Final

BUILDING 45
GREASE TRAP VAULT CLOSURE REPORT
FORMER YORK NAVAL ORDNANCE PLANT

SAIC Project 166345.00.08232.6072.00

Prepared for:

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

December 2009

Science Applications International Corporation
6310 Allentown Boulevard / Harrisburg, PA 17112 / tel: 717.901.8100 / www.saic.com

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By:

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1.0 INTRODUCTION AND BACKGROUND

This report describes the closure of an underground grease trap vault located near Building 45. The closure activities were conducted in accordance with the scope of work in Science Applications International Corporation (SAIC) proposal number 01-1633-71-2009-175, dated August 14, 2008.

Harley-Davidson Motor Company Operations, Inc. **(**Harley-Davidson) entered into a Settlement Agreement with the Department of Defense and the Department of the Navy (as facilitated by the United States Army Corps of Engineers [USACE]) on January 24, 1995. That agreement established a cost sharing arrangement between Harley-Davidson, as the present site owner, and the United States, as the past owner, for costs incurred in response to environmental contamination at the facility. A Trust Fund was established to handle the cost sharing of those response actions. All environmental response actions must be completed in accordance with federal methods. This scope of work and proposal were approved by Harley-Davidson and the York Remediation Trust Fund on September 8, 2008.

Building 45, which is currently used as a maintenance building, is located in the northwestern part of the Harley-Davidson, York, Pennsylvania, facility (see Figure 1). The vault, or grease trap as it is identified on some drawings/documents, was located west of Building 45. According to a 1945 as-built utility drawing, the vault was constructed to separate oil and water from a drain line exiting Building 45. The outlet from the vault was joined to an existing sanitary sewer line on the property. Historic drawings are included in Appendix A. Because there was no known ongoing need for the oil/water separator, Harley-Davidson decided to have the vault cleaned, inspected, and removed. Photographs taken during the investigation and closure of the vault are included in Appendix B.

Sludge and water in the vault were sampled in March 2008. Both the sludge and water contained elevated concentrations of oil/grease, chlorinated volatile organic compounds (VOCs), and certain metals. The metals in the sludge sample, however, did not exceed applicable criteria when tested via the Toxicity Characteristic Leaching Procedure (TCLP). The liquid and sludge

were removed from the vault in May 2008 and disposed of off-site at Modern Landfill of York, Pennsylvania by Veolia Environmental Services.

After the vault was cleaned, a sump pump was installed to remove liquids that continued to enter the vault through the inlet line (note - the inlet was connected to an oil/water separator as detailed in the next paragraph). The liquids collected by the sump pump were transferred to an on-site Baker tank. The liquids in the vault contained low levels of VOCs; however, water samples collected directly from the inlet pipe did not contain VOCs. Therefore, it was determined that VOCs were leaching into the water from the concrete vault. The vault water in the Baker tank was subsequently treated via the on-site groundwater treatment system.

A dye test was used to trace the influent pipe and ongoing discharge into the vault to an oil/water separator associated with an air dryer for two plant air compressor units located at the former fire station inside Building 45 (see photographs in Appendix B). The discharge was temporarily redirected using a sump pump to a sink near the men's bathroom of Building 45 to ensure that liquids would not reenter the vault during the excavation and removal activities. This sink is connected to the sanitary sewer via a separate discharge pipe.

Historic maps show that the effluent pipe from the vault was connected to a nearby sanitary sewer line. The maps also show the influent pipe was possibly connected to several floor drains/clean-outs located in Building 45. Dye tests conducted to confirm the connection of these floor drains to the vault were inconclusive. Therefore, Harley-Davidson decided to seal three of these floor drains/clean-outs by filling them with concrete to floor level in January 2009 in order to avoid uncontrolled releases from any future spills in Building 45.

2.0 VAULT REMOVAL AND SOIL EXCAVATION

Excavation of the vault began on January 5, 2009, using SAIC subcontractor, Stewart & Tate. The influent and effluent lines were excavated with a backhoe and cut with a gas-powered cut-off saw. Once the lines were cut, the vault was excavated and broken into pieces. The concrete pieces were placed in a roll-off container located adjacent to the excavation and subsequently disposed of off-site as hazardous waste by Envirite. Disposal documentation for the concrete vault is included in Appendix C.

Once the vault was removed, the soil around the vault was excavated and staged on plastic adjacent to the excavation. At approximately 10 feet below ground surface (2 feet below the bottom of the vault), a layer of stained soil and wood was encountered. The stained soil, which had a hydrocarbon-like odor, was staged separately from other soil. The excavation was discontinued at a depth of approximately 11 feet below the ground surface after all visual evidence of contamination had been removed.

The soil that did not display visual evidence of contamination was placed in a York Waste roll-off container and stored on-site until waste characterization was completed. Soil that displayed visual evidence of contamination was placed in an Envirite roll-off container and was also staged on-site until waste characterization was completed. Four Envirite containers and two York Waste containers were used. The soil in the containers was sampled on January 9, 2009, for waste characterization. Characterization results and disposal manifests for the excavated soils are provided in Appendix C.

3.0 SOIL SAMPLING AND ANALYSIS

On January 8, 2009, eight soil samples were collected from the bottom of the excavation using a hand auger. Sample depths ranged from 10 to 11.5 feet below ground surface and can be viewed on Table 1. Each sample location is shown on Figure 2.

All soil samples were screened in the field for the presence of VOCs using a photoionization detector (PID). Upon retrieving soil from the subsurface, the soil core was split open and the presence of VOCs was evaluated by placing the PID inlet inside of the soil core. Samples intended for laboratory analysis were placed into laboratory-supplied glassware immediately following field screening procedures. The samples were kept on ice in preparation for shipment to the analytical laboratory.

The laboratory soil samples were submitted to TestAmerica Laboratories, Inc. (TestAmerica) for analysis of VOCs, semi-volatile organic compounds (SVOCs), total metals, hexavalent chromium, total cyanide, and free cyanide. Safety fencing was installed around the excavation for several days until the sample results were received.

Analytical data received from TestAmerica are handled in accordance with SAIC's Quality Assurance Project Plan (QAPP, July 2009). Laboratory data packages are verified at SAIC and evaluated for completeness, technical holding times, blanks, duplicates, laboratory control samples, matrix spike samples, surrogates, and calibration to standards. Electronic data deliverables from the laboratory are entered into the former York Naval Ordnance Plant (fYNOP) data base, which is stored in the ARC IMS system and checked for completeness against the chain-of-custody record. Electronic analytical data are stored on an SAIC server, as well as at the laboratory. Laboratory records are retained at TestAmerica for a period of five years after the report is issued. The analytical results from these soil samples are summarized and compared to Pennsylvania Department of Environmental Protection's (DEP) nonresidential medium-specific concentrations (MSCs) and the United States Environmental Protection Agency's (EPA) risk-based concentrations (RBCs) for industrial soils in Table 1. None of the compounds analyzed were detected at a concentration greater than an MSC. Various metals

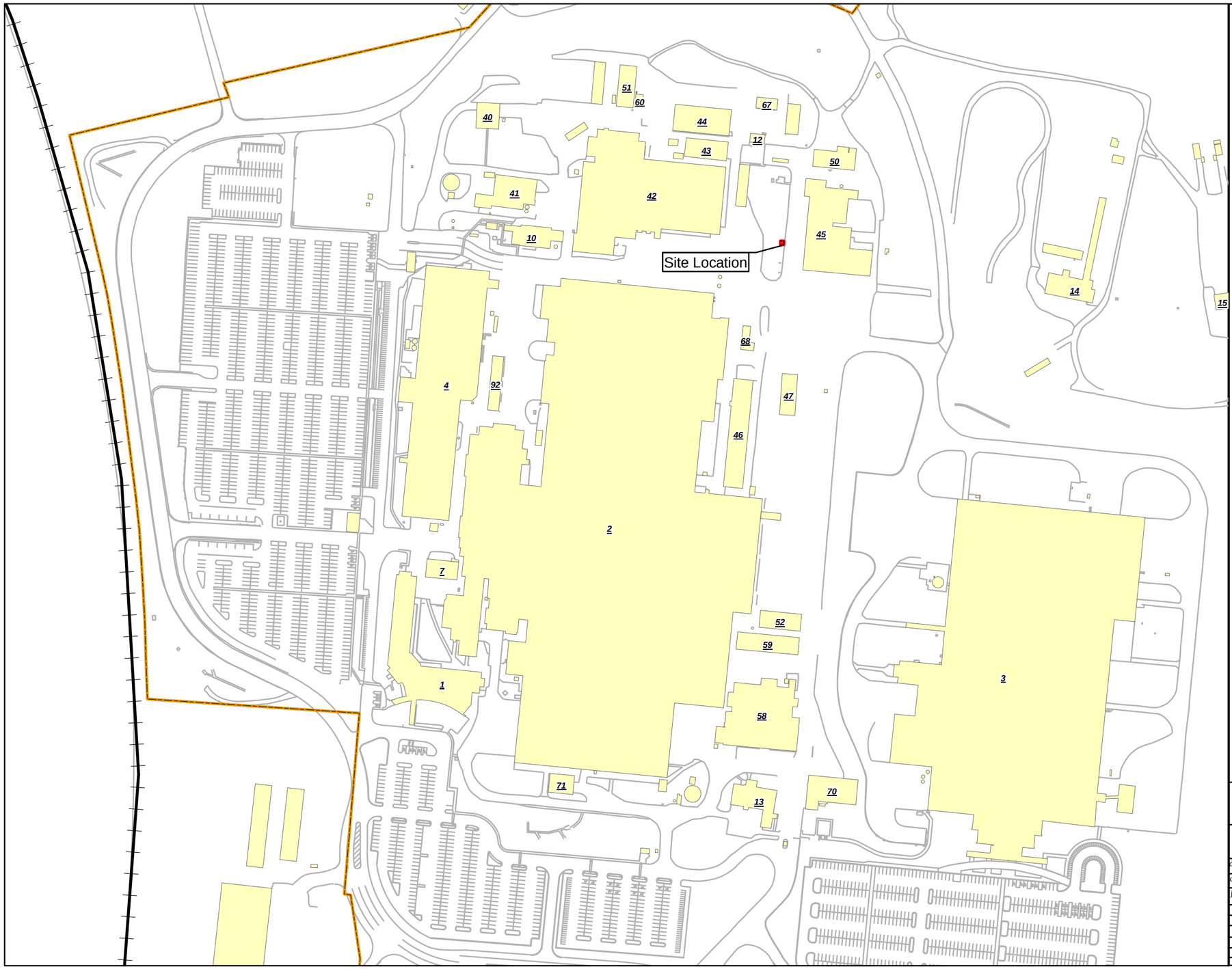
were detected at concentrations that are typical for soils. Butylbenzylphthalate, phenol, 1,1,1-trichloroethane (1,1,1-TCA), cis-1,2-dichloroethene (cis-1,2-DCE), and trichloroethene (TCE) were detected in some samples at concentrations that were below the lower quantitation limit (i.e., estimated concentrations), which indicates probable presence, but at concentrations far below the MSC.

4.0 SUMMARY AND CONCLUSIONS

This report describes the closure of an underground grease trap vault located near Building 45. Excavation of the vault began on January 5, 2009. Once the vault was removed, the soil around the vault was excavated and staged on plastic adjacent to the excavation. Soils displaying visual evidence of contamination were encountered beneath the vault to a depth of 11 feet below ground surface. These soils were containerized, characterized, and disposed of off-site. Following excavation activities, a total of eight confirmatory soil samples were collected from the bottom of the excavation using a hand auger. The laboratory soil samples were submitted to TestAmerica Laboratories, Inc. (TestAmerica) for analysis of VOCs, SVOCs, total metals, hexavalent chromium, total cyanide, and free cyanide. None of the compounds analyzed were detected at a concentration greater than an MSC. Various metals were detected at concentrations that are typical for soils.

Based on the analytical results for the soil samples, no further soil excavation was deemed necessary, and the excavation was backfilled and compacted with crushed stone to the elevation of the influent and effluent pipes. The influent and effluent pipes were joined using a section of 4-inch Schedule 40 PVC pipe and rubber couplings manufactured by Fernco, Inc. The oil/water separator for the air compressors in Building 45 was then reconnected to the influent pipe to allow it to discharge to the sanitary sewer. The remainder of the excavation was backfilled with crushed stone to near-grade. Topsoil was added, and Harley-Davidson personnel were tasked with the responsibility of reseeding the area.

FIGURES



N
W E
S

Legend

- Codorus Creek
- Railroad
- Buildings
- Harley-Davidson Property Boundary
- Roads and Curb Boundary

250 125 0 250 Feet

1 inch = 250 feet

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

SITE LOCATION MAP

drawn AGM	checked RDM	approved SMS	figure no. 1
date 5/4/09	date 7/7/09	date 7/7/09	
job no. 01-1633-00-5936-518		file no. Fig_1_Site_Area.mxd	

initials	date	revision

SAIC From Science to Solutions

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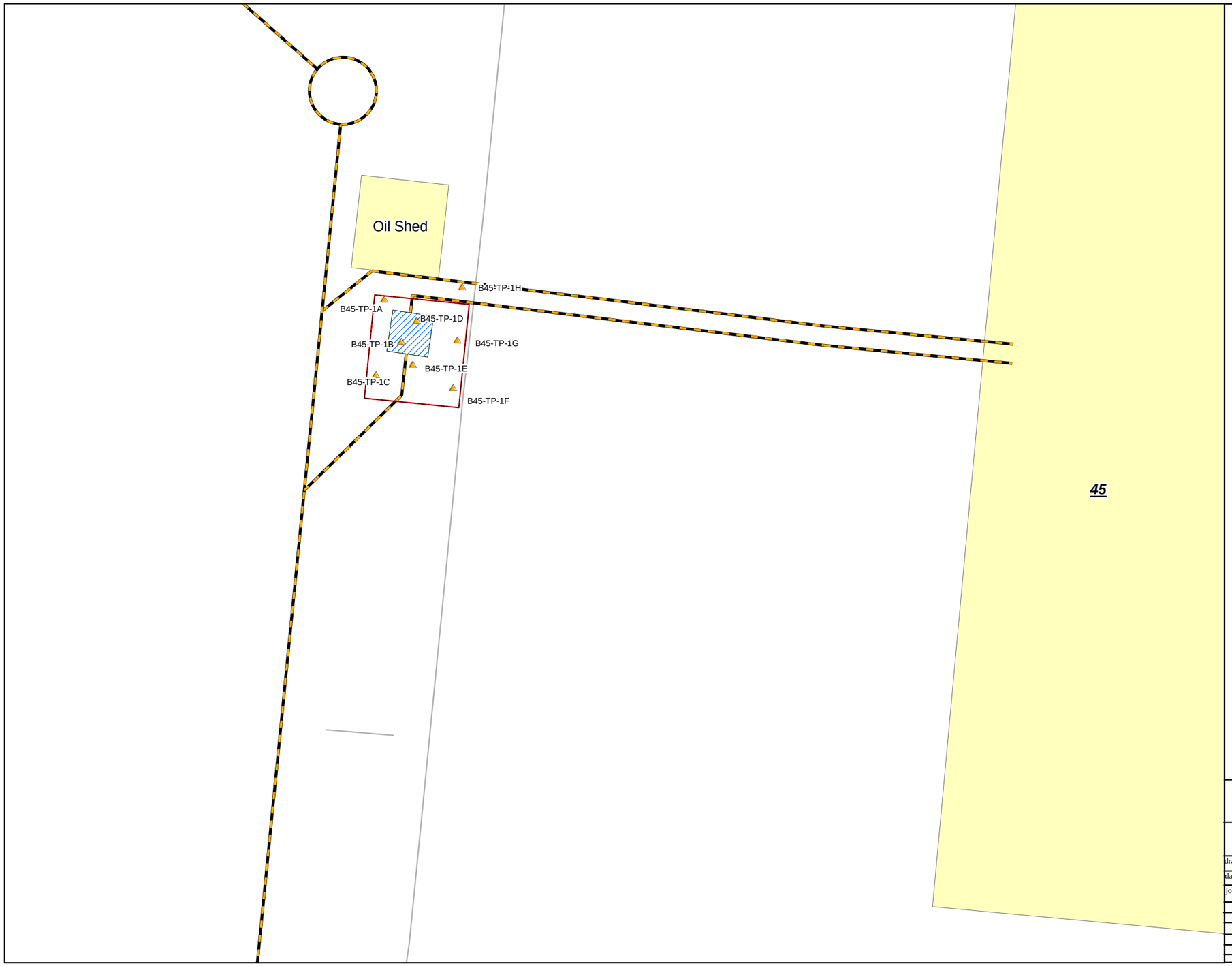

FORMER YORK NAVAL ORDNANCE PLANT

1425 EDEN ROAD, YORK, PA 17402

Building 45 Soil Samples

drawn AGM	checked RDM	approved SMS	figure no. 2
date 5/4/09	date 7/7/09	date 7/7/09	
job no. 01-1633-00-5936-518		file no. Fig_2 SMP_LOCS.mxd	

initials	date	revision

SAIC From Science to Solutions

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TABLES

Table 1.
Soils Data Summary - Building 45 (B45)
Former York Naval Ordnance Plant - York, PA

Location/ID Depth (ft.) Sample Date Parameter	MSC Soil to GW Used Aquifer (mg/kg)	MSC Direct Contact 0 - 2 ft (mg/kg)	MSC Direct Contact 2 - 15 ft (mg/kg)	EPA RBC[1] Industrial Soil (mg/kg)	B45-TP-1A 10.5 - 11 1/8/2009 (mg/kg)	B45-TP-1B 11 - 11.5 1/8/2009 (mg/kg)	B45-TP-1C 11 - 11.5 1/8/2009 (mg/kg)	B45-TP-1D 11 - 11.5 1/8/2009 (mg/kg)	B45-TP-1E 11 - 11.5 1/8/2009 (mg/kg)	B45-TP-1F 11 - 11.5 1/8/2009 (mg/kg)	B45-TP-1G 11 - 11.5 1/8/2009 (mg/kg)	B45-TP-1H 11 - 11.5 1/8/2009 (mg/kg)	B45-TP-1H 11 - 11.5 1/8/2009 (mg/kg)
Cyanide, Free													
Cyanide, Free	200	56000	190000	20000	0.62 U	0.71 U	0.59 U	0.69 U	0.7 U	0.66 U	0.62 U	0.61 U	0.62 U
Cyanide, Total													
Cyanide, Total	200	56000	190000		0.62 U	0.71 U	0.59 U	0.69 U	0.7 U	0.66 U	0.62 U	0.61 U	0.62 U
Hexavalent Chromium													
Hexavalent Chromium	190	420	190000	200	0.23 B	0.96	0.47 U	0.63	0.94	0.46 B	0.16 B	0.22 B	0.62
Mercury													
Mercury	10	840	190000	24	0.063 J	0.18 J	0.053 J	0.11 J	0.19 J	0.13 J	0.07 J	0.069 J	0.067 J
Metal													
Antimony	27	1100	190000	410	0.097 B	0.051 B	0.024 B	0.058 B	0.11 B	0.22 B	0.069 B	0.031 B	0.028 B
Arsenic	150	53	190000	1.6	1.1	1.3	0.37	1.1	1.2	1.6	0.52	0.56	0.41
Barium	8200	190000	190000	190000	94.9 J	74.1 J	37.2 J	104 J	118 J	74.5 J	67.5 J	56.1 J	64.2 J
Beryllium	320	5600	190000	2000	0.46	0.64	0.21	0.88	1	0.51	0.38	0.44	0.43
Cadmium	38	210	190000	800	0.066 B	0.097 B	0.039 B	0.14	0.17	0.2	0.072 B	0.079 B	0.068 B
Chromium				1500000	11.1 J	17.4 J	7.4 J	16.1 J	20.7 J	12.8 J	10.1 J	9.3 J	9.3 J
Copper	36000	100000	190000	41000	6.5	6.3	1.5	10.2	11.6	14.5	2.5	3.2	2.5
Lead	450	1000	190000	800	15.1 J	19.1 J	8.4 J	21.9 J	21.2 J	27.6 J	11.6 J	11.4 J	12.1 J
Nickel	650	56000	190000	20000	3.9 J	4.4 J	2.1 J	5.3 J	6.9 J	5 J	2.3 J	2.3 J	2.3 J
Selenium	26	14000	190000	5100	0.39 B	0.51 B	0.25 B	0.52 B	0.64 B	0.48 B	0.32 B	0.35 B	0.29 B
Silver	84	14000	190000	5100	0.12 U	0.14 U	0.12 U	0.023 B	0.071 B	0.0053 B	0.12 U	0.12 U	0.12 U
Thallium	14	200	190000	66	0.29	0.34	0.17	0.33	0.3	0.22 E	0.22	0.19	0.22
Vanadium	72000	20000	190000	5200	12.5 J	18.1 J	7.8 J	14.1 J	19.6 J	14.4 J	10.8 J	10 J	10.8 J
Zinc	12000	190000	190000	310000	13.8 J	13.5 J	5.6 J	17.9 J	20 J	18.6 J	8 J	7 J	6.8 J
SVOC													
1,2,4-Trichlorobenzene	27	10000	10000	400	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
1,2-Dichlorobenzene	60	10000	10000	10000	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
1,3-Dichlorobenzene	61	10000	10000	3066	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
1,4-Dichlorobenzene	10	3300	190000	13	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
2,4,5-Trichlorophenol	6100	190000	190000	62000	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
2,4,6-Trichlorophenol	8.9	840	190000	160	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
2,4-Dichlorophenol	2	8400	190000	1800	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
2,4-Dimethylphenol	200	10000	10000	12000	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
2,4-Dinitrophenol	4.1	5600	190000	1200	2.1 U	2.4 U	2 U	2.3 U	2.4 U	2.3 U	2.1 U	2.1 U	2.1 U
2,4-Dinitrotoluene	0.84	260	190000	2044	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
2,6-Dinitrotoluene	10	2800	190000	620	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
2-Chloronaphthalene	18000	190000	190000	82000	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
2-Chlorophenol	4.4	920	1100	5100	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
2-Methylnaphthalene	8000	10000	10000	4100	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
2-Methylphenol	510	10000	10000	51100	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
2-Nitroaniline	0.58	160	190000	1800	2.1 U	2.4 U	2 U	2.3 U	2.4 U	2.3 U	2.1 U	2.1 U	2.1 U
2-Nitrophenol	82	22000	190000		0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
3,3'-Dichlorobenzidine	32	180	190000	6.35911	2 U	2.3 U	1.9 U	2.2 U	2.2 U	2.1 U	2 U	2 U	2 U
3/4-Methylphenol				5100	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
3-Nitroaniline	0.58	160	190000		2.1 U	2.4 U	2 U	2.3 U	2.4 U	2.3 U	2.1 U	2.1 U	2.1 U
4,6-Dinitro-2-Methylphenol					2.1 U	2.4 U	2 U	2.3 U	2.4 U	2.3 U	2.1 U	2.1 U	2.1 U
4-Bromophenyl phenyl ether					0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
4-Chloro-3-Methyl-Phenol	110	14000	190000		0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
4-Chloroaniline	52	11000	190000	4088	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
4-Chlorodiphenyl Ether					0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
4-Nitroaniline	0.58	160	190000	86	2.1 U	2.4 U	2 U	2.3 U	2.4 U	2.3 U	2.1 U	2.1 U	2.1 U
4-Nitrophenol	6	22000	190000		2.1 U	2.4 U	2 U	2.3 U	2.4 U	2.3 U	2.1 U	2.1 U	2.1 U
Acenaphthene	4700	170000	190000	33000	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Acenaphthylene	6900	170000	190000		0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Anthracene	350	190000	190000	170000	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Benzo (A) Anthracene	320	110	190000	2.1	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Benzo (a) Pyrene	46	11	190000	0.21	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Benzo (b) Fluoranthene	170	110	190000	2.1	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Benzo (g,h,i) Perylene	180	170000	190000		0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Benzo (k) Fluoranthene	610	1100	190000	21	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U

Table 1.
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Former York Naval Ordnance Plant - York, PA

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Bis(2-Chloroethoxy) Methane				1800	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Bis(2-Chloroethyl) Ether	0.055	5	5.7	0.9	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Bis(2-Chloroisopropyl) Ether	30	160	190		0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Bis(2-Ethylhexyl) Phthalate	130	5700	10000	120	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Butylbenzylphthalate	10000	10000	10000	910	0.41 U	**0.072 J**	**0.038 J**	0.45 U	0.46 U	0.44 U	**0.04 J**	**0.03 J**	0.4 U
Carbazole	83	4000	190000		0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Chrysene	230	11000	190000	210	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Dibenzo (a,h) Anthracene	160	11	190000	0.21	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Dibenzofuran					0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Diethylphthalate	500	10000	10000	490000	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Dimethylphthalate					0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Di-n-Butylphthalate	4100	10000	10000		0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Di-n-octylphthalate	10000	10000	10000		0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Fluoranthene	3200	110000	190000	22000	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Fluorene	3800	110000	190000	22000	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Hexachlorobenzene	0.96	50	190000	1.1	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Hexachlorobutadiene	1.2	560	10000	22	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Hexachlorocyclopentadiene	91	10000	10000	3700	2 U	2.3 U	1.9 U	2.2 U	2.2 U	2.1 U	2 U	2 U	2 U
Hexachloroethane	0.56	2800	190000	120	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Indeno (1,2,3-cd) Pyrene	28000	110	190000	2.1	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Isophorone	10	10000	10000	1800	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Naphthalene	25	56000	190000	20	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Nitrobenzene	5.1	1400	10000	22	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
N-Nitrosodi-N-Propylamine	0.037	11	10000	0.25	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
N-Nitrosodiphenylamine	83	16000	190000	350	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Pentachlorophenol	5	660	190000	9	2 U	2.3 U	1.9 U	2.2 U	2.2 U	2.1 U	2 U	2 U	2 U
Phenanthrene	10000	190000	190000		0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Phenol	400	190000	190000	180000	**0.072 J B**	**0.027 J B**	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Pyrene	2200	84000	190000	17000	0.41 U	0.47 U	0.39 U	0.45 U	0.46 U	0.44 U	0.41 U	0.4 U	0.4 U
Total Solids													
Percent Solids					**80.40%**	**70.10%**	**84.10%**	**72.20%**	**71.80%**	**75.40%**	**80.50%**	**81.80%**	**81.10%**
VOC													
1,1,1,2-Tetrachloroethane	18	3100	190000	9.8	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
1,1,1-Trichloroethane	20	10000	10000	39000	0.0054 U	**0.0014 J**	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
1,1,2,2-Tetrachloroethane	0.03	28	33	2.9	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
1,1,2-Trichloroethane	0.5	100	120	5.5	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
1,1-Dichloroethane	11	1000	1200	17	0.0054 U	**0.0029 J**	0.0051 U	**0.0011 J**	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
1,1-Dichloroethene	0.7	33	38		0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
1,2-Dibromoethane	0.005	0.93	8.6	0.17	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
1,2-Dichloroethane	0.5	63	73	2.2	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
1,2-Dichloropropane	0.5	160	180	4.7	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
1,4-Dioxane	2.4	210	240	160	1.1 U	1.4 U	1 U	1.3 U	1.4 U	1.3 U	1.1 U	1 U	1.2 U
2-Butanone	580	10000	10000	190000	0.022 U	0.029 U	0.02 U	0.025 U	0.027 U	0.027 U	0.021 U	0.02 U	0.023 U
2-Hexanone					0.022 U	0.029 U	0.02 U	0.025 U	0.027 U	0.027 U	0.021 U	0.02 U	0.023 U
4-Methyl-2-Pentanone	41	4300	4900	52000	0.022 U	0.029 U	0.02 U	0.025 U	0.027 U	0.027 U	0.021 U	0.02 U	0.023 U
Acetone	1000	10000	10000	610000	0.022 U	0.029 U	0.02 U	0.025 U	0.027 U	0.027 U	0.021 U	0.02 U	0.023 U
Acrylonitrile	0.27	24	28	1.2	0.11 U	0.14 U	0.1 U	0.13 U	0.14 U	0.13 U	0.11 U	0.1 U	0.12 U
Benzene	0.5	210	240	5.6	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Bromochloromethane	9	10000	10000		0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Bromodichloromethane	10	45	51	1.4	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Bromoform	10	1500	1700	220	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U

Table 1.
Soils Data Summary - Building 45 (B45)
Former York Naval Ordnance Plant - York, PA

Location/ID Depth (ft.) Sample Date Parameter	MSC Soil to GW Used Aquifer (mg/kg)	MSC Direct Contact 0 - 2 ft (mg/kg)	MSC Direct Contact 2 - 15 ft (mg/kg)	EPA RBC[1] Industrial Soil (mg/kg)	B45-TP-1A 10.5 - 11 1/8/2009 (mg/kg)	B45-TP-1B 11 - 11.5 1/8/2009 (mg/kg)	B45-TP-1C 11 - 11.5 1/8/2009 (mg/kg)	B45-TP-1D 11 - 11.5 1/8/2009 (mg/kg)	B45-TP-1E 11 - 11.5 1/8/2009 (mg/kg)	B45-TP-1F 11 - 11.5 1/8/2009 (mg/kg)	B45-TP-1G 11 - 11.5 1/8/2009 (mg/kg)	B45-TP-1H 11 - 11.5 1/8/2009 (mg/kg)	B45-TP-1H 11 - 11.5 1/8/2009 (mg/kg)
Bromomethane	1	270	300	35	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Carbon Disulfide	410	10000	10000	3000	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Carbon Tetrachloride	0.5	110	120	1.3	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Chlorobenzene	10	10000	10000	1500	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Chlorodibromomethane	10	61	70		0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Chloroethane	90	10000	10000		0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Chloroform	10	17	19	1.5	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Chloromethane	0.3	920	1000	510	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
cis-1,2-Dichloroethene	7	1900	2100		**0.00096 J**	**0.0019 J**	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
cis-1,3-Dichloropropene	2.6	410	470		0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Ethylbenzene	70	10000	10000	29	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Methyl tert-butyl ether	2	3200	3700	190	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Methylene chloride	0.5	3500	4000	54	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Styrene	24	10000	10000	38000	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Tetrachloroethene	0.5	1500	3300	2.7	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Toluene	100	10000	10000	46000	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
trans-1,2-Dichloroethene	10	3700	4300		0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
trans-1,3-Dichloropropene	2.6	410	470		0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Trichloroethene	0.5	970	1100	14	**0.001 J**	**0.0026 J**	0.0051 U	**0.0011 J**	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Vinyl Chloride	0.2	53	220	1.7	0.0054 U	0.0072 U	0.0051 U	0.0063 U	0.0068 U	0.0066 U	0.0053 U	0.0051 U	0.0059 U
Xylenes (Total)	1000	10000	10000	2600	0.016 U	0.022 U	0.015 U	0.019 U	0.02 U	0.02 U	0.016 U	0.015 U	0.018 U

Qualifier	Explanation
	Organic Data Qualifiers
J	Indicates an estimated value. This flag is used when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
B	Analyte is found in the associated blank, as well as in the
U	with the detection limit value.
	Inorganic Data Qualifiers
J	Analyte is found in the associated blank, as well as in the
B	Indicates an estimated value. This flag is used when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
E	Matrix Interference
U	with the detection limit value.

Screening Value Comparison Qualifiers

Qualifier	Explanation
	Soils
W	Excedence of the Pennsylvania DEP Act 2 Medium Specific Concentration for Soil to Groundwater (are the greater of the "100 X GW MSC" and "Generic" regulation values).
X	Excedence of the Pennsylvania DEP Act 2 Medium Specific Concentration for Direct Contact 0' to 2' below ground surface.
Y	Excedence of the Pennsylvania DEP Act 2 Medium Specific Concentration for Direct Contact 2' to 15' below ground surface.
Z	Excedence of the United States EPA Region 3 Risked Based Concentrations for Industrial soil. Per EPA, for certain low-toxicity chemicals, the screening levels exceed possible concentrations at the target risks.

NOTES:

RBCs - Risk Based Concentrations from:
United States Environmental Protection Agency (EPA), May 19, 2009; Regional Screening Level Table.
MSCs - Medium Specific Concentrations from:
Pennsylvania Department of Environmental Protection (DEP), November 24, 2001; from Chapter 250, Appendix A.
1 - EPA has indicated that for certain low-toxicity chemicals, the screening levels exceed possible concentrations at the target risks.

APPENDIX A

Historical Drawings

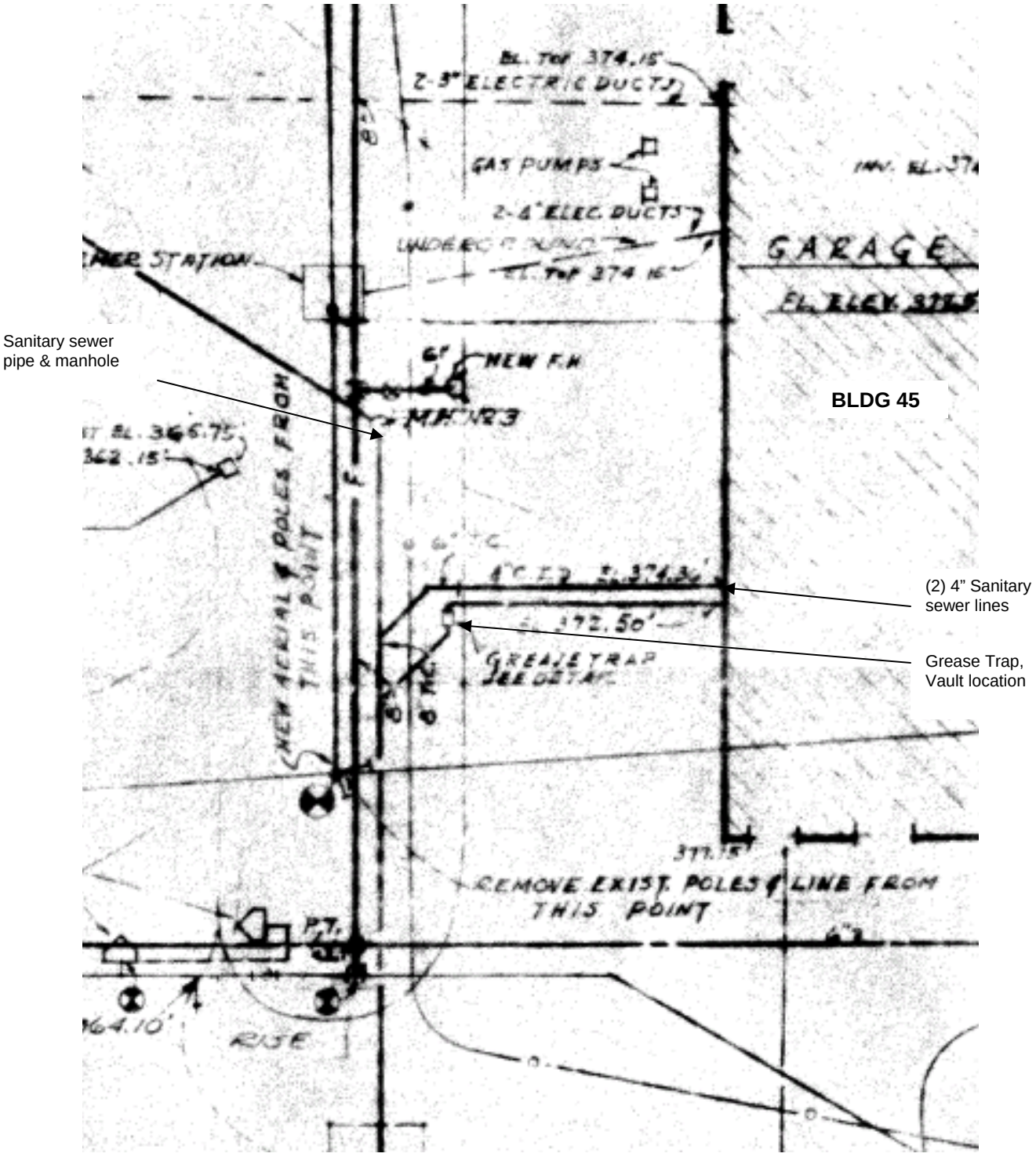

Figure 1. Bldg 45 facilities - 1945 Blaw-Knox As-Built Drawing.

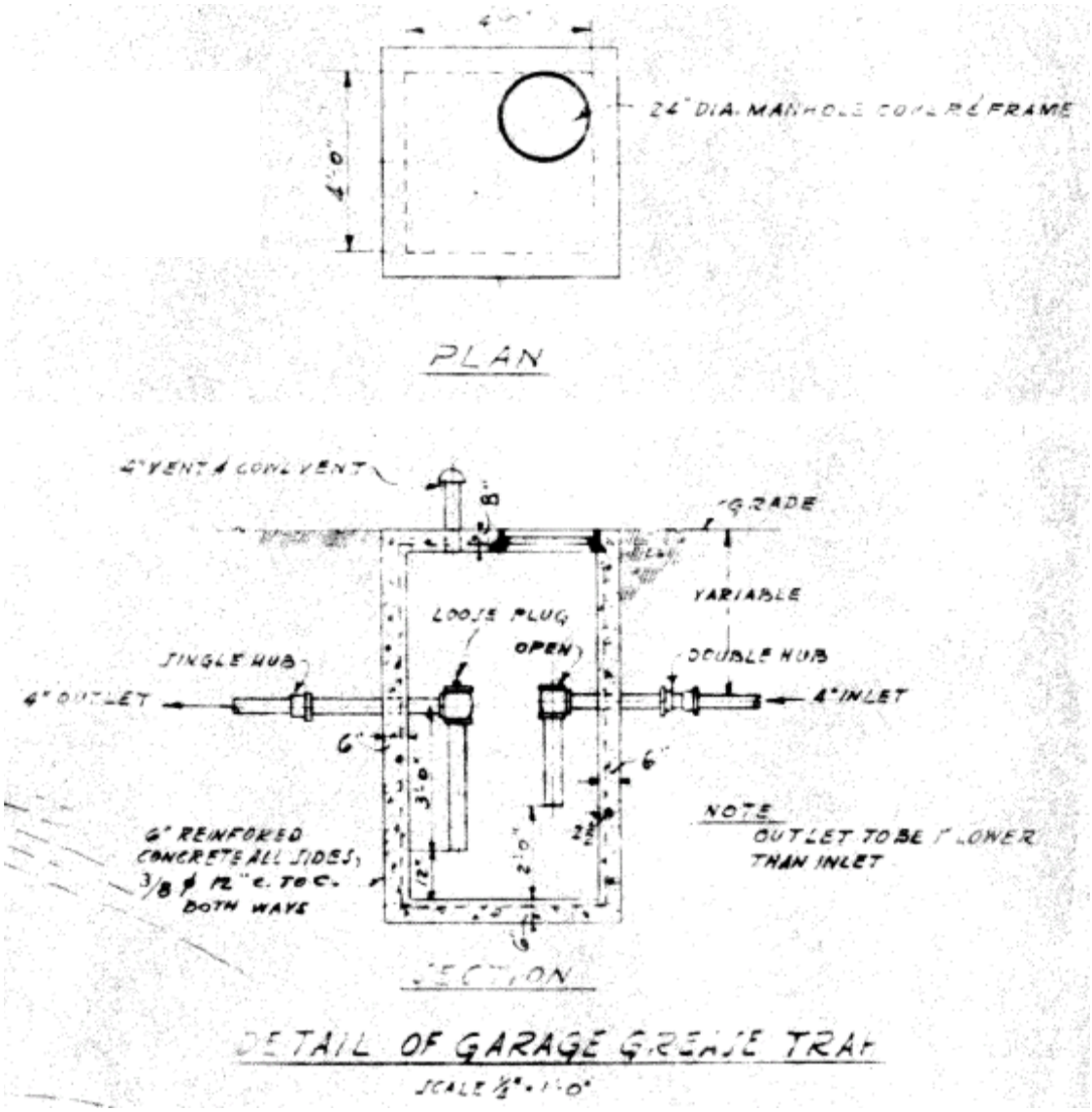

Figure 2. Bldg 45 Grease Trap Detail - 1945 Blaw-Knox As-Built Drawing.

APPENDIX B

Photographs

Photo 1 - Building 45 vault looking south. Building 45 is the left (west).

Photo 2 - Liquid in Building 45 vault prior to cleaning.

Photo 3 - Sump pump installed in Building 45 vault to remove liquids after cleaning.

Photo 4 - Liquids from Building 45 vault pumped into Baker Tank located next to vault.

Photo 5 - Condensate knockout tank that was the source of water draining into the vault following cleaning. This water was redirected with a hose to discharge into floor drain in men's bathroom during the closure of the vault.

Photo 6 - One of the 3 floor drains in Building 45 that were cemented shut as part of the vault closure procedure.

Photo 7 - Influent pipe from Building 45 into vault.

Photo 8 - Excavating Building 45 Vault and breaking concrete with jack hammer.

Photo 9 - Vault with top removed.

Photo 10 - Vault removed from excavation. Influent pipe visible on north side of excavation.

Photo 11 - East wall of excavation—stained and/or gleyed soil and wood debris visible.

Photo 12 - Excavated gleyed/stained soil from east wall of vault.

Photo 13 - Looking north at Building 45 vault excavation prior to sample collection

.

Photo 14 – Final closure of the vault. Compacted gravel overlain by topsoil, ready for seed by H-D trades.

APPENDIX C

Waste Characterization Results and Disposal Manifests

D16510

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: PAD001643691
2. Page 1 of: 1
3. Emergency Response Phone: 877.818.0087
4. Manifest Tracking Number: 005676249 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: Freehold Cartage, Inc.
U.S. EPA ID Number: NJD054126164

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

8. Designated Facility Name and Site Address
Envirite of Pennsylvania, Inc.
730 Vogelsong Road, York, PA 17404
Facility's Phone: 717.846.1900
U.S. EPA ID Number: PAD010154045

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. NA3077, Hazardous Waste Solid, N.O.S., (Trichloroethylene), 9, PG III, RQ (D040)	001	CM	20	Y	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
9a.1) Profile 18611 Concrete and Debris from Remediation (D040), ERG # 171
Box # 0407 VES PO # 3718-13658 Trust Fund

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: Brenda M Barber
Signature: Brenda M Barber
Month/Day/Year: 03/15/09

TRANSPORTER / 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.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: John M. Schmidt Sr.
Signature:
Month/Day/Year: 03/18/09

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

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
20080 lbs
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. H141 2. 3. 4.

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: Shane Biese
Signature:
Month/Day/Year: 03/18/09

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

DESIGNATED FACILITY TO GENERATOR

REPUBLIC SERVICES, INC.

07 42369

NON-HAZARDOUS WASTE MANIFEST

GENERATOR INFORMATION

Generator Name: Harley-Davidson Motor Co. Ops, Inc.

Address: 1425 Eden Road

City: York County: York

State: PA Zip: 17402

Site Location (if different):

Box # 25021

CUSTOMER/BILLING INFORMATION

Billing Name: York Waste Disposal

Address: 3730 Sandhurst Drive

City: York County: York

State: PA Zip 17406

Republic Services Approval Number	Description of Waste	Volume/Weight	Expiration Date	Container Type
20717J1	Non-Hazardous Soils			20 Cu. Yd.
	(Please provide weight to generator)	1156		
	York Remediation Trust Fund			

*Attach Additional Sheet if necessary.

I hereby certify that the above described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Sharon R Fisher — Generator/Authorized Agent Name

x Sharon R Fisher — Signature

2/2/09 — Date Shipped

TRANSPORTER INFORMATION

Transporter Name: Envirite of Pennsylvania DOT Number: PAD010154045

Address: 730 Vogelsong Road Truck Number: 8014

York, PA 17406 Phone Number: (717)846-1900

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

JAMES MILLER, JR — Name of Authorized Agent

X — Signature

2/2/09 — Date Delivered

DISPOSAL SITE INFORMATION

Site Name: Modern Landfill Phone Number: 717-246-2686

Address: 4400 Mt. Pisgah Road, York, PA 17406

I hereby acknowledge receipt of the above described materials.

Name (Print or Type)

X — Signature

TS 2209

Date Received

Form 001 3/04 (SW02 2002)

REPUBLIC SERVICES, INC.

07 42370

NON-HAZARDOUS WASTE MANIFEST

GENERATOR INFORMATION

Generator Name: Harley-Davidson Motor Co. Ops. Inc.

Address: 1425 Eden Road

City: York County: York

State: PA Zip: 17402

Site Location (if different):

CUSTOMER/BILLING INFORMATION

Billing Name: York Waste Disposal

Address: 3730 Sandhurst Drive

City: York County: York

State: PA Zip 17406

Box # 6028YD

Republic Services Approval Number	Description of Waste	Volume/Weight	Expiration Date	Container Type
20717J1	Non-Hazardous Soils			20 Cu. Yd.
	(Please provide weight to generator)	10.76		
	York Remediation Trust Fund			

*Attach Additional Sheet if necessary.

I hereby certify that the above described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Sharon R Fisher — Generator/Authorized Agent Name

X Sharon R Fisher — Signature

2/2/09 — Date Shipped

TRANSPORTER INFORMATION

Transporter Name: Envirite of PA DOT Number: PAD010154045

Address: 730 Vogelsong Road Truck Number: 8076/9006

York, PA 17406 Phone Number: (717)846-1900

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

JAMES MILLER, JR — Name of Authorized Agent

X — Signature

2/2/09 — Date Delivered

DISPOSAL SITE INFORMATION

Site Name: Modern Landfill Phone Number: 717-246-2686

Address: 4400 Mt. Pisgah Road, York, PA 17406

I hereby acknowledge receipt of the above described materials.

Name (Print or Type)

X — Signature

2209

Date Received

TRUST FUND

REPUBLIC SERVICES, INC.

07 42371

NON-HAZARDOUS WASTE MANIFEST

GENERATOR INFORMATION

Generator Name: Harley-Daivson Motor Co. Ops.Inc.

Address: 1425 Eden Road

City: York County: York

State: PA Zip: 17402

Site Location (if different):

CUSTOMER/BILLING INFORMATION

Billing Name: York Waste Disposal

Address: 3730 Sandhurst Drive

City: York County: York

State: PA Zip 17406

Republic Services Approval Number	Description of Waste	Volume/Weight	Expiration Date	Container Type
20717J1	Non-Hazardous Soils			20 Cu. Yd.
	(Please provide weight to generator)			
	York Remediation Trust Fund			

*Attach Additional Sheet if necessary.

I hereby certify that the above described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Sharon L. Fisher — Generator/Authorized Agent Name

X [signature] — Signature

2/2/09 — Date Shipped

TRANSPORTER INFORMATION

Transporter Name: Envirite of PA DOT Number: PAD010154045

Address: 730 Vogelsong Road Truck Number: 3842

York, PA 17406 Phone Number: (717)846-1900

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

HAROLD A WOOD — Name of Authorized Agent

X [signature] — Signature

2/2/09 — Date Delivered

DISPOSAL SITE INFORMATION

Site Name: Modern Landfill Phone Number: 717-246-2686

Address: 4400 Mt. Pisgah Road, York, PA 17406

I hereby acknowledge receipt of the above described materials.

Name (Print or Type)

X

Signature

Date Received

Form 001 3/04 (SW02 2003)

600740

07 42372

REPUBLIC SERVICES, INC.

NON-HAZARDOUS WASTE MANIFEST

GENERATOR INFORMATION

Generator Name: Harley-Davidson Motor Co.Ops., Inc.

Address: 1425 Eden Road

City: York County: York

State: PA Zip: 17402

Site Location (if different): _____

CUSTOMER/BILLING INFORMATION

Billing Name: York Waste Disposal

Address: 3730 Sandhurst Drive

City: York County: York

State: PA Zip 17406

Republic Services Approval Number	Description of Waste	Volume/Weight	Expiration Date	Container Type
20717J1	Non-Hazardous Soils			20 Cu. yd.
	(Please provide weight to generator)	1237		
	York Remediation Trust Fund			

*Attach Additional Sheet if necessary.

I hereby certify that the above described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Sharon R Fisher — Generator/Authorized Agent Name

x Sharon R Fisher — Signature

2/2/09 — Date Shipped

TRANSPORTER INFORMATION

Transporter Name: Envirite of PA DOT Number: PAD010154045

Address: 730 Vogelsong Road Truck Number: 8842

York, PA 17406 Phone Number: (717)846-1900

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

Harold A Wood — Name of Authorized Agent

x Harold A Wood — Signature

2/2/09 — Date Delivered

DISPOSAL SITE INFORMATION

Site Name: Modern Landfill Phone Number: 717-246-2686

Address: 4400 Mt. Pisgah Road, York, PA 17406

I hereby acknowledge receipt of the above described materials.

_____ — Name (Print or Type)

x _____ — Signature

2 2 09

_____ — Date Received

REPUBLIC SERVICES, INC.

07 42363

NON-HAZARDOUS WASTE MANIFEST

GENERATOR INFORMATION

Generator Name: Harley-Davidson Motor Co. Ops., Inc.

Address: 1425 Eden Road

City: York County: York

State: PA Zip: 17402

Site Location (if different): _____

CUSTOMER/BILLING INFORMATION

Billing Name: York Waste Disposal

Address: 3730 Sandhurst Drive

City: York County: York

State: PA Zip 17406

Republic Services Approval Number	Description of Waste	Volume/Weight	Expiration Date	Container Type
20717J1	Non-Hazardous Soils	10.93		20 Cu. Yd.
	(Please provide weight to generator)			
	York Remediation Trust Fund			

*Attach Additional Sheet if necessary.

I hereby certify that the above described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Shawn R Fisher — Generator/Authorized Agent Name

X Shawn R Fisher — Signature

1-30-09 — Date Shipped

TRANSPORTER INFORMATION

Transporter Name: York Waste Disposal DOT Number: 348394

Address: 3730 Sandhurst Drive Truck Number: 35

York, PA 17406 Phone Number: _____

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

Name of Authorized Agent

X _____ Signature

1/30/09 — Date Delivered

DISPOSAL SITE INFORMATION

Site Name: Modern Landfill Phone Number: 717-246-2686

Address: 4400 Mt. Pisgah Road, York, PA 17406

I hereby acknowledge receipt of the above described materials.

Name (Print or Type)

X _____ Signature

Date Received

Form 901-3/04 (SW02 2003)

REPUBLIC SERVICES, INC.

07 42368

NON-HAZARDOUS WASTE MANIFEST

GENERATOR INFORMATION

Generator Name: Harley-Davidson Motor Co. Ops., Inc.

Address: 1425 Eden Road

City: York County: York

State: PA Zip: 17402

Site Location (if different): _____

CUSTOMER/BILLING INFORMATION

Billing Name: York Waste Disposal

Address: 3730 Sandhurst Drive

City: York County: York

State: PA Zip 17406

Republic Services Approval Number	Description of Waste	Volume/Weight	Expiration Date	Container Type
20717J1	Non-Hazardous Soils			20 Cu. Yd.
	(Please provide weight to Generator)	14.97		
	York Remediation Trust Fund			

*Attach Additional Sheet if necessary.

I hereby certify that the above described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Sharon L. Fisher — Generator/Authorized Agent Name

X Sharon R. Fisher — Signature

1-30-09 — Date Shipped

TRANSPORTER INFORMATION

Transporter Name: York Waste Disposal DOT Number: 348394

Address: 3730 Sandhurst Drive Truck Number: 315

York, PA 17406 Phone Number: (717)845-1557

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

_____ — Name of Authorized Agent

X _____ — Signature

2/2/09 — Date Delivered

DISPOSAL SITE INFORMATION

Site Name: Modern Landfill Phone Number: 717-246-2686

Address: 4400 Mt. Pisgah Road, York, PA 17406

I hereby acknowledge receipt of the above described materials.

_____ — Name (Print or Type)

X _____ — Signature

2209 — Date Received

Form 901 3/04 (SW02 2003)

Table C-1
Buildings 45 Waste Characterization Summary
Former York Naval Ordnance Plant - York, PA

Parameter/Units	HD-B45-RO-01-5 1/9/2009	HD-B45-RO-02-5 1/9/2009	HD-B45-RO-03-5 1/9/2009	HD-B45-RO-04-5 1/9/2009	HD-B45-RO-05-5 1/9/2009	HD-B45-RO-06-5 1/9/2009	RCRA Toxicity Levels	EPA Hazardous Waste Number
TCLP Metals (mg/L)								
Arsenic	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**5**	**D004**
Barium	**0.31**	**0.29**	**0.26**	**0.27**	**0.47**	**0.27**	**100**	**D005**
Cadmium	**0.0018**	**0.0018**	**0.0015**	**0.0030**	**0.0022**	**0.0024**	**1**	**D006**
Chromium, total	**0.0014**	**0.0012**	**0.0012**	**0.0014**	**0.0022**	**0.0016**	**5**	**D007**
Lead	**0.0085**	**0.0094**	**0.0062**	**0.065**	**0.011**	**0.013**	**5**	**D008**
Mercury	<0.0002	**0.000025**	**0.000062**	**0.000021**	<0.00020	<0.00020	**0.2**	**D009**
Selenium	**0.0073**	**0.0053**	**0.0067**	**0.0072**	**0.0071**	**0.0064**	**1**	**D010**
Silver	<0.50	<0.50	<0.50	**0.00055**	**0.00068**	<0.50	**5**	**D011**
TCLP Volatile Organics (mg/L)								
Benzene	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**0.5**	**D018**
2-Butanone (MEK)	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**200**	**D035**
Carbon tetrachloride	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**0.5**	**D019**
Chlorobenzene	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**100**	**D021**
1,2-Dichloroethane	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**0.5**	**D028**
1,1-Dichloroethene	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**0.7**	**D029**
Tetrachloroethene (PCE)	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**0.7**	**D039**
Trichloroethene (TCE)	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**0.5**	**D040**
Vinyl Chloride	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**0.2**	**D043**

ND = Not detected
NA = Not Analyzed

Table C-2
Building 45 Waste Disposal Summary
Former York Naval Ordnance Plant - York, PA

	Remediation Area	Volume	Container type	Container Owner	Ref. No.	Date arrived	Date shipped	contents	Destination	Manifest Ref.	Net Wt. (Tons)	
	Bldg 45	20 CY	Roll-off	FCI	0407	12/29/2008	3/18/2009	Haz concrete	Envirite	005676249JJK	10.04	
	Bldg 45	20 CY	Roll-off	Envirite	25021	1/9/2009	2/2/2009	non-haz soil	Modern LF	07 42369	11.56	
	Bldg 45	20 CY	Roll-off	Envirite	6028YO	1/9/2009	2/2/2009	non-haz soil	Modern LF	07 42370	10.76	
	Bldg 45	20 CY	Roll-off	Envirite	6018YO	1/9/2009	2/2/2009	non-haz soil	Modern LF	07 42371	9.96	
	Bldg 45	20 CY	Roll-off	Envirite	6007YO	1/9/2009	2/2/2009	non-haz soil	Modern LF	07 42372	12.37	
	Bldg 45	20 CY	Roll-off	York Waste		1/6/2009	1/30/2009	non-haz soil	Modern LF	07 42363	6.93	
	Bldg 45	20 CY	Roll-off	York Waste		1/6/2009	1/30/2009	non-haz soil	Modern LF	07 42368	14.97	
											76.59	