
TSCA	Toxic Substances Control Act

1.0 INTRODUCTION

This report documents the sampling and analysis of potentially impacted concrete walls at several former electrical transformer areas (ETAs) and the subsequent removal and off-site disposal of polychlorinated biphenyls (PCB) impacted concrete at two ETAs within the Harley-Davidson Motor Company Operations, Inc. (Harley-Davidson) facility in York, Pennsylvania (see **Figure 1**). The remedial actions were performed as a result of the ongoing characterization and remediation of the former York Naval Ordnance Plant (fYNOP), which included demolition of selected buildings and other features.

Background information regarding prior investigation and remediation of the former ETAs at the facility is provided in Section 2.0, and a description of the sampling activities at four ETAs is provided in Section 3.0. Building removal activities conducted at four of the ETAs is discussed in Section 4.0, and special debris handling and waste disposal details associated with two of the former ETAs are documented in Section 5.0. References are provided in Section 6.0.

2.0 BACKGROUND

This section presents a summary of the preexisting environmental condition of each ETA prior to the start of demolition. Historically, there were several PCB-containing electrical transformers located throughout the Harley-Davidson facility. Each transformer area on the property was originally identified by alphabetic letter and the word "Bank" (i.e., "A" Bank, "B" Bank, "C" Bank, and so on). There are five ETAs where historic spills were investigated, closure/upgrade has occurred, or (in some cases) remediation was conducted. These include B-Bank, C-Bank, D-Bank, H-Bank, and L-Bank, as shown on **Figure 2**. As of approximately 2003, all known PCB-containing transformers were removed from the property or were drained of PCB-containing oil and replaced with nonhazardous mineral oils. Each of the ETAs of concern is described in the following subsections. Additional details of previous investigations of these ETAs are provided in the Supplemental Remedial Investigation (RI) Soils Report (Science Applications International Corporation, 2009).

2.1 B-Bank ETA

Transformer Bank "B" (B-Bank) previously consisted of three 500-kilovolt amperes (KVA) transformers located on a concrete pad within a walled enclosure with a locked gate/fence, along the outer west wall of former Building 2 (see **Figure 2**). The transformers and pad area were investigated in 1999 and removed in 2002 in order to construct a room to upgrade and house new non-PCB containing electrical equipment. This construction included the replacement of a concrete pad over the entire area and the construction of a roof over the original walled enclosure. One foot of soil, the original concrete pad, three transformers, and the electrical rigging from this area were removed in 2002 (Science Applications International Corporation, 2002). Approximately 50 tons of soil, concrete, and metal were transported under manifest to Chemical Waste Management's (CWM) hazardous waste landfill in Model City, New York. Four confirmatory surface soil samples were taken from beneath the excavation. Detected concentrations of Aroclor 1260 were less than the regulatory limits established by Pennsylvania Department of Environmental Protection (PADEP) Act 2 (nonresidential, direct contact) medium specific concentration (MSC) and less than the Toxic Substances Control Act (TSCA) limits of

50 milligrams per kilogram (mg/kg). Clean gravel backfill, a new concrete pad, new transformers, and a roofed enclosure were constructed at the B-Bank following the remediation.

2.2 C-Bank ETA

Transformer Bank "C" (C-Bank) previously consisted of two 500-KVA transformers located on a concrete pad within a walled enclosure with a locked gate/fence, along the outer west wall of former Building 2, south of B-Bank (see **Figure 2**). The transformers and pad area for C-Bank were investigated in 1999 and removed and replaced with new transformers in 2003. Prior to the planned renovations to this area, additional characterization and soil removals were conducted at specific areas within the transformer C-Bank (Science Applications International Corporation, 2004). Approximately 106 tons (70 cubic yards [CY]) of PCB-impacted soils were removed from C-Bank and disposed off-site at approved facilities. Soils excavated from the vault pits contained low levels of PCBs and were placed into roll-off containers for nonhazardous off-site disposal (at Modern Landfill). Soils containing PCBs at concentrations greater than the TSCA limit along the south and west walls of the C-Bank were excavated and shipped off-site for disposal at CWM Model City Landfill. Confirmatory soil samples collected from the bottom of these excavations had PCB concentrations that were less than the PADEP MSCs and the TSCA regulatory limit.

2.3 D-Bank ETA

Transformer Bank "D" (D-Bank) was located along the eastern side of former Building 2 (see **Figure 2**). This ETA consisted of three 500-KVA transformers located on a concrete pad adjacent to the east outer wall of former Building 2 and was surrounded on the remaining three sides with a locked fence enclosure. Soil, concrete, and transformers from D-Bank were remediated in 1994. A total of approximately 150 tons of PCB-impacted concrete, soil, and debris were removed and disposed at CWM's Model City Landfill (Model City, New York). PCB concentrations in confirmatory soil samples collected from the bottom of the excavations were less than the PADEP MSCs and the TSCA regulatory limit. Clean backfill, a new concrete pad, and cleaned transformers were replaced at this location following the remediation.

2.4 H-Bank ETA

Transformer Bank "H" (H-Bank) was located just west of Building 45, as shown in **Figure 2**. The H-Bank transformers were located within a small locked fenced area on a concrete pad, which was not located adjacent to any buildings. There was no visual evidence of any release in the area and no historical records indicating any releases had occurred at this ETA. Several soil samples were collected from borings adjacent to the transformers in 2007. PCB concentrations in all soil samples were non-detect or less than PADEP MSCs and TSCA limits for PCBs, and no further investigation or cleanup was performed. This transformer was relocated following the demolition of Building 45 in 2010.

2.5 L-Bank ETA

Transformer Bank "L" (L-Bank) was also identified as Electrical Transformer Area-1 (ETA-1) during the 1998-1999 RI investigation. L-Bank consisted of three transformers located on a concrete pad surrounded by gravel, along the outer northeast wall of former Building 2. A locked fence enclosure originally surrounded the two non-walled sides of this ETA (see **Figure 2**).

During the 1999 site-wide RI, testing for PCBs was conducted at the concrete pad and surrounding gravel-covered soils within L-Bank. Three surface soil samples were collected adjacent to the pad, and five chip samples were collected from the concrete pad. No PCBs were detected in these samples. Science Applications International Corporation collected six additional soil samples in 2003 from three borings adjacent to the transformers. PCB concentrations in all soil samples were non-detect or less than the PADEP MSCs and TSCA limits. Based on the analytical results, no further investigation or cleanup of the soils was performed.

3.0 ETA WALL SAMPLING

In anticipation of building demolition activities, SAIC Energy, Environment & Infrastructure, LLC (SAIC) completed wall sampling and testing of the adjacent building structures at ETAs "B," "C," "D," and "L." Sampling of the walls adjacent to the B-Bank and C-Bank areas within former Building 2 were conducted in May and September 2011. Walls adjacent to former D-Bank and L-Bank transformer areas were sampled in August 2011. Sampling was not conducted at H-Bank area since there were no building structures adjacent to this ETA.

The wall sampling was conducted due to the proximity of historical uses of PCB-containing transformers. Although none of the active transformers in these areas contained regulated levels of PCBs, historical releases of PCBs from former equipment have been documented in these areas. Sampling was recommended of the remaining walls in these areas to properly plan for handling of these materials during demolition.

At each wall sampling area, concrete or masonry cuttings were collected from within a square, measuring approximately 8 inches by 12 inches, at potentially worst-case locations based on any visible staining (see photos of sampling locations in **Appendix A**). The samples were collected from the top one inch of the wall surface using a portable drill and clean one-inch masonry bit. A section of clean plastic sheet was taped to the wall beneath the target collection area, and the drill cuttings were collected onto the plastic sheet from multiple holes drilled within the target collection zone. The cuttings were then transferred to a clean eight-ounce glass container for shipment to the laboratory (TestAmerica Inc., Pittsburgh, Pennsylvania) for analysis of total PCBs by United States Environmental Protection Agency (EPA) Method 8082.

3.1 B-Bank

At the B-Bank area, all walls had been painted within the recent past, and no visible staining was observed. B-Bank wall samples designated as ETAB-WC-001, -002, -003, and -004 were collected in May 2011 from the lower three feet of wall in areas along the north, east, south, and west walls, respectively. During the follow-on (September 2011) sampling at B-Bank, wall

samples designated as ETAB-WC-005, -006, -007, -008, -009, and -010 were collected at elevated heights ranging from 8.5 feet to 10 feet above the floor. The ceiling of B-Bank was not sampled, as it was constructed after the known releases of PCBs in this area. Photos of the wall sampling conducted within B-Bank are provided in **Appendix A**.

3.2 C-Bank

At the C-Bank area, most of the wall areas were not painted and were mostly uniformly dirty and stained. C-Bank samples designated as ETAC-WC-001, -002, -003, and -004 were collected in May 2011 from the lower three feet of wall in areas along the west, north, east, and south walls, respectively. The wall sampling locations collected from the C-Bank area in September 2011 (ETAC-WC-005 through -009) were collected at heights ranging between 8.8 feet to 13 feet above grade. Photos of the wall sampling conducted within C-Bank are provided in **Appendix A**.

3.3 D-Bank

At the D-Bank area, portions of the wall were painted, whereas other portions were not painted. D-Bank samples designated as samples ETAD-WC-001 and ETAD-WC-002 were collected from the wall. ETAD-WC-001 was collected from a painted area, and ETAD-WC-002 was collected from an unpainted area. Photos of the wall sampling conducted within D-Bank are provided in **Appendix A**.

3.4 L-Bank

At the L-Bank area, portions of the wall were painted, whereas other portions were not painted. L-Bank samples designated as samples ETAL-WC-001 and ETAD-WC-003 were collected from painted portions of the wall. The sample designated as ETAL-WC-002 was collected from an unpainted area. Photos of the wall sampling conducted within L-Bank are provided in **Appendix A**.

3.5 Results Summary

The wall sampling data were compared with applicable EPA and PADEP residual waste regulations and for proper handling of the anticipated construction/demolition debris. PADEP Regulated Fill Policy (General Permit No. WMGR096, for Processing/Beneficial Use of Residual Waste, April 13, 2009) and the Clean Fill Policy (Management of Fill, August 7, 2010) were used to compare established concentration limits with the sampling data. EPA TSCA limits were also used to determine if the material required handling as a hazardous waste.

A summary of the analytical results of the initial and follow-on analyses for B-Bank and C-Bank wall areas is shown on **Table 1**, and the results of wall sampling for D-Bank and L-Bank areas are summarized on **Table 2**. The surficial concrete within most of the ETA wall samples contained detectable levels of only Aroclor-1260 (i.e., PCB-1260). None of the other regulated Aroclors were detected in any of the samples. Concentrations of Aroclor-1260 detected in the samples collected from D-Bank and L-Bank were not greater than the PADEP Clean Fill, Regulated Fill, or TSCA limits.

Aroclor-1260 was detected in samples collected from the lower portion of the east and south wall at B-Bank (ETAB-WC-002, -003, and -006) and from the lower east wall at C-Bank (ETAC-WC-003) at concentrations greater than the PADEP Clean Fill Limit of 30 mg/kg and the TSCA limit of 50 mg/kg. The Aroclor-1260 concentration in one sample (ETAB-WC-002) also exceeded the PADEP Regulated Fill Limit of 130 mg/kg.

In summary, the PCB-impacted wall areas requiring special handling and disposal, when demolished, were identified as the lower concrete sections of the south and east walls in B-Bank and the lower east wall of C-Bank. The estimated dimensions and volume of the PCB-impacted walls were as follows:

B-Bank, lower south concrete wall:

25 feet wide by 6 feet high by 2 feet thick = 11 CY.

B-Bank, lower east concrete wall (below former windows):

30 feet wide by 3 feet high by 2 feet thick = 7 CY.

C-Bank, lower east concrete wall (below block):

30 feet wide by 3 feet high by 2 feet thick = 7 CY.

4.0 INTERIM REMEDIATION ACTIVITIES

Interim remediation activities required for the PCB-impacted walls at the B- and C-Bank areas were coordinated with the plant demolition work. Bids were previously solicited for the off-site transportation and disposal activities. Several qualified contractors were contacted, and bids were awarded by SAIC to BrightFields, Inc. (Wilmington, Delaware, for special environmental activities) and to EQ Environmental Inc. (for waste transportation and disposal activities). BrightFields subcontracted the PCB-impacted concrete sizing and handling work to Meco Demolition (Meco, Bensalem, Pennsylvania), who were conducting the building demolition work.

4.1 Preliminary Activities

The following environmental actions and planning activities were conducted prior to demolition and the planned interim remedial actions:

- Developed an "Environmental Demolition Work Plan" (Harley-Davidson, 2011) to assist demolition contractors during handling of potentially contaminated materials and to identify specific environmental concerns for special handling during demolition. This plan also identified the role of the environmental inspector (EI), who was present to monitor, document, and control potentially hazardous materials encountered during the demolition activities.

- Prepared a health and safety plan (HASP) to address the potential for worker exposure to hazardous chemicals during demolition, remediation, and construction. All contractors that handled PCB-impacted concrete were 40-hour Occupational, Safety and Health Administration (OSHA), Hazardous Waste Operations and Emergency Response (Hazwoper) trained.

Demolition efforts began in April 2011 and were essentially completed by February 2012. Photographs taken before and during demolition activities associated with the B- and C-Bank

demolition areas are provided in **Appendix A** (Photos A-1 through A-17). Photographs taken following demolition activities associated with the B- and C-Bank are shown on Photos A-18 through A-20 (**Appendix A**).

4.2 B-Bank Area

Prior to demolition activities, SAIC (the EI) marked the impacted concrete areas with red paint to allow for segregation of the impacted versus un-impacted demolition debris by the demolition contractor. Beginning in mid-December 2011, the B-Bank structure was demolished in stages to allow removal of salvageable electrical components, followed by demolition of the ceiling and walls, down to the impacted wall areas along the lower east and south walls. The un-impacted debris was segregated and removed first, leaving only the PCB-impacted concrete (see photos A-12 and A-13, **Appendix A**). Meco then knocked down the impacted sections of concrete wall and removed any salvageable metal. Impacted concrete that was removed from the structure was placed onto plastic near B-Bank for further processing, and the pile was covered with plastic.

Later, similar material from C-Bank was added to the impacted stockpile, and special equipment was used to crush the concrete into sizes of less than six inches (see photo A-20, **Appendix A**). Following processing, the crushing and handling equipment was decontaminated, and the pile was covered to await shipment and off-site disposal. The concrete floor of B-Bank was not disturbed during the demolition activities. A clean continuous concrete slab was left intact across this area following demolition.

4.3 C-Bank Area

Prior to demolition activities, SAIC (the EI) marked the impacted concrete areas with red paint to allow for segregation of the impacted versus un-impacted demolition debris by the demolition contractor (see photos A-16 and A-17, **Appendix A**). Beginning in early January 2012, the C-Bank structure was demolished in stages to allow removal of salvageable electrical components, followed by demolition of the walls, down to the impacted zone along the lower eastern wall. The un-impacted debris was segregated and removed first, leaving only the

PCB-impacted concrete. Meco then knocked down the impacted section of concrete wall and removed any salvageable metal.

Impacted concrete that was removed from the structure was placed onto plastic, along with impacted concrete from B-Bank, near the former B-Bank area for further processing. Special equipment was used to crush the concrete into sizes of less than six inches (see photo A-20, **Appendix A**). After processing, the crushing and handling equipment was decontaminated, and the pile was re-covered to await shipment and off-site disposal. Following demolition of the aboveground structure at C-Bank, additional gravel was placed, leveled, and compacted over the existing gravel and former transformer pad areas within the C-Bank footprint.

5.0 DEBRIS HANDLING, WASTE GENERATION, AND DISPOSAL

Impacted concrete generated during the project was placed on and covered with plastic. The analytical results for the samples collected from the intact concrete walls were used to characterize the debris for off-site disposal, which resulted in the material being processed as a TSCA hazardous waste.

Following waste characterization and classification, disposal options were developed and presented to Harley-Davidson for evaluation and selection. The selected off-site disposal facility was CWM Model City Landfill (Model City, New York) for TSCA solids landfill disposal. This facility was audited and approved by Harley-Davidson prior to use.

Lined dump trailers were delivered from EQ on February 1 and 2, 2012, for loading and shipment of the impacted debris to the CWM Model City Landfill. Approximately 38 tons of TSCA hazardous concrete were loaded from the former B- and C-Bank walls and shipped off-site (2 loads) to Model City Landfill for disposal. Copies of the waste manifests associated with the two waste shipments are provided in **Appendix B**.

6.0 REFERENCES

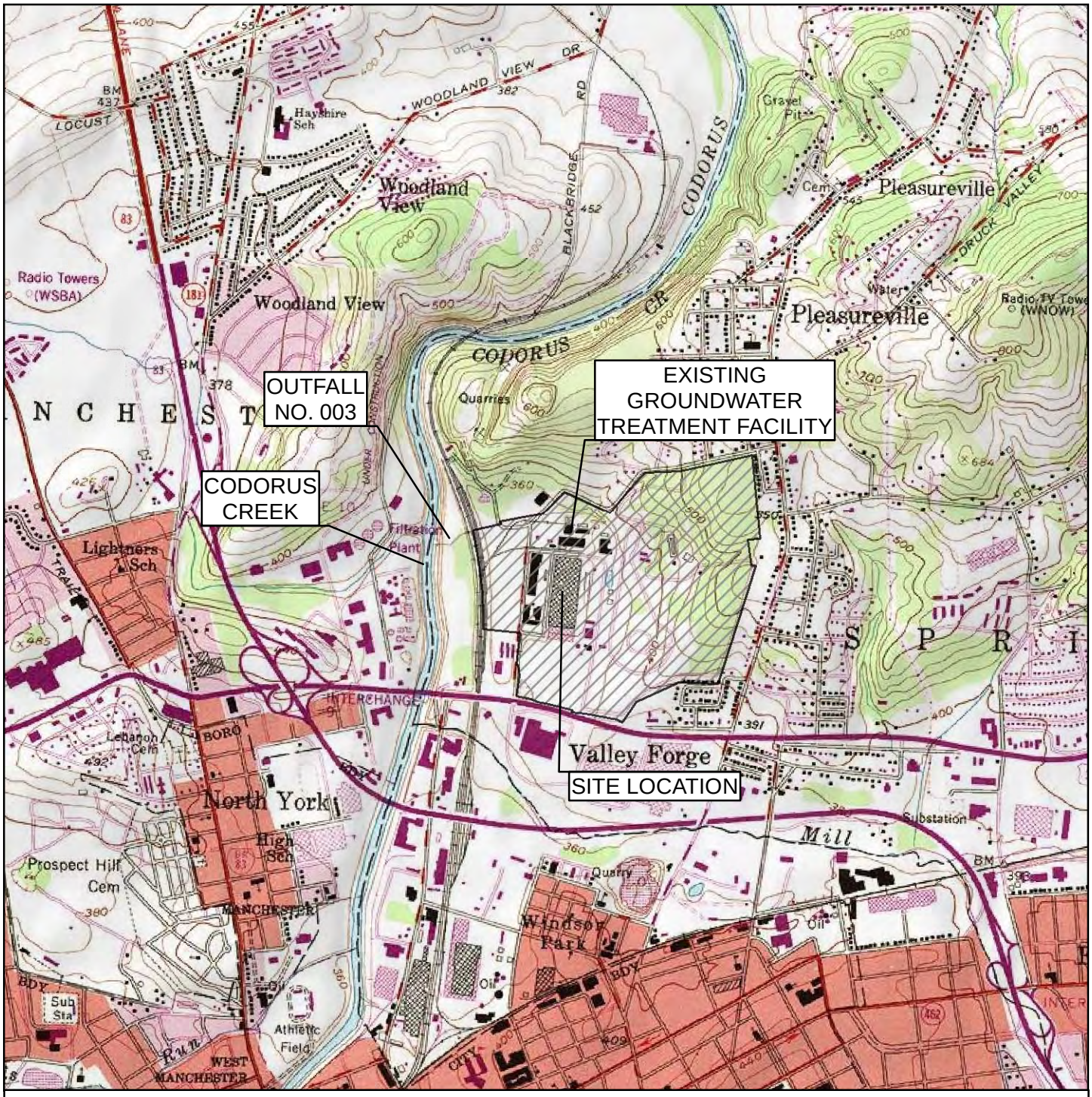
Harley-Davidson Motor Company Operations, Inc. (Harley-Davidson), 2011. Final, Restructuring Environmental Demolition Work Plan, March.

Science Applications International Corporation, 2002. PCB Remediation at Electrical Transformer Bank B. Letter Report to Harley-Davidson Motor Company Operations, Inc. November 21.

Science Applications International Corporation, 2004. C-Bank Transformer Area Soil Investigation and Remediation Report. January.

Science Applications International Corporation, 2009. Supplemental Remedial Investigations Soils Report, former York Naval Ordnance Plant, December.

FIGURES



NOTE: Map based on USGS 7.5 minute series York quadrangle.

0 1,000 2,000 4,000 '

1 inch = 2,000 feet

N
W E
S

YORK

QUADRANGLE LOCATION

FORMER YORK NAVAL ORDNANCE PLANT

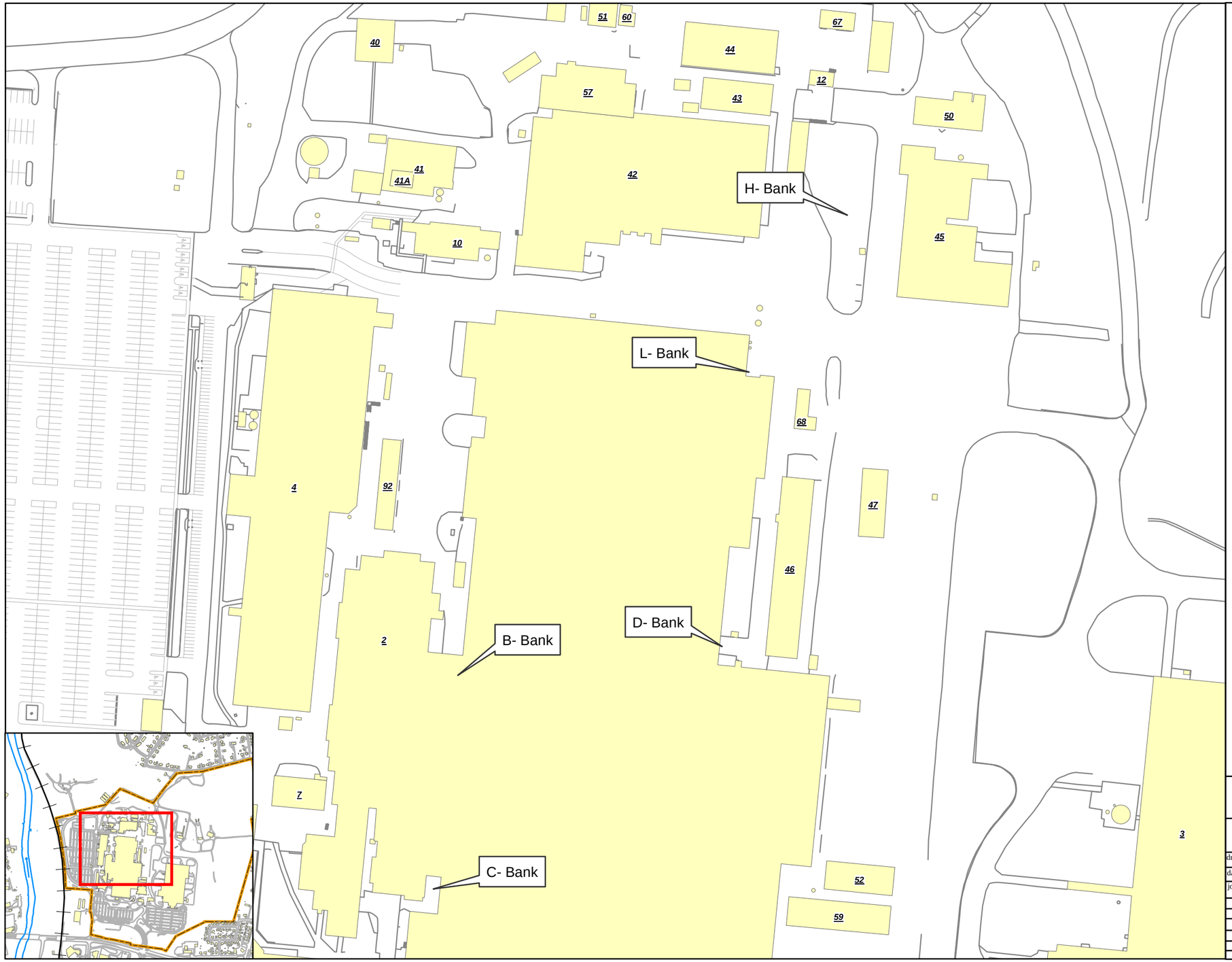
1425 EDEN ROAD, YORK, PA 17402

SITE LOCATION MAP

drawn JEB	checked	approved	figure no. 1
date 1/26/2012	date	date	
job no.		file no. Fig1site-loc.mxd	

initials	date	revision

SAIC



N
W E
S

Legend

- Codorus Creek
- Railroad
- Roads and Curb Boundary (2006)
- Parking (2006)
- Buildings
- Harley-Davidson Property Boundary

140 70 0 140 Feet

1 inch = 150 feet

FORMER YORK NAVAL ORDNANCE PLANT
1425 EDEN ROAD, YORK, PA 17402

Transformer Bank Locations

drawn AGM	checked TDE	approved SMS	figure no. 2
date 2/9/09	date 8/26/09	date	
job no. 01-1633-00-9806-309		file no.	

initials	date	revision

SAIC From Science to Solutions

TABLES

Table 1.
Building Wall Sampling Summary - B-Bank and C-Bank Areas
Former York Naval Ordnance Plant - York, PA

Location/ID	PADEP	PADEP	ETAB-WC-001 North wall, 17"	ETAB-WC-002 East wall, 19"	ETAB-WC-003 South wall, 22"	ETAB-WC-004 West Wall, 20"
Depth (ft.)	Clean Fill Limits	Regulated Fill Limits	0 - 0.08	0 - 0.08	0 - 0.08	0 - 0.08
Sample Date			5/19/2011	5/19/2011	5/19/2011	5/19/2011
Parameter	mg/kg	mg/kg				
Media			Concrete	Concrete	Concrete	Concrete
Total PCBs (mg/kg)						
PCB-1016	15	200	0.016 U	0.83 U	0.82 U	0.083 U
PCB-1221	0.63	2.5	0.016 U	0.83 U	0.82 U	0.083 U
PCB-1232	0.5	2	0.016 U	0.83 U	0.82 U	0.083 U
PCB-1242	16	62	0.016 U	0.83 U	0.82 U	0.083 U
PCB-1248	9.9	44	0.016 U	0.83 U	0.82 U	0.083 U
PCB-1254	4.4	44	0.016 U	0.83 U	0.82 U	0.083 U
PCB-1260	30	130	0.26	140	88	1.1
TSCA limit = 50 mg/kg						

Location/ID	PADEP	PADEP	ETAC-WC-001 West Wall, 38"	ETAC-WC-002 North wall, 20"	ETAC-WC-003 East wall, 6"	ETAC-WC-004 South wall, 15"
Depth (ft.)	Clean Fill Limits	Regulated Fill Limits	0 - 0.08	0 - 0.08	0 - 0.08	0 - 0.08
Sample Date			5/19/2011	5/19/2011	5/19/2011	5/19/2011
Parameter	mg/kg	mg/kg				
Media			Concrete	Concrete	Concrete	Concrete
Total PCBs (mg/kg)						
PCB-1016	15	200	0.016 U	0.016 U	0.83 U	0.017 U
PCB-1221	0.63	2.5	0.016 U	0.016 U	0.83 U	0.017 U
PCB-1232	0.5	2	0.016 U	0.016 U	0.83 U	0.017 U
PCB-1242	16	62	0.016 U	0.016 U	0.83 U	0.017 U
PCB-1248	9.9	44	0.016 U	0.016 U	0.83 U	0.017 U
PCB-1254	4.4	44	0.016 U	0.016 U	0.83 U	0.017 U
PCB-1260	30	130	0.94	0.21	70	1.3
TSCA limit = 50 mg/kg						

All values reported as mg/kg.
U - Indicates undetected at reported detection limit.

Table 1.
Building Wall Sampling Summary - B-Bank and C-Bank Areas
Former York Naval Ordnance Plant - York, PA

Location/ID	PADEP	PADEP	ETAB-WC-005 N Wall, 29"	ETAB-WC-006 S Wall, 33"	ETAB-WC-007 W Wall, 33"	ETAB-WC-008 N Wall, 112"	ETAB-WC-009 S Wall, 113"	ETAB-WC-010 W Wall, 104"
Depth (ft.)	Clean Fill	Regulated Fill	0 - 0.08	0 - 0.08	0 - 0.08	0 - 0.08	0 - 0.08	0 - 0.08
Sample Date	Limits	Limits	9/20/2011	9/20/2011	9/20/2011	9/20/2011	9/20/2011	9/20/2011
Parameter	mg/kg	mg/kg						
Media			Concrete	Concrete	Concrete	Concrete	Concrete	Concrete
Total PCBs (mg/kg)								
PCB-1016	15	200	0.33 U	1.70 U	0.33 U	0.016 U	0.017 U	0.017 U
PCB-1221	0.63	2.5	0.33 U	1.70 U	0.33 U	0.016 U	0.017 U	0.017 U
PCB-1232	0.5	2	0.33 U	1.70 U	0.33 U	0.016 U	0.017 U	0.017 U
PCB-1242	16	62	0.33 U	1.70 U	0.33 U	0.016 U	0.017 U	0.017 U
PCB-1248	9.9	44	0.33 U	1.70 U	0.33 U	0.016 U	0.017 U	0.017 U
PCB-1254	4.4	44	0.33 U	1.70 U	0.33 U	0.016 U	0.017 U	0.017 U
PCB-1260	30	130	28	68	14	0.26	1.6	0.27
TSCA limit = 50 mg/kg								

Location/ID	PADEP	PADEP	ETAC-WC-005 W Wall, 109"	ETAC-WC-006 N Wall, 110"	ETAC-WC-007 E Wall, 118"	ETAC-WC-008 E Wall, 148"	ETAC-WC-009 S Wall, 106"
Depth (ft.)	Clean Fill	Regulated Fill	0 - 0.08	0 - 0.08	0 - 0.08	0 - 0.08	0 - 0.08
Sample Date	Limits	Limits	9/20/2011	9/20/2011	9/20/2011	9/20/2011	9/20/2011
Parameter	mg/kg	mg/kg					
Media			Concrete	Concrete	Block	Block	Concrete
Total PCBs (mg/kg)							
PCB-1016	15	200	0.017 U	0.016 U	0.017 U	0.017 U	0.017 U
PCB-1221	0.63	2.5	0.017 U	0.016 U	0.017 U	0.017 U	0.017 U
PCB-1232	0.5	2	0.017 U	0.016 U	0.017 U	0.017 U	0.017 U
PCB-1242	16	62	0.017 U	0.016 U	0.017 U	0.017 U	0.017 U
PCB-1248	9.9	44	0.017 U	0.016 U	0.017 U	0.017 U	0.017 U
PCB-1254	4.4	44	0.017 U	0.016 U	0.017 U	0.017 U	0.017 U
PCB-1260	30	130	0.16	0.072	0.085	0.017 U	0.098
TSCA limit = 50 mg/kg							

All values reported as mg/kg.
U - Indicates undetected at reported detection limit.

Table 2
Building Wall Sampling Summary - D-Bank and L-Bank Areas
Former York Naval Ordnance Plant - York, PA

Location/ID	PADEP	PADEP	ETAD-WC-001	ETAD-WC-002
			West wall (painted)	West wall (unpainted)
Depth (ft.)	Clean Fill	Regulated Fill	0 - 0.08	0 - 0.08
Sample Date	Limits	Limits	8/3/2011	8/3/2011
Parameter	mg/kg	mg/kg		
Media			Concrete	Concrete
Total PCBs (mg/kg)				
PCB-1016	15	200	0.016 U	0.017 U
PCB-1221	0.63	2.5	0.016 U	0.017 U
PCB-1232	0.5	2	0.016 U	0.017 U
PCB-1242	16	62	0.016 U	0.017 U
PCB-1248	9.9	44	0.016 U	0.017 U
PCB-1254	4.4	44	0.016 U	0.017 U
PCB-1260	30	130	1.3	0.017 U
TSCA limit = 50 mg/kg				

Location/ID	PADEP	PADEP	ETAL-WC-001	ETAL-WC-002	ETAL-WC-003
			West wall (painted)	West wall (unpainted)	South wall (painted)
Depth (ft.)	Clean Fill	Regulated Fill	0 - 0.08	0 - 0.08	0 - 0.08
Sample Date	Limits	Limits	8/3/2011	8/3/2011	8/3/2011
Parameter	mg/kg	mg/kg			
Media			Concrete	Concrete	Concrete
Total PCBs (mg/kg)					
PCB-1016	15	200	0.016 U	0.016 U	0.017 U
PCB-1221	0.63	2.5	0.016 U	0.016 U	0.017 U
PCB-1232	0.5	2	0.016 U	0.016 U	0.017 U
PCB-1242	16	62	0.016 U	0.016 U	0.017 U
PCB-1248	9.9	44	0.016 U	0.016 U	0.017 U
PCB-1254	4.4	44	0.016 U	0.016 U	0.017 U
PCB-1260	30	130	0.032	0.016 U	0.017 U
TSCA limit = 50 mg/kg					

All values reported as mg/kg.
U - Indicates undetected at reported detection limit.

APPENDIX A

Interim Remediation Photographs

Remediation Photos – B-Bank and C-Bank Transformer Areas

A-1: Pre-Demo view inside B-Bank, looking north at north.

A-2: Pre-Demo view inside B-Bank, looking south at west wall.

A-3: Pre-Demo view inside B-Bank, looking south at south wall.

A-4: Pre-Demo view inside B-Bank, looking south at east wall.

A-5: Pre-Demo view inside C-Bank, looking south at south wall.

A-6: Pre-Demo view inside C-Bank, looking southwest at west wall.

A-7: Pre-Demo view inside C-Bank, looking north at north wall.

A-8: Pre-Demo view inside C-Bank, looking east at east wall.

A-9: Pre-Demo view inside C-Bank, looking east at east wall.

A-10: Demolition view - Looking south at B-Bank after Paint 91 was demolished.

A-11: Demolition view - Looking east at the south entrance to C-Bank.

A-12: Demolition view - Looking southeast at B-Bank during Building 2 demolition. The PCB-impacted concrete (marked with the red X's) was segregated from other demolition debris.

A-13: Demolition view - Looking southeast at B-Bank during Building 2 demolition. The PCB-impacted concrete (marked with the red X's) was segregated from other demolition debris.

A-14: View looking east at west wall of C-Bank during Building 2 demolition.

A-15: Looking northeast at west and south walls of C-Bank during Building 2 demolition.

A-16: Looking northeast into the south entrance of C-Bank. PCB-impacted concrete (marked with the red X's) was separated from other demolition debris for proper disposal.

A-17: Looking northeast at the east wall inside C-Bank. The PCB-impacted concrete (marked with red X's) was segregated for proper disposal.

A-18: Post-Demo view - Looking southeast at impacted concrete pile from B-Bank demolition. Note red paint marks on the debris pile.

A-19: Post-Demo view - Looking east at concrete debris from C-Bank demolition. Note red paint marks (indicated by white arrow) on the debris.

A-20: Post-Demo view - Looking at crushed impacted concrete pile from B-Bank and C-Bank areas prior to loading and off-site shipment. The crushed concrete pile is on plastic.

APPENDIX B

Waste Disposal Documentation

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) ~~Chemtree # CCN10181~~ Kas Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: PAD001643691
2. Page 1 of: 1
3. Emergency Response Phone: 800-424-9300
4. Manifest Tracking Number: **007538956 JJK**

5. Generator's Name and Mailing Address:
Harley-Davidson Motor Co. Ops., Inc.
1425 Eden Road York, PA 17402

Generator's Site Address (if different than mailing address)

Generator's Phone: 717-848-1177

6. Transporter 1 Company Name: Horwith Trucks, Inc. — U.S. EPA ID Number: PAD146714878

7. Transporter 2 Company Name: ~~Horwith Trucks, Inc.~~ Kas — U.S. EPA ID Number: ~~PAD146714878~~ Kas

8. Designated Facility Name and Site Address:
CWM Chemical Services, LLC
1550 Balmer Road Mocel City, NY 14107
U.S. EPA ID Number: NYD049836679

Facility's Phone: 716-286-1550

GENERATOR

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN3432, Polychlorinated biphenyls mixture, 9, PGIII, RQ	001	DT	Est 23	T	B007
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information: Items 11 & 12 S/B in Kilograms qp 2/2/12
9b.1. Bldg 2, B-Bank/C-Bank Concrete/Debris profile NO. NY301340 81650374
York Facility Remediation Trust Fund OSP: ~~10/25/11~~ qp 2/2/12
"ER Service contracted withWaste Management" 1/7/12 qp 2/2/12 SR # 974584-1 rec'd 23651K

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Sharon R Fisher — Signature: Sharon R Fisher — Month 02 Day 01 Year 12

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Pete Wittmann — Signature: [signature] — Month 02 Day 01 Year 12
Transporter 2 Printed/Typed Name: — Signature: — Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

qty est actual rec'd 23651K.

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Jody Parfinski — Signature: Jody Parfinski — Month 2 Day 2 Year 12

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

WASTE MANAGEMENT

CWM CHEMICAL SERVICES, LLC
1550 Balmer Road
Model City, NY 14107
(716) 286-1550
(716) 286-0211 Fax

HARLEY-DAVIDSON MOTOR CO OPS
ATTN: SHARON FISHER
PAD001643691
1425 EDEN RD
YORK PA 17402

CERTIFICATE OF DISPOSAL

CWM CHEMICAL SERVICES, L.L.C., EPA ID: NYD049836679, has received waste material from HARLEY-DAVIDSON MOTOR CO OPS on 02/02/12 as described on Shipping Document number 007538956JJK Sequence number 01. CWM CHEMICAL SERVICES, L.L.C. hereby certifies that the above described material was landfilled in accordance with the 40 CFR part 761 as it pertains to the land disposal of polychlorinated biphenyl contaminated materials.

Profile Number: NY301340
CWM Tracking ID: 8165037401
CWM Unit #: 1*0
Disposal Date: 02/02/12

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification, that this information is true accurate and complete.

MICHAEL D MAHAR
DISTRICT MANAGER
Certificate # 352399
02/03/12

For questions please call our Customer Service Dept. at (800) 843-3604

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) ~~Chemtrec # CCN10181~~ Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	PAD001643691	1	800-424-9300	007538957 JJK

GENERATOR

5. Generator's Name and Mailing Address
Harley-Davidson Motor Co. Ops., Inc.
1425 Eden Road York, PA 17402
Generator's Phone: 717-848-1177

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Horwith Trucks, Inc. — U.S. EPA ID Number: PAD146714878

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CWM Chemical Services, LLC
1550 Balmer Road Model City, NY 14107
Facility's Phone: 716-286-1550
U.S. EPA ID Number: NYD049836679

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. UN3432, Polychlorinated biphenyls mixture, 9, PGIII, RQ	001	DT	(est) 10,000	K	B007		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
9b.1. Bldg 2, B-Bank/C-Bank Concrete/Debris
York Facility Remediation Trust Fund
#ER Service contracted by Waste Management
Profile No. NY301340 81650395
OSD 01/07/12
SR # 974663-1 recd 10433K

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Sharon R Fisher — Signature: Sharon R Fisher — Month 02 Day 02 Year 12

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Timothy Nfuahe — Signature — Month 02 Day 02 Year 12

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Jody Pinkerton — Signature: Jody Pinkerton — Month 12 Day 13 Year 12

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

WASTE MANAGEMENT

CWM CHEMICAL SERVICES, LLC
1550 Balmer Road
Model City, NY 14107
(716) 286-1550
(716) 286-0211 Fax

HARLEY-DAVIDSON MOTOR CO OPS
ATTN: SHARON FISHER
PAD001643691
1425 EDEN RD
YORK PA 17402

CERTIFICATE OF DISPOSAL

CWM CHEMICAL SERVICES, L.L.C., EPA ID: NYD049836679, has received waste material from HARLEY-DAVIDSON MOTOR CO OPS on 02/03/12 as described on Shipping Document number 007538957JJK Sequence number 01. CWM CHEMICAL SERVICES, L.L.C. hereby certifies that the above described material was landfilled in accordance with the 40 CFR part 761 as it pertains to the land disposal of polychlorinated biphenyl contaminated materials.

Profile Number: NY301340
CWM Tracking ID: 8165039501
CWM Unit #: 1*0
Disposal Date: 02/03/12

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true accurate and complete.

MICHAEL D MAHAR
DISTRICT MANAGER
Certificate # 352443
02/06/12

For questions please call our Customer Service Dept. at (800) 843-3604