



**INTERIM REMEDIAL
MEASURES WORK PLAN
PCB CONTAMINATED SOIL
EXCAVATION AND REMOVAL
SPECIAL METALS
CORPORATION
100 WILLOWBROOK AVENUE
DUNKIRK, NEW YORK
SITE # 907031**

PREPARED FOR:

Special Metals Corporation
100 Willowbrook Avenue
Dunkirk, New York

PREPARED BY:

GZA GeoEnvironmental of New York
Buffalo, New York

February 2007
File No. 21.0056196.10





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1.0 INTRODUCTION

GZA GeoEnvironmental of New York (GZA) prepared this Interim Remedial Measure (IRM) Work Plan, on behalf of Special Metals Corporation (SMC), to address polychlorinated biphenyls (PCBs) contamination identified in soils at the SMC facility located at 100 Willowbrook Avenue, in Dunkirk, New York. Subsurface soil probes were completed at the SMC facility in the Area of Concern (AOC)¹ to better define the limits of PCB-impacted soils to be remediated. SMC plans to excavate the identified contaminated soil in the AOC and haul the excavated soil to an approved hazardous waste disposal facility in accordance with this IRM Work Plan. A Locus Plan is attached as Figure 1 and a Site Plan identifying the AOC is included as Figure 2.

This work will be done under an Order on Consent (Index# B9-0737-07-02; Site# 907031) between the New York State Department of Environmental Conservation (NYSDEC) and SMC. Under the Order on Consent, the "Site" or AOC has been identified as an approximate 100 foot by 100 foot area, as shown on Figure 2.

2.0 BACKGROUND

The SMC facility consists of an approximate 8-acre industrial property in Dunkirk, New York (see Figure 1) located at 100 Willowbrook Avenue that is used for the manufacture of alloys for the aerospace industry. The facility is bordered by the former Al-Tech Specialty Steel site, which is currently on the New York State Registry of Inactive Hazardous Waste Disposal Sites (Registry Site # 907022) ("Al-Tech Site")

An expansion of the SMC facility on the western portion of the existing building for the installation of a new rotary forge is currently underway. This expansion includes construction of a new building addition over an area of about 72-feet (north-south) by 87-feet to the west (see Figure 2).

Prior to building expansion construction and as part of its due diligence process, SMC requested that GZA prepared a Soils and Site Management Plan² (SSMP) that sets forth the procedures to be followed in the event contaminated or suspected contaminated soils and/or groundwater were encountered during the construction activities (see Appendix A). A copy of this SSMP was previously provided by SMC to the Region 9 Office of New York State Department of Environmental Conservation (NYSDEC).

¹ The Area of Concern (AOC) is shown on Figure 2 and is generally located southwest of the on-Site building. This AOC has also been identified as the "Site" under the referenced Order on Consent between NYSDEC and SMC.

² Soils and Site Management Plan, Special Metals Corporation, Dunkirk, New York, July 2006, GZA Project File: 21.0056196.0.

The SSMP provides generic procedures regarding earthwork construction related to the plant expansion. This work plan provides more detailed procedures for the planned IRM, incorporating where appropriate procedures from the SSMP.

As part of the building expansion, the following four trench excavations were completed within the vicinity of the AOC for the placement of subsurface utilities.



1. A natural gas and water line trench excavation was done in August 2006 along the southern and western sides of the new building expansion, north of the AOC. Olfactory or visual evidence of impacted soil was not noted in this excavation. Additionally, impacted soils were not observed in the soil excavation for the building expansion foundation, located approximately 5 to 10 feet north of the natural gas and water line excavation.
2. An electrical conduit trench was excavated along the western portion of the property from an electrical pole to the building expansion area (the "Electric Trench"). During the Electric Trench excavation (August 30, 2006), odors were detected within a portion of the trench, shown on Figures 2, 3 and 4. SMC requested that its earthwork contractor stockpile the soil excavated from the trench on the asphalt surface and collect soil samples for analytical testing. Two soil samples were collected (designated Electric Trench 1 and Electric Trench 2, see Table 1).

Results of the sampling indicated that PCBs were present at a concentration of 140 parts per million (ppm) and 31 ppm in samples Electric Trench 1 and Electric Trench 2, respectively. Other compounds were also detected, including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and metals (see Table 1). The detected levels of VOCs and SVOCs are relatively minor, but the PCB concentration of 140 ppm is above the 50 ppm threshold for the material to be considered hazardous waste in New York (6 NYCRR § 371.4(e)).

Of the metals detected, chromium was the one that posed a potential concern due to its detection at a concentration above NYSDEC soil cleanup objectives.³ However, subsequent toxicity characteristic leachate procedure (TCLP) testing that was done on samples collected as part of the soil probe delineation did not indicate the presence of chromium above the hazardous waste threshold.

The elevated detections of chromium (Electric Trench 1; Electric Trench 2; SP-1, 2 – 4 ft bgs; SP-6, 2 – 4 ft bgs; SP-9, 0 – 2 ft bgs; and SP-16, 2 – 4 ft bgs) are located within the area delineated for excavation and disposal as part of this IRM. The results of testing of environmental soil samples, which were collected as part of the geotechnical work, reflect in the development of the SSMP and included as Table 1 of the SSMP. These samples also had

³ NYSDEC, Technical and Administrative Guidance Memorandum (TAGM) HWR-94-4046: Determination of Soil Cleanup Objectives and Cleanup Levels, dated January 24, 1994 and revised December 20, 2000 (referred to herein as "TAGM 4046").



detections of total chromium above TAGM 4046, but within the range of the TAGM 4046 Eastern USA Background levels.

Analytical data from the adjacent Al-Tech Site⁴, included the detection of chromium at levels consistently above TAGM 4046 at multiple locations around the property and in many instances above Eastern USA Background levels. The presence of chromium may be attributed to the apparent presence of historic fill material. Although it is the presence of PCBs that is compelling this IRM and will define its extent, areas of elevated chromium concentrations will also be addressed in the removal of PCB-impacted soil. Soil samples will be collected to confirm the residual concentration of chromium following the IRM excavation to evaluate whether future exposure to the soils needs to be limited by institutional controls. The frequency for metals analysis in the confirmation soil samples is discussed in Section 5.0.

The impacted soil stockpiled from the Electric Trench excavation was placed in a roll-off and disposed of at the landfill facility operated by CWM Chemical Services in Model City, NY (CMW) on September 22, 2006. Approximately 16 tons (14,545 kg) of soil were disposed (see Appendix B for disposal documentation) and Waste Technology Services, Inc. (WTS) assisted SMC in making the disposal arrangements.

3. A trench excavation was dug on December 12, 2006 for a communication utility line along the western side of the existing building from the building expansion south to the Guard House (see Figure 2). The excavation is located in the eastern portion of the AOC. When olfactory evidence of impacted soil was noted, SMC had its earthwork contractor stockpile the soil on polyethylene sheeting. A composite sample (designated Trench Stockpile) was collected from the soil stockpile and tested for PCBs. Results of the sampling indicated that PCBs were present at a concentration of 370 ppm (see Table 1). Re-analysis of the sample by another laboratory indicated that PCBs were present at a concentration of 1,200 ppm. The laboratory reports are included as Appendix C.

The soil stockpiled from the communication trench was placed in roll-offs and disposed of at CWM on January 9 and 23, 2007 (see Appendix B for disposal documentation).

4. A trench excavation was dug on December 13, 2006 for electric and communication utility lines along the southwestern portion of the property (see southern trench on Figure 2). The trench was excavated from the utility pole south to the back flow prevention meter along Willowbrook Avenue. During the course of this excavation, olfactory evidence of impacted soil was noted in a 2-foot wide by 3-foot long by 1-foot deep (6 cubic feet) area of the trench. This

⁴ "Phase I RCRA Facility Investigation Report, Al Tech Specialty Steel Corporation, Dunkirk, New York, Volume 1 of 6" dated October 22, 1998. Prepared by Environmental Strategies Corporation.

soil was removed and placed with soil stockpiled from the communication trench excavation (see Item 3 above) that was dug east of the AOC.

3.0 DELINEATION OF PCB-IMPACTED SOIL



Subsurface soils probes were conducted in the AOC to delineate the extent of the PCB contamination (see Figure 3) on two separate events. The soil probe logs are included as Appendix C. Groundwater was not encountered in any of the soil probe work.

1. The first event was done on September 16, 2006 and consisted of 16 soil probes (SP-1 through SP-16) to an approximate depth of 12 feet below ground surface (bgs) or refusal, whichever came first.
2. The second event was completed on December 2, 2006 and consisted of 12 soil probes (SP-17 through SP-27) to an approximate depth of 12 feet bgs or refusal, whichever came first (see Figure 3 for soil probe locations).

Soil samples were collected in two feet intervals and were field and headspace screened for organic vapors using an organic vapor meter (OVM) equipped with a photoionization detector (PID). Results of the headspace screening were recorded on the soil probe logs included as Appendix C. No significant headspace readings were noted.

Select soil samples were field screened using a Dextsil L2000 DX PCB Analyzer (see Figure 3 for a comparison of the field screening results and laboratory analytical results). Based on the findings of the field screening, olfactory observations and for broader coverage, 56 soil samples were selected and sent for analysis that included PCBs via USEPA Method 8082, RCRA 8 Metals via USEPA Method 6010B17470, Total Compound List (TCL) VOCs via USEPA Method 8260 and TCLP Chromium via USEPA Method 1311/6010B. Laboratory reports are included in Appendix D. The following summary Tables are attached.

- Table 2 contains a summary of the soil samples submitted for testing and analysis performed.
- Table 3 is a summary of the VOC and SVOC data generated.
- Table 4 is a summary of the PCB and metal data generated.

Results of the analysis from the delineation effort were consistent with the initial Electric Trench samples in that PCBs are the primary parameters of concern. VOC and SVOC contamination was detected but not at levels of concern.

During the first round of sampling (September 16, 2006), metals were tested using a direct methodology that detected the presence of chromium above TAGM 4046, but not above the industrial use standard for chromium (trivalent) specified in the recently promulgated amendments to 6 NYCRR Part 375.⁵ During the second round of sampling (December 2,

⁵ The following became effective with the other amendments to Part 375 on December 14, 2006. Testing will be conducted as part of this IRM to determine if the chromium detected is trivalent.



2006), TCLP methodology was used to determine if chromium was present above the hazardous waste threshold of 5 mg/l (see 6 NYCRR § 371.3(e)(1)). None of the samples tested were found to exceed the hazardous waste threshold (see Table 4 for results).

Based on the two soil probe delineation events, the area of PCB-impacted soil to be addressed has been identified using the 10 ppm subsurface PCB standard found in TAGM 4046 and it is shown on Figure 4. The remedial area (AOC) shown on Figure 4 has an approximate 6,400 square foot footprint. The excavated soil will be disposed of as hazardous waste at the CWM facility.

4.0 EXCAVATION AND REMOVAL PROCEDURES

Pinto Construction is to perform the PCB soil excavation and backfill. GZA will provide full time oversight of the remedial activities, conduct air monitoring (organic vapor and particulate) and collect samples for field screening and laboratory analysis. WTS will be responsible for the coordination of the PCB-impacted soil disposal.

A Site Specific Health and Safety Plan (HASP) has been developed and will be implemented during this remedial effort (see Appendix E of this Work Plan).

A hydraulic excavator will be used to remove soils from the area shown on Figure 4. It is estimated that approximately 1,000 tons of soil will be disposed of as hazardous waste. It should be noted that one bucket will be used to excavate the contaminated soil and another bucket will be used to place backfill. The bucket used for excavation will be placed in a polyethylene lined staging area when it is not in use. The excavation bucket will be decontaminated at the completion of the project as discussed in Section 8.2 of the HASP (Appendix C of the Work Plan). Section 8.2 of the HASP further discusses the decontamination procedures to be used for decontamination of sampling equipment, soil excavation equipment, transportation equipment, etc.

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
Metals							
Chromium, hexavalent ^h	18540-29-9	22	110	400	800	1 ^e	19
Chromium, trivalent ^h	16065-83-1	36	180	1,500	6,800	41	NS

e – For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the SCO value.

h – The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.



Soil excavated for disposal will be directly loaded into lined trucks for transportation to the disposal facility. Soils will not be staged outside of the open excavation area. Polyethylene sheeting will be placed on the ground beneath the truck loading area. Prior to leaving the AOC, the polyethylene lined loading area along with the tires of the truck will be inspected. Soil observed on the polyethylene sheeting that may contaminate equipment operating on the sheeting will be removed and placed back into the excavation. Trucks will not be allowed to leave the loading area if their tires have contacted contaminated soil without being cleaned. Cleaning will consist of using a brush to scrub the tires with a solution ofalconox and water. The solution used to clean and water used to rinse the tires will be containerized for proper disposal. The polyethylene sheeting used in the soil loading area will be replaced as it becomes soiled or torn.

The majority of the excavation will be dug to a depth of approximately 2 feet below ground surface. A portion of the excavation will be dug to a depth of approximately 6 to 8 feet bgs. These areas are identified on Figure 4.

As soils are removed from the excavation and the limits of the proposed excavation are reached, a GZA environmental field technician will collect field samples. The samples will be screened using a Dexsil L2000 DX PCB Analyzer. Based on field observations and the results of the field screening, a decision will be made on whether to terminate excavation in the identified areas.

Field screening will also include an odor assessment. A distinct odor was often observed at some of the soil probe locations where analytical results for PCBs were greater than 25 ppm.

Based on previous investigation at the SMC facility, groundwater is not expected to be encountered during the excavation. However, should it occur and require removal, dewatering shall be limited to that required to complete the IRM excavation work. Pinto will properly contain groundwater in temporary aboveground storage tanks for proper testing and disposal in accordance with local, state and federal regulations. WTS will assist with the proper disposal of the containerized groundwater.

Precipitation (snow and/or storm water) may be a concern due to the time of year (March) the work is scheduled to be performed. Polyethylene sheeting will be placed in the open excavation to cover impacted soil not yet removed if precipitation is thought to be a concern. Snow that accumulates on top of the sheeting will be shoveled from the excavation. Storm water accumulating on top of the sheeting will be pumped off and discharged to a storm sewer. Precipitation that comes in contact with impacted soil that needs to be removed shall be containerized in temporary aboveground storage tanks for proper testing and disposal in accordance with local, state and federal regulations. WTS will assist in the proper disposal of the containerized precipitation.

If polyethylene sheeting is used to cover the open excavation, it will be disposed of as hazardous waste with the soil from the excavation.

5.0 CONFIRMATORY SAMPLING AND BACKFILLING

Once the limits of the excavation have been reached, confirmatory composite samples will be collected for PCB analysis via USEPA Method 8082. Sample locations will be based on field observations and GZA will get spatial distribution within the base and along the perimeter of the excavation.



It is estimated that fifteen (15) samples will be collected for confirmatory purposes from the shallow 2-foot excavation, approximately 10 from the sidewalls and 5 from the bottom of the excavation. One sidewall composite sample will be collected approximately every 30 linear feet of perimeter excavation. The five bottom composite samples will be collected to achieve spatial distribution along the floor of the excavation.

Six confirmatory samples will be collected from the deeper portion of the excavation that will extend down to approximately 8 feet below ground surface. One composite side wall sample will be collected from each of the side walls and two composite samples will be collected from the bottom of the excavation.

A 24-hour sample analysis turnaround time will be used to evaluate the remedial effort. Two duplicate samples will also be submitted along with the confirmatory samples. One duplicate sample will be submitted from the deeper excavation and one sample from the shallow portion of the excavation.

The TAGM 4046 RSCO of 10 ppm for PCBs (subsurface) will be used to define the extent of the excavation based upon the results of the confirmatory testing. If confirmatory testing finds PCB concentrations above 10 ppm, excavation will continue. In addition to the PCB analysis to be done, one (1) out of every five (5) soil samples collected will also be analyzed for total compound list (TCL) VOCs, TCL SVOCs, total analyte list (TAL) metals, and hexavalent chromium.

Sample analysis will be completed by a laboratory with the New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP) Contract Laboratory Protocol (CLP) certification. The samples collected as part of this IRM will be subject to analytical testing methodologies that follow NYSDEC Analytical Service Protocol (ASP) Category B deliverables and data validation. Further information regarding sampling and testing methodologies can be found in the Site-specific QAPP (Appendix D of the Work Plan).

Upon receipt of the data, a data usability summary report (DUSR) will be generated by Data Validation Services that meets the requirements of the NYSDEC Draft DER-10, Technical guidance for Site Investigation and Remediation, dated December 2002 (DER-10).

The excavation will be backfilled with clean crushed gravel or stone from an off-site borrow source. The source of the backfill will be from a borrow source that is excavating natural in-place sand/gravel or bedrock for manufacturing (crushed stone product).

6.0 REPORTING



The results of the IRM work will be submitted in a report along with the findings of the Remedial Investigation/Feasibility Study (RI/FS) that is to be completed as part of the Order on Consent. The IRM portion of the Report will provide a summary of the work completed, contain the locations and results of the confirmatory sampling, identify the final limits (horizontal and vertical) of the excavation and include disposal documentation. The IRM and RI/FS Report will be completed in accordance with the DER-10.

TABLES

Table 1
Electric Trench & Trench Stockpile Soil Analytical Testing Results Summary
Special Metals Corporation
Dunkirk, New York
Interim Remedial Measure Work Plan

Sample Location	NYSDEC TAGM 4046 RSCO	Eastern USA Background	NYSDEC Part 375-6 SCO	Electric Trench 1		Electric Trench 2		Trench Stockpile	
					Q		Q		Q
Volatile Organics (mg/kg)									
Acetone	0.2	NA	1,000	0.043		0.006	J	NT	
Methylene Chloride	0.1	NA	1,000	0.006	B	0.01	B	NT	
Trichlorofluoromethane	NV	NA	NV	0.001	J	0.001	J	NT	
Semi-Volatile Organics mg/kg)									
Biphenyl	NV	NA	NV	0.14	J	0.03	J	NT	
2-Methylphenol	0.1 or MDL	NA	NV	0.12	J	0.061	J	NT	
4-Methylphenol	0.9	NA	NV	0.12	J	0.061	J	NT	
2,4-Dimethylphenol	NV	NA	NV	17	D	8.8	D	NT	
Phenanthrene	50	NA	1,000	0.024	J	0.019	J	NT	
Fluoranthene	50	NA	1,000			0.02	J	NT	
Pyrene	50	NA	1,000	0.027	J	0.023	J	NT	
Benzo(a)anthracene	0.224 or MDL	NA	1	0.028	J			NT	
Chrysene	0.4	NA	1	0.066	J	0.033	J	NT	
bis(2-Ethylhexyl)phthalate	50	NA	NV	0.26	J	0.1	J	NT	
Benzo(b)fluoranthene	1.1	NA	1.7	0.074	J	0.039	J	NT	
Benzo(k)fluoranthene	1.1	NA	1.7	0.066	J	0.027	J	NT	
PCBs (mg/kg)									
Aroclor-1242		NA		140		31		370 ¹²	
TOTAL PCBs	10	NA	25	140		31		370	
Inorganics (mg/kg)									
Arsenic	7.5 or SB	3-12	16	7.2		7.2		NT	
Barium	300 or SB	15-600	10,000	105		112		NT	
Chromium	10 or SB	1.5-40	6,800*/800**	114		122		NT	
Lead	SB	200-500	3,900	23		28.5		NT	
Mercury	0.1	0.001-0.2	5.7			0.025		NT	

Notes:

- Only compounds detected in one or more soil samples are presented in this table.
- Blank indicates compound was not detected.
- Analytical testing completed by STL Buffalo and GZA GeoEnvironmental Laboratory in Hopkinton Massachusetts.
- Q = laboratory qualifier; J = estimated concentration; D = concentration obtained from diluted concentration;
B = compound was detected in associated method blank.
- mg/kg = parts per million
- TAGM # 4046 RSCO are Recommended Soil Cleanup Criteria from NYSDEC Technical and Administrative Guidance Memorandum No. HWR-94-4046, dated January 1994, amended December 2000.
- NYSDEC Part 375-6 SCO are Soil Cleanup Objectives from NYSDEC 6 NYCRR Subpart 375-6, effective December 14, 2006.
- Concentrations that are bold exceed TAGM 4046 RSCO.
- Eastern USA Background are from TAGM 4046.
- NV = no value, MDL = method detection limits.
- * = trivalent chromium cleanup value; ** = hexavalent chromium cleanup value.
- Analytical result of Trench Stockpile sample re-test was 1,200 ppm.

Table 2
Analytical Testing Program Summary
Special Metals Corporation
Dunkirk, New York
Interim Remedial Measure Work Plan

Location	Date Collected	Depth/ Interval (ft bgs)	PCBs EPA Method 8082	VOCs EPA Method 8260 TCL	SVOCs EPA Method 8270 Base Neutrals	RCRA 8 Metals EPA Method 6010B/7470	TCLP Chromium EPA Method 1311/6010B
Soil Samples							
SP-1	9/16/2006	2 to 4	X			X	
		4 to 6	X				
		8 to 10	X				
SP-2	9/16/2006	0 to 2	X				
		2 to 4		X	X		
		4 to 6	X				
SP-3	9/16/2006	0 to 2	X				
		2 to 4	X				
SP-4	9/16/2006	0 to 2	X				
		2 to 4	X				
SP-5	9/16/2006	0 to 2	X				
		2 to 4	X				
		4 to 6	X				
		6 to 8	X	X	X		
SP-6	9/16/2006	0 to 2	X				
		2 to 4	X			X	
SP-7	9/16/2006	2 to 4	X				
SP-8	9/16/2006	2 to 4	X				
SP-9	9/16/2006	0 to 2	X			X	
		6 to 7		X	X		
SP-10	9/16/2006	0 to 2	X				
		2 to 4	X				
		4 to 6	X				
		6 to 8	X				
		8 to 10	X				
SP-12	9/16/2006	0 to 2	X				
		2 to 4	X				
		6 to 8	X				
SP-13	9/16/2006	0 to 2	X				
		2 to 4	X				
		4 to 6	X				
SP-14	9/16/2006	0 to 2	X				
SP-15	9/16/2006	0 to 2	X				
SP-16	9/16/2006	0 to 2	X	X	X		
		2 to 4	X			X	
SP-17	12/2/2006	0 to 2	X				X
		2 to 4	X				
SP-18	12/2/2006	2 to 4	X				
SP-19	12/2/2006	0 to 2	X				
SP-20	12/2/2006	0 to 2	X				X
		2 to 4	X				
SP-21	12/2/2006	0 to 2	X				
		2 to 4	X				X
		4 to 6	X				
SP-22	12/2/2006	0 to 3.6	X				
SP-23	12/2/2006	0 to 2	X				X
SP-24	12/2/2006	0 to 2	X				
		4 to 6	X				
SP-25	12/2/2006	0 to 2	X				X
SP-26	12/2/2006	0 to 2	X				X
		2 to 4	X				
		4 to 6	X				
SP-27	12/2/2006	0 to 2	X				X
		2 to 4	X				
		4 to 6	X				
SP-28	12/2/2006	0 to 2	X				

Notes:

1. ft bgs = feet below ground surface
2. PCBs = Polychlorinated Biphenyls
3. VOCs = Volatile Organic Compounds
4. SVOCs = Semi-Volatile Organic Compounds
5. TCLP = Total Characteristic Leachate Procedure
6. TCL = total compound list.
7. RCRA = Resource Conservation and Recovery Act

Table 3
VOC & SVOC Soil Analytical Testing Results Summary
Special Metals Corporation
Dunkirk, New York
Interim Remedial Measure Work Plan

Sample Location Sample Depth	NYSDEC TAGM 4046	NYSDEC Part 375 Restricted Industrial	SP-2 2 to 4	SP-5 6 to 8	SP-9 6 to 7	SP-16 0 to 2
Volatile Organic Compounds - EPA Method 8260 TCL (mg/kg)						
m&p-Xylene	1.2 *	1,000 *	0.17			
o-Xylene	1.2 *	1,000 *	0.18			
Isopropylbenzene	5	NV	0.34			
n-Propylbenzene	14	1,000	1.6			
1,3,5-Trimethylbenzene	3.3	380	4.5			
1,2,4-Trimethylbenzene	13	380	18			
sec-Butylbenzene	25	1,000	1.6			
p-Isopropyltoluene	11	NV	1.6			
n-Butylbenzene	18	NV	1.2			
1,2,4-Trichlorobenzene	3.4	NV	0.07			0.077
Naphthalene	13	1,000	0.081			
Semi-Volatile Organic Compounds - EPA Method 8270 Full List (mg/kg)						
2,4-Dimethylphenol	NV	NV	11	1.3		1.6

Notes:

- Compounds detected in one or more samples are presented on this table.
Refer to Appendix D for list of all compounds included in analysis.
- Analytical testing completed by GZA GeoEnvironmental Laboratory, in Hopkinton, MA.
- TAGM # 4046 RSCO are Recommended Soil Cleanup Criteria from NYSDEC Technical and Administrative Guidance Memorandum No. HWR-94-4046.
- NYSDEC Part 375-6 SCO are Soil Cleanup Objectives from NYSDEC 6 NYCRR Subpart 375-6, effective Decemeber 14, 2006.
- * = applies to the total concentration of all xlyene compounds.
- mg/kg = parts per million.
- Shading indicates values exceeding NYSDEC TAGM 4046 criteria.
- Blank indicates compounds were not detected above method detection limits.

Table 4
Soil Analytical Testing Results Summary
Special Metals Corporation
Dunkirk, New York
Interim Remedial Measure Work Plan

1st ROUND OF SOIL PROBES, September 16, 2006

Sample Location	NYSDEC	NYSDEC Part 375	SP-1	SP-1	SP-1	SP-2	SP-2	SP-2	SP-3	SP-3	SP-4	SP-4	SP-5	SP-5	SP-5	SP-5	SP-6	SP-6	SP-7
Sample Depth	TAGM 4046	Restricted Industrial	2 to 4	4 to 6	8 to 10	0 to 2	2 to 4	4 to 6	0 to 2	2 to 4	0 to 2	2 to 4	0 to 2	2 to 4	4 to 6	6 to 8	0 to 2	2 to 4	2 to 4
Polychlorinated Biphenyls Compounds - EPA Method 8082 (mg/kg)																			
Aroclor-1242			150	8.7		0.84	65						120	30	26	48			
Aroclor-1248			120						6.7		32				26		60		
Aroclor-1254																			
Aroclor-1260																			
TOTAL PCBs	10	25	270	8.7	0	0.84	65	0	6.7	0	32	0	120	30	52	48	60	0	0
RCRA 8 Metals (mg/kg)																			
Arsenic	7.5 or SB	16	6.55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.63	NS
Barium	300 or SB	10,000	92.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	344	NS
Chromium	10 or SB	6,800	1,530	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20.4	NS
Lead	SB	3,900	34.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	22.4	NS
Mercury	0.1	5.7		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.04	NS

Sample Location	NYSDEC	NYSDEC Part 375	SP-8	SP-9	SP-10	SP-10	SP-10	SP-10	SP-12	SP-12	SP-12	SP-13	SP-13	SP-13	SP-14	SP-15	SP-16	SP-16
Sample Depth	TAGM 4046	Restricted Industrial	2 to 4	0 to 2	0 to 2	4 to 6	6 to 8	8 to 10	0 to 2	2 to 4	6 to 8	0 to 2	2 to 4	4 to 6	0 to 2	0 to 2	0 to 2	2 to 4
Aroclor-1242						13	1.3	8.3										4.2
Aroclor-1248				46	3.7				5.2	16		120	59	22	2	10	33	
Aroclor-1254																		
Aroclor-1260																		
TOTAL PCBs	10	25	0	46	3.7	13	1.3	8.3	5.2	16	0	120	59	22	2	10	33	4.2
RCRA 8 Metals (mg/kg)																		
Arsenic	7.5 or SB	16	NS	6.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.25
Barium	300 or SB	10,000	NS	159	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	106
Chromium	10 or SB	6800 ***/800 ****	NS	898	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	184
Lead	SB	3,900	NS	17	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	17.5
Mercury	0.1	5.7	NS	0.028	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	

2nd ROUND OF SOIL PROBES, December 2, 2006

Sample Location	NYSDEC	NYSDEC Part 375	SP-17	SP-17	SP-18	SP-19	SP-20	SP-20	SP-21	SP-21	SP-21	SP-22	SP-23	SP-24	SP-24	SP-25	SP-26	SP-26	SP-26	SP-27	SP-27	SP-27	SP-28
Sample Depth	TAGM 4046	Restricted Industrial	0 to 2	2 to 4	2 to 4	0 to 2	0 to 2	2 to 4	0 to 2	2 to 4	4 to 6	0 to 3.6	0 to 2	0 to 2	4 to 6	0 to 2	0 to 2	2 to 4	4 to 6	0 to 2	2 to 4	4 to 6	0 to 2
Polychlorinated Biphenyls Compounds - EPA Method 8082 (mg/kg)																							
Aroclor-1242																							
Aroclor-1248			33			8.9	78		8.6	7			2.9	0.74		1	17			5.2		0.77	
Aroclor-1254																							
Aroclor-1260																							
TOTAL PCBs	10	25	33	0	0	8.9	78	0	8.6	7	0	0	2.9	0.74	0	1	17	0	0	5.2	0	NS	0
TCLP Chromium (mg/L)																							
Chromium	5 **	NV	0.014	NS	NS	NS	0.007	NS	NS	0.0056	NS	NS	0.012	NS	NS		0.011	NS	NS	0.0068	NS	NS	NS

1. Compounds detected in one or more samples are presented on this table.
Refer to Appendix D for list of all compounds included in analysis.

2. Analytical testing completed by GZA GeoEnvironmental Laboratory, in Hopkinton, MA.

3. TAGM # 4046 RSCO are Recommended Soil Cleanup Criteria from NYSDEC Technical and Administrative Guidance Memorandum No. HWR-94-4046, dated January 1994, ammended December 2000.

4. NYSDEC Part 375-6 SCO are Soil Cleanup Objectives from NYSDEC 6 NYCRR Subpart 375-6, effective Decemeber 14, 2006.

5. * = total concentration of all xlyene compounds

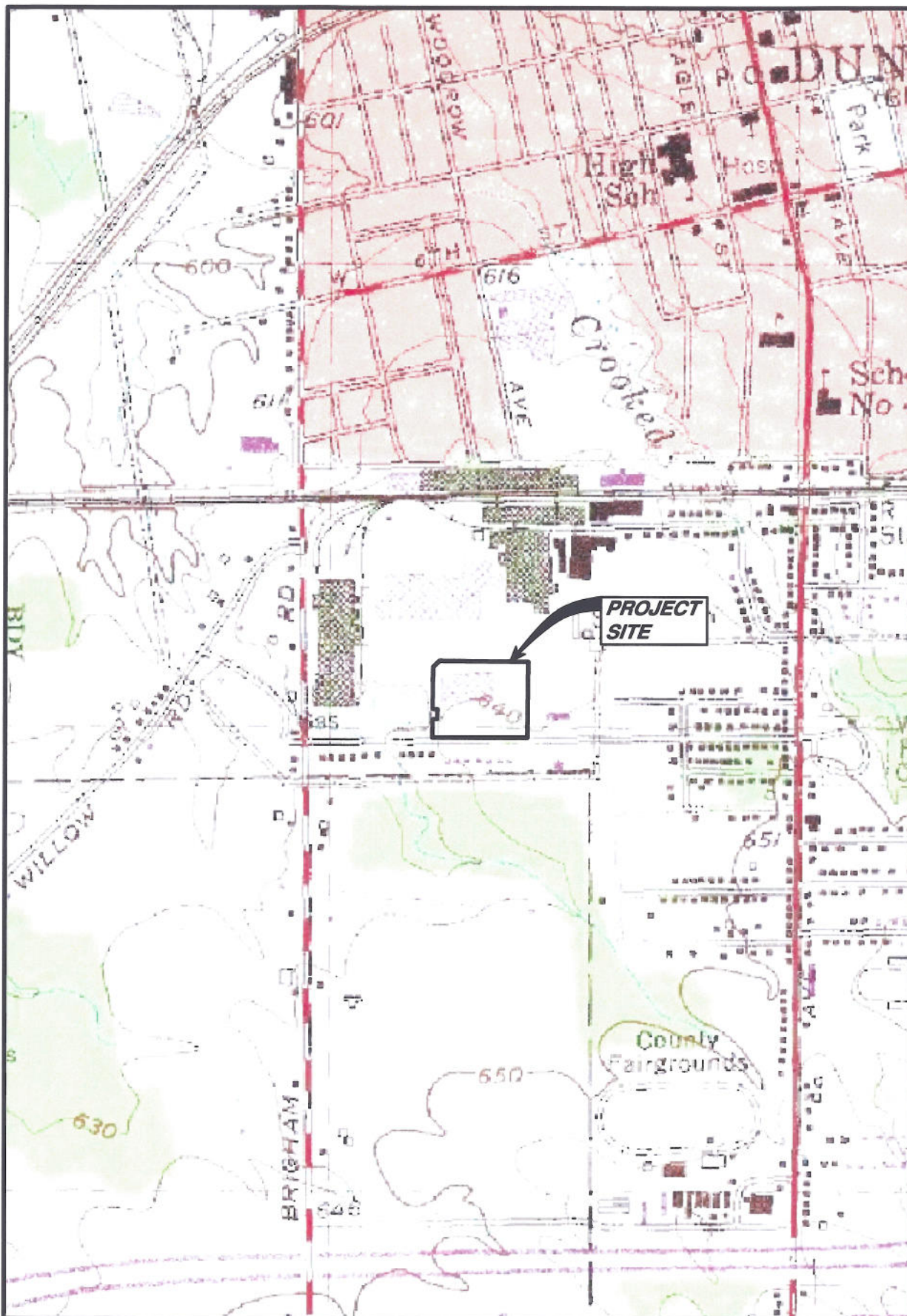
6. ** = USEPA 40 CFR Toxicity Regulatory Level for Hazardous Waste

7. ug/L = parts per billion.

8. Shading indicates values exceeding NYSDEC TAGM 4046 criteria.

9. Blank indicates compounds were not detected above method detection limits.

FIGURES



NOTE:

BASE MAP ADAPTED FROM U.S.G.S.
TOPOGRAPHIC MAPS DOWNLOADED
FROM TERRASERVER.MICROSOFT.COM



SPECIAL METALS CORPORATION

DUNKIRK FACILITY

100 WILLOWBROOK AVENUE

DUNKIRK, NEW YORK

INTERIM REMEDIAL MEASURE WORK PLAN

LOCUS PLAN

PROJECT No.

21.0056196.10

FIGURE No.

1

SCALE IN FEET

0 500 1000 2000

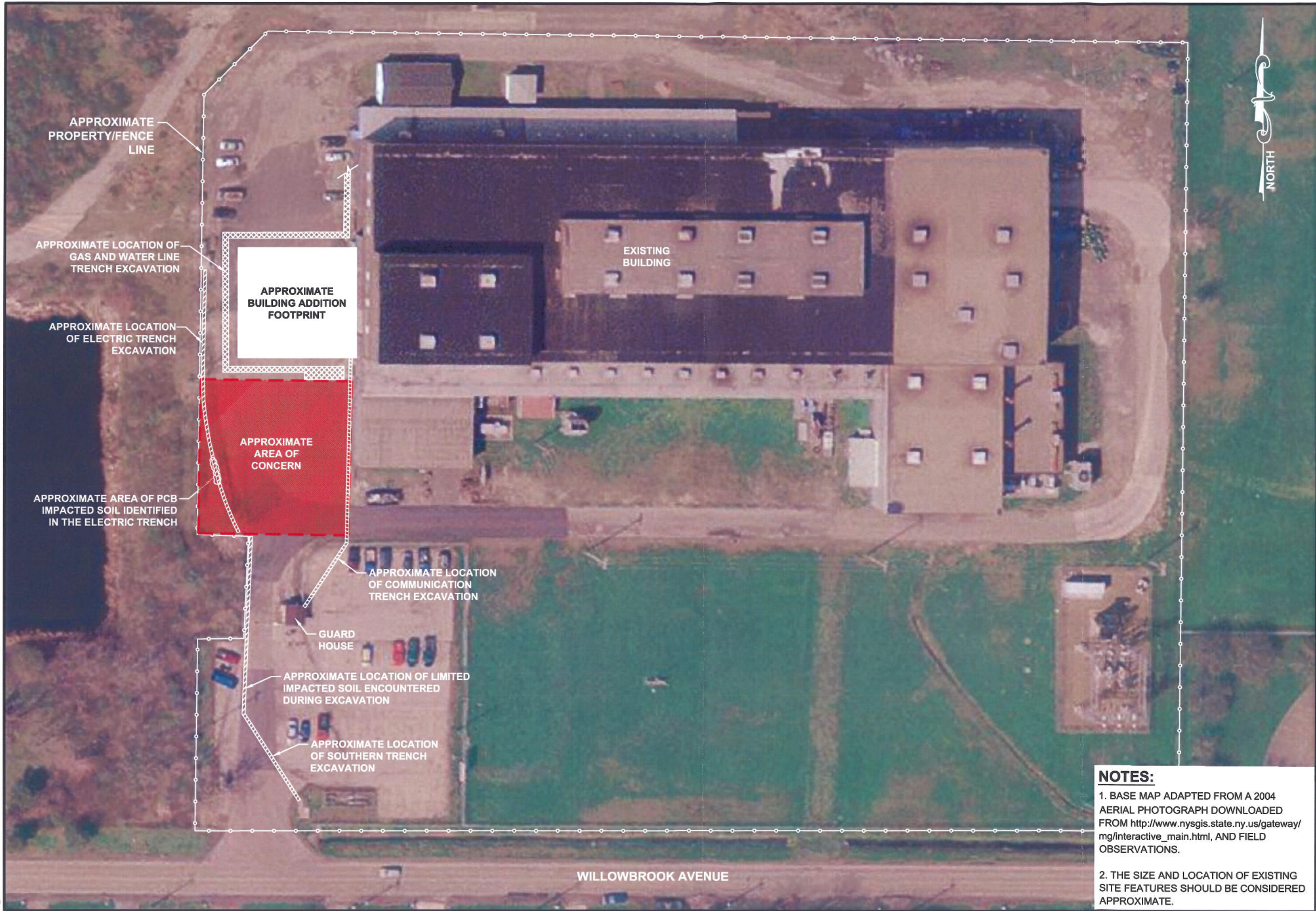


DRAWN BY: DEW

DATE: FEBRUARY 2007




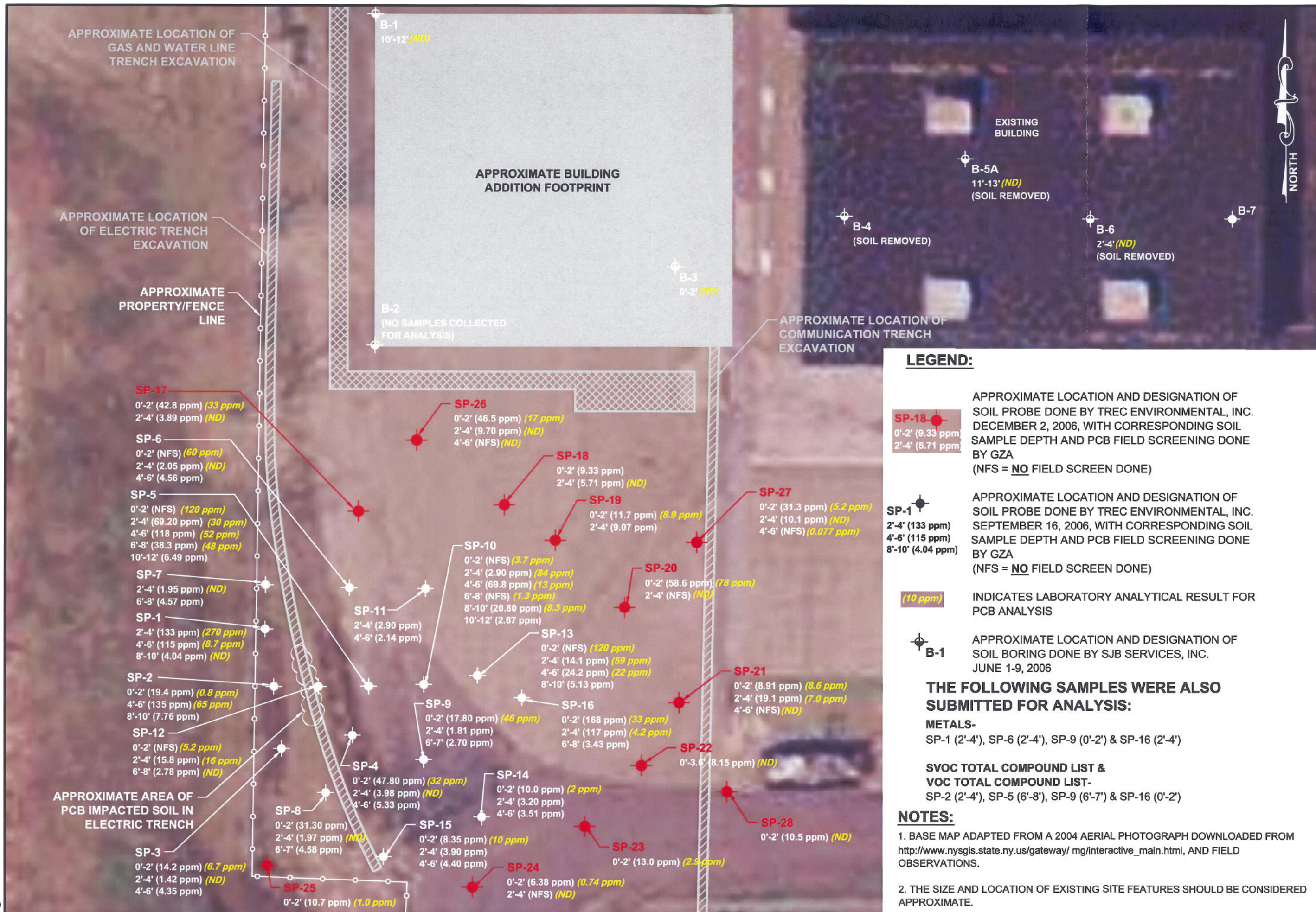
**GZA GeoEnvironmental of
New York**



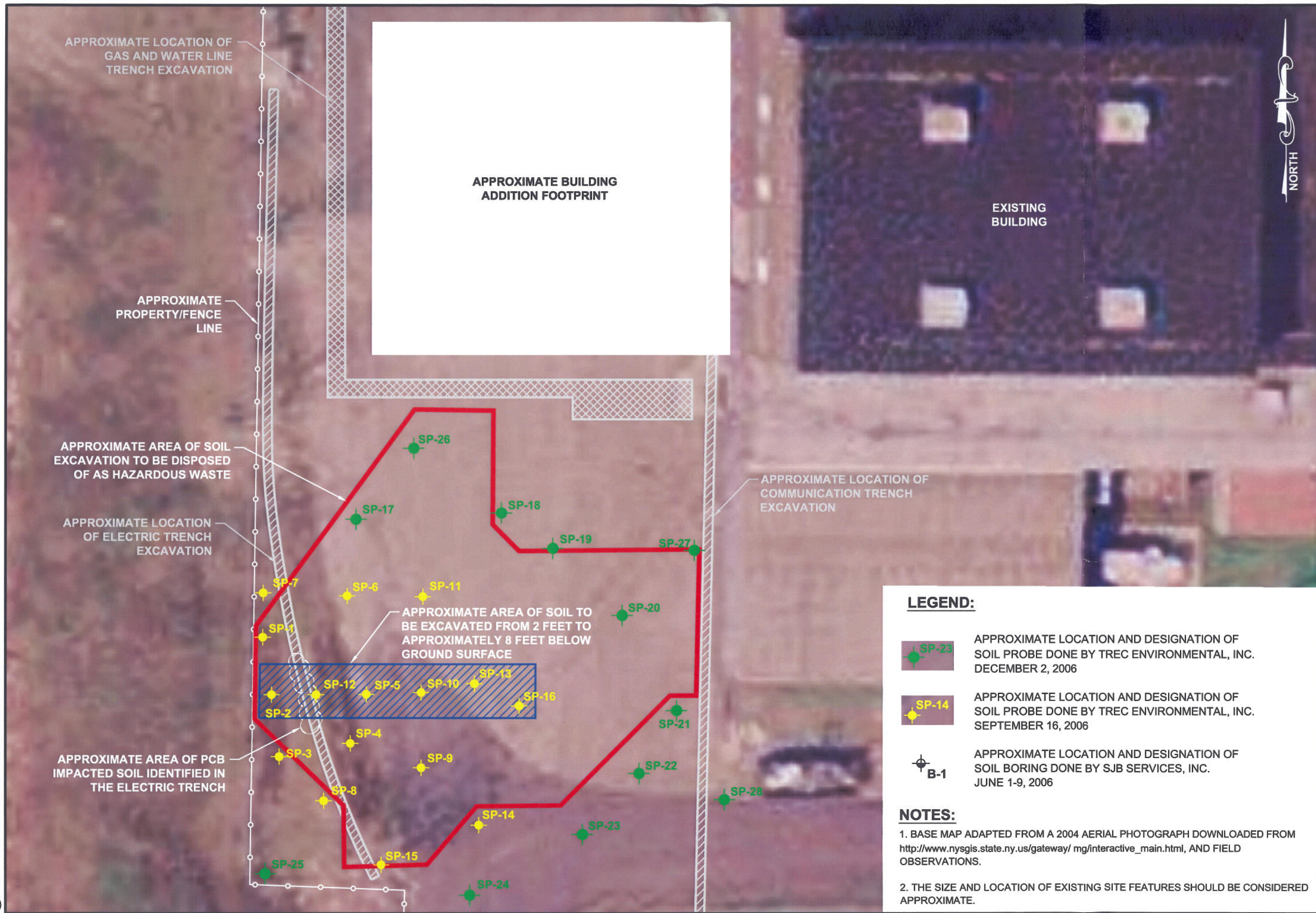
NOTES:

1. BASE MAP ADAPTED FROM A 2004 AERIAL PHOTOGRAPH DOWNLOADED FROM http://www.nysgis.state.ny.us/gateway/mg/interactive_main.html, AND FIELD OBSERVATIONS.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

DRAWN BY: DEW DATE: FEBRUARY 2007		 GZA GeoEnvironmental of New York
APPROXIMATE SCALE IN FEET 0 30 60 120		SPECIAL METALS CORPORATION DUNKIRK FACILITY 100 WILLOWBROOK AVENUE DUNKIRK, NEW YORK
PROJECT No. 21.0056196.10		INTERIM REMEDIAL MEASURE WORK PLAN OVERALL SITE PLAN AND AREA OF CONCERN
FIGURE No. 2		



DRAWN BY: DEW	DATE: FEBRUARY 2007	SPECIAL METALS CORPORATION DUNKIRK FACILITY 100 WILLOWBROOK AVENUE DUNKIRK, NEW YORK	PROJECT No. 21.0056196.10
GZA GeoEnvironmental of New York	GZA		
		INTERIM REMEDIAL MEASURE WORK PLAN FIELD SCREEN vs. LAB ANALYSIS PLAN	FIGURE No. 3



LEGEND:



APPROXIMATE LOCATION AND DESIGNATION OF SOIL PROBE DONE BY TREC ENVIRONMENTAL, INC. DECEMBER 2, 2006



APPROXIMATE LOCATION AND DESIGNATION OF SOIL PROBE DONE BY TREC ENVIRONMENTAL, INC. SEPTEMBER 16, 2006



APPROXIMATE LOCATION AND DESIGNATION OF SOIL BORING DONE BY SJB SERVICES, INC. JUNE 1-9, 2006

NOTES:

1. BASE MAP ADAPTED FROM A 2004 AERIAL PHOTOGRAPH DOWNLOADED FROM http://www.nysgis.state.ny.us/gateway/mg/interactive_main.html, AND FIELD OBSERVATIONS.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

SPECIAL METALS CORPORATION DUNKIRK FACILITY 100 WILLOWBROOK AVENUE DUNKIRK, NEW YORK	DRAWN BY: DEW DATE: FEBRUARY 2007
	GZA GeoEnvironmental of New York
APPROXIMATE SCALE IN FEET 0 10 20 40	
PROJECT No. 21.0056196.10	
INTERIM REMEDIAL MEASURE WORK PLAN PCB SOIL REMEDIATION EXCAVATION PLAN FIGURE No. 4	

APPENDIX A
SOILS & SITE MANAGEMENT PLAN



**SOILS & SITE MANAGEMENT PLAN
SPECIAL METALS CORP.
100 WILLOWBROOK AVENUE
DUNKIRK, NEW YORK**

Prepared For:
Special Metals, Corp
Dunkirk, New York

Prepared By:
GZA GeoEnvironmental of New York
Buffalo, New York

July 2006
File No: 21.0056196

**SOILS AND SITE MANAGEMENT PLAN
SPECIAL METALS CORP.
100 WILLOWBROOK AVENUE
DUNKIRK, NEW YORK**

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TABLES

TABLE 1	SUMMARY OF SUBSURFACE SOIL SAMPLE ANALYSIS
TABLE 2	SUMMARY OF CONSTRUCTION MATERIALS SAMPLE ANALYSIS

FIGURE

FIGURE 1	LOCUS PLAN
FIGURE 2	SITE PLAN

APPENDICES

APPENDIX A	ANALYTICAL LABORATORY REPORT
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1.00 OVERVIEW AND OBJECTIVES



The Site is an approximate 8-acre industrial property in Dunkirk, New York (see Figure 1) operated by Special Metals, Corp. (Special Metals) that consists of one parcel identified at 100 Willowbrook Avenue. It is utilized for the manufacture of steel products. A planned Site expansion on the western portion of the existing building includes the removal of an older steel forge and its replacement with updated forge equipment. The new forge equipment installation will result in a building expansion over an area of about 75-feet (north south) by 75 to 80-feet to the west. Figure 2 presents a Site Plan

Site conditions within the planned expansion area, both inside and outside, and along the access road around the existing building have been characterized by a subsurface exploration program, which included the following (see also Figure 2).

Test Boring B1 through B3 – Conducted on the exterior and west side of the building, within the proposed expansion area.


Pavement Cores PC1 through PC7 – Shallow test borings drilled to depths of about 5-feet along the existing access road that circles the building.

Test Boring B4 through B7 – Conducted within interior portions of the building in the area of proposed construction (adjacent to the expansion area)

Soil and bedrock samples were collected and screened for volatile organic compounds (VOCs), using an organic vapor meter (OVM), equipped with a photo-ionization detector (PID). The overburden soil thickness ranged from about 16 to 17-feet. Bedrock was cored for a thickness of between 10 and 40-feet. In addition, visual and olfactory observations were made of the soil/rock samples collected as a secondary screening method to check for obvious signs of potential contaminants of concern¹. The OVM/PID screening resulted in measurements that ranged from 0 to 10 parts per million (ppm). Field observations did not

¹ Contaminants of concern are assumed to consist of petroleum related compounds, polychlorinated biphenyl's and metals unless otherwise stated.

note visual or olfactory evidence of potential contamination. Soil samples were randomly selected and sent to a laboratory for further analysis. The analytical methods used were:



Volatile Organic Compounds	EPA Method 8260
Semi-volatile Organic Compounds	EPA Method 8270
PCBs	EPA Method 8080
Metals	EPA Method 6010

Groundwater was not encountered within the overburden soils during the subsurface investigation. Bedrock core samples were also collected at several locations and screened with the OVM/PID. Measurements or visual observations did not indicate contamination was present.

The objective of this Soils and Site Management Plan (SSMP) is to set guidelines for the management of soil and construction material that may be generated by subsurface activities resulting from construction, demolition, or utility installation/repair done in and around the Site during Special Metals' planned construction activities. This SSMP addresses environmental concerns related to soil and construction material management. To further assess potential construction materials that may be generated, GZA collected:

Paint chip samples from overhead structural support beams for lead content analysis; and

Swipe samples from the surface of exposed interior concrete for PCB analysis.

2.00 NATURE AND EXTENT OF CONTAMINATION

Data obtained from subsurface investigation, soil and construction material sampling and chemical analysis conducted at the Site was compiled to identify if the following contamination² is present.



Subsurface Soil

- ☐ Volatile Organic Compounds (VOCs)
- ☐ Semi-Volatile Organic Compounds (SVOCs)
- ☐ Polychlorinated Biphenyl's (PCBs)
- ☐ Metals

Construction Material

- ☐ Polychlorinated Biphenyl's (PCBs) on Concrete
- ☐ Lead in Paint from Steel Ceiling Beams

Groundwater was not encountered.

Bedrock did not exhibit signs of contamination.

Contaminants of concern are those compounds detected above method detection limits in the soil samples and construction materials analyzed. A summary of the compounds detected within soil samples are identified on Table 1. A comparison to the applicable regulatory guidelines (TAGM #4046) is included on Table 1 also.

² Contamination is considered present if compounds detected in soil and/or water samples are at concentrations above those presented in the New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum (TAGM) #4046: Determination of Soil Cleanup Objectives and Cleanup Levels (www.dec.state.ny.us/website/der/tagms/).



VOCs: Benzene was detected within one soil sample at a concentration slightly above recommended soil cleanup objectives. This lone detection of Benzene is not considered an environmental concern.

SVOCs: No SVOCs were detected above method detection limits within the five soil samples analyzed.

PCBs: No PCBs were detected above method detection limits within the five soil samples analyzed.

Metals: Several metals were detected within each of the five soil samples analyzed. Chromium was the only compound detected at a concentration above recommended soil cleanup objectives. However, the concentration detected was within the range established as Eastern USA Background. Therefore, metals are not considered to be an environmental concern.

Groundwater was not encountered during the subsurface explorations; therefore, exposure to groundwater is not considered an environmental concern.

3.00 CONTEMPLATED USE



The Site has been identified for continued industrial use as a steel processing/manufacturing facility. Future Site use beyond its current anticipated/planned use may require approval from the City of Dunkirk and/or the Chautauqua County Department of Health. It is anticipated that residential, daycare, child care and/or health/medical care use would not be recommended without additional and more comprehensive Site assessment of soil and groundwater.

4.00 SOIL AND SITE MANAGEMENT PLAN OUTLINE

4.10 PURPOSE AND SCOPE



The purpose of this SSMP is to define the program for handling, segregating, testing, reuse, and offsite disposal of soil/material encountered during the Site development and building construction activities planned by Special Metals. The Contractor selected by Special Metals for Site development/construction is responsible for implementing the aspects of this plan under guidance/oversight from Special Metals or its construction manager. The information presented in this plan provides procedures/requirements for materials management during the project based on our current understanding of the Site and project parameters. The scope of the SSMP relates to the handling and management of at-grade and below-grade soils, groundwater and other materials. Also included is a general discussion on asbestos materials and lead based paint, should it be encountered during building renovation.

4.20 PROJECT REPRESENTATIVES

Construction Manager:	Hohl Industrial Services, Inc. 770 Riverview Blvd., Buffalo, NY 14150 716-332-0466
Environmental Consultant	GZA GeoEnvironmental of New York 364 Nagel Dr., Buffalo, NY 14225 716-685-2300
Geotechnical Engineer:	Empire Geo-Services, Inc. 5167 South Park Avenue, Hamburg, NY 14075 716-649-8110

4.30 RESPONSIBILITIES

Although environmentally-impacted soils were not encountered during the subsurface investigation, it may be encountered during excavation activities associated with the Site development. Based on the current and expected final grades, dewatering (other than for stormwater control) will not likely be required. The following is a description of certain key tasks relating to soils management.



- A. Special Metals or the Construction Manager has the authority to approve or disapprove Contractor's selected disposal sites for all materials shipped off-site. Representatives of Special Metals and/or the Construction Manager shall periodically observe construction activities for signs of potentially contaminated materials.
- B. The Contractor shall be responsible for:
 - 1. Implementing this SSMP including the costs associated with excavation, stockpiling, physical and chemical testing and offsite material shipment and disposal, should it be required. The Contractor shall notify Special metals and The Construction Manager should material be encountered that exhibits signs of potential contamination.
 - 2. Determining the project schedule, construction sequencing, and other operational parameters of the project and communicating such information to the project team.
 - 3. Overseeing all construction work for the project.
 - 4. Preparing waste manifests, bills of lading, waste shipping records, and associated paperwork, as applicable, for wastes transported from the site.
 - 5. Designating on-site material staging or stockpiling locations.



6. Assuring compliance with the necessary environmental and non-environmental permits, approvals, authorizations, site health and safety plan and all other applicable local, state, and federal health and safety standards for the performance of the construction work. Should asbestos, potential asbestos containing materials, or lead based paint be encountered, the Contractor is responsible for its proper abatement and disposal. Lead-based paint is present on the ceiling support beams.
 7. Identification and selection of appropriate, licensed, permitted disposal sites for waste materials shipped off-site.
 8. Providing all labor, materials, equipment, and other services required for handling, segregating, reusing, transporting, and disposing of materials encountered during construction.
 9. Protecting the health of workers, other on-site personnel, the general public, and minimizing impacts to the environment.
 10. Reviewing and complying with the project Health and Safety Plan (HASP) and all other applicable local, state, and federal health and safety standards.
- C. The Environmental Consultant will implement the following:
1. Observe, on an on-call basis, soil excavation activities for evidence of environmentally-impacted material, should potential signs of contamination be noted by on-Site personnel. Upon arrival on-Site, the Environmental Consultant will perform an initial field screening to classify excavated materials as Unregulated or Potentially Regulated based on existing available analytical data, visual observations, olfactory evidence and/or field screening using a photoionization detector.

2. Coordinate with the Construction Manager and Contractor to ensure proper segregation of materials based on screening and/or sampling results.
3. Reviewing Contractor's documents related to compliance with applicable environmental permits, approvals, and authorizations.
4. Participating in the review of Contractors selected disposal facility/location process.



5.00 EXECUTION (SITE MANAGEMENT)

5.10 REGULATORY COMPLIANCE



The Contractor shall conduct all work in accordance with applicable federal, State of New York, and/or Chautauqua County/City of Dunkirk codes, ordinances, statutes, regulations, and permits.

5.20 PLANNED EXCAVATION ACTIVITIES

The work associated with this Site development project is anticipated to include earthwork activities related to excavation and grading, and utility and foundation installation. The Contractor should review associated bid documents and specifications to make its own determination on the quantities of material for import and export/disposal.

5.30 EXCAVATION ENVIRONMENTAL CONTROLS

5.31 Dust Control

The Contractor shall employ dust control measures necessary to minimize the generation of airborne fugitive dust. Such measures could include periodic wetting of high traffic areas and active excavation areas, use of crushed stone or other dust control products in high traffic and staging areas, use of temporary mats or coverings to minimize dust generation, and any other feasible means to control dust, as necessary. As verification of adequate controls, the Contractor must monitor the work area for dust, as outlined in the HASP specification for the project.

Should contaminated material be encountered, the Environmental Consultant will monitor dust control measures to comply with NYSDEC Technical and Administrative

Guidance Memorandum #4031 – Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites (although the Site is not an inactive hazardous waste site) for the areas designated.

5.32 Vapor and Odor Control

Contractor or Environmental Consultant will monitor the work area in accordance with the requirements of the HASP for the Site. In the event that excavation or other site activities generate excessive contaminants, vapors or odors, as determined through air monitoring and/or direct observations, the Contractor shall employ control measures necessary to minimize the generation of such contaminants, vapors and odors. Such measures could include: restricting work in a particular area, use of temporary mats or coverings, use of odor-suppressant foam, containment of a particular work area, and other feasible means of controlling contaminants, vapors and odors, as necessary.

The Environmental Consultant will monitor subsurface excavations into existing soils that have been determined to contain contaminated materials using an organic vapor meter (OVM) outfitted with a photo-ionization detector (PID).

5.40 EXCAVATED MATERIAL CLASSIFICATION, HANDLING, AND DISPOSITION

The Environmental Consultant will perform the initial classification of excavated materials, as categorized below, in accordance with the procedures described herein. The Contractor shall handle, segregate, and manage excavated materials in accordance with the guidance in this SSMP.

It is anticipated that environmentally impacted materials will not be encountered, during on-Site work, with the exception of lead-based paint and possible asbestos piping. Environmentally impacted subsurface soils were not encountered during the subsurface investigation done in June 2006.. However, the Contractor should be prepared to address



environmentally impacted materials encountered during Site development and construction.

5.41 Impacted Materials



Environmental investigations were done in June 2006 to help identify areas of environmental concern (see Tables 1 and 2, and Figure 2). Soil sampling and laboratory testing was performed and this information is available and included as Appendix A. On-Site soils were not determined to be impacted with contaminants of concern.


Groundwater was not encountered during the subsurface investigation. However, the on-Site soils are fine in nature (silts and clays) and enough time may not have elapsed for groundwater to stabilize and be detectable within the test borings. The Contractor should be ready to do soil dewatering should perched groundwater be encountered in excavations.

5.42 Clean Fill and Bulky Waste Materials

Clean fill materials generally consist of materials that are not environmentally impacted and include natural soils, unpainted concrete, extracted foundations and asphalt paving fragments which are virtually inert, and pose neither a pollution threat to soil, groundwater, or surface waters nor a fire hazard. These materials are excluded from New York State Solid Waste regulations (6NYCRR, Part 360).

5.50 ASBESTOS MATERIAL IDENTIFICATION, HANDLING AND DISPOSAL

Prior to facility renovation, equipment removal and expansion activities, suspect asbestos containing materials (ACM) shall be identified and sampled. Applicable protocols for this work are provided in Part 56 of the Official Compilation of Codes, Rules and Regulations of the State of New York (12 NYCRR Part 56). In general, if suspect ACM is identified, sampling procedures include:

- 
- ☐ Material is wetted with amended water;
 - ☐ Position a plastic sample collection bag near the sample collection area to catch the sample;
 - ☐ Detach a small representative sample directly into the sample collection bag;
 - ☐ Label each collection bag with a unique identifying number; and
 - ☐ Record sample and respective information on a chain-of-custody form and transfer samples and form to a New York State Department of Health (NYSDOH) and ELAP certified laboratory for analysis

Samples are first analyzed using polarized light microscopy (PLM) in accordance with USEPA Interim Method 40 CFR 763 (NYSDOH Method 198.1). Non-friable and semi-friable samples require enhanced sample preparation to improve the results of the analysis. Additional analysis is needed to detect asbestos fibers in non-friable organically bound (NOB) bulk material with a transmission electron microscopy (TEM) in accordance with NYSDOH ELAP Item No. 98.4. polarized light microscopy (PLM). The material is deemed asbestos containing if 1% or greater, by volume, is identified.

Should ACM be identified, the building facility owner is required to inform tenants, employees and contractors/subcontractors of its presence. Abatement work plans need to be prepared by a certified Asbestos Project Designer. If required, abatement shall be done by a certified asbestos abatement contractor who has provided advanced notification to the New York State Department of Labor (NYSDOL). Daily air sampling and oversight may be required during asbestos abatement activities. Properly contained asbestos must be disposed off at an approved disposal facility.

A project monitor is required to make an inspection of the impacted area following abatement activities.

5.60 LEAD BASED PAINT REMOVAL, HANDLING AND DISPOSAL



As part of the facility renovation, building and equipment (i.e., existing crane rail) alterations may be necessary that may require the removal of lead based paint. Applicable laws, rules and regulations for this work are governed under United States Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) regulations, and must be complied with. GZA identified the following specific regulations, which pertain to work associated with removal of lead based paint in the workplace.

- 29 CFR 1910.12. Hazardous Waste Operations and Emergency Response;
- 29 CFR 1910.134 Respiration Protection;
- 29 CFR 1926 Occupational Safety and Health Regulations for Construction;
- 29 CFR 1926.62 Lead;
- 40 CFR 50 National Primary and Secondary Ambient Air Quality Standards;
- 40 CFR 261 – 264 Hazardous Waste Standards;
- 40 CFR 265.13 General Waste Analysis;
- 40 CFR 268 Land Disposal Restrictions; and
- 49 CFR 171 – 179 Transportation Regulations.

29 CFR 1926.353 (c)(2)(i)(b) and 291926.354 (c)(1) pertain particularly to welding, cutting or heating metals coated with lead based paint in an enclosed space.

Before preparations are allowed to begin, the Contractor shall submit the following to the Construction Manager for approval, a copy shall also be provided to Special Metals.

1. Copies of all notifications, permits, applications, licenses, and like documents required by federal, state, or local regulations obtained or submitted in proper fashion;
2. Written site-specific Respiratory Protection Program for employees throughout all phases of the job, including make, model and NIOSH approval numbers of respirators to be used on this specific job;



3. Proof that the abatement supervisor and workers have been examined by a qualified physician within the past 12 months, and are capable of wearing respiratory protection and are able to perform lead paint abatement work and other related activities;
4. Chain of Command of responsibility at work site including supervisors, foreman, and competent person, their names, and resumes;
5. Proposed Emergency Plan and route of egress from work areas in case of fire or injury, including the name, directions/map and phone number of nearest medical assistance center;
6. The name and address of the Contractor's personal air monitoring and testing laboratory including proof of NIOSH proficiency;
7. An MSDS or equivalent, in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) for all products and materials proposed for use on the project;
8. A current negative exposure assessment in accordance with OSHA 1926.62 providing recent data (less than six months old) showing personal exposures to lead for comparable workers;
9. Any other documentation that applies and is called for by this or other sections of the project specifications.

The Lead Abatement Contractor shall be qualified to perform hazardous materials abatement operations as described herein and shall have sufficient workers and supervisors who have successfully completed the OSHA Hazardous Waste Operations 40 Hour Training in compliance with 29 CFR 1910.120, 8 hours annual refresher training, annual medical monitoring by an occupational physician, and 24 hours "on the job" training. Copies of updated training certificates of all workers and supervisors to be used on this project shall be

submitted. In addition, The Lead Abatement Contactor shall submit:

1. Name, address, and ID number of the hazardous waste hauler(s), waste transfer route(s), and proposed disposal site(s); and,
2. Site-specific Health and Safety Plan.



The Lead Abatement Contractor will be responsible for providing the equipment and materials needed to monitor and contain the work and debris generated; and prepare and implement a Written Compliance Program (WCP) in accordance with 29 CFR 1926.62 (e) (2) (i). A copy of the WCP must be available at the construction site for review by all employees.

In general lead-based paint being removed will need to be contained from spreading throughout the work area via drop cloths or ploy-sheeting enclosures, collected and properly disposed. If lead-based paint are removed by methodologies which create air-borne dust and the dust is allowed to accumulate on the ground surface, confirmatory sampling will be required after the material has been collected for disposal. Analytical test methodology USEPA 6010 will be utilized.

The Lead Abatement Contractor should consider using a stripping agent to remove the necessary lead based paint rather than a grinder/sander to minimize the air borne particulate generated, which could reduce the amount of monitoring and personal protective equipment need. Generated material and other waste shall be properly contained, collected and disposed.

6.00 SOIL MANAGEMENT

6.10 EXCAVATED SOIL, ENVIRONMENTAL FIELD SCREENING



Representatives of Special Metals and/or the Construction Manager will be present to observe excavation activities and note if visual or olfactory methods indicate potential contamination. The Environmental Consultant should then be notified to visit the Site and perform environmental field screening of excavated materials. The Contractor shall coordinate its earthwork activities with the Environmental Consultant so that field screening is accomplished. The environmental field screening will be used to initially assess soils for reuse on-site or for off-site transport and disposal. The reuse of soil on-site shall be subject also to the engineering requirements established by the Geotechnical Engineer, or Site development criteria preferred by Special Metals. Environmental field screening will assess soils as Unregulated (no environmental impact conditions observed) or Potentially Regulated (environmental impact conditions observed). Potentially regulated soils will be those that show visible signs or smell (nuisance odor) of petroleum and/or have a total organic vapor measurement greater than 10 ppm (measured with an organic vapor meter). The Contractor shall be responsible for managing all soil based on these initial field screenings.

All Potentially Regulated materials shall be stockpiled on-Site for further classification based on sampling and laboratory testing, which is the responsibility of the Contractor. Refer also to Section 6.30 Stockpile Criteria for additional information. Laboratory testing must conform to the requirements of the Contractor's proposed disposal facility and at a minimum, this testing shall include VOCs (via EPA Method 8260). The sampling frequency shall be consistent with the following Table.



Soil Quantity (Cubic Yard)	Number of Grab Samples	Number of Composite Samples
0 – 50	1	1
50 – 100	2	1
100 – 200	3	1
200 - 300	4	1
300 – 400	4	2
400 – 500	5	2
500 – 800	6	2
800 – 1,000	7	2

All laboratory analyses shall be performed by a laboratory having all applicable New York State and US EPA certifications/licenses for waste characterization testing. A copy of all laboratory results shall be submitted to the Developer, Construction Manager and the Environmental Consultant. The Environmental Consultant will review the laboratory data. If the data indicates the soil is not regulated, then it may be used as unregulated material. The soil will be considered as regulated if sample analysis indicates compound concentrations exceed those listed in the NYSDEC Technical and Administrative Guidance Memorandum #4046: Determination of Soil Cleanup Objectives and Cleanup Levels. NYSDEC shall be notified when regulated soils are identified.

Soil assessed by the Environmental Consultant as Unregulated may be reused on-site if compliant with all engineering specifications. Excess soil, which will not be reused on-site, shall be transported to an off-site regulated solid waste (landfill) facility, subject to approval by Special metals and the Environmental Consultant. No materials shall be shipped off-site without prior approval of its final disposition location by Special metals and Environmental Consultant. If subsequent testing indicates that the soil is regulated, then Contractor shall dispose of material as a Regulated Soil. Soil disposal requires the approval of the disposal facility that is accepting the regulated material, prior to transport. NYSDEC shall also be notified of the disposal location.



Excavation of existing subsurface materials may include environmentally impacted and contaminated materials, which will require special handling and stockpiling. The Contractor shall perform excavation and material handling in a manner that limits mixing materials with different levels and/or types of contamination. The Contractor shall excavate material by methods, which will permit observation of exposed subsurface soils to reduce the potential of mixing regulated soils with unregulated soils.

6.20 DISPOSITION OF MATERIAL


Disposal and recycling of all material from excavation and dewatering activities must be in conformance with applicable Federal, State and local regulations governing solid waste, hazardous waste and recyclable material disposal, as appropriate. Disposal or recycling facilities, which are under active or pending enforcement action by NY State Agencies, US EPA, or other responsible regulatory agencies, are not acceptable disposal or recycling facilities.

6.21 Unregulated Soil

Material classified as Unregulated Soil and meeting geotechnical specification requirements for re-use may be used by the Contractor in areas within the project limits, subject to geotechnical standards and specifications. Unregulated Soil material not used on Site must be disposed of off-Site at a regulated/permitted landfill facility. The Contractor shall submit to the Construction Manager and Environmental Consultant, the proposed disposal location, written authorization from the disposal facility for receipt of the soil and documentation about its permit/license.

NOTE: The Contractor is encouraged to provide Specialty Metals with alternatives for the on-site reuse or recycling of excess unregulated soil materials.

6.22 Regulated Soils



Excavated Regulated Soil that is not suitable for re-use on-Site must be disposed of at an off-site location that complies with all local, state and federal requirements and it shall have a current permit/license in good standing. The Contractor shall submit the proposed disposal or recycling location(s) for review and approval by the Developer, Construction Manager and Environmental Consultant. The Contractor shall be responsible for all testing required by the proposed disposal/recycling facilities. Workers employed by the Contractor that handle or are exposed to regulated soil shall have completed Health and Safety Training per Occupational Safety and Health Administration (OSHA) Regulation CFR 1910.120. Minimum criteria for acceptable special waste disposal or recycling sites are:

1. Materials shall not be disposed in a location which is considered a hazardous material or hazardous waste transfer, storage, or disposal facility.
2. Materials shall not be disposed at sites which are actively considered by the NYSDEC, USEPA, or other responsible agency as potential or confirmed hazardous waste or hazardous material sites.
3. The proposed disposal sites shall provide written certification or information substantiating the suitability of the site to receive and dispose of material meeting the criteria for classification as Regulated Soil/Special Waste, in compliance with all applicable local, state and federal regulations.

It is anticipated that regulated soil can be disposed of at the following landfill facilities within the Western New York area.

Chautauqua County Landfill
3889 Towerville Road
Jamestown, New York 14701
22-miles from Special Metals

716-985-4785

Waste Management – Chaffee Landfill (Not allowed to take PCB soils)

10860 Olean Road

Chaffee, New York 14030

66-miles from Special Metals

716-754-0455

Allied/BFI Waste Systems

5600 Niagara Falls Boulevard

Niagara Falls, New York 14304

65-miles from Special Metals

716-285-3344

These landfill facilities generally require that soil material for waste disposal be sampled and tested at a frequency of one (1) sample per 1,000 tons of soil delivered. Each sample analysis is to include:

Volatile Organic Compounds (EPA Method 8260)

Semi-volatile Organic Compounds (EPA Method 8270)

TCLP³ Metals-Full List (EPA Method 8080)

PCBs-Target Compounds (EPA Method 6010)

Flashpoint and Corrosivity (pH)

6.30 STOCKPILE CRITERIA

At least one week prior to the commencement of excavation, work area(s) shall be prepared to receive the stockpiling of materials. The following minimum stockpile criteria shall apply to all stockpiled materials considered to be potentially Regulated Soil.

³ Toxicity Characterization Leaching Procedure (TCLP)





1. Stockpile areas shall be graded such that stormwater run-on and run-off is diverted around the stockpiled materials. At a minimum, a silt-fence and hay bales shall be placed continuously around the perimeter of each stockpile area. To prevent contact of run-off with or from regulated soils and to contain drainage, excavated soils shall be placed in a stockpile atop a minimum 6-mil poly-sheeting.
2. Drainage effluent from the stockpiles, which is to be contained within perimeter berms, shall be disposed of in such a manner that will not cause injury to: public health, water quality of nearby surface water bodies, public or private property, existing work, the work completed or in progress, the surface of roads, walks and streets, nor cause any undue interference with the use of the same by the public.
3. The stockpile area shall be cleared and then fenced off to minimize the contact of workman and passers-by with stockpiled materials. The area shall be visibly marked with appropriate signs warning of potential hazards.
4. Stockpiled materials shall be placed within the designated stockpile areas, graded to shed water, and covered prior to inclement weather and at the end of each work day with a minimum six (6)-mil-thick black polyethylene cover overlapped and weighted to form a continuous waterproof barrier over the material. The cover shall be maintained throughout the stockpile period to prevent water from entering the stockpiled materials and to prevent blowing dust. Stockpile locations shall be placed as approved by the Developer, Construction Manager and Environmental Consultant in advance of construction.

The Contractor is responsible for all construction, protection, movement and maintenance of stockpiles for the duration of the project work or until directed otherwise by the Developer, Construction Manager or the Environmental Consultant. The transfer of materials from the excavation to the stockpile area shall be conducted in such a manner as to prevent loss of or spread of contaminated materials across the Site. Excavation,

handling and stockpiling shall be performed in such a manner which prevents mixing regulated soils with unregulated soils on-Site. Disposal of soil which is regulated as a result of the Contractor's careless or unauthorized procedures for excavation or soil handling and stockpiling shall be at the Contractor's expense.



The clearing and preparing of stockpile areas and the grading, polyethylene barriers, berms, and all other materials, equipment, and labor required for protection of the excavated material will be considered part of the work. Unregulated Soil shall be stockpiled consistent with the Soil Erosion/Sediment Control requirements of the construction specifications.

6.40 MATERIAL LOADING AND TRANSPORTATION

The Contractor shall observe the following provisions when transporting excavated material:

1. Load material within the Site limits.
2. Cover all trucks leaving the Site and prevent debris from spilling from trucks or being tracked off-Site.
3. Provide for the transport of environmentally-impacted material by a licensed solid waste or hazardous waste transporter, as applicable, in accordance with United States Department of Transportation (USDOT) and/or NYSDEC Regulations.
4. Arrange for transportation of environmentally impacted material from the Site in accordance with the HASP and this SSMP. Final disposal location of all Site export materials must be approved by the Developer, Construction Manager and the Environmental Consultant at least two working days prior to off-Site transport. Regulated material will be sent to a NYSDEC regulated landfill or other appropriate

and approved facility. Clean fill materials will be sent to an approved location and final disposal of clean fill materials will not violate any federal, state and/or local zoning, wetland, environmental, and/or other regulations (see Section 6.21).



6.50 DECONTAMINATION OF EQUIPMENT

The Contractor is responsible to clean all tools and equipment before they are taken from the Site. Contractor's tools and equipment which are to be taken from the Site shall be decontaminated on-Site. This shall include all tools, heavy machinery, excavating and hauling equipment used during excavation, stockpiling and any re-handling of polluted soil or groundwater.

7.00 MANAGEMENT OF CONTAMINATED GROUNDWATER



7.10 DESCRIPTION

It is not anticipated that groundwater will be encountered during project construction. However, should it occur, then the Contractor shall determine the groundwater quality. Dewatering of contaminated groundwater shall be limited to that required to complete the work. The Contractor shall properly contain contaminated groundwater discharge and manage all dewatering in accordance with local, State and federal regulations.

7.20 REFERENCE

Groundwater was not encountered during the subsurface investigation observed by the Environmental Consultant.

7.30 SUBMITTALS

Prior to the start of excavations and/or dewatering activities on-Site, the Contractor shall submit to Special Metals, the Construction Manager and Environmental Consultant, in writing, the following for review.

- Names of appropriately trained staff utilized to manage contaminated groundwater and documentation that the staff is informed of procedures to be followed to protect the Health and Safety of all on-Site workers as it relates to handling contaminated groundwater. Workers shall have completed Health and Safety Training per Occupational Safety and Health Administration (OSHA) Regulation CFR 1910.120. The Contractor is responsible for the health and safety of his own employees and subcontractors.



- Describe methods to contain contaminated groundwater and locations of discharge of contaminated and non-contaminated groundwater as well as monitoring of discharge for possible contaminants.
- Identification, via a Worker Health and Safety Plan, of methods for worker and environment protection when transporting and managing contaminated groundwater. The Contractor will be responsible for his own health and safety plan, and for a health and safety plan for his subcontractors and his own employees.
- Copies of written notice(s) describing the hygiene practices outlined in the Worker Health and Safety Plan to be given to workers.

7.40 RESPONSIBILITY OF THE CONTRACTOR

Minimum precautions noted in this Section shall not relieve the Contractor of his responsibility for implementing stricter health and safety precautions as warranted by the Work. The Contractor shall be responsible for:

- Adhering to regulations, specifications, and recognized standard practices related to contaminated excavated soil and/or contaminated groundwater handling during excavation and dewatering construction activities;
- Containing, managing and the disposal/discharge of contaminated soil/dewatered groundwater in accordance with all local, State and federal regulations; and
- The handling/disposal of excavated soil or the discharge, containerization, treatment and disposal of groundwater generated from dewatering activities.

7.50 PERMITS, CODES AND SAFETY REGULATIONS

Contractor's work shall conform to the Drawings and Specifications and shall comply with applicable codes, permits, and regulations of all authorities having jurisdiction.



7.60 DEWATERING EXCAVATIONS

Dewatering operations, with the exception of precipitation or storm water run-off, is not anticipated. Should precipitation or storm water collect in excavations required during the installation of certain portions of the utility and foundation systems, the water generated shall be managed in accordance with applicable local, state, and federal laws and regulations.. The Contractor should implement construction practices to minimize dewatering; and is responsible for all costs to store, pump, treat, test and dispose of dewatering effluent. Dewatering effluent originating from areas where impacted soil may exist should be stored temporarily in an aboveground storage tank pending environmental testing. Water which is not impacted may be infiltrated and/or managed consistent with local and/or state regulations. Impacted water must be disposed of in accordance with applicable local, state and federal requirements.

7.70 DECONTAMINATION OF EQUIPMENT

Contractor's tools and equipment, which are to be taken from the Site, shall be decontaminated on-Site. This shall include all tools, heavy machinery and excavating and hauling equipment used during excavation and dewatering construction.

8.00 PURPOSE AND DESCRIPTION OF SURFACE COVER SYSTEM



The surface cover system at the Site will consist of the building concrete slab-on-grade, asphalt concrete pavement and/or landscaped areas, which will eliminate the potential for human contact with residual contaminated soil and/or groundwater that may be encountered and will remain at the Site. The cover systems consist of the following types of material.

- **Crushed Stone:** Manufactured crushed stone or structural fill is planned for areas to level grades, for working cover and as subbase material beneath the slab-on-grade, asphalt concrete pavement and sidewalks/curbs. This material shall be placed in a minimum thickness of 6-inches.
- **Topsoil:** Topsoil shall be place in landscaped areas to promote vegetative growth. The minimum topsoil thickness is 6-inches.
- **Concrete:** For construction of slab-on-grade, footers and foundation walls, sidewalks and curbs, concrete shall be placed over a properly prepared subbase in a minimum thickness of 6-inches.
- **Asphalt Concrete Pavement:** Placed in parking and driveway locations over a properly prepared subbase at a minimum thickness of 6-inches (including base and top course).

9.00 MANAGEMENT OF SOIL/FILL AND LONG TERM MAINTENANCE OF COVER SYSTEM



This section provides environmental guidelines for management of subsurface soil/fill and the long-term maintenance pertaining to breaches of the cover system during future intrusive work.

The SSMP includes the following conditions.

- Breaches of the soil/fill cover system resulting from construction, demolition, or utility work, must be replaced or repaired using acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination. The repaired areas must be covered with clean crushed stone or covered with an impervious product such as concrete or asphalt, as described in Section 8.00, to prevent erosion in the future.
- Site soil that is excavated and is intended to be removed from the property must be managed, characterized and properly disposed of in accordance with NYSDEC regulations and directives. See Section 9.10 for additional details.
- Soil excavated at the Site may be reused as backfill material on-Site provided it does not contain visual or olfactory evidence of contamination, and it is placed beneath a cover system component as described in Section 8.00.
- Off-Site fill material brought to the Site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination. The soil will be acceptable

for use as fill or cover material provided that all parameters meet the NYSDEC recommended soil cleanup objectives included in TAGM 4046⁴.

- Prior to any construction activities, on-Site workers are to be notified of the Site conditions with clear instructions regarding how the work is to proceed. Invasive work performed at the Site will be done in accordance with all applicable local, state and federal regulations to protect worker health and safety.



9.10 EXCAVATED AND STOCKPILED SOIL AND FILL DISPOSAL

Soil/fill that is excavated as part of development or utility repair/installation, which cannot be used as fill below the cover system, will be further characterized prior to transportation off-Site for re-use or disposal at a permitted facility. Excavated soil/fill, with visual evidence of contamination (i.e., staining or elevated organic vapor meter (OVM) measurements) shall be sampled at a frequency of, one composite sample for each 500 tons of stockpiled soil/fill. Excavated soil/fill that does not exhibit visual evidence of contamination but must be sent for off-Site disposal shall be sampled at a frequency of, one composite sample for each 1,000 tons of stockpiled soil. A minimum of one sample will be collected for volumes less than 1,000 tons.

The composite sample will be collected from five locations within each stockpile. OVM measurements will be recorded for each of the five individual locations. One grab sample will be collected from the individual location with the highest OVM measurement. If none of the five individual sample locations exhibit OVM readings, then a grab sample is not required. The composite and grab sample will be analyzed by a laboratory certified under the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP). The analysis will include: pH, TCL VOCs, PCBs, metals and

⁴ Technical and Administrative Guidance Memorandum (TAGM) HWR-94-4046: Determination of Soil Cleanup Objectives and Cleanup Levels, prepared by NYSDEC, Division of Hazardous Waste Remediation, dated January 1994.

other laboratory analysis required by the disposal facility. Sample jars will be labeled and a chain-of-custody form will be prepared.



Additional characterization sampling for off-Site disposal will likely be required by the disposal facility. If the analytical results indicate that the soil/fill is a solid waste, the material shall be properly disposed off-site at a non-hazardous waste facility. Alternatively, the excavated soil may be considered “clean” and reused as fill on-Site or at other projects. Stockpiled soil cannot be transported on- or off-site until the analytical results are received, and NYSDEC has been notified and approves the final deposition location.

9.20 SUBGRADE MATERIAL

Subgrade material used to backfill excavations or placed to increase Site grades or elevations shall meet the following criteria.

- Excavated on-Site soil/fill, which appears to be visually impacted, shall be sampled and analyzed. If analytical results indicate that the contaminants, if any, are present at concentrations below the NYSDEC TAGM 4046 recommended soil cleanup objectives (RSCOs), the soil/fill can be used as backfill on-Site.
- Off-Site fill material brought to the Site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination.
- Off-Site soil intended for use as Site backfill can not otherwise be defined as a solid waste in accordance with 6 NYCRR Part 360-1.2(a).

- If the contractor designates a source as “virgin” soil, it shall be further documented in writing to be native soil material from areas not having supported any known industrial or commercial development or agricultural use.
- Non-virgin soils will be tested via collection of one composite sample per 500 tons of material from each source area. If more than 1,000 tons of soil are borrowed from a given off-Site non-virgin soil source area and results of chemical analysis on both samples of the first 1,000 tons meet TAGM 4046 RSCOs, then the sample collection frequency will be reduced to one composite sample for every 2,500 tons of additional soil from the same source, up to 5,000 cubic yards. For borrow sources greater than 5,000 tons, sampling frequency may be reduced to one sample per 5,000 tons, provided all earlier samples meet TAGM 4046 RSCOs.



10.00 COMMUNITY AIR MONITORING




If contaminated soils are identified on-Site, community air monitoring for dust and volatile organic compound levels at the perimeter of the work area will be conducted as follows during intrusive activities below existing pre-construction ground elevations, within areas of concern.

Volatile organic compounds shall be monitored at the downwind perimeter of the work area on a continuous basis with equipment that is able to calculate 15-minute running average concentrations.

- If total organic vapor levels exceed 5 ppm above background, for the 15-minute average, work activities shall be temporarily halted until readings decrease below the 5 ppm threshold.
- If total organic vapor levels exceed 5 ppm but are less than 25 ppm for the 15-minute average, work activities shall be halted and the source of vapors identified, corrective actions taken and monitoring continued. Work activities can continue provided the total organic vapor level 200-feet downwind or half the distance to the nearest receptor or residential/commercial structure (whichever is less) is below 5 ppm for the 15-minute average.
- If the organic vapor level is above 25 ppm at the downwind perimeter of the work area, work activities must be halted.

If, following the cessation of the work activities, or as a result of an emergency, organic levels persist above 5 ppm above background 200-feet downwind or half the distance to the nearest residential or commercial property from the work area, then the air quality must be monitored within 20-feet of the perimeter of the nearest residential or commercial structure (20 Foot Zone). If efforts to abate the emission source are unsuccessful and

levels at 5 ppm or greater above background persist for more than 30 minutes in the 20 Foot Zone, then the following shall automatically be placed into effect.

- 
- The local police authorities, fire department and the Developer and Construction Manager will immediately be contacted by the Safety Officer and advised of the situation.
 - Frequent air monitoring will be conducted at 30-minute intervals within the 20 Foot Zone.
 - If two successive readings below action levels are measured, air monitoring may be halted or modified by the GZA field staff.

Community air monitoring for particulates (dust) shall be monitored at an upwind and downwind location continuously during excavation activities below preconstruction/existing ground surface elevations. Particulate monitoring shall be done using equipment that is capable of measuring particle size in the 10-micrometer range (PM-10) and can integrate measurements over a 15-minute time frame. The equipment shall also have an audible alarm indicating an exceedance of the action level.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind) for the 15-minute average period or if visible air borne dust is noted leaving the work area, then dust suppression techniques (wetting, lower drop heights, etc) shall be employed.
- If downwind PM-10 particulate levels are greater than $150 \text{ mcg}/\text{m}^3$ above the upwind level, work must stop and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls (if needed) are successful in reducing the downwind PM-10 particulate concentration to within $150 \text{ mcg}/\text{m}^3$ of the upwind level and in preventing visible dust migration from the work area.

Equipment is to be calibrated daily. 15-minute recordings for organic vapor and particulates shall be recorded and a copy maintained on-Site.



TABLES

Table 1: Summary of Soil Analysis
Soils Site Management Plan
Special Metals Corp.
Dunkirk, New York

EPA	CAS	Units	Recommended Soil Cleanup Objective ¹	Eastern USA Background	B-1, S-6, 10-12'	B-3, S-1, 0-2'	PC-2, S-1, 1-3'	B5-A, S-5, 11-13 Ft	B-6 S-2, 2-4'
8260	71-43-2	mg/kg (ppm)	0.06		ND	0.082	ND	ND	ND
8270									
8082									
POLYCHLORINATED BIPHENYLS									
	Aroclor 1268	mg/kg (ppm)			ND	ND	ND	ND	ND
	Aroclor 1262	mg/kg (ppm)			ND	ND	ND	ND	ND
	Aroclor 1260	mg/kg (ppm)			ND	ND	ND	ND	ND
	Aroclor 1254	mg/kg (ppm)			ND	ND	ND	ND	ND
	Aroclor 1248	mg/kg (ppm)			ND	ND	ND	ND	ND
	Aroclor 1242/1016	mg/kg (ppm)			ND	ND	ND	ND	ND
	Aroclor 1232	mg/kg (ppm)			ND	ND	ND	ND	ND
	Aroclor 1221	mg/kg (ppm)			ND	ND	ND	ND	ND
6010B									
RCRA METALS									
	Silver	mg/kg (ppm)			1.86	3.48	7.07	7.32	1.94
	Arsenic	mg/kg (ppm)			67	89.1	64.3	106	81.8
	Barium	mg/kg (ppm)			ND	ND	ND	ND	ND
	Cadmium	mg/kg (ppm)			14.6	13.8	31.3	14.5	13.7
	Chromium	mg/kg (ppm)			ND	0.0399	ND	ND	0.0393
	Mercury	mg/kg (ppm)			5.2	18.7	18.6	12.8	12.6
	Lead	mg/kg (ppm)			ND	ND	ND	ND	ND
7471A									
	Selenium	mg/kg (ppm)			ND	ND	ND	ND	ND

Notes:

¹ Recommended soil cleanup objective obtained from Technical and Administrative Guidance Memorandum #4046
Determination of Soil Cleanup Objectives and Cleanup Levels; NYSDEC, Division of Environmental Remediation.

SB Site Background

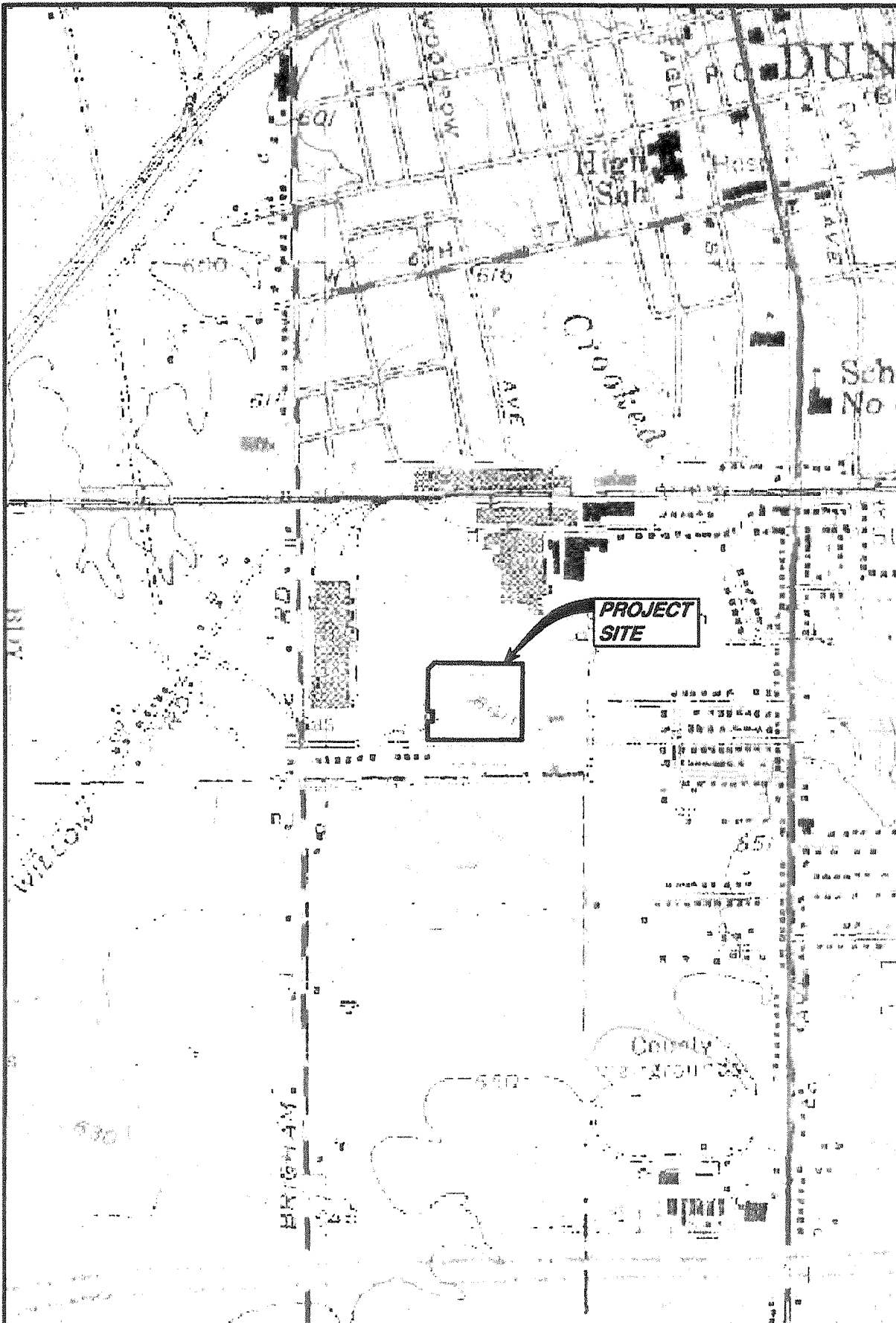
ND Not Detected

Table 2: Summary of Construction Material Analysis
Soils Site Management Plan
Special Metals Corp.
Dunkirk, New York

CAS		Units	Paint - 1	Paint - 2	Paint - 3	Paint - 4	Wipe - 1	Wipe - 2	Wipe - 3	Wipe - 4	Wipe - 5	Wipe - 6	Wipe - 7	Wipe - 8
EPA 8082	POLYCHLORINATED BIPHENYLS													
	Aroclor 1268	11100-14-4	ug/wipe	NT	NT	NT	NT	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Aroclor 1262	37324-23-5	ug/wipe	NT	NT	NT	NT	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Aroclor 1260	11096-82-5	ug/wipe	NT	NT	NT	NT	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Aroclor 1254	11097-68-1	ug/wipe	NT	NT	NT	NT	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Aroclor 1248	12672-29-6	ug/wipe	NT	NT	NT	NT	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Aroclor 1242/1016	53469-21-9	ug/wipe	NT	NT	NT	NT	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Aroclor 1232	11141-16-5	ug/wipe	NT	NT	NT	NT	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Aroclor 1221	11104-28-2	ug/wipe	NT	NT	NT	NT	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	LEAD ANALYSIS													
EPA 6010B	Lead	7439-92-1	mg/kg (ppm)	191,000	199,000	114,000	189,000	NT	NT	NT	NT	NT	NT	NT

Notes: NT Not Tested

FIGURES



DRAWN BY: DEW

DATE: APRIL 2006



GZA GeoEnvironmental of
New York

SCALE IN FEET



SPECIAL METALS CORPORATION

DUNKIRK FACILITY

100 WILLOWBROOK AVENUE
DUNKIRK, NEW YORK

SOILS AND SITE MANAGEMENT PLAN

LOCUS PLAN

PROJECT No.

21.P000044.07

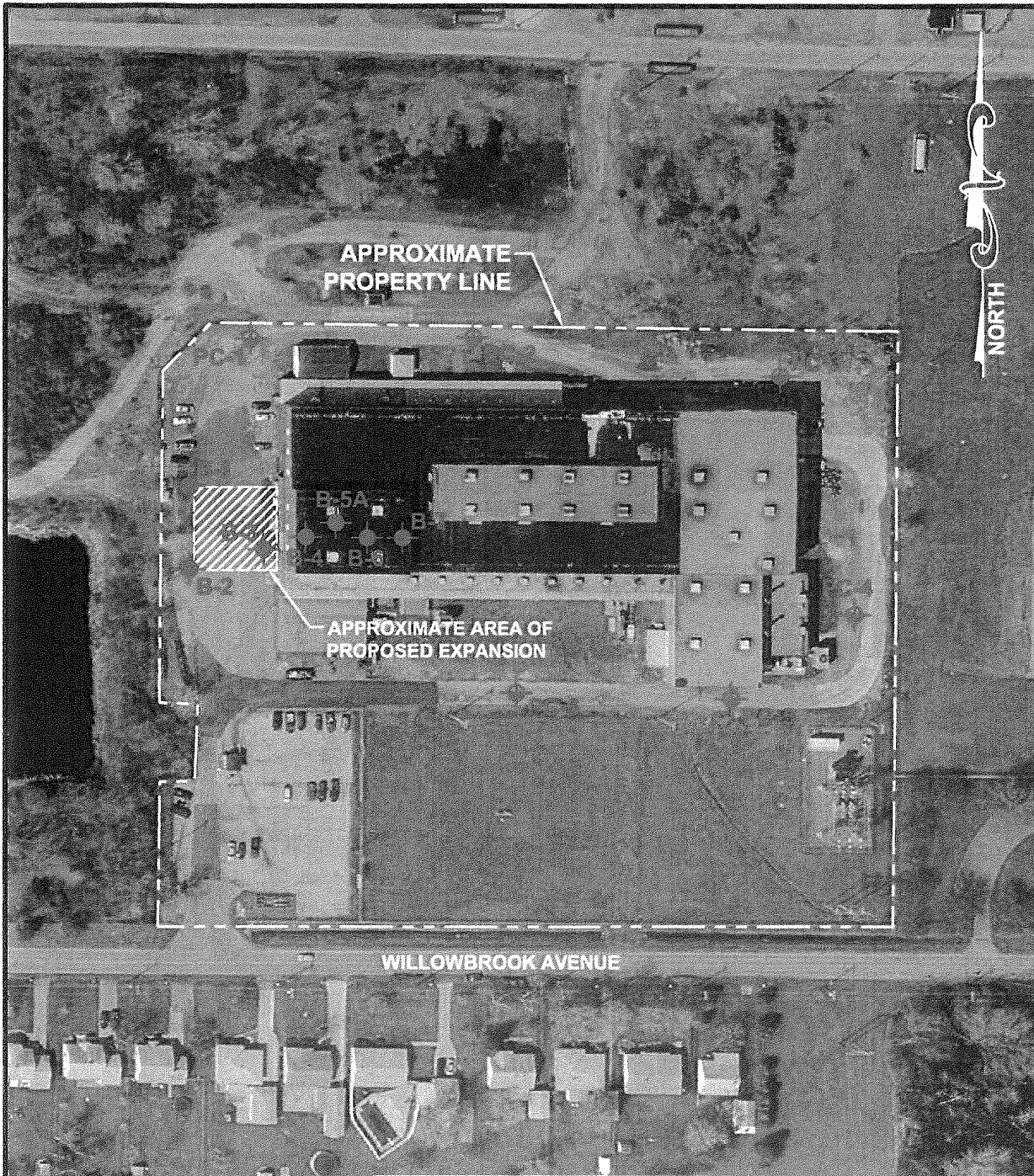
FIGURE No.

1

NOTE:

BASE MAP ADAPTED FROM U.S.G.S.
TOPOGRAPHIC MAPS DOWNLOADED
FROM TERRASERVER.MICROSOFT.COM





LEGEND:



APPROXIMATE LOCATION AND DESIGNATION OF
SOIL BORING DONE BY SJB SERVICES, INC.
JUNE 1-9, 2006



APPROXIMATE LOCATION AND DESIGNATION OF
PAVEMENT CORE DONE BY SJB SERVICES, INC.
JUNE 1, 2006

NOTES:

1. BASE MAP ADAPTED FROM A 2004 AERIAL PHOTOGRAPH DOWNLOADED FROM http://www.nysgis.state.ny.us/gateway/mg/interactive_main.html, AND FIELD OBSERVATIONS.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

SPECIAL METALS CORPORATION

DUNKIRK FACILITY

100 WILLOWBROOK AVENUE

DUNKIRK, NEW YORK

SOILS AND SITE MANAGEMENT PLAN

OVERALL SITE PLAN

APPROXIMATE SCALE IN FEET



DRAWN BY: DEW

DATE: JULY 2006



**GZA GeoEnvironmental of
New York**

PROJECT No.

21.0056196.00

FIGURE No.

2

APPENDIX B
SOIL DISPOSAL DOCUMENTATION

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NYD057982993		2. Page 1 of 1	3. Emergency Response Phone (315) 798-2000		4. Manifest Tracking Number 000061568 JJK				
		5. Generator's Name and Mailing Address Special Metals Corp. 100 Walworth Avenue Dunkirk NY 14045		Generator's Site Address (if different than mailing address)							
6. Transporter 1 Company Name Freehold Carriage, Inc.		U.S. EPA ID Number NJD054128164									
7. Transporter 2 Company Name		U.S. EPA ID Number									
8. Designated Facility Name and Site Address CWM Chemical Services, LLC 1550 Balmer Road, PO Box 200 Model City NY 14107		U.S. EPA ID Number NYD049830679									
Facility's Phone: 716 754-8231											
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) 1. POLYCHLORINATED BIPHENYLS, solid 9, UN3092, III			10. Containers		11. Total Quantity EST 14545	12. Unit Wt./Vol. K	13. Waste Codes 8007 L		
					No.	Type					
14. Special Handling Instructions and Additional Information (15) VC 1765 TSCA Solis, ERGM 71, Accumulated for disposal on: 9/6/06 81608911											
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/Offoror's Printed/Typed Name - PAB DIVENDI					Signature <i>[Signature]</i>			Month Day Year 09/22/06			
INT'L	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> 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	Transporter 1 Printed/Typed Name LEIGH TPIE					Signature <i>[Signature]</i>			Month Day Year 09/22/06		
	Transporter 2 Printed/Typed Name					Signature <i>[Signature]</i>			Month Day Year		
DESIGNATED FACILITY	18. Discrepancy										
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Artificial Bead 19242K										
	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. H132			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 Billie Connor					Signature <i>[Signature]</i>			Month Day Year 9/22/06			

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NYD057982993		2. Page 1 of 1		3. Emergency Response Phone (315) 798-2800		4. Manifest Tracking Number 000061568 JJK				
		5. Generator's Name and Mailing Address 100 Wadsworth Ave Dunkirk NY 14048						Generator's Site Address (if different than mailing address)				
Generator's Phone: 315 525-4340		6. Transporter 1 Company Name Francia Carriage, Inc.						U.S. EPA ID Number NJ0054120134				
7. Transporter 2 Company Name								U.S. EPA ID Number				
8. Designated Facility Name and Site Address CVM Chemical Services, LLC 1550 Sabier Road, PO Box 200 Model City NY 14107								U.S. EPA ID Number NYD049838670				
Facility's Phone: 716 754-8231												
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) 1 PC Polychlorinated biphenyls, solid 9, UN3432, III				10. Containers		11. Total Quantity EST 14545	12. Unit Wt./Vol. K	13. Waste Codes 6007 L		
						No.	Type					
	X		001	CM								
14. Special Handling Instructions and Additional Information (S) VCT/No TSCA Solns, ERG171, Accumulated for disposal on: 9/6/06												
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/Offor's Printed/Typed Name BOB DIFONDI						Signature <i>Bob Difondi</i>		Month Day Year 09 22 06				
TRANSPORTER	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> 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 LEIGH PRUE						Signature <i>Leigh Prue</i>		Month Day Year 09 22 06			
	Transporter 2 Printed/Typed Name						Signature		Month Day Year			
DESIGNATED FACILITY	18. Discrepancy											
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> 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.			
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						Signature		Month Day Year				

Disposal Standards for NY State Regulated Hazardous PCB Wastes

GENERATOR NAME: Special Metals Corp.

MANIFEST # 000061568 JJK

PROFILE # VC1796

The following NY State regulated wastes and land restricted in the State of New York and are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

☐ B001

☐ B002

☐ B003

☐ B004

☐ B005

☐ B006

☒ B007

Certification - Waste Meets Treatment Standards

☒ I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

☐ I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in Part 376.4 (f). This waste must be treated to the applicable standards set forth in 6 NYCRR Part 376.4(f) prior to land disposal.

GENERATOR SIGNATURE: _____

Bobbi Fondi

TITLE: _____

ENV. COORD

DATE: _____

8/21/06



FREEHOLD CARTAGE INC.
P.O. BOX 5010 • FREEHOLD, NJ 07728-5010
(732) 462-1001 • FAX (732) 308-0924

FCI EPA ID NO. NJD054126164

Q 73919

114 Schoolground Rd.
Branford, CT 06405
Phone: (203) 483-5964
Fax: (203) 483-5984

350 Pigeon Point Road
New Castle, DE 19720
Phone: (302) 658-2005
Fax: (302) 658-6229

175 Bartow Mun. Airport
Bartow, FL 33830
Phone: (863) 533-4599
Fax: (863) 533-1613

5533 Dunham Road
Maple Heights, OH 44137
Phone: (330) 835-3473
Fax: (330) 835-3732

108 Monahan Avenue
Dunmore, PA 18512
Phone: (570) 342-7232
Fax: (570) 342-7367

40 Boulevard St.
Sumter, SC 29150
Phone: (803) 773-2611
Fax: (803) 773-2942

SHIPPER NAME/ADDRESS <i>SPECIAL METALS CORP</i>		PHONE (AREA CODE) <i>504</i>		TRAILER <i>705</i>		APPOINTMENT TIME :	
FCI REP. LOADING (PRINT) <i>PAF</i>	PROCEDURE <i>REMOVE</i>	EQUIP. SPOTTED	EQUIP. REMOVED <i>04/02</i>	TIME AT SHIPPER (MILITARY TIME ONLY) :		ARRIVAL TIME DEPARTURE TIME	
COMMENTS OR DELAYS AT SHIPPER				EQUIPMENT USED			

BROKER:

PO #: WO #:

MANIFEST / DOCUMENT NO.

PROPER U.S. D.O.T. SHIPPING NAME	U.S. D.O.T. HAZARDOUS CLASS	NA/UN/NO.	PACKING GROUP	NO. CONT.	CONT. TYPE	NET QUANTITY	UNIT MEASURE	WASTE NO.	FORM
1 <i>hazardous solid</i>	<i>9</i>	<i>3077</i>	<i>TIT</i>	<i>1</i>	<i>M</i>	<i>30</i>	<i>40</i>		
2 <i>PCB's</i>									
3									

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION NUMBER.

SHIPPER'S CERTIFICATION: This is to certify 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, U.S. EPA and the State. The materials described above were consigned to the Transporter named. The consignee can and will accept the shipment and has a valid permit to do so if required. I certify that the foregoing is true and correct to the best of my knowledge.

Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the shipper is obligated to pay the agreed rate offered to the contractor.

PLEASE PRINT NAME/TITLE <i>Ed. D...</i>	SHIPPER'S SIGNATURE <i>X</i> <i>[Signature]</i>	DATE LOADED <i>9/22/06</i>
I HAVE READ THE ABOVE AND UNDERSTAND AND AGREE TO ALL OF ITS CONTENT.		MO. DAY YR.

CONSIGNEE NAME/ADDRESS <i>CWH</i>		PHONE (AREA CODE) <i>594</i>		TRAILER <i>200</i>		APPOINTMENT TIME :	
FCI REP. UNLOADING (PRINT) <i>True</i>	PROCEDURE <i>drop</i>	EQUIP. SPOTTED	EQUIP. REMOVED	TIME AT CONSIGNEE (MILITARY TIME ONLY) :		ARRIVAL TIME DEPARTURE TIME	
COMMENTS OR DELAYS AT CONSIGNEE				EQUIPMENT USED			

PLEASE PRINT NAME/TITLE	CONSIGNEE SIGNATURE <i>X</i> _____	DATE UNLOADED <i>9/22/06</i>
		MO. DAY YR.

AR H-0257	MD HWH-167	MO H-1490	OH UPW-0190713-OH	TX 40705
CT CT-HW-307	2001-OPV-2335	ND WH-429	OK UPW-0190713-OH	WI 11602
DE DE-HW-203	ME ME-HWT-47	NH TNH-0047	ONTARIO, CANADA A 840943	WV UPW-0190713-OH
DE-SW-203	ME-WOT-47	NJ S-2265	PA PA-AH-0067	
IL UPW-0190713-OH	MI UPW-0190713-OH	15939	QUEBEC, CANADA QC-6ML-047	
MA MA-294	MN UPW-0190713-OH	NY NJ-113	RI RI-535	

White - FCI Original
Yellow - FCI Billing
Blue - FCI Office/Customer
Green - Retained by TSDF
Gold - Retained by Generator

Q 73919



CWM CHEMICAL SERVICES, LLC

1550 Balmer Road
P.O. Box 200
Model City, NY 14107
(716) 754-8231
(716) 754-0211 Fax

SPECIAL METALS CORP
ATTN: ENVIRONMENTAL COMPLIANCE DEPT
NYD057982993
100 WILLOWBROOK AVE
DUNKIRK NY 14048

CERTIFICATE OF DISPOSAL

CWM CHEMICAL SERVICES, L.L.C., EPA ID: NYD049836679, has received waste material from SPECIAL METALS CORP on 09/22/06 as described on Shipping Document number 000061568JJK 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: VC1796
CWM Tracking ID: 8160881101
CWM Unit #: 1*0
Disposal Date: 09/22/06

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.

RICHARD STURGES
DISTRICT MANAGER
Certificate # 296593
09/25/06

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

PLEASE PRINT IN INK OR TYPE

Service Agreement on File? ☒ YES ☐ NO
☒ Hazardous ☐ Non-Hazardous ☒ TSCAProfile Number: VC1796
Renewal Date: / /**A. Waste Generator Information**

1. Generator Name: Special Metals Corp. 2. SIC Code: 331112
3. Facility Street Address: 100 Willowbrook Ave 4. Phone: (315) 525-4340
5. Facility City: Dunkirk 6. State/Province: NY
7. Zip/Postal Code: 14048 8. Generator USEPA/Federal ID #: NYD 057 982 993
9. County: Chautauqua 10. State/Province ID#: N/A
11. Customer Name: Waste Technology Services, Inc 12. Customer Phone: (716) 754-5400
13. Customer Contact: Dean F. Cattieu 14. Customer Fax: (716) 754-8001
15. Billing Address: 435 North 2nd Street, Lewiston, NY 14092 ☐ Same as above

B. Waste Stream Information**1. Description**

a. Name of Waste: Soil contaminated w/ PCBs WTS# 24147
b. Process Generating Waste: Utility trench installation produced soils w/ PCBs - source unknown

c. Color <u>Brown</u>	d. Strong odor (describe): <u>none</u>	e. Physical state @ 70 F <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Gas <input type="checkbox"/> Sludge <input type="checkbox"/> Other	f. Layers <input checked="" type="checkbox"/> Single Layer <input type="checkbox"/> multi-layer	g. Free liquid range <u>0</u> to <u>0</u> % h. pH: Range <u>5</u> to <u>9</u> %
--------------------------	---	---	---	--

1. Liquid Flash Point: ☐ <73 F ☐ 73-99 F ☐ 100-139 F ☐ 140-199 F ☐ ≥ 200 F ☒ Not applicable
j. Chemical Composition (List all constituents [including halogenated organics, debris, and UHC's] present in any concentration and submit representative analysis):

Constituents	Concentration Range	Constituents	Concentration Range
Soil contaminated w/ PCBs	99-100%		
Polychlorinated Biphenyls	31 ppm		
(see attached analysis)			

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

- k. ☐ Oxidizer ☐ Pyrophoric ☐ Explosive ☐ Radioactive
☐ Carcinogen ☐ Infectious ☐ Shock Sensitive ☐ Water Reactive

- l. Does the waste represented by this profile contain any of the carcinogens which require OSHA notification? (list in Section B.1.j) ☐ YES ☒ NO
m. Does the waste represented by this profile contain dioxins? (list in Section B.1.j) ☐ YES ☒ NO
n. Does the waste represented by this profile contain asbestos? ☐ YES ☒ NO
If yes ☐ friable ☐ non-friable
o. Does the waste represented by this profile contain benzene? ☐ YES ☒ NO
If yes, concentration _____ ppm
Is the waste subject to the benzene waste operations NESHAP? ☐ YES ☒ NO
p. Is the waste subject to RCRA Subpart CC controls? ☐ YES ☒ NO
If no, does the waste meet the organic LDR Exemption? ☐ YES ☒ NO
If no, does the waste contain <500 ppmw volatile organic (VO)? ☒ YES ☐ NO
Volatile organic concentration 0 ppmw
q. Does the waste contain any Class I or Class II ozone-depleting substances? ☐ YES ☒ NO
r. Does the waste contain debris? (list in Section B.1.j) ☐ YES ☒ NO
s. Is the waste subject to controls as a Group 1 wastewater or residual under the HON? ☐ YES ☒ NO
If yes, is it a Table 8 _____ or Table 9 _____ compound?

2. Quantity of WasteEstimated Annual Volume 20-100 ☒ Tons ☐ Yards ☐ Drums ☐ Other (specify) _____**3. Shipping Information****a. Packaging:**☒ Bulk Solid; Type/Size: 30 yd. rolloff
☐ Drum; Type; Size: _____☐ Bulk Liquid; Type/Size: _____
☐ Other: _____

- b. Shipping Frequency: Units 20-100 Tons Per ☐ Month ☐ Quarter ☒ Year ☐ One time ☐ Other _____
- c. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If no, skip d, e, and f) ☒ YES ☐ NO
- d. Reportable Quantity (lbs.; kgs.): 1 lbs e. Hazard Class/ID #, 9, UN3432, III (PCB's)
- f. USDOT Shipping Name: RQ Polychlorinated biphenyls, solid
- g. Personal Protective Equipment Requirements: Level C recommended
- h. Transporter/Transfer Station: CWM - Model City

C. Generator's Certification: (Please check appropriate responses, sign, and date below.)

1. Is this a USEPA hazardous waste (40 CFR Part 261)? If the answer is no, skip to 2 ☐ YES ☒ NO
a. If yes, identify ALL USEPA listed and characteristic waste code numbers (D, F, K, P, U) _____
- b. If a characteristic hazardous waste, do underlying hazardous constituents (UHCs) apply? (If yes, list in Section B.1.) ☐ YES ☐ NO
- c. Does this waste contain debris? (If yes, list size and type in Chemical Composition - B.1.) ☐ YES ☐ NO
2. Is this a state hazardous waste? ☒ YES ☐ NO
Identify ALL state hazardous waste codes B007
3. Is the waste from a CERCLA (40 CFR 300, Appendix B) or state mandated clean-up? ☐ YES ☒ NO
If yes, attach Record of Decision (ROD), 104/106 or 122 order or court order that governs site clean-up activity. For state mandated clean-up provide relevant documentation.
4. Does the waste represented by this waste profile sheet contain radioactive material, or is disposal regulated by the Nuclear Regulatory Commission? ☐ YES ☒ NO
5. Does the waste represented by this waste profile sheet contain concentrations of Polychlorinated Biphenyls (PCBs) regulated by 40 CFR 761? (If yes, list in Chemical Composition - B.1.) ☒ YES ☐ NO
a. If yes, were the PCBs imported into the U.S.? ☐ YES ☒ NO
6. Do the waste profile sheet and all attachments contain true and accurate descriptions of the waste material, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor? ☒ YES ☐ NO
7. Will all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor? ☒ YES ☐ NO

☐ Check here if a Certificate of Destruction or Disposal is required.

Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. I authorize WM to obtain a sample from any waste shipment for purposes of recertification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Profile Sheet from information provided by the generator and additional information as it has determined to be reasonably necessary. If approved for management, Contractor has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.

Certification Signature: Robert DiFondi Title: Environmental Coordinator

Name (Type or Print): Robert DiFondi Company Name: Special Metals Corp. Date: 9/19/06

☒ Check if additional information is attached. Indicate the number of attached pages _____

D. WM Management's Decision**FOR WM USE ONLY**

1. Management Method ☐ Landfill ☐ Non-hazardous Solidification ☐ Bioremediation ☐ Incineration
☐ Hazardous Stabilization ☐ Other (Specify) _____
2. Proposed Ultimate Management Facility: _____
3. Precautions, Special Handling Procedures, or Limitation on Approval; _____
4. Waste Form _____ 5. Source _____ 6. System Type _____
- Special Waste Decision ☐ Approved ☐ Disapproved
- Salesperson's Signature: _____ Date: _____
- Division Approval Signature (Optional): _____ Date: _____
- Special Waste Approvals Person Signature: _____ Date: _____



179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

LABORATORY REPORT OF ANALYSIS

Client: Waste Technology Services, Inc. Lab Project No.: 06-2704
Client Job Site: Special Metals Lab Sample No.: 9023
Client Job No.: 6/14/1960 Sample Type: Soil
Field Location: Trench Soils with PCB Date Sampled: 9/8/2006
Date Received: 9/8/2006

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Cyanide Reactivity	9/11/2006	SW846, 7.3.3.2	ND<1 Non Reactive
Sulfide Reactivity	9/12/2006	SW846, 7.3.4.2	ND<10 Non Reactive

ELAP ID. No.: 10709

Comments: ND denotes Non Detected.
Hazardous Waste Regulatory Levels for Reactivity are as follows:
Sulfide - 500 mg/kg, Cyanide - 250 mg/kg.

Approved By Technical Director: _____


Bruce Hoogesteger



179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-33

Client: Waste Technology Services, Inc.

Lab Project No.: 06-2704

Client Job Site: Special Metals Dunkirk

Lab Sample No.: 9023

Client Job No.: N/A

Sample Type: TCLP Extract

Field Location: Trench Soils with PCB

Date Sampled: 09/08/2006

Field ID No.: N/A

Date Received: 09/08/2006

Laboratory Report for TCLP Metals Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Arsenic	09/12/2006	EPA 6010	<0.100	5.0
Barium	09/12/2006	EPA 6010	2.08	100
Cadmium	09/12/2006	EPA 6010	<0.025	1.0
Chromium	09/12/2006	EPA 6010	<0.050	5.0
Copper	09/12/2006	EPA 6010	0.053	N/A
Lead	09/12/2006	EPA 6010	<0.100	5.0
Mercury	09/12/2006	EPA 7470	<0.0020	0.2
Nickel	09/12/2006	EPA 6010	1.49	N/A
Selenium	09/12/2006	EPA 6010	<0.100	1.0
Silver	09/12/2006	EPA 6010	<0.050	5.0
Zinc	09/12/2006	EPA 6010	0.823	N/A

ELAP ID No.: 10958

Comments:

Approved By: _____

Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional sample information, including compliance with sample condition requirements upon receipt.

File ID:062704.xls



ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

Semi-Volatile Analysis Report for TCLP ExtractClient: **Waste Technology Services, Inc.**

Client Job Site: Special Metals Dunkirk

Lab Project Number: 06-2704

Client Job Number: N/A

Lab Sample Number: 9023

Field Location: Trench Soils with PCB

Date Sampled: 09/08/2006

Field ID Number: N/A

Date Received: 09/08/2006

Sample Type: TCLP Extract

Date Analyzed: 09/11/2006

Base / Neutrals	Results in ug / L	Regulatory Limits in ug / L
1,4-Dichlorobenzene	ND< 40.0	7,500
2,4-Dinitrotoluene	ND< 40.0	130
Hexachlorobenzene	ND< 40.0	300
Hexachlorobutadiene	ND< 40.0	500
Hexachloroethane	ND< 40.0	130
Nitrobenzene	ND< 40.0	200
Pyridine	ND< 40.0	500

Acids	Results in ug / L	Regulatory Limits in ug / L
Cresols (as m,p,o-Cresol)	ND< 80.0	200,000
Pentachlorophenol	ND< 100	100,000
2,4,5-Trichlorophenol	ND< 100	400,000
2,4,6-Trichlorophenol	ND< 40.0	2000

ELAP Number 10958

Method: EPA 8270C

Data File: S31193.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:


 Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

062704s1.xls



ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for TCLP ExtractClient: Waste Technology Services, Inc

Client Job Site: Special Metals
Dunkirk
Client Job Number: N/A
Field Location: Trench Soils with PCB
Field ID Number: N/A
Sample Type: TCLP Extract

Lab Project Number: 08-2704
Lab Sample Number: 9023
Date Sampled: 09/08/2006
Date Received: 09/08/2006
Date Analyzed: 09/12/2006

Compounds	Results in ug / L	Regulatory Limits in ug / L
Benzene	ND< 20.0	500
2-Butanone	ND< 50.0	200,000
Carbon Tetrachloride	ND< 20.0	500
Chlorobenzene	ND< 20.0	100,000
Chloroform	ND< 20.0	6,000
1,2-Dichloroethane	ND< 20.0	500
1,1-Dichloroethene	ND< 20.0	700
Tetrachloroethene	ND< 20.0	700
Trichloroethene	ND< 20.0	500
Vinyl chloride	ND< 20.0	200

ELAP Number 10956

Method: EPA 8260B

Data File: V39068.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____

Bruce Hoogestetter, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

062704V1.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 547-2530 • (800) 724-1997
FAX: (585) 547-3311

CHAIN OF CUSTODY

COMPANY: Waste Technology Services, Inc.
ADDRESS: 435 N 2nd St
CITY: Lehigh Valley
STATE: PA
ZIP: 18001
PHONE: (610) 754-5400
FAX: 716 754 8801
ATTN: Dean Cathers
COMMENTS: WTSPO 22081

LAB PROJECT #: 06-2704
CLIENT PROJECT #:
TURNAROUND TIME (WORKING DAYS): ASAP
QUOTE #: due 9/12 per J.H.

PROJECT NAME(SITE NAME): Special Metals Dunkirk
PERIOD: 9/8/06

DATE	TIME	COMPOSITE	GRADES	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINER NUMBERS	REMARKS	PARADIGM LAB SAMPLE NUMBER
9/8/06	930	X		Trench Soils with PGB	5	1	TCLP Metals TCLP Vol TCLP Semi Vol CN/S Reactivity Plus Co Ni Zn	9023
2								
3								
4								
5								
6								
7								
8								
9								
10								

Sample Condition: Per NELAP 2102.41/2422.43/244

Receipt Parameter
 Container Type: ☐ Y ☐ N
 Preservation: ☒ Y ☐ N
 Holding Time: ☒ Y ☐ N
 Temperature: 19°C iced - ☒ Y ☐ N
 Comments: Sent directly to lab

Sampled By: [Signature] **Date/Time:** 9/8/06 930 am
Relinquished By: [Signature] **Date/Time:** 11 am 9/8/06
Received By: Elizabeth A. Honch **Date/Time:** 11 am 9/8/06
Received @ Lab By: [Signature] **Date/Time:** 9/8/06 1600

Total Cost:
P.L.F.

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

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number	Form Approved, OMB No. 2050-0039	
		NYD057982993	1	(315) 798-2900	002632852 JJK		
5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address)					
Special Metals Corp. 100 Willowbrook Avenue Dunkirk NY 14048							
Generator's Phone: 315 525-4340							
6. Transporter 1 Company Name		U.S. EPA ID Number					
Hazmat Environmental Group Inc.		NYD980769947					
7. Transporter 2 Company Name		U.S. EPA ID Number					
		U.S. EPA ID Number					
8. Designated Facility Name and Site Address		U.S. EPA ID Number					
CWM Chemical Services, LLC 1550 Balmer Road, PO Box 200 Model City NY 14107		NYD049836679					
Facility's Phone: 716 754-8231							
GENERATOR	9a. HMI	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt/Vol	13. Waste Codes
	X	1. RQ Polychlorinated biphenyls, solid 9. UN3432, III	No.	Type	EST 9000	K	B007 L
		2.	001	CM			
		3.					
		4.					
14. Special Handling Instructions and Additional Information							
1(S) VC1796 TSCA Soils, ERG#171, Accumulated for disposal on: 12/2/06, WTS#23428, SR#820911							
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/Officer's Printed/Typed Name		Signature		Month Day Year			
Bob Difondi		Bob Difondi		10/23/07			
TRANSPORTER	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit:		Date leaving U.S.:		
	17. Transporter Acknowledgment of Receipt of Materials		Signature		Month Day Year		
	Transporter 1 Printed/Typed Name		Signature		Month Day Year		
Kevin Maggard		Kevin Maggard		10/23/07			
Transporter 2 Printed/Typed Name		Signature		Month Day Year			
DESIGNATED FACILITY	18. Discrepancy						
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
	18b. Alternate Facility (or Generator)						
	Manifest Reference Number:						
	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. H132 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		Signature		Month Day Year			
ETLEDN CARTON		Edison Carter		11/23/07			

02/16/2007 13:30

3157986854

B DIFONDI SPEC MET

PAGE 03

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 NYD057982993		2. Page 1 of 1		3. Emergency Response Phone (315) 798-2900		4. Manifest Tracking Number 002632831 JJK				
5. Generator's Name and Mailing Address Special Metals Corp. 100 Willowbrook Avenue Dunkirk NY 14048						Generator's Site Address (if different than mailing address)						
Generator's Phone: 315 525-4340						NYD980769947						
6. Transporter 1 Company Name Fischer Service, Inc. HAZMAT ENVIRONMENTAL GROUP						U.S. EPA ID Number NYD054125154						
7. Transporter 2 Company Name						U.S. EPA ID Number						
8. Designated Facility Name and Site Address CWM Chemical Services, LLC 1550 Balmer Road, PO Box 200 Model City NY 14107						U.S. EPA ID Number						
Facility's Phone: 716 754-8231						NYD049835679						
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))				10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
						No.	Type					
	X	1. RQ Polychlorinated biphenyls, solid S, UN3432, III (RQ:)				001	CM	EST 16000	K	B007	L	
		2.										
		3.										
	4.											
14. Special Handling Instructions and Additional Information 1(XS) VC1796 TSCA Solis, ERG#171, Accumulated for disposal on: 12/12/06, WTS#23428. SR# 550811												
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 BOB DIFONDI						Signature Bob Difondi		Month Day Year 01/09/07				
INT'L	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> 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 ALFAL HIBBITTS						Signature [Signature]		Month Day Year 01/09/07			
	Transporter 2 Printed/Typed Name						Signature		Month Day Year			
DESIGNATED FACILITY	18. Discrepancy											
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection											
	18b. Alternate Facility (or Generator) Manifest Reference Number: _____ 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. H132		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 Angela Cadwalader						Signature Angela Cadwalader		Month Day Year 01/12/07				

APPENDIX C
SOIL PROBES LOGS

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE		9/16/06		END DATE		9/16/06	
GZA GEOENVIRONMENTAL REPRESENTATIVE		C. Boron					
WATER LEVEL DATA				TYPE OF DRILL RIG			
				Geoprobe 54 LT			
DATE				CASING SIZE AND DIAMETER			
TIME				2" diameter by 48" long			
WATER				OVERBURDEN SAMPLING METHOD			
CASING				Direct push			
				ROCK DRILLING METHOD			
				NA			
D E P T H	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)	
	Sample Number	DEPTH (FT)	RECOVERY (%)				
1		0 - 2	80	FILL - Olive Clayey SILT, some Sand, some Gravel, moist.	First attempt less than 10% recovery. Probe relocated in immediate vicinity.	ND	
2							
3		2 - 4	80	NATIVE - Olive Silty CLAY, trace Sand, trace Gravel, moist.		ND	
4							
5		4 - 6	75	Grades to: ...light brown, some Sand, trace Gravel.		1	
6							
7		6 - 8	75	Brown Clayey SILT, trace Sand, trace Gravel, moist.		ND	
8							
9		8 - 10	70	End of Probe at 12 ft bgs		ND	
10							
11		10 - 12	70			ND	
12							
13							
14							
15							
16							
17							
18							
19							
20							
S - Split Spoon Sample		NOTES: 1) Hnu PI-101 organic vapor meter used to					
C - Rock Core Sample		Meter was calibrated to the equivalent of 58 ppm benzene in air.					
General		1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.					
Notes:		2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.					

Probe No. SP-4

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE		9/16/06		END DATE		9/16/06	
GZA GEOENVIRONMENTAL REPRESENTATIVE		C. Boron					
WATER LEVEL DATA				TYPE OF DRILL RIG			
				Geoprobe 54 LT			
DATE				CASING SIZE AND DIAMETER			
TIME				2" diameter by 48" long			
WATER				OVERBURDEN SAMPLING METHOD			
CASING				Direct push			
				ROCK DRILLING METHOD			
				NA			
D E P T H	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)	
	Sample Number	DEPTH (FT)	RECOVERY (%)				
1		0 - 2	95	FILL - Brown SAND, little SILT, trace Gravel, moist.	ODOR	ND	
2				NATIVE - Olive Clayey SILT, trace Sand, trace Gravel, moist.			
3		2 - 4	95		ODOR	ND	
4							
5		4 - 6	45		ODOR	ND	
6							
7		6 - 8	45		ODOR	ND	
8							
9		8 - 10	45		ODOR	ND	
10							
11		10 - 12	45	Brown SAND and Silt, trace Gravel, moist to wet.	ODOR	ND	
12							
13				End of Probe at 12 ft bgs			
14							
15							
16							
17							
18							
19							
20							
S - Split Spoon Sample		NOTES: 1) Hnu PI-101 organic vapor meter used to					
C - Rock Core Sample		Meter was calibrated to the equivalent of 58 ppm benzene in air.					
General		1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.					
Notes:		2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.					

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE		9/16/06		END DATE		9/16/06	
GZA GEOENVIRONMENTAL REPRESENTATIVE		C. Boron					

WATER LEVEL DATA				TYPE OF DRILL RIG				Geoprobe 54 LT					
DATE		TIME		WATER		CASING		CASING SIZE AND DIAMETER		2" diameter by 48" long			
								OVERBURDEN SAMPLING METHOD		Direct push			
								ROCK DRILLING METHOD		NA			

D E P T H	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1		0 - 2	90	FILL - Gray GRAVEL, some Sand, moist.	ODOR	ND
				FILL - Light brown SILT, some Gravel, some Sand, moist.		
2						
		2 - 4	90		ODOR	ND
3						
4						
		4 - 6	100	NATIVE - Olive Clayey SILT, trace Sand, trace Gravel, moist.	ODOR	ND
5						
6						
		6 - 8	100	Grades to:...Brown, some sand, some Gravel.		ND
7						
8						
		8 - 8.6	15			
9				Refusal at 8.6 ft bgs.		
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General	1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
Notes:	2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

Probe No. SP-7

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE		9/16/06		END DATE		9/16/06	
GZA GEOENVIRONMENTAL REPRESENTATIVE		C. Boron					

WATER LEVEL DATA				TYPE OF DRILL RIG		Geoprobe 54 LT	
DATE	TIME	WATER	CASING	CASING SIZE AND DIAMETER		2" diameter by 48" long	
				OVERBURDEN SAMPLING METHOD		Direct push	
				ROCK DRILLING METHOD		NA	

D E P T H	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1		0 - 2	90	FILL - Brown SAND and Gravel, some SILT, moist. NATIVE - Olive Silty CLAY, trace Sand, trace Gravel, moist. Reddish brown Clayey SILT, trace Sand, trace Gravel, moist.	ODOR	ND
2						
3		2 - 4	90			
4						
5		4 - 6	80			
6						
7		6 - 7	80			
8		7 - 9	60			
9						
10		9 - 10.2	60			
11				Refusal at 10.2 ft bgs.		ND
12						
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General Notes: 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual. 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.	

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE 9/16/06		END DATE 9/16/06		GZA GEOENVIRONMENTAL REPRESENTATIVE		C. Boron	

WATER LEVEL DATA				TYPE OF DRILL RIG		Geoprobe 54 LT	
DATE	TIME	WATER	CASING	CASING SIZE AND DIAMETER		2" diameter by 48" long	
				OVERBURDEN SAMPLING METHOD		Direct push	
				ROCK DRILLING METHOD		NA	

D E P T H	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1		0 - 2	90	FILL - Gray GRAVEL, some Sand, some Silt, moist.	ODOR	ND
				NATIVE - Olive Clayey SILT, trace Sand, trace Gravel, moist.		
2						
		2 - 4	90		ODOR	ND
3						
4						
		4 - 6	60			ND
5						
				Grades to:....Light brown, some weathered Shale, trace Sand, trace Gravel.		
6						
		6 - 7	60			ND
7						
		7 - 9				
8						
						ND
9				Grades to:....Gray Clayey SILT.		
		9 - 10				
10						
		10 - 11.6		Grades to:....Reddish brown, trace Sand, trace Gravel.		ND
11						
12				Refusal at 11.6 ft bgs.		
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General Notes: 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual. 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.	

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE		9/16/06		END DATE		9/16/06	
GZA GEOENVIRONMENTAL REPRESENTATIVE				C. Boron			

WATER LEVEL DATA				TYPE OF DRILL RIG		Geoprobe 5400	
DATE	TIME	WATER	CASING	CASING SIZE AND DIAMETER		2" diameter by 48" long	
				OVERBURDEN SAMPLING METHOD		Direct push	
				ROCK DRILLING METHOD		NA	

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1		0 - 2	70	ASPHALT FILL - Gray GRAVEL, some Sand, some Silt, moist.	ODOR	ND
2				NATIVE - Olive Clayey SILT, trace Sand, trace Gravel, moist.		
3		2 - 4	70		ODOR	ND
4						
5		4 - 6	75		ODOR	ND
6				Olive Silty CLAY, trace Sand, trace Gravel, moist.		
7		6 - 8	75			ND
8						
9		8 - 10	75		ODOR	ND
10				Reddish brown Clayey SILT, some Sand, trace Gravel, moist.		
11		10 - 12	75			ND
12						
13				End of Probe at 12 ft bgs.		
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General Notes: 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual. 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.	

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE		9/16/06		END DATE		9/16/06	
GZA GEOENVIRONMENTAL REPRESENTATIVE		C. Boron					
WATER LEVEL DATA				TYPE OF DRILL RIG			
				Geoprobe 54 LT			
DATE				CASING SIZE AND DIAMETER			
TIME				2" diameter by 48" long			
WATER				OVERBURDEN SAMPLING METHOD			
				Direct push			
CASING				ROCK DRILLING METHOD			
				NA			
D E P T H	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)	
	Sample Number	DEPTH (FT)	RECOVERY (%)				
1		0 - 2	60	ASPHALT FILL - Brown SAND and Gravel, moist	ODOR	ND	
2							
3		2 - 4	60	NATIVE - Olive Clayey SILT, trace Sand, trace Gravel, moist.		ND	
4							
5		4 - 7	75			ND	
6				Grades to:....Light brown, some Gravel, trace Sand.			
7							
8		7 - 10	75			ND	
9				Grades to:....Reddish brown.			
10				Grades to:....Gray.			
11		10 - 12	90			ND	
12							
13				End of Probe at 12 ft bgs.			
14							
15							
16							
17							
18							
19							
20							
S - Split Spoon Sample		NOTES: 1) Hnu PI-101 organic vapor meter used to					
C - Rock Core Sample		Meter was calibrated to the equivalent of 58 ppm benzene in air.					
General		1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.					
Notes:		2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.					

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE		9/16/06		END DATE		9/16/06	
GZA GEOENVIRONMENTAL REPRESENTATIVE		C. Boron					

WATER LEVEL DATA				TYPE OF DRILL RIG		Geoprobe 54 LT	
DATE	TIME	WATER	CASING	CASING SIZE AND DIAMETER		2" diameter by 48" long	
				OVERBURDEN SAMPLING METHOD		Direct push	
				ROCK DRILLING METHOD		NA	

D E P T H	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1		0 - 2	70	ASPHALT FILL - Brown SAND, some Gravel, moist.	ODOR	ND
2				NATIVE - Olive Clayey SILT, trace Sand, trace Gravel, moist.	ODOR	ND
3		2 - 4	70			
4					ODOR	ND
5		4 - 6	80			
6				Olive Silty CLAY, some Sand, some Gravel, moist.	ODOR	ND
7		6 - 8	80			
8						
9		8 - 10	70	Light brown Clayey SILT, trace Sand, trace Gravel, moist.		ND
10						
11		10 - 12	70	Grades to:...Gray.		ND
12				End of Probe at 12 ft bgs.		
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General Notes: 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual. 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.	

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE		9/16/06		END DATE		9/16/06	
GZA GEOENVIRONMENTAL REPRESENTATIVE		C. Boron					

WATER LEVEL DATA				TYPE OF DRILL RIG				Geoprobe 54 LT							
DATE		TIME		WATER		CASING		CASING SIZE AND DIAMETER				2" diameter by 48" long			
								OVERBURDEN SAMPLING METHOD				Direct push			
								ROCK DRILLING METHOD				NA			

D E P T H	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1		0 - 2	70	ASPHALT	ODOR	ND
				FILL - Gray GRAVEL, some Sand, moist.		
2				NATIVE - Olive Clayey SILT, trace Sand, trace Gravel, moist.	ODOR	ND
		2 - 4	70			
3						
4				Grades to:....Reddish brown.		ND
		4 - 6	90			
5						
6				Olive Silty CLAY, trace Sand, trace Gravel, moist.		ND
		6 - 8	90			
7						
8				Reddish brown Clayey SILT, trace Sand, trace Gravel, moist.		ND
		8 - 10	70			
9				Grades to:....Gray.		
10						
		10 - 11.1	70			1
11						
12				Refusal at 11.1 ft bgs.		
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General Notes: 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual. 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.	

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE		9/16/06		END DATE		9/16/06	
GZA GEOENVIRONMENTAL REPRESENTATIVE		C. Boron					
WATER LEVEL DATA				TYPE OF DRILL RIG			
				Geoprobe 54 LT			
DATE				CASING SIZE AND DIAMETER			
TIME				2" diameter by 48" long			
WATER				OVERBURDEN SAMPLING METHOD			
CASING				Direct push			
				ROCK DRILLING METHOD			
				NA			
D E P T H	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)	
	Sample Number	DEPTH (FT)	RECOVERY (%)				
1		0 - 2	60	FILL - Light brown Silty CLAY, trace Sand, trace Gravel, moist.	ODOR	ND	
2							
3		2 - 4	60	Grades to:...Olive.	ODOR	ND	
4				NATIVE - Light brown Clayey SILT, trace Sand, trace Gravel, moist.			
5		4 - 6	100		ODOR	ND	
6				Olive Silty CLAY, trace Sand, trace Gravel, moist.			
7		6 - 8	100			ND	
8				Grades to:...Reddish brown.			
9		8 - 10	70			ND	
10							
11		10 - 12	70	Grades to:...Gray.		ND	
12							
13				End of Probe at 12 ft bgs.			
14							
15							
16							
17							
18							
19							
20							
S - Split Spoon Sample		NOTES: 1) Hnu PI-101 organic vapor meter used to					
C - Rock Core Sample		Meter was calibrated to the equivalent of 58 ppm benzene in air.					
General		1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.					
Notes:		2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.					

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE		9/16/06		END DATE		9/16/06	
GZA GEOENVIRONMENTAL REPRESENTATIVE				C. Boron			

WATER LEVEL DATA				TYPE OF DRILL RIG				Geoprobe 54 LT					
DATE		TIME		WATER		CASING		CASING SIZE AND DIAMETER		2" diameter by 48" long			
								OVERBURDEN SAMPLING METHOD		Direct push			
								ROCK DRILLING METHOD		NA			

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1		0 - 2	100	ASPHALT Gray GRAVEL, some Sand, moist.	ODOR	ND
2				NATIVE - Olive Clayey SILT, trace Sand, trace Gravel, moist.		
3		2 - 4	100		ODOR	ND
4						
5		4 - 6	60		ODOR	ND
6				Olive Silty CLAY, trace Sand, trace Gravel, moist.		
7		6 - 8	60		ODOR	ND
8						
9		8 - 10	50		ODOR	ND
10				Olive SILT and Sand, moist.		
11		10 - 12	50			ND
12						
13				End of Probe at 12 ft bgs.		
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General Notes: 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual. 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.	

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE		12/2/06		END DATE		12/2/06	
GZA GEOENVIRONMENTAL REPRESENTATIVE				C. Boron			

WATER LEVEL DATA				TYPE OF DRILL RIG		Geoprobe 54 LT	
DATE	TIME	WATER	CASING	CASING SIZE AND DIAMETER		2" diameter by 48" long	
				OVERBURDEN SAMPLING METHOD		Direct push	
				ROCK DRILLING METHOD		NA	

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1		0 - 2	90	FILL - Black Silty CLAY, trace Sand, trace Gravel, moist. Grades to: ... Yellowish Brown.	ODOR	ND
2						
3		2 - 4	90	NATIVE - Olive Clayey SILT, some Sand, trace Gravel, moist.		ND
4						
5		4 - 6	100			ND
6						
7		6 - 8	100	Reddish brown Silty CLAY, trace Sand, trace Gravel, moist.		ND
8						
9		8 - 10	60			ND
10						
11		10 - 10.4	60	Refusal at 10.4 ft. bgs.		ND
12						
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General Notes: 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual. 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.	

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE 12/2/06		END DATE 12/2/06		GZA GEOENVIRONMENTAL REPRESENTATIVE		C. Boron	

WATER LEVEL DATA				TYPE OF DRILL RIG		Geoprobe 54 LT	
DATE	TIME	WATER	CASING	CASING SIZE AND DIAMETER		2" diameter by 48" long	
				OVERBURDEN SAMPLING METHOD		Direct push	
				ROCK DRILLING METHOD		NA	

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1		0 - 2	90	FILL - Reddish Brown SILT, some Gravel, trace Sand, moist.	ODOR	1
2				Grades to: ... Dark Brown	ODOR	ND
3		2 - 4	90			
4						
5		4 - 4.5	40	Refusal at 4.5 ft. bgs.		ND
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General Notes: 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual. 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.	

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE		12/2/06		END DATE		12/2/06	
GZA GEOENVIRONMENTAL REPRESENTATIVE		C. Boron					

WATER LEVEL DATA				TYPE OF DRILL RIG		Geoprobe 54 LT	
DATE	TIME	WATER	CASING	CASING SIZE AND DIAMETER		2" diameter by 48" long	
				OVERBURDEN SAMPLING METHOD		Direct push	
				ROCK DRILLING METHOD		NA	

D E P T H	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)			
	Sample Number	DEPTH (FT)	RECOVERY (%)						
1		0 - 2	40	FILL - Reddish brown SILT, some Gravel, trace Sand, moist.	ODOR	2			
2				FILL - Brown Sand, some Silt, trace Clay, trace Gravel, moist.	ODOR	ND			
3		2 - 4	40	NATIVE - Olive Clayey SILT, some Sand, trace Gravel, moist.					
4				Grades to:... Yellowish brown, trace Sand, trace Gravel.			ND		
5		4 - 6	100						
6								Grades to:... Reddish brown.	ND
7		6 - 8	100						
8					Refusal at 11.6 ft bgs.	ND			
9		8 - 10	100						
10									
11		10 - 11.6	20						
12									
13									
14									
15									
16									
17									
18									
19									
20									

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General Notes: 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual. 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.	

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE		12/2/06		END DATE		12/2/06	
GZA GEOENVIRONMENTAL REPRESENTATIVE				C. Boron			

WATER LEVEL DATA				TYPE OF DRILL RIG				Geoprobe 54 LT							
DATE		TIME		WATER		CASING		CASING SIZE AND DIAMETER				2" diameter by 48" long			
								OVERBURDEN SAMPLING METHOD				Direct push			
								ROCK DRILLING METHOD				NA			

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1		0 - 2	100	FILL - Reddish Brown SILT, some Gravel, trace Sand, moist.	ODOR	ND
2						
3		2 - 4	100	NATIVE - Olive Clayey SILT, some Sand, trace Gravel, moist.	ODOR	ND
4						
5		4 - 6	100			ND
6						
7		6 - 8	100	Grades to:.... Reddish brown, trace Sand, trace Gravel.		ND
8						
9		8 - 10	100			ND
10						
11		10 - 12	75	Grades to:....Grey.		ND
12						
13				Refusal at 12 ft. bgs.		
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General Notes: 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual. 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.	

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE		12/2/06		END DATE		12/2/06	
				GZA GEOENVIRONMENTAL REPRESENTATIVE		C. Boron	

WATER LEVEL DATA				TYPE OF DRILL RIG		Geoprobe 54 LT	
DATE	TIME	WATER	CASING	CASING SIZE AND DIAMETER		2" diameter by 48" long	
				OVERBURDEN SAMPLING METHOD		Direct push	
				ROCK DRILLING METHOD		NA	

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1		0 - 2	90	FILL - Yellowish Brown SILT, some Gravel, trace Sand, moist. Grades to:.... Dark Brown Grades To:.... Yellosish brown.		ND
2						
3		2 - 3.6	90			
4				Refusal at 3.6 ft. bgs.		ND
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General Notes: 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual. 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.	

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE		12/2/06		END DATE		12/2/06	
GZA GEOENVIRONMENTAL REPRESENTATIVE				C. Boron			

WATER LEVEL DATA				TYPE OF DRILL RIG			
DATE	TIME	WATER	CASING	Geoprobe 54 LT			
				CASING SIZE AND DIAMETER			
				2" diameter by 48" long			
				OVERBURDEN SAMPLING METHOD			
				Direct push			
				ROCK DRILLING METHOD			
				NA			

D E P T H	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1		0 - 2	90	FILL - Brown Clayey SILT, some Gravel, trace Sand, moist. NATIVE - Olive Clayey SILT, some Sand, trace Gravel, moist.		ND
2						
3		2 - 4	90			
4						
5		4 - 6	100			
6						
7		6 - 8	100			
8						
9		8 - 10	100			
10						
11				Refusal at 9 ft bgs.		ND
12						
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General Notes: 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual. 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.	

CONTRACTOR <u>TREC Environmental Services</u>		BORING LOCATION <u>See Location Plan</u>	
DRILLER <u>J. Agar</u>		GROUND SURFACE ELEVATION <u>DATUM</u>	
START DATE <u>12/2/06</u> END DATE <u>12/2/06</u>		GZA GEOENVIRONMENTAL REPRESENTATIVE <u>C. Boron</u>	

WATER LEVEL DATA				TYPE OF DRILL RIG <u>Geoprobe 54 LT</u>	
DATE	TIME	WATER	CASING	CASING SIZE AND DIAMETER <u>2" diameter by 48" long</u>	
				OVERBURDEN SAMPLING METHOD <u>Direct push</u>	
				ROCK DRILLING METHOD <u>NA</u>	

D E P T H	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1		0 - 2	100	CONCRETE FILL - Brown Clayey SILT, some Gravel, trace Sand, moist.		ND
2				NATIVE - Olive Clayey SILT, trace Sand, trace Gravel, moist.		ND
3		2 - 4	100			ND
4						ND
5		4 - 6	100			ND
6				Olive Silty CLAY, trace Sand, trace Gravel, moist.		ND
7		6 - 7	100			ND
8		7 - 10	100			ND
9				Grades to.... Brown.		ND
10						
11				Refusal at 10 ft. bgs.		
12						
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.	
Notes: 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.	

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE 12/2/06		END DATE 12/2/06		GZA GEOENVIRONMENTAL REPRESENTATIVE		C. Boron	
WATER LEVEL DATA				TYPE OF DRILL RIG			
DATE				Geoprobe 54 LT			
TIME				CASING SIZE AND DIAMETER			
WATER				2" diameter by 48" long			
CASING				OVERBURDEN SAMPLING METHOD			
				Direct push			
				ROCK DRILLING METHOD			
				NA			
SAMPLE INFORMATION				SAMPLE DESCRIPTION		NOTES	
Sample Number		DEPTH (FT)		RECOVERY (%)			
1		0 - 2		100		FILL - Brown Clayey SILT, some Gravel, trace Sand, moist.	
2		2 - 4		100		NATIVE - Yellowish brown Clayey SILT, some Gravel, trace Sand, moist.	
3		4 - 6		100			
4		6 - 7		100			
5		7 - 9		90		Grades to:... Brown, moist to wet.	
6							
7							
8							
9							
10						Refusal at 9 ft. bgs.	
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
S - Split Spoon Sample				NOTES: 1) Hnu PI-101 organic vapor meter used to			
C - Rock Core Sample				Meter was calibrated to the equivalent of 58 ppm benzene in air.			
General Notes: 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.							
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.							

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE		12/2/06		END DATE		12/2/06	
GZA GEOENVIRONMENTAL REPRESENTATIVE		C. Boron					

WATER LEVEL DATA				TYPE OF DRILL RIG		Geoprobe 54 LT	
DATE	TIME	WATER	CASING	CASING SIZE AND DIAMETER		2" diameter by 48" long	
				OVERBURDEN SAMPLING METHOD		Direct push	
				ROCK DRILLING METHOD		NA	

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1		0 - 2	90	FILL - Brown Silty SAND, some Gravel, trace clay, moist.		ND
2						
3		2 - 4	90	NATIVE - Yellowish brown Silty CLAY, trace Sand, trace Gravel, moist.		ND
4						
5		4 - 6	100	Reddish brown Sandy SILT, some Clay, trace Gravel, moist.		ND
6						
7		6 - 7.6	50	Brown Silty CLAY, trace Sand, trace Gravel, moist.		ND
8		7.6 - 8.6	50			ND
9				Refusal at 8.6 ft. bgs.		
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General Notes: 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual. 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.	

CONTRACTOR		TREC Environmental Services		BORING LOCATION		See Location Plan	
DRILLER		J. Agar		GROUND SURFACE ELEVATION		DATUM	
START DATE 12/2/06		END DATE 12/2/06		GZA GEOENVIRONMENTAL REPRESENTATIVE		C. Boron	

WATER LEVEL DATA				TYPE OF DRILL RIG		Geoprobe 54 LT	
DATE	TIME	WATER	CASING	CASING SIZE AND DIAMETER		2" diameter by 48" long	
				OVERBURDEN SAMPLING METHOD		Direct push	
				ROCK DRILLING METHOD		NA	

D E P T H	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1		0 - 2	95	FILL - Brown Clayey SILT, some Gravel, trace Sand, moist.		ND
2						
3						
4						
5						
6		2 - 4	95	NATIVE - Olive Clayey SILT, some Sand, trace Gravel, moist.	ODOR	ND
7						
8						
9						
10						
11		4 - 6	100			ND
12						
13						
14						
15						
16		6 - 7	100			ND
17						
18						
19						
20						
		7 - 8.6	80	Grades to:.... Yellowish brown, trace Sand, trace Gravel.		ND
				Refusal at 8.6 ft. bgs.		

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General Notes: 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual. 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.	

CONTRACTOR <u>TREC Environmental Services</u>		BORING LOCATION <u>See Location Plan</u>	
DRILLER <u>J. Agar</u>		GROUND SURFACE ELEVATION <u>DATUM</u>	
START DATE <u>12/2/06</u> END DATE <u>12/2/06</u>		GZA GEOENVIRONMENTAL REPRESENTATIVE <u>C. Boron</u>	

WATER LEVEL DATA				TYPE OF DRILL RIG <u>Geoprobe 54 LT</u>	
DATE	TIME	WATER	CASING	CASING SIZE AND DIAMETER	<u>2" diameter by 48" long</u>
				OVERBURDEN SAMPLING METHOD	<u>Direct push</u>
				ROCK DRILLING METHOD	<u>NA</u>

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1		0 - 2	50	Brown Silty SAND, some Gravel, trace Clay, moist.	ODOR	ND
2						
3		2 - 4	50			
4						
5		4 - 6	100			
6						
7		6 - 8	100			
8						
9		8-9.7	100			
10						
11				NATIVE - Olive Clayey SILT, some Sand, trace Gravel, moist. Grades to:.... Reddish brown, trace Sand, trace Gravel.		ND
12						
13						
14						
15						
16						
17						
18						
19						
20						
				Refusal at 9.7 ft. bgs.		

S - Split Spoon Sample	NOTES: 1) Hnu PI-101 organic vapor meter used to Meter was calibrated to the equivalent of 58 ppm benzene in air.
C - Rock Core Sample	
General 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.	
Notes: 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.	

APPENDIX D
LABORATORY REPORTS



GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: MA092 NH: 2028
CT: PH0579 RI: LAO00236
NELAC - NYS DOH: 11063

ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Project No.: 21.0056196.10
Work Order No.: 0609-00138
Date Received: 09/19/2006
Date Reported: 09/27/2006

Chris Boron

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
09/16/2006	Solid	0609-00138 001	SP-1 2-4
09/16/2006	Solid	0609-00138 002	SP-1 8-10
09/16/2006	Solid	0609-00138 003	SP-3 2-4
09/16/2006	Solid	0609-00138 004	SP-4 0-2
09/16/2006	Solid	0609-00138 005	SP-4 2-4
09/16/2006	Solid	0609-00138 006	SP-5 4-6
09/16/2006	Solid	0609-00138 007	SP-6 2-4
09/16/2006	Solid	0609-00138 008	SP-7 2-4
09/16/2006	Solid	0609-00138 009	SP-8 2-4
09/16/2006	Solid	0609-00138 010	SP-9 0-2
09/16/2006	Solid	0609-00138 011	SP-12 6-8
09/16/2006	Solid	0609-00138 012	SP-16 2-4
09/16/2006	Solid	0609-00138 013	SP-2 2-4
09/16/2006	Solid	0609-00138 014	SP-5 6-8
09/16/2006	Solid	0609-00138 015	SP-9 6-7
09/16/2006	Solid	0609-00138 016	SP-16 0-2

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ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/19/2006**
Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 09/19/06 via __GZA courier, __x UPS, __FEDEX, or __hand delivered. The temperature of the __temperature blank/ __x cooler air, was 3.8 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8082 - PCBs

Attach QC 8082 09/19/06 - Solid

* The samples indicate the presence of more than one Aroclor product. The PCB concentrations are estimates as some PCB congeners are contained in more than one Aroclor mixture.

** The diluted out surrogate recoveries are due to the high levels of Aroclors found in the samples.
Attach QC

3. EPA Method 6010B/7471A - Metals

Attach QC 6010B 09/20/06 - Solid
Attach QC 7471A 09/20/06 - Solid

4. EPA Method 8260 - VOCs

The percent recoveries for the surrogates in the diluted runs are as follows:

SP-2 2-4: 1,2- Dichloroethane-D4 - 93.3%, Toluene-D8 - 96.3%, 4-Bromofluorobenzene - 103%

Attach QC 8260 09/22/06 A - Solid
Attach QC 8260 09/26/06 A - Solid

5. EPA Method 8270 - SVOCs

Attach QC 8270 09/20/06 - Solid



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/19/2006**
Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:

% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
DO = Diluted Out

Method Key:

Method 8260: The current version of the method is 8260B.
Method 8021: The current version of the method is 8021B.
Method 8270: The current version of the method is 8270C.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

The laboratory report shall not be reproduced except in full without the written consent of the laboratory.

Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/19/2006**
Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-1 2-4**
Sample Date: **09/16/2006**

Sample No.: **001**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		85.9	%	TAJ	09/20/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/20/2006
Aroclor 1268	EPA 8082	<120000	ug/kg	TAJ	09/20/2006
Aroclor 1262	EPA 8082	<120000	ug/kg	TAJ	09/20/2006
Aroclor 1260	EPA 8082	<120000	ug/kg	TAJ	09/20/2006
Aroclor 1254	EPA 8082	<120000	ug/kg	TAJ	09/20/2006
Aroclor 1248	EPA 8082	120000*	ug/kg	TAJ	09/20/2006
Aroclor 1242/1016	EPA 8082	150000*	ug/kg	TAJ	09/20/2006
Aroclor 1232	EPA 8082	<120000	ug/kg	TAJ	09/20/2006
Aroclor 1221	EPA 8082	<120000	ug/kg	TAJ	09/20/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	09/20/2006
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	DO	* % R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	DO	* % R	TAJ	09/20/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/19/2006
RCRA METALS				KMD	09/25/2006
Silver	EPA 6010B	<0.580	mg/kg	KMD	09/25/2006
Arsenic	EPA 6010B	6.55	mg/kg	KMD	09/25/2006
Barium	EPA 6010B	92.2	mg/kg	KMD	09/25/2006
Cadmium	EPA 6010B	<0.580	mg/kg	KMD	09/25/2006
Chromium	EPA 6010B	1530	mg/kg	KMD	09/25/2006
Mercury	EPA 7471A	<0.0241	mg/kg	AVD	09/22/2006
Lead	EPA 6010B	34.3	mg/kg	KMD	09/25/2006
Selenium	EPA 6010B	<2.90	mg/kg	KMD	09/25/2006
Metals Preparation	EPA 3051	99.6	DFS	AVD	09/20/2006



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Date Received: **09/19/2006**
Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-1 8-10**
Sample Date: **09/16/2006**

Sample No.: **002**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		93.4	%	TAJ	09/20/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/20/2006
Aroclor 1268	EPA 8082	<600	ug/kg	TAJ	09/20/2006
Aroclor 1262	EPA 8082	<600	ug/kg	TAJ	09/20/2006
Aroclor 1260	EPA 8082	<600	ug/kg	TAJ	09/20/2006
Aroclor 1254	EPA 8082	<600	ug/kg	TAJ	09/20/2006
Aroclor 1248	EPA 8082	<600	ug/kg	TAJ	09/20/2006
Aroclor 1242/1016	EPA 8082	<600	ug/kg	TAJ	09/20/2006
Aroclor 1232	EPA 8082	<600	ug/kg	TAJ	09/20/2006
Aroclor 1221	EPA 8082	<600	ug/kg	TAJ	09/20/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	62.4	% R	TAJ	09/20/2006
***Tetrachloro-m-xylene	EPA 8082	67.5	% R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	74.0	% R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	67.6	% R	TAJ	09/20/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/19/2006



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Date Received: **09/19/2006**
Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-3 2-4**
Sample Date: **09/16/2006**

Sample No.: **003**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		85.7	%	TAJ	09/20/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/19/2006
Aroclor 1268	EPA 8082	<100	ug/kg	TAJ	09/19/2006
Aroclor 1262	EPA 8082	<100	ug/kg	TAJ	09/19/2006
Aroclor 1260	EPA 8082	<100	ug/kg	TAJ	09/19/2006
Aroclor 1254	EPA 8082	<100	ug/kg	TAJ	09/19/2006
Aroclor 1248	EPA 8082	<100	ug/kg	TAJ	09/19/2006
Aroclor 1242/1016	EPA 8082	<100	ug/kg	TAJ	09/19/2006
Aroclor 1232	EPA 8082	<100	ug/kg	TAJ	09/19/2006
Aroclor 1221	EPA 8082	<100	ug/kg	TAJ	09/19/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	62.0	% R	TAJ	09/19/2006
***Tetrachloro-m-xylene	EPA 8082	57.6	% R	TAJ	09/19/2006
***Decachlorobiphenyl	EPA 8082	82.1	% R	TAJ	09/19/2006
***Decachlorobiphenyl	EPA 8082	74.5	% R	TAJ	09/19/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/19/2006



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Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-4 0-2**
Sample Date: **09/16/2006**

Sample No.: **004**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		89.4	%	TAJ	09/20/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/20/2006
Aroclor 1268	EPA 8082	<28000	ug/kg	TAJ	09/20/2006
Aroclor 1262	EPA 8082	<28000	ug/kg	TAJ	09/20/2006
Aroclor 1260	EPA 8082	<28000	ug/kg	TAJ	09/20/2006
Aroclor 1254	EPA 8082	<28000	ug/kg	TAJ	09/20/2006
Aroclor 1248	EPA 8082	32000	ug/kg	TAJ	09/20/2006
Aroclor 1242/1016	EPA 8082	<28000	ug/kg	TAJ	09/20/2006
Aroclor 1232	EPA 8082	<28000	ug/kg	TAJ	09/20/2006
Aroclor 1221	EPA 8082	<28000	ug/kg	TAJ	09/20/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	09/20/2006
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	DO	* % R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	DO	* % R	TAJ	09/20/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/19/2006



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Work Order No.: **0609-00138**

Sample ID: **SP-4 2-4**
Sample Date: **09/16/2006**

Sample No.: **005**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		88.0	%	TAJ	09/20/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/20/2006
Aroclor 1268	EPA 8082	<300	ug/kg	TAJ	09/20/2006
Aroclor 1262	EPA 8082	<300	ug/kg	TAJ	09/20/2006
Aroclor 1260	EPA 8082	<300	ug/kg	TAJ	09/20/2006
Aroclor 1254	EPA 8082	<300	ug/kg	TAJ	09/20/2006
Aroclor 1248	EPA 8082	<300	ug/kg	TAJ	09/20/2006
Aroclor 1242/1016	EPA 8082	<300	ug/kg	TAJ	09/20/2006
Aroclor 1232	EPA 8082	<300	ug/kg	TAJ	09/20/2006
Aroclor 1221	EPA 8082	<300	ug/kg	TAJ	09/20/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	58.4	% R	TAJ	09/20/2006
***Tetrachloro-m-xylene	EPA 8082	53.1	% R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	82.8	% R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	78.6	% R	TAJ	09/20/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/19/2006



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Date Received: **09/19/2006**
Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-5 4-6**
Sample Date: **09/16/2006**

Sample No.: **006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		88.6	%	TAJ	09/20/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/20/2006
Aroclor 1268	EPA 8082	<26000	ug/kg	TAJ	09/20/2006
Aroclor 1262	EPA 8082	<26000	ug/kg	TAJ	09/20/2006
Aroclor 1260	EPA 8082	<26000	ug/kg	TAJ	09/20/2006
Aroclor 1254	EPA 8082	<26000	ug/kg	TAJ	09/20/2006
Aroclor 1248	EPA 8082	26000*	ug/kg	TAJ	09/20/2006
Aroclor 1242/1016	EPA 8082	26000*	ug/kg	TAJ	09/20/2006
Aroclor 1232	EPA 8082	<26000	ug/kg	TAJ	09/20/2006
Aroclor 1221	EPA 8082	<26000	ug/kg	TAJ	09/20/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	09/20/2006
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	DO	* % R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	DO	* % R	TAJ	09/20/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/19/2006



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Work Order No.: **0609-00138**

Sample ID: **SP-6 2-4**
Sample Date: **09/16/2006**

Sample No.: **007**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		78.2	%	TAJ	09/20/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/20/2006
Aroclor 1268	EPA 8082	<50	ug/kg	TAJ	09/20/2006
Aroclor 1262	EPA 8082	<50	ug/kg	TAJ	09/20/2006
Aroclor 1260	EPA 8082	<50	ug/kg	TAJ	09/20/2006
Aroclor 1254	EPA 8082	<50	ug/kg	TAJ	09/20/2006
Aroclor 1248	EPA 8082	<50	ug/kg	TAJ	09/20/2006
Aroclor 1242/1016	EPA 8082	<50	ug/kg	TAJ	09/20/2006
Aroclor 1232	EPA 8082	<50	ug/kg	TAJ	09/20/2006
Aroclor 1221	EPA 8082	<50	ug/kg	TAJ	09/20/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	72.8	% R	TAJ	09/20/2006
***Tetrachloro-m-xylene	EPA 8082	67.1	% R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	105	% R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	102	% R	TAJ	09/20/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/19/2006
RCRA METALS				KMD	09/25/2006
Silver	EPA 6010B	<0.621	mg/kg	KMD	09/25/2006
Arsenic	EPA 6010B	6.63	mg/kg	KMD	09/25/2006
Barium	EPA 6010B	344	mg/kg	KMD	09/25/2006
Cadmium	EPA 6010B	<0.621	mg/kg	KMD	09/25/2006
Chromium	EPA 6010B	20.4	mg/kg	KMD	09/25/2006
Mercury	EPA 7471A	0.0400	mg/kg	AVD	09/22/2006
Lead	EPA 6010B	22.4	mg/kg	KMD	09/25/2006
Selenium	EPA 6010B	<3.10	mg/kg	KMD	09/25/2006
Metals Preparation	EPA 3051	97.1	DFS	AVD	09/20/2006



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Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-7 2-4**
Sample Date: **09/16/2006**

Sample No.: **008**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		90.7	%	TAJ	09/20/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/20/2006
Aroclor 1268	EPA 8082	<100	ug/kg	TAJ	09/20/2006
Aroclor 1262	EPA 8082	<100	ug/kg	TAJ	09/20/2006
Aroclor 1260	EPA 8082	<100	ug/kg	TAJ	09/20/2006
Aroclor 1254	EPA 8082	<100	ug/kg	TAJ	09/20/2006
Aroclor 1248	EPA 8082	<100	ug/kg	TAJ	09/20/2006
Aroclor 1242/1016	EPA 8082	<100	ug/kg	TAJ	09/20/2006
Aroclor 1232	EPA 8082	<100	ug/kg	TAJ	09/20/2006
Aroclor 1221	EPA 8082	<100	ug/kg	TAJ	09/20/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	81.0	% R	TAJ	09/20/2006
***Tetrachloro-m-xylene	EPA 8082	75.2	% R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	93.5	% R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	92.1	% R	TAJ	09/20/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/19/2006



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Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-8 2-4**
Sample Date: **09/16/2006**

Sample No.: **009**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		87.5	%	TAJ	09/20/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/20/2006
Aroclor 1268	EPA 8082	<100	ug/kg	TAJ	09/20/2006
Aroclor 1262	EPA 8082	<100	ug/kg	TAJ	09/20/2006
Aroclor 1260	EPA 8082	<100	ug/kg	TAJ	09/20/2006
Aroclor 1254	EPA 8082	<100	ug/kg	TAJ	09/20/2006
Aroclor 1248	EPA 8082	<100	ug/kg	TAJ	09/20/2006
Aroclor 1242/1016	EPA 8082	<100	ug/kg	TAJ	09/20/2006
Aroclor 1232	EPA 8082	<100	ug/kg	TAJ	09/20/2006
Aroclor 1221	EPA 8082	<100	ug/kg	TAJ	09/20/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	76.2	% R	TAJ	09/20/2006
***Tetrachloro-m-xylene	EPA 8082	70.6	% R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	87.0	% R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	81.7	% R	TAJ	09/20/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/19/2006



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Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-9 0-2**
Sample Date: **09/16/2006**

Sample No.: **010**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		87.7	%	TAJ	09/20/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/20/2006
Aroclor 1268	EPA 8082	<40000	ug/kg	TAJ	09/20/2006
Aroclor 1262	EPA 8082	<40000	ug/kg	TAJ	09/20/2006
Aroclor 1260	EPA 8082	<40000	ug/kg	TAJ	09/20/2006
Aroclor 1254	EPA 8082	<40000	ug/kg	TAJ	09/20/2006
Aroclor 1248	EPA 8082	46000	ug/kg	TAJ	09/20/2006
Aroclor 1242/1016	EPA 8082	<40000	ug/kg	TAJ	09/20/2006
Aroclor 1232	EPA 8082	<40000	ug/kg	TAJ	09/20/2006
Aroclor 1221	EPA 8082	<40000	ug/kg	TAJ	09/20/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	105	% R	TAJ	09/20/2006
***Tetrachloro-m-xylene	EPA 8082	74.4	% R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	113	% R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	136	% R	TAJ	09/20/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/19/2006
RCRA METALS				KMD	09/25/2006
Silver	EPA 6010B	<0.518	mg/kg	KMD	09/25/2006
Arsenic	EPA 6010B	6.53	mg/kg	KMD	09/25/2006
Barium	EPA 6010B	159	mg/kg	KMD	09/25/2006
Cadmium	EPA 6010B	<0.518	mg/kg	KMD	09/25/2006
Chromium	EPA 6010B	898	mg/kg	KMD	09/25/2006
Mercury	EPA 7471A	0.0280	mg/kg	AVD	09/22/2006
Lead	EPA 6010B	16.6	mg/kg	KMD	09/25/2006
Selenium	EPA 6010B	<2.59	mg/kg	KMD	09/25/2006
Metals Preparation	EPA 3051	90.9	DFS	AVD	09/20/2006



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Date Received: **09/19/2006**
Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-12 6-8**
Sample Date: **09/16/2006**

Sample No.: **011**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		92.6	%	TAJ	09/20/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/20/2006
Aroclor 1268	EPA 8082	<75	ug/kg	TAJ	09/20/2006
Aroclor 1262	EPA 8082	<75	ug/kg	TAJ	09/20/2006
Aroclor 1260	EPA 8082	<75	ug/kg	TAJ	09/20/2006
Aroclor 1254	EPA 8082	<75	ug/kg	TAJ	09/20/2006
Aroclor 1248	EPA 8082	<75	ug/kg	TAJ	09/20/2006
Aroclor 1242/1016	EPA 8082	<75	ug/kg	TAJ	09/20/2006
Aroclor 1232	EPA 8082	<75	ug/kg	TAJ	09/20/2006
Aroclor 1221	EPA 8082	<75	ug/kg	TAJ	09/20/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	76.0	% R	TAJ	09/20/2006
***Tetrachloro-m-xylene	EPA 8082	70.9	% R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	86.0	% R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	82.8	% R	TAJ	09/20/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/19/2006



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Date Received: **09/19/2006**
Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-16 2-4**
Sample Date: **09/16/2006**

Sample No.: **012**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		88.0	%	TAJ	09/20/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/20/2006
Aroclor 1268	EPA 8082	<2000	ug/kg	TAJ	09/20/2006
Aroclor 1262	EPA 8082	<2000	ug/kg	TAJ	09/20/2006
Aroclor 1260	EPA 8082	<2000	ug/kg	TAJ	09/20/2006
Aroclor 1254	EPA 8082	<2000	ug/kg	TAJ	09/20/2006
Aroclor 1248	EPA 8082	<2000	ug/kg	TAJ	09/20/2006
Aroclor 1242/1016	EPA 8082	4200	ug/kg	TAJ	09/20/2006
Aroclor 1232	EPA 8082	<2000	ug/kg	TAJ	09/20/2006
Aroclor 1221	EPA 8082	<2000	ug/kg	TAJ	09/20/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	89.2	% R	TAJ	09/20/2006
***Tetrachloro-m-xylene	EPA 8082	71.1	% R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	126	% R	TAJ	09/20/2006
***Decachlorobiphenyl	EPA 8082	101	% R	TAJ	09/20/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/19/2006
RCRA METALS				KMD	09/25/2006
Silver	EPA 6010B	<0.461	mg/kg	KMD	09/25/2006
Arsenic	EPA 6010B	8.25	mg/kg	KMD	09/25/2006
Barium	EPA 6010B	106	mg/kg	KMD	09/25/2006
Cadmium	EPA 6010B	<0.461	mg/kg	KMD	09/25/2006
Chromium	EPA 6010B	184	mg/kg	KMD	09/25/2006
Mercury	EPA 7471A	<0.0264	mg/kg	AVD	09/22/2006
Lead	EPA 6010B	17.5	mg/kg	KMD	09/25/2006
Selenium	EPA 6010B	<2.31	mg/kg	KMD	09/25/2006
Metals Preparation	EPA 3051	81.2	DFS	AVD	09/20/2006



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GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/19/2006**
Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-2 2-4**
Sample Date: **09/16/2006**

Sample No.: **013**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		87.1	%	TAJ	09/20/2006
VOLATILE ORGANICS	EPA 8260			MQS	09/22/2006
Dichlorodifluoromethane	EPA 8260	<100	ug/kg	MQS	09/22/2006
Chloromethane	EPA 8260	<100	ug/kg	MQS	09/22/2006
Vinyl Chloride	EPA 8260	<50	ug/kg	MQS	09/22/2006
Bromomethane	EPA 8260	<100	ug/kg	MQS	09/22/2006
Chloroethane	EPA 8260	<50	ug/kg	MQS	09/22/2006
Trichlorofluoromethane	EPA 8260	<100	ug/kg	MQS	09/22/2006
Diethylether	EPA 8260	<50	ug/kg	MQS	09/22/2006
Acetone	EPA 8260	<500	ug/kg	MQS	09/22/2006
1,1-Dichloroethene	EPA 8260	<50	ug/kg	MQS	09/22/2006
Dichloromethane	EPA 8260	<50	ug/kg	MQS	09/22/2006
Methyl-Tert-Butyl-Ether	EPA 8260	<50	ug/kg	MQS	09/22/2006
trans-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	09/22/2006
1,1-Dichloroethane	EPA 8260	<50	ug/kg	MQS	09/22/2006
2-Butanone	EPA 8260	<500	ug/kg	MQS	09/22/2006
2,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	09/22/2006
cis-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	09/22/2006
Chloroform	EPA 8260	<50	ug/kg	MQS	09/22/2006
Bromochloromethane	EPA 8260	<50	ug/kg	MQS	09/22/2006
Tetrahydrofuran	EPA 8260	<100	ug/kg	MQS	09/22/2006
1,1,1-Trichloroethane	EPA 8260	<50	ug/kg	MQS	09/22/2006
1,1-Dichloropropene	EPA 8260	<50	ug/kg	MQS	09/22/2006
Carbon Tetrachloride	EPA 8260	<50	ug/kg	MQS	09/22/2006
1,2-Dichloroethane	EPA 8260	<50	ug/kg	MQS	09/22/2006
Benzene	EPA 8260	<50	ug/kg	MQS	09/22/2006
Trichloroethene	EPA 8260	<50	ug/kg	MQS	09/22/2006
1,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	09/22/2006
Bromodichloromethane	EPA 8260	<50	ug/kg	MQS	09/22/2006
Dibromomethane	EPA 8260	<50	ug/kg	MQS	09/22/2006
4-Methyl-2-Pentanone	EPA 8260	<100	ug/kg	MQS	09/22/2006
cis-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	09/22/2006
Toluene	EPA 8260	<50	ug/kg	MQS	09/22/2006
trans-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	09/22/2006
1,1,2-Trichloroethane	EPA 8260	<50	ug/kg	MQS	09/22/2006
2-Hexanone	EPA 8260	<100	ug/kg	MQS	09/22/2006
1,3-Dichloropropane	EPA 8260	<50	ug/kg	MQS	09/22/2006



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Sample Date: **09/16/2006**

Sample No.: **013**

Test Performed	Method	Results	Units	Tech	Analysis Date
Tetrachloroethene	EPA 8260	<50	ug/kg	MQS	09/22/2006
Dibromochloromethane	EPA 8260	<50	ug/kg	MQS	09/22/2006
1,2-Dibromoethane (EDB)	EPA 8260	<100	ug/kg	MQS	09/22/2006
Chlorobenzene	EPA 8260	<50	ug/kg	MQS	09/22/2006
1,1,1,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	09/22/2006
Ethylbenzene	EPA 8260	<50	ug/kg	MQS	09/22/2006
m&p-Xylene	EPA 8260	170	ug/kg	MQS	09/22/2006
o-Xylene	EPA 8260	180	ug/kg	MQS	09/22/2006
Styrene	EPA 8260	<50	ug/kg	MQS	09/22/2006
Bromoform	EPA 8260	<100	ug/kg	MQS	09/22/2006
Isopropylbenzene	EPA 8260	340	ug/kg	MQS	09/22/2006
1,1,2,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	09/22/2006
1,2,3-Trichloropropane	EPA 8260	<50	ug/kg	MQS	09/22/2006
Bromobenzene	EPA 8260	<50	ug/kg	MQS	09/22/2006
n-Propylbenzene	EPA 8260	1600	ug/kg	MQS	09/22/2006
2-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	09/22/2006
1,3,5-Trimethylbenzene	EPA 8260	4500	ug/kg	MQS	09/22/2006
4-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	09/22/2006
tert-Butylbenzene	EPA 8260	<50	ug/kg	MQS	09/22/2006
1,2,4-Trimethylbenzene	EPA 8260	18000	ug/kg	MQS	09/26/2006
sec-Butylbenzene	EPA 8260	1600	ug/kg	MQS	09/22/2006
p-Isopropyltoluene	EPA 8260	1600	ug/kg	MQS	09/22/2006
1,3-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/22/2006
1,4-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/22/2006
n-Butylbenzene	EPA 8260	1200	ug/kg	MQS	09/22/2006
1,2-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/22/2006
1,2-Dibromo-3-Chloropropane	EPA 8260	<250	ug/kg	MQS	09/22/2006
1,2,4-Trichlorobenzene	EPA 8260	70	ug/kg	MQS	09/22/2006
Hexachlorobutadiene	EPA 8260	<50	ug/kg	MQS	09/22/2006
Naphthalene	EPA 8260	81	ug/kg	MQS	09/22/2006
1,2,3-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/22/2006
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	98.6	% R	MQS	09/22/2006
***Toluene-D8	EPA 8260	101	% R	MQS	09/22/2006
***4-Bromofluorobenzene	EPA 8260	94.7	% R	MQS	09/22/2006
Preparation	EPA 5035	1.0	DF	MQS	09/22/2006
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	09/22/2006



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Sample ID: **SP-2 2-4**
Sample Date: **09/16/2006**

Sample No.: **013**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Chlorophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Methylphenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
3&4-Methylphenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Nitrophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2,4-Dimethylphenol	EPA 8270	11000	ug/kg	CMG	09/27/2006
Benzoic Acid	EPA 8270	<3300	ug/kg	CMG	09/22/2006
2,4-Dichlorophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Chloro-3-Methylphenol	EPA 8270	<660	ug/kg	CMG	09/22/2006
2,4,6-Trichlorophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2,4,5-Trichlorophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2,4-Dinitrophenol	EPA 8270	<3300	ug/kg	CMG	09/22/2006
4-Nitrophenol	EPA 8270	<1700	ug/kg	CMG	09/22/2006
4,6-Dinitro-2-Methylphenol	EPA 8270	<1700	ug/kg	CMG	09/22/2006
Pentachlorophenol	EPA 8270	<1700	ug/kg	CMG	09/22/2006
n-Nitrosodimethylamine	EPA 8270	<330	ug/kg	CMG	09/22/2006
bis(2-Chloroethyl)Ether	EPA 8270	<330	ug/kg	CMG	09/22/2006
1,3-Dichlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
1,4-Dichlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzyl Alcohol	EPA 8270	<660	ug/kg	CMG	09/22/2006
1,2-Dichlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
bis(2-Chloroisopropyl)Ether	EPA 8270	<330	ug/kg	CMG	09/22/2006
n-Nitrosodi-n-Propylamine	EPA 8270	<330	ug/kg	CMG	09/22/2006
Hexachloroethane	EPA 8270	<330	ug/kg	CMG	09/22/2006
Nitrobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Isophorone	EPA 8270	<330	ug/kg	CMG	09/22/2006
bis(2-Chloroethoxy)Methane	EPA 8270	<330	ug/kg	CMG	09/22/2006
1,2,4-Trichlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Naphthalene	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Chloroaniline	EPA 8270	<660	ug/kg	CMG	09/22/2006
Hexachlorobutadiene	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Methylnaphthalene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Hexachlorocyclopentadiene	EPA 8270	<1700	ug/kg	CMG	09/22/2006
2-Chloronaphthalene	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Nitroaniline	EPA 8270	<660	ug/kg	CMG	09/22/2006
Dimethylphthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
Acenaphthylene	EPA 8270	<330	ug/kg	CMG	09/22/2006



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Sample Date: **09/16/2006**

Sample No.: **013**

Test Performed	Method	Results	Units	Tech	Analysis Date
2,6-Dinitrotoluene	EPA 8270	<330	ug/kg	CMG	09/22/2006
3-Nitroaniline	EPA 8270	<660	ug/kg	CMG	09/22/2006
Acenaphthene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Dibenzofuran	EPA 8270	<330	ug/kg	CMG	09/22/2006
2,4-Dinitrotoluene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Diethylphthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
Fluorene	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Chlorophenyl Phenyl Ether	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Nitroaniline	EPA 8270	<660	ug/kg	CMG	09/22/2006
n-Nitrosodiphenylamine	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Bromophenyl Phenyl Ether	EPA 8270	<330	ug/kg	CMG	09/22/2006
Hexachlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Phenanthrene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Anthracene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Carbazole	EPA 8270	<330	ug/kg	CMG	09/22/2006
di-n-Butylphthalate	EPA 8270	<500	ug/kg	CMG	09/22/2006
Fluoranthene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Pyrene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Butylbenzylphthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [a] Anthracene	EPA 8270	<330	ug/kg	CMG	09/22/2006
3,3'-Dichlorobenzidine	EPA 8270	<660	ug/kg	CMG	09/22/2006
Chrysene	EPA 8270	<330	ug/kg	CMG	09/22/2006
bis(2-Ethylhexyl)Phthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
di-n-Octylphthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [b] Fluoranthene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [k] Fluoranthene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [a] Pyrene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Indeno [1,2,3-cd] Pyrene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Dibenzo [a,h] Anthracene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [g,h,i] Perylene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Surrogates:					
***2-Fluorophenol	EPA 8270	58.2	% R	CMG	09/22/2006
***Phenol-D6	EPA 8270	57.0	% R	CMG	09/22/2006
***Nitrobenzene-D5	EPA 8270	64.6	% R	CMG	09/22/2006
***2-Fluorobiphenyl	EPA 8270	55.1	% R	CMG	09/22/2006
***2,4,6-Tribromophenol	EPA 8270	58.5	% R	CMG	09/22/2006
***P-Terphenyl-D14	EPA 8270	49.0	% R	CMG	09/22/2006



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Test Performed	Method	Results	Units	Tech	Analysis Date
Extraction	EPA 3545	1.0	DF	TN	09/20/2006



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Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-5 6-8**
Sample Date: **09/16/2006**

Sample No.: **014**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		82.9	%	TAJ	09/20/2006
VOLATILE ORGANICS	EPA 8260			MQS	09/23/2006
Dichlorodifluoromethane	EPA 8260	<100	ug/kg	MQS	09/23/2006
Chloromethane	EPA 8260	<100	ug/kg	MQS	09/23/2006
Vinyl Chloride	EPA 8260	<50	ug/kg	MQS	09/23/2006
Bromomethane	EPA 8260	<100	ug/kg	MQS	09/23/2006
Chloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Trichlorofluoromethane	EPA 8260	<100	ug/kg	MQS	09/23/2006
Diethylether	EPA 8260	<50	ug/kg	MQS	09/23/2006
Acetone	EPA 8260	<500	ug/kg	MQS	09/23/2006
1,1-Dichloroethene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Dichloromethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Methyl-Tert-Butyl-Ether	EPA 8260	<50	ug/kg	MQS	09/23/2006
trans-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,1-Dichloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
2-Butanone	EPA 8260	<500	ug/kg	MQS	09/23/2006
2,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	09/23/2006
cis-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Chloroform	EPA 8260	<50	ug/kg	MQS	09/23/2006
Bromochloromethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Tetrahydrofuran	EPA 8260	<100	ug/kg	MQS	09/23/2006
1,1,1-Trichloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,1-Dichloropropene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Carbon Tetrachloride	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2-Dichloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Benzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Trichloroethene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Bromodichloromethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Dibromomethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
4-Methyl-2-Pentanone	EPA 8260	<100	ug/kg	MQS	09/23/2006
cis-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Toluene	EPA 8260	<50	ug/kg	MQS	09/23/2006
trans-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,1,2-Trichloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
2-Hexanone	EPA 8260	<100	ug/kg	MQS	09/23/2006
1,3-Dichloropropane	EPA 8260	<50	ug/kg	MQS	09/23/2006



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Sample No.: **014**

Test Performed	Method	Results	Units	Tech	Analysis Date
Tetrachloroethene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Dibromochloromethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2-Dibromoethane (EDB)	EPA 8260	<100	ug/kg	MQS	09/23/2006
Chlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,1,1,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Ethylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
m&p-Xylene	EPA 8260	<50	ug/kg	MQS	09/23/2006
o-Xylene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Styrene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Bromoform	EPA 8260	<100	ug/kg	MQS	09/23/2006
Isopropylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,1,2,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2,3-Trichloropropane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Bromobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
n-Propylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
2-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,3,5-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
4-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	09/23/2006
tert-Butylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2,4-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
sec-Butylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
p-Isopropyltoluene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,3-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,4-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
n-Butylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2-Dibromo-3-Chloropropane	EPA 8260	<250	ug/kg	MQS	09/23/2006
1,2,4-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Hexachlorobutadiene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Naphthalene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2,3-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	98.2	% R	MQS	09/23/2006
***Toluene-D8	EPA 8260	99.7	% R	MQS	09/23/2006
***4-Bromofluorobenzene	EPA 8260	98.6	% R	MQS	09/23/2006
Preparation	EPA 5035	1.0	DF	MQS	09/22/2006
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	09/22/2006



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Sample ID: **SP-5 6-8**
Sample Date: **09/16/2006**

Sample No.: **014**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Chlorophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Methylphenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
3&4-Methylphenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Nitrophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2,4-Dimethylphenol	EPA 8270	1300	ug/kg	CMG	09/22/2006
Benzoic Acid	EPA 8270	<3300	ug/kg	CMG	09/22/2006
2,4-Dichlorophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Chloro-3-Methylphenol	EPA 8270	<660	ug/kg	CMG	09/22/2006
2,4,6-Trichlorophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2,4,5-Trichlorophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2,4-Dinitrophenol	EPA 8270	<3300	ug/kg	CMG	09/22/2006
4-Nitrophenol	EPA 8270	<1700	ug/kg	CMG	09/22/2006
4,6-Dinitro-2-Methylphenol	EPA 8270	<1700	ug/kg	CMG	09/22/2006
Pentachlorophenol	EPA 8270	<1700	ug/kg	CMG	09/22/2006
n-Nitrosodimethylamine	EPA 8270	<330	ug/kg	CMG	09/22/2006
bis(2-Chloroethyl)Ether	EPA 8270	<330	ug/kg	CMG	09/22/2006
1,3-Dichlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
1,4-Dichlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzyl Alcohol	EPA 8270	<660	ug/kg	CMG	09/22/2006
1,2-Dichlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
bis(2-Chloroisopropyl)Ether	EPA 8270	<330	ug/kg	CMG	09/22/2006
n-Nitrosodi-n-Propylamine	EPA 8270	<330	ug/kg	CMG	09/22/2006
Hexachloroethane	EPA 8270	<330	ug/kg	CMG	09/22/2006
Nitrobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Isophorone	EPA 8270	<330	ug/kg	CMG	09/22/2006
bis(2-Chloroethoxy)Methane	EPA 8270	<330	ug/kg	CMG	09/22/2006
1,2,4-Trichlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Naphthalene	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Chloroaniline	EPA 8270	<660	ug/kg	CMG	09/22/2006
Hexachlorobutadiene	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Methylnaphthalene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Hexachlorocyclopentadiene	EPA 8270	<1700	ug/kg	CMG	09/22/2006
2-Chloronaphthalene	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Nitroaniline	EPA 8270	<660	ug/kg	CMG	09/22/2006
Dimethylphthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
Acenaphthylene	EPA 8270	<330	ug/kg	CMG	09/22/2006



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/19/2006**
Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-5 6-8**
Sample Date: **09/16/2006**

Sample No.: **014**

Test Performed	Method	Results	Units	Tech	Analysis Date
2,6-Dinitrotoluene	EPA 8270	<330	ug/kg	CMG	09/22/2006
3-Nitroaniline	EPA 8270	<660	ug/kg	CMG	09/22/2006
Acenaphthene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Dibenzofuran	EPA 8270	<330	ug/kg	CMG	09/22/2006
2,4-Dinitrotoluene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Diethylphthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
Fluorene	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Chlorophenyl Phenyl Ether	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Nitroaniline	EPA 8270	<660	ug/kg	CMG	09/22/2006
n-Nitrosodiphenylamine	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Bromophenyl Phenyl Ether	EPA 8270	<330	ug/kg	CMG	09/22/2006
Hexachlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Phenanthrene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Anthracene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Carbazole	EPA 8270	<330	ug/kg	CMG	09/22/2006
di-n-Butylphthalate	EPA 8270	<500	ug/kg	CMG	09/22/2006
Fluoranthene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Pyrene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Butylbenzylphthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [a] Anthracene	EPA 8270	<330	ug/kg	CMG	09/22/2006
3,3'-Dichlorobenzidine	EPA 8270	<660	ug/kg	CMG	09/22/2006
Chrysene	EPA 8270	<330	ug/kg	CMG	09/22/2006
bis(2-Ethylhexyl)Phthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
di-n-Octylphthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [b] Fluoranthene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [k] Fluoranthene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [a] Pyrene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Indeno [1,2,3-cd] Pyrene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Dibenzo [a,h] Anthracene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [g,h,i] Perylene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Surrogates:					
***2-Fluorophenol	EPA 8270	38.3	% R	CMG	09/22/2006
***Phenol-D6	EPA 8270	42.1	% R	CMG	09/22/2006
***Nitrobenzene-D5	EPA 8270	36.6	% R	CMG	09/22/2006
***2-Fluorobiphenyl	EPA 8270	46.2	% R	CMG	09/22/2006
***2,4,6-Tribromophenol	EPA 8270	55.6	% R	CMG	09/22/2006
***P-Terphenyl-D14	EPA 8270	51.0	% R	CMG	09/22/2006



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GZA GeoEnvironmental of NY
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Project No.: **21.0056196.10**

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Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-5 6-8**
Sample Date: **09/16/2006**

Sample No.: **014**

Test Performed	Method	Results	Units	Tech	Analysis Date
Extraction	EPA 3545	1.0	DF	TN	09/20/2006



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364 Nagel Drive
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Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/19/2006**
Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-9 6-7**
Sample Date: **09/16/2006**

Sample No.: **015**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		88.7	%	TAJ	09/20/2006
VOLATILE ORGANICS	EPA 8260			MQS	09/23/2006
Dichlorodifluoromethane	EPA 8260	<100	ug/kg	MQS	09/23/2006
Chloromethane	EPA 8260	<100	ug/kg	MQS	09/23/2006
Vinyl Chloride	EPA 8260	<50	ug/kg	MQS	09/23/2006
Bromomethane	EPA 8260	<100	ug/kg	MQS	09/23/2006
Chloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Trichlorofluoromethane	EPA 8260	<100	ug/kg	MQS	09/23/2006
Diethylether	EPA 8260	<50	ug/kg	MQS	09/23/2006
Acetone	EPA 8260	<500	ug/kg	MQS	09/23/2006
1,1-Dichloroethene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Dichloromethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Methyl-Tert-Butyl-Ether	EPA 8260	<50	ug/kg	MQS	09/23/2006
trans-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,1-Dichloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
2-Butanone	EPA 8260	<500	ug/kg	MQS	09/23/2006
2,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	09/23/2006
cis-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Chloroform	EPA 8260	<50	ug/kg	MQS	09/23/2006
Bromochloromethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Tetrahydrofuran	EPA 8260	<100	ug/kg	MQS	09/23/2006
1,1,1-Trichloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,1-Dichloropropene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Carbon Tetrachloride	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2-Dichloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Benzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Trichloroethene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Bromodichloromethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Dibromomethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
4-Methyl-2-Pentanone	EPA 8260	<100	ug/kg	MQS	09/23/2006
cis-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Toluene	EPA 8260	<50	ug/kg	MQS	09/23/2006
trans-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,1,2-Trichloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
2-Hexanone	EPA 8260	<100	ug/kg	MQS	09/23/2006
1,3-Dichloropropane	EPA 8260	<50	ug/kg	MQS	09/23/2006



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Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-9 6-7**
Sample Date: **09/16/2006**

Sample No.: **015**

Test Performed	Method	Results	Units	Tech	Analysis Date
Tetrachloroethene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Dibromochloromethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2-Dibromoethane (EDB)	EPA 8260	<100	ug/kg	MQS	09/23/2006
Chlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,1,1,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Ethylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
m&p-Xylene	EPA 8260	<50	ug/kg	MQS	09/23/2006
o-Xylene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Styrene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Bromoform	EPA 8260	<100	ug/kg	MQS	09/23/2006
Isopropylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,1,2,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2,3-Trichloropropane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Bromobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
n-Propylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
2-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,3,5-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
4-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	09/23/2006
tert-Butylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2,4-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
sec-Butylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
p-Isopropyltoluene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,3-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,4-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
n-Butylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2-Dibromo-3-Chloropropane	EPA 8260	<250	ug/kg	MQS	09/23/2006
1,2,4-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Hexachlorobutadiene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Naphthalene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2,3-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	94.5	% R	MQS	09/23/2006
***Toluene-D8	EPA 8260	102	% R	MQS	09/23/2006
***4-Bromofluorobenzene	EPA 8260	98.2	% R	MQS	09/23/2006
Preparation	EPA 5035	1.0	DF	MQS	09/22/2006
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	09/22/2006



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Work Order No.: **0609-00138**

Sample ID: **SP-9 6-7**
Sample Date: **09/16/2006**

Sample No.: **015**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Chlorophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Methylphenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
3&4-Methylphenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Nitrophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2,4-Dimethylphenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzoic Acid	EPA 8270	<3300	ug/kg	CMG	09/22/2006
2,4-Dichlorophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Chloro-3-Methylphenol	EPA 8270	<660	ug/kg	CMG	09/22/2006
2,4,6-Trichlorophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2,4,5-Trichlorophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2,4-Dinitrophenol	EPA 8270	<3300	ug/kg	CMG	09/22/2006
4-Nitrophenol	EPA 8270	<1700	ug/kg	CMG	09/22/2006
4,6-Dinitro-2-Methylphenol	EPA 8270	<1700	ug/kg	CMG	09/22/2006
Pentachlorophenol	EPA 8270	<1700	ug/kg	CMG	09/22/2006
n-Nitrosodimethylamine	EPA 8270	<330	ug/kg	CMG	09/22/2006
bis(2-Chloroethyl)Ether	EPA 8270	<330	ug/kg	CMG	09/22/2006
1,3-Dichlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
1,4-Dichlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzyl Alcohol	EPA 8270	<660	ug/kg	CMG	09/22/2006
1,2-Dichlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
bis(2-Chloroisopropyl)Ether	EPA 8270	<330	ug/kg	CMG	09/22/2006
n-Nitrosodi-n-Propylamine	EPA 8270	<330	ug/kg	CMG	09/22/2006
Hexachloroethane	EPA 8270	<330	ug/kg	CMG	09/22/2006
Nitrobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Isophorone	EPA 8270	<330	ug/kg	CMG	09/22/2006
bis(2-Chloroethoxy)Methane	EPA 8270	<330	ug/kg	CMG	09/22/2006
1,2,4-Trichlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Naphthalene	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Chloroaniline	EPA 8270	<660	ug/kg	CMG	09/22/2006
Hexachlorobutadiene	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Methylnaphthalene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Hexachlorocyclopentadiene	EPA 8270	<1700	ug/kg	CMG	09/22/2006
2-Chloronaphthalene	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Nitroaniline	EPA 8270	<660	ug/kg	CMG	09/22/2006
Dimethylphthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
Acenaphthylene	EPA 8270	<330	ug/kg	CMG	09/22/2006



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Work Order No.: **0609-00138**

Sample ID: **SP-9 6-7**
Sample Date: **09/16/2006**

Sample No.: **015**

Test Performed	Method	Results	Units	Tech	Analysis Date
2,6-Dinitrotoluene	EPA 8270	<330	ug/kg	CMG	09/22/2006
3-Nitroaniline	EPA 8270	<660	ug/kg	CMG	09/22/2006
Acenaphthene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Dibenzofuran	EPA 8270	<330	ug/kg	CMG	09/22/2006
2,4-Dinitrotoluene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Diethylphthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
Fluorene	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Chlorophenyl Phenyl Ether	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Nitroaniline	EPA 8270	<660	ug/kg	CMG	09/22/2006
n-Nitrosodiphenylamine	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Bromophenyl Phenyl Ether	EPA 8270	<330	ug/kg	CMG	09/22/2006
Hexachlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Phenanthrene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Anthracene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Carbazole	EPA 8270	<330	ug/kg	CMG	09/22/2006
di-n-Butylphthalate	EPA 8270	<500	ug/kg	CMG	09/22/2006
Fluoranthene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Pyrene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Butylbenzylphthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [a] Anthracene	EPA 8270	<330	ug/kg	CMG	09/22/2006
3,3'-Dichlorobenzidine	EPA 8270	<660	ug/kg	CMG	09/22/2006
Chrysene	EPA 8270	<330	ug/kg	CMG	09/22/2006
bis(2-Ethylhexyl)Phthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
di-n-Octylphthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [b] Fluoranthene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [k] Fluoranthene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [a] Pyrene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Indeno [1,2,3-cd] Pyrene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Dibenzo [a,h] Anthracene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [g,h,i] Perylene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Surrogates:					
***2-Fluorophenol	EPA 8270	59.3	% R	CMG	09/22/2006
***Phenol-D6	EPA 8270	64.4	% R	CMG	09/22/2006
***Nitrobenzene-D5	EPA 8270	70.4	% R	CMG	09/22/2006
***2-Fluorobiphenyl	EPA 8270	69.7	% R	CMG	09/22/2006
***2,4,6-Tribromophenol	EPA 8270	80.6	% R	CMG	09/22/2006
***P-Terphenyl-D14	EPA 8270	85.8	% R	CMG	09/22/2006



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Date Received: **09/19/2006**
Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-9 6-7**
Sample Date: **09/16/2006**

Sample No.: **015**

Test Performed	Method	Results	Units	Tech	Analysis Date
Extraction	EPA 3545	1.0	DF	TN	09/20/2006



ANALYTICAL REPORT

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364 Nagel Drive
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Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/19/2006**
Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-16 0-2**
Sample Date: **09/16/2006**

Sample No.: **016**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		87.8	%	TAJ	09/20/2006
VOLATILE ORGANICS	EPA 8260			MQS	09/23/2006
Dichlorodifluoromethane	EPA 8260	<100	ug/kg	MQS	09/23/2006
Chloromethane	EPA 8260	<100	ug/kg	MQS	09/23/2006
Vinyl Chloride	EPA 8260	<50	ug/kg	MQS	09/23/2006
Bromomethane	EPA 8260	<100	ug/kg	MQS	09/23/2006
Chloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Trichlorofluoromethane	EPA 8260	<100	ug/kg	MQS	09/23/2006
Diethylether	EPA 8260	<50	ug/kg	MQS	09/23/2006
Acetone	EPA 8260	<500	ug/kg	MQS	09/23/2006
1,1-Dichloroethene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Dichloromethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Methyl-Tert-Butyl-Ether	EPA 8260	<50	ug/kg	MQS	09/23/2006
trans-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,1-Dichloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
2-Butanone	EPA 8260	<500	ug/kg	MQS	09/23/2006
2,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	09/23/2006
cis-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Chloroform	EPA 8260	<50	ug/kg	MQS	09/23/2006
Bromochloromethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Tetrahydrofuran	EPA 8260	<100	ug/kg	MQS	09/23/2006
1,1,1-Trichloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,1-Dichloropropene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Carbon Tetrachloride	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2-Dichloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Benzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Trichloroethene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Bromodichloromethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Dibromomethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
4-Methyl-2-Pentanone	EPA 8260	<100	ug/kg	MQS	09/23/2006
cis-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Toluene	EPA 8260	<50	ug/kg	MQS	09/23/2006
trans-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,1,2-Trichloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
2-Hexanone	EPA 8260	<100	ug/kg	MQS	09/23/2006
1,3-Dichloropropane	EPA 8260	<50	ug/kg	MQS	09/23/2006



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
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Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/19/2006**
Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-16 0-2**
Sample Date: **09/16/2006**

Sample No.: **016**

Test Performed	Method	Results	Units	Tech	Analysis Date
Tetrachloroethene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Dibromochloromethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2-Dibromoethane (EDB)	EPA 8260	<100	ug/kg	MQS	09/23/2006
Chlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,1,1,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Ethylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
m&p-Xylene	EPA 8260	<50	ug/kg	MQS	09/23/2006
o-Xylene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Styrene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Bromoform	EPA 8260	<100	ug/kg	MQS	09/23/2006
Isopropylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,1,2,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2,3-Trichloropropane	EPA 8260	<50	ug/kg	MQS	09/23/2006
Bromobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
n-Propylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
2-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,3,5-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
4-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	09/23/2006
tert-Butylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2,4-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
sec-Butylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
p-Isopropyltoluene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,3-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,4-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
n-Butylbenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2-Dibromo-3-Chloropropane	EPA 8260	<250	ug/kg	MQS	09/23/2006
1,2,4-Trichlorobenzene	EPA 8260	77	ug/kg	MQS	09/23/2006
Hexachlorobutadiene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Naphthalene	EPA 8260	<50	ug/kg	MQS	09/23/2006
1,2,3-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	09/23/2006
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	91.9	% R	MQS	09/23/2006
***Toluene-D8	EPA 8260	97.6	% R	MQS	09/23/2006
***4-Bromofluorobenzene	EPA 8260	97.9	% R	MQS	09/23/2006
Preparation	EPA 5035	1.0	DF	MQS	09/22/2006
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	09/22/2006



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Sample ID: **SP-16 0-2**

Sample No.: **016**

Sample Date: **09/16/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
Phenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Chlorophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Methylphenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
3&4-Methylphenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Nitrophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2,4-Dimethylphenol	EPA 8270	1600	ug/kg	CMG	09/22/2006
Benzoic Acid	EPA 8270	<3300	ug/kg	CMG	09/22/2006
2,4-Dichlorophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Chloro-3-Methylphenol	EPA 8270	<660	ug/kg	CMG	09/22/2006
2,4,6-Trichlorophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2,4,5-Trichlorophenol	EPA 8270	<330	ug/kg	CMG	09/22/2006
2,4-Dinitrophenol	EPA 8270	<3300	ug/kg	CMG	09/22/2006
4-Nitrophenol	EPA 8270	<1700	ug/kg	CMG	09/22/2006
4,6-Dinitro-2-Methylphenol	EPA 8270	<1700	ug/kg	CMG	09/22/2006
Pentachlorophenol	EPA 8270	<1700	ug/kg	CMG	09/22/2006
n-Nitrosodimethylamine	EPA 8270	<330	ug/kg	CMG	09/22/2006
bis(2-Chloroethyl)Ether	EPA 8270	<330	ug/kg	CMG	09/22/2006
1,3-Dichlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
1,4-Dichlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzyl Alcohol	EPA 8270	<660	ug/kg	CMG	09/22/2006
1,2-Dichlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
bis(2-Chloroisopropyl)Ether	EPA 8270	<330	ug/kg	CMG	09/22/2006
n-Nitrosodi-n-Propylamine	EPA 8270	<330	ug/kg	CMG	09/22/2006
Hexachloroethane	EPA 8270	<330	ug/kg	CMG	09/22/2006
Nitrobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Isophorone	EPA 8270	<330	ug/kg	CMG	09/22/2006
bis(2-Chloroethoxy)Methane	EPA 8270	<330	ug/kg	CMG	09/22/2006
1,2,4-Trichlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Naphthalene	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Chloroaniline	EPA 8270	<660	ug/kg	CMG	09/22/2006
Hexachlorobutadiene	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Methylnaphthalene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Hexachlorocyclopentadiene	EPA 8270	<1700	ug/kg	CMG	09/22/2006
2-Chloronaphthalene	EPA 8270	<330	ug/kg	CMG	09/22/2006
2-Nitroaniline	EPA 8270	<660	ug/kg	CMG	09/22/2006
Dimethylphthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
Acenaphthylene	EPA 8270	<330	ug/kg	CMG	09/22/2006



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Work Order No.: **0609-00138**

Sample ID: **SP-16 0-2**
Sample Date: **09/16/2006**

Sample No.: **016**

Test Performed	Method	Results	Units	Tech	Analysis Date
2,6-Dinitrotoluene	EPA 8270	<330	ug/kg	CMG	09/22/2006
3-Nitroaniline	EPA 8270	<660	ug/kg	CMG	09/22/2006
Acenaphthene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Dibenzofuran	EPA 8270	<330	ug/kg	CMG	09/22/2006
2,4-Dinitrotoluene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Diethylphthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
Fluorene	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Chlorophenyl Phenyl Ether	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Nitroaniline	EPA 8270	<660	ug/kg	CMG	09/22/2006
n-Nitrosodiphenylamine	EPA 8270	<330	ug/kg	CMG	09/22/2006
4-Bromophenyl Phenyl Ether	EPA 8270	<330	ug/kg	CMG	09/22/2006
Hexachlorobenzene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Phenanthrene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Anthracene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Carbazole	EPA 8270	<330	ug/kg	CMG	09/22/2006
di-n-Butylphthalate	EPA 8270	<500	ug/kg	CMG	09/22/2006
Fluoranthene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Pyrene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Butylbenzylphthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [a] Anthracene	EPA 8270	<330	ug/kg	CMG	09/22/2006
3,3'-Dichlorobenzidine	EPA 8270	<660	ug/kg	CMG	09/22/2006
Chrysene	EPA 8270	<330	ug/kg	CMG	09/22/2006
bis(2-Ethylhexyl)Phthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
di-n-Octylphthalate	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [b] Fluoranthene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [k] Fluoranthene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [a] Pyrene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Indeno [1,2,3-cd] Pyrene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Dibenzo [a,h] Anthracene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Benzo [g,h,i] Perylene	EPA 8270	<330	ug/kg	CMG	09/22/2006
Surrogates:					
***2-Fluorophenol	EPA 8270	38.7	% R	CMG	09/22/2006
***Phenol-D6	EPA 8270	43.0	% R	CMG	09/22/2006
***Nitrobenzene-D5	EPA 8270	46.1	% R	CMG	09/22/2006
***2-Fluorobiphenyl	EPA 8270	52.9	% R	CMG	09/22/2006
***2,4,6-Tribromophenol	EPA 8270	51.9	% R	CMG	09/22/2006
***P-Terphenyl-D14	EPA 8270	56.0	% R	CMG	09/22/2006



GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

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364 Nagel Drive
Buffalo, NY 14225

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Project Name.: **Specialty Metals Environmental**
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Date Reported: **09/27/2006**
Work Order No.: **0609-00138**

Sample ID: **SP-16 0-2**
Sample Date: **09/16/2006**

Sample No.: **016**

Test Performed	Method	Results	Units	Tech	Analysis Date
Extraction	EPA 3545	1.0	DF	TN	09/20/2006

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH STREET, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 8082 ANALYSIS
QUALITY CONTROL SOLID

DATE EXTRACTED: 09/19/06

DATE ANALYZED: 09/19/06

METHOD BLANK	Concentration		Quantitation Limit
POLYCHLORINATED BIPHENYLS as AROCLORS	ug/kg-PPB		ug/kg-PPB
Aroclor 1262	ND		5.0
Aroclor 1260	ND		5.0
Aroclor 1254	ND		5.0
Aroclor 1248	ND		5.0
Aroclor 1242/1016	ND		5.0
Aroclor 1232	ND		5.0
Aroclor 1221	ND		5.0
Surrogates:	(A)	(B)	
Tetrachloro-m-xylene	75.3	67.4	30-150
Decachlorobiphenyl	104	87.1	30-150

LABORATORY CONTROL SAMPLE (LCS)	% Recovery		Acceptance Limits
Aroclor 1016	107	93.7	40-140
Aroclor 1260	128	113	40-140
Surrogates:			
Tetrachloro-m-xylene	88.2	79.9	30-150
Decachlorobiphenyl	122	107	30-150

*Matrix Spike/Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH ST, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 6010B ANALYSIS
Metals by ICP

QUALITY CONTROL - SOLID

DATE PREPARED: 9/20/2006

QC Sample	Method Blank	Lab Control Sample
Units	mg/kg	% Recovery
Acceptance Limits	Results	80-120
Analyte		
Silver (Ag)	<0.500	84.3
Aluminum (Al)	NA	NA
Arsenic (As)	<1.00	81.7
Boron (B)	NA	NA
Barium (Ba)	<0.500	84.9
Beryllium (Be)	NA	NA
Calcium (Ca)	NA	NA
Cadmium (Cd)	<0.500	85.2
Cobalt (Co)	NA	NA
Chromium (Cr)	<0.500	87.0
Copper (Cu)	NA	NA
Iron (Fe)	NA	NA
Magnesium (Mg)	NA	NA
Manganese (Mn)	NA	NA
Molybdenum (Mo)	NA	NA
Nickel (Ni)	NA	NA
Lead (Pb)	<1.00	85.8
Antimony (Sb)	NA	NA
Selenium (Se)	<2.50	85.3
Strontium (Sr)	NA	NA
Titanium (Ti)	NA	NA
Thallium (Tl)	NA	NA
Vanadium (V)	NA	NA
Zinc (Zn)	<1.00	101

Matrix Spike / Duplicate Spike performed as per method and
reported if assigned on Chain of Custody.

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH ST, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 7471A ANALYSIS
Mercury by Cold Vapor Atomic Absorption

QUALITY CONTROL - Solid

Date Extracted:09/20/06

QC Sample	Method Blank	Lab Control Sample
Units	mg/kg	% Recovery
Acceptance Limits	Results	85-115
Analyte		
Mercury (Hg)	<0.025 (Sol)	95.7

Matrix Spike / Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

EPA Method 8260 Solid Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Analyzed:	9/22/2006	
Conc. ug/kg	Acceptance Limit	
Volatile Organics	< 135	< 135
dichlorodifluoromethane	< 135	< 135
chloromethane	< 135	< 135
vinyl chloride	< 135	< 135
bromomethane	< 135	< 135
chloroethane	< 135	< 135
trichlorofluoromethane	< 135	< 135
diethyl ether	< 270	< 270
acrolein	< 400	< 400
acetone	< 700	< 700
1,1-dichloroethene	< 70	< 70
FREON-113	< 135	< 135
iodomethane	< 70	< 70
carbon disulfide	< 135	< 135
dichloromethane	< 135	< 135
tert-butyl alcohol (TBA)	< 700	< 700
acrylonitrile	< 135	< 135
methyl-tert-butyl-ether	< 135	< 135
trans-1,2-dichloroethene	< 70	< 70
1,1-dichloroethane	< 70	< 70
di-isopropyl ether (DIPE)	< 135	< 135
ethyl tert-butyl ether (ETBE)	< 135	< 135
vinyl acetate	< 135	< 135
2-butanone	< 700	< 700
2,2-dichloropropane	< 70	< 70
cis-1,2-dichloroethene	< 70	< 70
chloroform	< 70	< 70
bromochloromethane	< 70	< 70
tetrahydrofuran	< 400	< 400
1,1,1-trichloroethane	< 70	< 70
1,1-dichloropropene	< 70	< 70
carbon tetrachloride	< 70	< 70
1,2-dichloroethane	< 70	< 70
benzene	< 70	< 70
tert-amyl methyl ether (TAME)	< 135	< 135
trichloroethene	< 70	< 70
1,2-dichloropropane	< 70	< 70
bromodichloromethane	< 70	< 70
2-chloroethyl vinyl ether	< 135	< 135
1,4-Dioxane	< 1300	< 1300
1,1,1,2-tetrachloroethane	< 70	< 70
4-methyl-2-pentanone	< 400	< 400
cis-1,3-dichloropropene	< 70	< 70
toluene	< 70	< 70
trans-1,3-dichloropropene	< 70	< 70
1,1,2-trichloroethane	< 135	< 135
2-hexanone	< 400	< 400
1,3-dichloropropane	< 70	< 70
tetrachloroethene	< 70	< 70
1,2-dibromomethane	< 70	< 70
1,2-dibromoethane (EDB)	< 70	< 70
chlorobenzene	< 70	< 70
1,1,1,2-tetrachloroethane	< 70	< 70
ethylbenzene	< 70	< 70
1,1,2,2-tetrachloroethane	< 70	< 70
m&p-xylene	< 135	< 135
o-xylene	< 70	< 70
styrene	< 70	< 70
bromofom	< 70	< 70
isopropylbenzene	< 70	< 70
1,2,3-trichloropropane	< 70	< 70
bromobenzene	< 70	< 70
n-propylbenzene	< 70	< 70
2-chlorotoluene	< 70	< 70
1,3,5-trimethylbenzene	< 70	< 70
trans-1,4-dichloro-2-butene	< 135	< 135
4-chlorotoluene	< 70	< 70
tert-butyl-benzene	< 70	< 70
1,2,4-trimethylbenzene	< 70	< 70
sec-butyl-benzene	< 70	< 70
p-isopropyltoluene	< 135	< 135
1,3-dichlorobenzene	< 70	< 70
1,4-dichlorobenzene	< 70	< 70
n-butylbenzene	< 70	< 70
1,2-dichlorobenzene	< 70	< 70
1,2-dibromo-3-chloropropane	< 135	< 135
1,2,4-trichlorobenzene	< 70	< 70
hexachlorobutadiene	< 70	< 70
naphthalene	< 70	< 70
1,2,3-trichlorobenzene	< 70	< 70

Laboratory Control Sample

Date Analyzed:	9/22/2006		
Spike Concentration = 2500ug/kg	% Recovery	Acceptance Limits	Verdict
dichlorodifluoromethane	91.3	70-130	ok
chloromethane	82.6	70-130	ok
vinyl chloride	94.3	70-130	ok
bromomethane	104	70-130	ok
chloroethane	94.9	70-130	ok
trichlorofluoromethane	102	70-130	ok
diethyl ether	96.3	70-130	ok
acrolein	90.7	70-130	ok
acetone	100	70-130	ok
1,1-dichloroethene	98.1	70-130	ok
FREON-113	111	70-130	ok
iodomethane	102	70-130	ok
carbon disulfide	92.5	70-130	ok
dichloromethane	94.8	70-130	ok
tert-butyl alcohol (TBA)	98.5	70-130	ok
acrylonitrile	96.7	70-130	ok
methyl-tert-butyl-ether	103	70-130	ok
trans-1,2-dichloroethene	103	70-130	ok
1,1-dichloroethane	99.2	70-130	ok
di-isopropyl ether (DIPE)	95.4	70-130	ok
ethyl tert-butyl ether (ETBE)	101	70-130	ok
vinyl acetate	92.9	70-130	ok
2-butanone	96.3	70-130	ok
2,2-dichloropropane	103	70-130	ok
cis-1,2-dichloroethene	101	70-130	ok
chloroform	95.4	70-130	ok
bromochloromethane	106	70-130	ok
tetrahydrofuran	87.6	70-130	ok
1,1,1-trichloroethane	99.6	70-130	ok
1,1-dichloropropene	93.0	70-130	ok
carbon tetrachloride	98.3	70-130	ok
1,2-dichloroethane	91.7	70-130	ok
benzene	93.3	70-130	ok
tert-amyl methyl ether (TAME)	97.0	70-130	ok
trichloroethene	126	70-130	ok
1,2-dichloropropane	97.9	70-130	ok
bromodichloromethane	96.2	70-130	ok
2-chloroethyl vinyl ether	97.5	70-130	ok
1,4-Dioxane	107	70-130	ok
1,1,1,2-tetrachloroethane	108	70-130	ok
4-methyl-2-pentanone	91.0	70-130	ok
cis-1,3-dichloropropene	98.2	70-130	ok
toluene	105	70-130	ok
trans-1,3-dichloropropene	91.6	70-130	ok
1,1,2-trichloroethane	95.1	70-130	ok
2-hexanone	87.8	70-130	ok
1,3-dichloropropane	93.7	70-130	ok
tetrachloroethene	111	70-130	ok
1,2-dibromomethane	98.8	70-130	ok
1,2-dibromoethane (EDB)	93.7	70-130	ok
chlorobenzene	96.2	70-130	ok
1,1,1,2-tetrachloroethane	103	70-130	ok
ethylbenzene	97.0	70-130	ok
1,1,2,2-tetrachloroethane	82.8	70-130	ok
m&p-xylene	92.3	70-130	ok
o-xylene	91.9	70-130	ok
styrene	90.4	70-130	ok
bromofom	94.9	70-130	ok
isopropylbenzene	92.7	70-130	ok
1,2,3-trichloropropane	89.3	70-130	ok
bromobenzene	96.7	70-130	ok
n-propylbenzene	95.8	70-130	ok
2-chlorotoluene	92.5	70-130	ok
1,3,5-trimethylbenzene	93.6	70-130	ok
trans-1,4-dichloro-2-butene	79.0	70-130	ok
4-chlorotoluene	89.6	70-130	ok
tert-butyl-benzene	101	70-130	ok
1,2,4-trimethylbenzene	94.8	70-130	ok
sec-butyl-benzene	96.6	70-130	ok
p-isopropyltoluene	101	70-130	ok
1,3-dichlorobenzene	103	70-130	ok
1,4-dichlorobenzene	103	70-130	ok
n-butylbenzene	100	70-130	ok
1,2-dichlorobenzene	102	70-130	ok
1,2-dibromo-3-chloropropane	84.2	70-130	ok
1,2,4-trichlorobenzene	110	70-130	ok
hexachlorobutadiene	122	70-130	ok
naphthalene	94.4	70-130	ok
1,2,3-trichlorobenzene	106	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict
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EPA Method 8260 Solid Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Analyzed:	9/26/2006	
Volatile Organics	Conc. ug/kg	Acceptance Limit
dichlorodifluoromethane	< 135	< 135
chloromethane	< 135	< 135
vinyl chloride	< 135	< 135
bromomethane	< 135	< 135
chloroethane	< 135	< 135
trichlorofluoromethane	< 135	< 135
diethyl ether	< 270	< 270
acrolein	< 400	< 400
acetone	< 700	< 700
1,1-dichloroethene	< 70	< 70
FREON-113	< 135	< 135
iodomethane	< 70	< 70
carbon disulfide	< 135	< 135
dichloromethane	< 135	< 135
tert-butyl alcohol (TBA)	< 700	< 700
acrylonitrile	< 135	< 135
methyl-tert-butyl-ether	< 135	< 135
trans-1,2-dichloroethene	< 70	< 70
1,1-dichloroethane	< 70	< 70
di-isopropyl ether (DIPE)	< 135	< 135
ethyl tert-butyl ether (ETBE)	< 135	< 135
vinyl acetate	< 135	< 135
2-butanone	< 700	< 700
2,2-dichloropropane	< 70	< 70
cis-1,2-dichloroethene	< 70	< 70
chloroform	< 70	< 70
bromochloromethane	< 70	< 70
tetrahydrofuran	< 400	< 400
1,1,1-trichloroethane	< 70	< 70
1,1-dichloropropene	< 70	< 70
carbon tetrachloride	< 70	< 70
1,2-dichloroethane	< 70	< 70
benzene	< 70	< 70
tert-amyl methyl ether (TAME)	< 135	< 135
trichloroethene	< 70	< 70
1,2-dichloropropane	< 70	< 70
bromodichloromethane	< 70	< 70
2-chloroethyl vinyl ether	< 135	< 135
1,4-Dioxane	< 1300	< 1300
tribromomethane	< 70	< 70
4-methyl-2-pentanone	< 400	< 400
cis-1,3-dichloropropene	< 70	< 70
toluene	< 70	< 70
trans-1,3-dichloropropene	< 70	< 70
1,1,2-trichloroethane	< 135	< 135
2-hexanone	< 400	< 400
1,3-dichloropropane	< 70	< 70
tetrachloroethene	< 70	< 70
tribromochloromethane	< 70	< 70
1,2-dibromoethane (EDB)	< 70	< 70
chlorobenzene	< 70	< 70
1,1,1,2-tetrachloroethane	< 70	< 70
ethylbenzene	< 70	< 70
1,1,2,2-tetrachloroethane	< 70	< 70
m&p-xylene	< 135	< 135
o-xylene	< 70	< 70
styrene	< 70	< 70
bromoform	< 70	< 70
isopropylbenzene	< 70	< 70
1,2,3-trichloropropane	< 70	< 70
bromobenzene	< 70	< 70
n-propylbenzene	< 70	< 70
2-chlorotoluene	< 70	< 70
1,3,5-trimethylbenzene	< 70	< 70
trans-1,4-dichloro-2-butene	< 135	< 135
4-chlorotoluene	< 70	< 70
tert-butyl-benzene	< 70	< 70
1,2,4-trimethylbenzene	< 70	< 70
sec-butyl-benzene	< 70	< 70
p-isopropyltoluene	< 135	< 135
1,3-dichlorobenzene	< 70	< 70
1,4-dichlorobenzene	< 70	< 70
n-butylbenzene	< 70	< 70
1,2-dichlorobenzene	< 70	< 70
1,2-dibromo-3-chloropropane	< 135	< 135
1,2,4-trichlorobenzene	< 70	< 70
hexachlorobutadiene	< 70	< 70
naphthalene	< 70	< 70
1,2,3-trichlorobenzene	< 70	< 70

Laboratory Control Sample

Date Analyzed:	9/26/2006		
Spike Concentration = 2500ug/kg	% Recovery	Acceptance Limits	Verdict
dichlorodifluoromethane	106	70-130	ok
chloromethane	95.6	70-130	ok
vinyl chloride	107	70-130	ok
bromomethane	118	70-130	ok
chloroethane	110	70-130	ok
trichlorofluoromethane	113	70-130	ok
diethyl ether	106	70-130	ok
acrolein	99.4	70-130	ok
acetone	97.5	70-130	ok
1,1-dichloroethene	108	70-130	ok
FREON-113	118	70-130	ok
iodomethane	113	70-130	ok
carbon disulfide	107	70-130	ok
dichloromethane	103	70-130	ok
tert-butyl alcohol (TBA)	122	70-130	ok
acrylonitrile	103	70-130	ok
methyl-tert-butyl-ether	112	70-130	ok
trans-1,2-dichloroethene	112	70-130	ok
1,1-dichloroethane	107	70-130	ok
di-isopropyl ether (DIPE)	102	70-130	ok
ethyl tert-butyl ether (ETBE)	105	70-130	ok
vinyl acetate	102	70-130	ok
2-butanone	99.5	70-130	ok
2,2-dichloropropane	104	70-130	ok
cis-1,2-dichloroethene	108	70-130	ok
chloroform	101	70-130	ok
bromochloromethane	113	70-130	ok
tetrahydrofuran	97.3	70-130	ok
1,1,1-trichloroethane	105	70-130	ok
1,1-dichloropropene	102	70-130	ok
carbon tetrachloride	100	70-130	ok
1,2-dichloroethane	97.5	70-130	ok
benzene	100	70-130	ok
tert-amyl methyl ether (TAME)	104	70-130	ok
trichloroethene	138	70-130	out
1,2-dichloropropane	104	70-130	ok
bromodichloromethane	102	70-130	ok
2-chloroethyl vinyl ether	103	70-130	ok
1,4-Dioxane	111	70-130	ok
tribromomethane	114	70-130	ok
4-methyl-2-pentanone	98.1	70-130	ok
cis-1,3-dichloropropene	105	70-130	ok
toluene	111	70-130	ok
trans-1,3-dichloropropene	98.5	70-130	ok
1,1,2-trichloroethane	96.0	70-130	ok
2-hexanone	90.7	70-130	ok
1,3-dichloropropane	96.1	70-130	ok
tetrachloroethene	110	70-130	ok
tribromochloromethane	101	70-130	ok
1,2-dibromoethane (EDB)	94.8	70-130	ok
chlorobenzene	98.7	70-130	ok
1,1,1,2-tetrachloroethane	106	70-130	ok
ethylbenzene	102	70-130	ok
1,1,2,2-tetrachloroethane	96.2	70-130	ok
m&p-xylene	96.7	70-130	ok
o-xylene	96.8	70-130	ok
styrene	96.0	70-130	ok
bromoform	100	70-130	ok
isopropylbenzene	98.9	70-130	ok
1,2,3-trichloropropane	96.6	70-130	ok
bromobenzene	100	70-130	ok
n-propylbenzene	102	70-130	ok
2-chlorotoluene	99.4	70-130	ok
1,3,5-trimethylbenzene	101	70-130	ok
trans-1,4-dichloro-2-butene	83.3	70-130	ok
4-chlorotoluene	99.9	70-130	ok
tert-butyl-benzene	107	70-130	ok
1,2,4-trimethylbenzene	99.0	70-130	ok
sec-butyl-benzene	102	70-130	ok
p-isopropyltoluene	107	70-130	ok
1,3-dichlorobenzene	107	70-130	ok
1,4-dichlorobenzene	108	70-130	ok
n-butylbenzene	105	70-130	ok
1,2-dichlorobenzene	105	70-130	ok
1,2-dibromo-3-chloropropane	89.9	70-130	ok
1,2,4-trichlorobenzene	113	70-130	ok
hexachlorobutadiene	123	70-130	ok
naphthalene	98.4	70-130	ok
1,2,3-trichlorobenzene	108	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict
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EPA Method 8270 Solid Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Extracted: 09/20/06
Date Analyzed: 09/22/06
File Name: L1515

	Result	Reporting Limit (ug/kg)
Semi-Volatile Organics		
n-nitrosodimethylamine	ND	330
pyridine	ND	3300
phenol	ND	330
bis(2-chloroethyl)ether	ND	330
2-chlorophenol	ND	330
1,3-dichlorobenzene	ND	330
1,4-dichlorobenzene	ND	330
benzyl alcohol	ND	660
1,2-dichlorobenzene	ND	330
2-methylphenol	ND	330
bis(2-chloroisopropyl)ether	ND	330
3&4-methylphenol	ND	330
n-nitrosodi-n-propylamine	ND	330
hexachloroethane	ND	330
nitrobenzene	ND	330
isophrone	ND	330
2-nitrophenol	ND	330
2,4-dimethylphenol	ND	330
benzoic acid	ND	330
bis(2-chloroethoxy)methane	ND	330
2,4-dichlorophenol	ND	330
1,2,4-trichlorobenzene	ND	330
naphthalene	ND	330
4-chloroaniline	ND	660
hexachlorobutadiene	ND	330
4-chloro-3-methylphenol	ND	660
2-methylnaphthalene	ND	330
aniline	ND	330
hexachlorocyclopentadiene	ND	1700
2,4,6-trichlorophenol	ND	330
2,4,5-trichlorophenol	ND	330
2-chloronaphthalene	ND	330
2-nitroaniline	ND	1700
dimethylphthalate	ND	330
acenaphthylene	ND	330
2,6-dinitrotoluene	ND	330
3-nitroaniline	ND	1700
acenaphthene	ND	330
2,4-dinitrophenol	ND	3300
dibenzofuran	ND	330
4-nitrophenol	ND	1700
2,4-dinitrotoluene	ND	330
diethylphthalate	ND	330
fluorene	ND	330
4-chlorophenyl phenyl ether	ND	330
4-nitroaniline	ND	660
4,6-dinitro-2-methylphenol	ND	1700
n-nitrosodiphenylamine	ND	330
4-bromophenyl phenyl ether	ND	330
hexachlorobenzene	ND	330
pentachlorophenol	ND	1700
phenanthrene	ND	330
anthracene	ND	330
carbazole	ND	330
di-n-butylphthalate	ND	500
fluoranthene	ND	330
benzidine	ND	330
pyrene	ND	330
butylbenzylphthalate	ND	330
benz [a] anthracene	ND	330
3,3'-dichlorobenzidine	ND	660
chrysene	ND	330
bis(2-ethylhexyl)phthalate	ND	330
di-n-octylphthalate	ND	330
benzo [b] fluoranthene	ND	330
benzo [k] fluoranthene	ND	330
benzo [a] pyrene	ND	330
indeno [1,2,3-cd] pyrene	ND	330
dibenz [a,h] anthracene	ND	330
benzo [ghi] perylene	ND	330

Surrogates:	Recovery (%)	Acceptance Limits
2-FLUOROPHENOL	65.4	30-130
PHENOL-D6	68.2	30-130
NITROBENZENE-D5	68.2	30-130
2-FLUOROBIPHENYL	66.2	30-130
2,4,6-TRIBROMOPHENOL	78.6	30-130
p-TERPHENYL-D14	83.7	30-130

EPA Method 8270 Solid Method Blank (MB) and Laboratory Control Sample (LCS) Data

Laboratory Control Sample

Date Extracted: 09/20/06
Date Analyzed: 09/22/06
File Name: L1516

Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict
n-nitrosodimethylamine	75.7	40-140	ok
pyridine	71.1	40-140	ok
phenol	85.3	30-130	ok
bis(2-chloroethyl)ether	82.0	40-140	ok
2-chlorophenol	83.3	30-130	ok
1,3-dichlorobenzene	76.8	40-140	ok
1,4-dichlorobenzene	84.0	40-140	ok
benzyl alcohol	86.9	40-140	ok
1,2-dichlorobenzene	80.8	40-140	ok
2-methylphenol	88.5	30-130	ok
bis(2-chloroisopropyl)ether	81.7	40-140	ok
3,4-methylphenol	156	30-130	out
n-nitrosodi-n-propylamine	85.1	40-140	ok
hexachloroethane	82.3	40-140	ok
nitrobenzene	87.8	40-140	ok
isophrone	95.5	40-140	ok
2-nitrophenol	90.8	30-130	ok
2,4-dimethylphenol	82.1	30-130	ok
benzoic acid	44.1	30-130	ok
bis(2-chloroethoxy)methane	85.9	40-140	ok
2,4-dichlorophenol	92.4	30-130	ok
1,2,4-trichlorobenzene	86.3	40-140	ok
naphthalene	89.3	40-140	ok
4-chloroaniline	61.2	40-140	ok
hexachlorobutadiene	86.4	40-140	ok
4-chloro-3-methylphenol	93.9	30-130	ok
2-methylnaphthalene	86.1	40-140	ok
aniline	73.8	40-140	ok
hexachlorocyclopentadiene	84.0	40-140	ok
2,4,6-trichlorophenol	90.2	30-130	ok
2,4,5-trichlorophenol	100	30-130	ok
2-chloronaphthalene	87.4	40-140	ok
2-nitroaniline	95.2	40-140	ok
dimethylphthalate	91.1	40-140	ok
acenaphthylene	90.1	40-140	ok
2,6-dinitrotoluene	111	40-140	ok
3-nitroaniline	89.5	40-140	ok
acenaphthene	90.0	40-140	ok
2,4-dinitrophenol	78.3	30-130	ok
dibenzofuran	88.8	40-140	ok
4-nitrophenol	108	30-130	ok
2,4-dinitrotoluene	107	40-140	ok
diethylphthalate	97.0	40-140	ok
fluorene	94.9	40-140	ok
4-chlorophenyl phenyl ether	90.1	40-140	ok
4-nitroaniline	88.4	40-140	ok
4,6-dinitro-2-methylphenol	96.4	30-130	ok
n-nitrosodiphenylamine	100	40-140	ok
4-bromophenyl phenyl ether	92.6	40-140	ok
hexachlorobenzene	95.8	40-140	ok
pentachlorophenol	111	30-130	ok
phenanthrene	94.8	40-140	ok
anthracene	104	40-140	ok
carbazole	98.3	40-140	ok
di-n-butylphthalate	99.6	40-140	ok
fluoranthene	104	40-140	ok
benzidine	0.00	40-140	out
pyrene	100	40-140	ok
butylbenzylphthalate	88.6	40-140	ok
benz [a] anthracene	98.0	40-140	ok
3,3'-dichlorobenzidine	67.4	40-140	ok
chrysene	95.4	40-140	ok
bis(2-ethylhexyl)phthalate	95.8	40-140	ok
di-n-octylphthalate	103	40-140	ok
benzo [b] fluoranthene	99.7	40-140	ok
benzo [k] fluoranthene	96.8	40-140	ok
benzo [a] pyrene	101	40-140	ok
indeno [1,2,3-cd] pyrene	97.7	40-140	ok
dibenz [a,h] anthracene	97.8	40-140	ok
benzo [ghi] perylene	96.0	40-140	ok

CAM criteria allows 15% of analytes to exceed criteria.

Surrogates:	Recovery (%)	Acceptance Limits	Verdict
2-FLUOROPHENOL	77.8	30-130	ok
PHENOL-D6	79.5	30-130	ok
NITROBENZENE-D5	77.5	30-130	ok
2-FLUOROBIPHENYL	73.3	30-130	ok
2,4,6-TRIBROMOPHENOL	87.9	30-130	ok
p-TERPHENYL-D14	82.9	30-130	ok

CHAIN-OF-CUSTODY RECORD

W.O. # 0609-00138
(for lab use only)

Sample I.D.	Date/Time Sampled (Very Important)	Matrix A=Air S=Soil GW=Ground W. SW=Surface W. WW=Waste W. DW=Drinking W. Other (specify)	WV ONLY						ANALYSIS REQUIRED										Total # of Cont.	Note #
			624	601 □ 602	625	□ 524.2 □ 602.1	8290	8290 - "8240" List	8021	8021 - "8010" List	8021 - "8020" List	8270 □ PAH □ A □ BN	8081 Pest Only	TPH-GC (Mod 8100)	ETPH (CT)	Metals □ PPM-13 Pb-Cd	Metals (List Below)			
SP-1 2-4	9/16/06 830	Soil													X	X		H		
SP-1 8-10	900																	L		
SP-3 2-4	930																	L		
SP-4 0-2	10:00																	M		
SP-4 2-4	1030																	L		
SP-5 4-6	11:00																	H		
SP-6 2-4	11:30																	C		
SP-7 2-4	12:00																	L		
SP-8 2-4	12:30																	L		
SP-9 0-2	13:00																	M		
SP-12 6-8	13:30																	L		
SP-16 2-4	14:00																	H		
PRESERVATIVE (Cl - HCl, N - HNO ₃ , S - H ₂ SO ₄ , Na - NaOH, O - Other)* KCF																				
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*																				
RELINQUISHED BY: Chris Boran	DATE/TIME 9/18/06 1700	RECEIVED BY: UPS																		
RELINQUISHED BY: vps	DATE/TIME	RECEIVED BY:																		
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:																		

NOTES: Preservatives, special reporting limits, known contamination, etc.
PCB Field Screen Results Low(L) - 0-10 ppm Medium(M) - 10-50 ppm High(H) - >50 ppm

CA 0600

LAB USE TEMP. OF COOLER 3.0 °C

TURNAROUND TIME: Standard Rush 3 Days, Approved by

GZA FILE NO: 21-0656196.10 P.O. NO. 099

PROJECT SPECIAL METALS

LOCATION DUNKIRK, NY

COLLECTOR(S) J. DAVIOE / C. BORAN

SHEET 1 OF 2

PROJECT MANAGER: CHRIS BORAN EXT: 3309

GZA GEOENVIRONMENTAL, INC.
LABORATORY

106 South St
Hopkinton, MA 01748
(508) 435-9244
FAX (508) 435-9912

CHAIN-OF-CUSTODY RECORD

W.O. # 605-00138
(for lab use only)

[illegible]



GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: MA092 NH: 2028
CT: PH0579 RI: LAO00236
NELAC - NYS DOH: 11063

ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project No.: 21.0056196.10
Work Order No.: 0609-00199
Date Received: 09/26/2006
Date Reported: 09/29/2006

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
09/16/2006	Solid	0609-00199 001	SP-1 4-6
09/16/2006	Solid	0609-00199 002	SP-2 0-2
09/16/2006	Solid	0609-00199 003	SP-2 4-6
09/16/2006	Solid	0609-00199 004	SP-3 0-2
09/16/2006	Solid	0609-00199 005	SP-5 0-2
09/16/2006	Solid	0609-00199 006	SP-5 2-4
09/16/2006	Solid	0609-00199 007	SP-5 6-8
09/16/2006	Solid	0609-00199 008	SP-6 0-2
09/16/2006	Solid	0609-00199 009	SP-10 0-2
09/16/2006	Solid	0609-00199 010	SP-10 2-4
09/16/2006	Solid	0609-00199 011	SP-10 4-6
09/16/2006	Solid	0609-00199 012	SP-10 6-8

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GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
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ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00199**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 09/26/06 via __GZA courier, __x UPS, __FEDEX, or __hand delivered. The temperature of the __temperature blank/_x_cooler air, was 1.3 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8082 - PCBs

Attach QC 8082 09/26/06 - Solid

* The diluted out surrogate recoveries are due to the high level Aroclors present in the sample.



GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Page 3 of 15

ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00199**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:

% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
DO = Diluted Out

Method Key:

Method 8260: The current version of the method is 8260B.
Method 8021: The current version of the method is 8021B.
Method 8270: The current version of the method is 8270C.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

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Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00199**

Sample ID: **SP-1 4-6**
Sample Date: **09/16/2006**

Sample No.: **001**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		83.2	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/27/2006
Aroclor 1268	EPA 8082	<8500	ug/kg	TAJ	09/27/2006
Aroclor 1262	EPA 8082	<8500	ug/kg	TAJ	09/27/2006
Aroclor 1260	EPA 8082	<8500	ug/kg	TAJ	09/27/2006
Aroclor 1254	EPA 8082	<8500	ug/kg	TAJ	09/27/2006
Aroclor 1248	EPA 8082	<8500	ug/kg	TAJ	09/27/2006
Aroclor 1242/1016	EPA 8082	8700	ug/kg	TAJ	09/27/2006
Aroclor 1232	EPA 8082	<8500	ug/kg	TAJ	09/27/2006
Aroclor 1221	EPA 8082	<8500	ug/kg	TAJ	09/27/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	136	% R	TAJ	09/27/2006
***Tetrachloro-m-xylene	EPA 8082	74.9	% R	TAJ	09/27/2006
***Decachlorobiphenyl	EPA 8082	122	% R	TAJ	09/27/2006
***Decachlorobiphenyl	EPA 8082	110	% R	TAJ	09/27/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



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106 South Street
Hopkinton, MA 01748
(781) 278-4700

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ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00199**

Sample ID: **SP-2 0-2**
Sample Date: **09/16/2006**

Sample No.: **002**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		91.0	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/28/2006
Aroclor 1268	EPA 8082	<800	ug/kg	TAJ	09/28/2006
Aroclor 1262	EPA 8082	<800	ug/kg	TAJ	09/28/2006
Aroclor 1260	EPA 8082	<800	ug/kg	TAJ	09/28/2006
Aroclor 1254	EPA 8082	<800	ug/kg	TAJ	09/28/2006
Aroclor 1248	EPA 8082	<800	ug/kg	TAJ	09/28/2006
Aroclor 1242/1016	EPA 8082	840	ug/kg	TAJ	09/28/2006
Aroclor 1232	EPA 8082	<800	ug/kg	TAJ	09/28/2006
Aroclor 1221	EPA 8082	<800	ug/kg	TAJ	09/28/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	77.3	% R	TAJ	09/28/2006
***Tetrachloro-m-xylene	EPA 8082	93.4	% R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	79.8	% R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	81.7	% R	TAJ	09/28/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



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Date Reported: **09/29/2006**
Work Order No.: **0609-00199**

Sample ID: **SP-2 4-6**
Sample Date: **09/16/2006**

Sample No.: **003**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		85.3	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/28/2006
Aroclor 1268	EPA 8082	<60000	ug/kg	TAJ	09/28/2006
Aroclor 1262	EPA 8082	<60000	ug/kg	TAJ	09/28/2006
Aroclor 1260	EPA 8082	<60000	ug/kg	TAJ	09/28/2006
Aroclor 1254	EPA 8082	<60000	ug/kg	TAJ	09/28/2006
Aroclor 1248	EPA 8082	<60000	ug/kg	TAJ	09/28/2006
Aroclor 1242/1016	EPA 8082	65000	ug/kg	TAJ	09/28/2006
Aroclor 1232	EPA 8082	<60000	ug/kg	TAJ	09/28/2006
Aroclor 1221	EPA 8082	<60000	ug/kg	TAJ	09/28/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	09/28/2006
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	DO	* % R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	DO	* % R	TAJ	09/28/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



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Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00199**

Sample ID: **SP-3 0-2**
Sample Date: **09/16/2006**

Sample No.: **004**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		90.5	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/28/2006
Aroclor 1268	EPA 8082	<5000	ug/kg	TAJ	09/28/2006
Aroclor 1262	EPA 8082	<5000	ug/kg	TAJ	09/28/2006
Aroclor 1260	EPA 8082	<5000	ug/kg	TAJ	09/28/2006
Aroclor 1254	EPA 8082	<5000	ug/kg	TAJ	09/28/2006
Aroclor 1248	EPA 8082	6700	ug/kg	TAJ	09/28/2006
Aroclor 1242/1016	EPA 8082	<5000	ug/kg	TAJ	09/28/2006
Aroclor 1232	EPA 8082	<5000	ug/kg	TAJ	09/28/2006
Aroclor 1221	EPA 8082	<5000	ug/kg	TAJ	09/28/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	79.5	% R	TAJ	09/28/2006
***Tetrachloro-m-xylene	EPA 8082	85.4	% R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	101	% R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	110	% R	TAJ	09/28/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



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Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00199**

Sample ID: **SP-5 0-2**
Sample Date: **09/16/2006**

Sample No.: **005**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		87.4	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/28/2006
Aroclor 1268	EPA 8082	<100000	ug/kg	TAJ	09/28/2006
Aroclor 1262	EPA 8082	<100000	ug/kg	TAJ	09/28/2006
Aroclor 1260	EPA 8082	<100000	ug/kg	TAJ	09/28/2006
Aroclor 1254	EPA 8082	<100000	ug/kg	TAJ	09/28/2006
Aroclor 1248	EPA 8082	<100000	ug/kg	TAJ	09/28/2006
Aroclor 1242/1016	EPA 8082	120000	ug/kg	TAJ	09/28/2006
Aroclor 1232	EPA 8082	<100000	ug/kg	TAJ	09/28/2006
Aroclor 1221	EPA 8082	<100000	ug/kg	TAJ	09/28/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	09/28/2006
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	DO	* % R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	DO	* % R	TAJ	09/28/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



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Work Order No.: **0609-00199**

Sample ID: **SP-5 2-4**
Sample Date: **09/16/2006**

Sample No.: **006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		87.9	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/28/2006
Aroclor 1268	EPA 8082	<30000	ug/kg	TAJ	09/28/2006
Aroclor 1262	EPA 8082	<30000	ug/kg	TAJ	09/28/2006
Aroclor 1260	EPA 8082	<30000	ug/kg	TAJ	09/28/2006
Aroclor 1254	EPA 8082	<30000	ug/kg	TAJ	09/28/2006
Aroclor 1248	EPA 8082	<30000	ug/kg	TAJ	09/28/2006
Aroclor 1242/1016	EPA 8082	30000	ug/kg	TAJ	09/28/2006
Aroclor 1232	EPA 8082	<30000	ug/kg	TAJ	09/28/2006
Aroclor 1221	EPA 8082	<30000	ug/kg	TAJ	09/28/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	124	% R	TAJ	09/28/2006
***Tetrachloro-m-xylene	EPA 8082	77.8	% R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	102	% R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	112	% R	TAJ	09/28/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



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Chris Boron

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Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00199**

Sample ID: **SP-5 6-8**
Sample Date: **09/16/2006**

Sample No.: **007**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		82.5	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/28/2006
Aroclor 1268	EPA 8082	<45000	ug/kg	TAJ	09/28/2006
Aroclor 1262	EPA 8082	<45000	ug/kg	TAJ	09/28/2006
Aroclor 1260	EPA 8082	<45000	ug/kg	TAJ	09/28/2006
Aroclor 1254	EPA 8082	<45000	ug/kg	TAJ	09/28/2006
Aroclor 1248	EPA 8082	<45000	ug/kg	TAJ	09/28/2006
Aroclor 1242/1016	EPA 8082	48000	ug/kg	TAJ	09/28/2006
Aroclor 1232	EPA 8082	<45000	ug/kg	TAJ	09/28/2006
Aroclor 1221	EPA 8082	<45000	ug/kg	TAJ	09/28/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	09/28/2006
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	DO	* % R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	DO	* % R	TAJ	09/28/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



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Date Reported: **09/29/2006**
Work Order No.: **0609-00199**

Sample ID: **SP-6 0-2**
Sample Date: **09/16/2006**

Sample No.: **008**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		89.0	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/28/2006
Aroclor 1268	EPA 8082	<50000	ug/kg	TAJ	09/28/2006
Aroclor 1262	EPA 8082	<50000	ug/kg	TAJ	09/28/2006
Aroclor 1260	EPA 8082	<50000	ug/kg	TAJ	09/28/2006
Aroclor 1254	EPA 8082	<50000	ug/kg	TAJ	09/28/2006
Aroclor 1248	EPA 8082	60000	ug/kg	TAJ	09/28/2006
Aroclor 1242/1016	EPA 8082	<50000	ug/kg	TAJ	09/28/2006
Aroclor 1232	EPA 8082	<50000	ug/kg	TAJ	09/28/2006
Aroclor 1221	EPA 8082	<50000	ug/kg	TAJ	09/28/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	132	% R	TAJ	09/28/2006
***Tetrachloro-m-xylene	EPA 8082	104	% R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	133	% R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	105	% R	TAJ	09/28/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



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Work Order No.: **0609-00199**

Sample ID: **SP-10 0-2**
Sample Date: **09/16/2006**

Sample No.: **009**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		95.0	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/28/2006
Aroclor 1268	EPA 8082	<3500	ug/kg	TAJ	09/28/2006
Aroclor 1262	EPA 8082	<3500	ug/kg	TAJ	09/28/2006
Aroclor 1260	EPA 8082	<3500	ug/kg	TAJ	09/28/2006
Aroclor 1254	EPA 8082	<3500	ug/kg	TAJ	09/28/2006
Aroclor 1248	EPA 8082	3700	ug/kg	TAJ	09/28/2006
Aroclor 1242/1016	EPA 8082	<3500	ug/kg	TAJ	09/28/2006
Aroclor 1232	EPA 8082	<3500	ug/kg	TAJ	09/28/2006
Aroclor 1221	EPA 8082	<3500	ug/kg	TAJ	09/28/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	99.4	% R	TAJ	09/28/2006
***Tetrachloro-m-xylene	EPA 8082	113	% R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	116	% R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	130	% R	TAJ	09/28/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



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Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00199**

Sample ID: **SP-10 2-4**
Sample Date: **09/16/2006**

Sample No.: **010**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		85.8	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/28/2006
Aroclor 1268	EPA 8082	<80000	ug/kg	TAJ	09/28/2006
Aroclor 1262	EPA 8082	<80000	ug/kg	TAJ	09/28/2006
Aroclor 1260	EPA 8082	<80000	ug/kg	TAJ	09/28/2006
Aroclor 1254	EPA 8082	<80000	ug/kg	TAJ	09/28/2006
Aroclor 1248	EPA 8082	<80000	ug/kg	TAJ	09/28/2006
Aroclor 1242/1016	EPA 8082	84000	ug/kg	TAJ	09/28/2006
Aroclor 1232	EPA 8082	<80000	ug/kg	TAJ	09/28/2006
Aroclor 1221	EPA 8082	<80000	ug/kg	TAJ	09/28/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	09/28/2006
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	DO	* % R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	DO	* % R	TAJ	09/28/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



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Date Reported: **09/29/2006**
Work Order No.: **0609-00199**

Sample ID: **SP-10 4-6**

Sample No.: **011**

Sample Date: **09/16/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		88.0	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/28/2006
Aroclor 1268	EPA 8082	<10000	ug/kg	TAJ	09/28/2006
Aroclor 1262	EPA 8082	<10000	ug/kg	TAJ	09/28/2006
Aroclor 1260	EPA 8082	<10000	ug/kg	TAJ	09/28/2006
Aroclor 1254	EPA 8082	<10000	ug/kg	TAJ	09/28/2006
Aroclor 1248	EPA 8082	<10000	ug/kg	TAJ	09/28/2006
Aroclor 1242/1016	EPA 8082	13000	ug/kg	TAJ	09/28/2006
Aroclor 1232	EPA 8082	<10000	ug/kg	TAJ	09/28/2006
Aroclor 1221	EPA 8082	<10000	ug/kg	TAJ	09/28/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	124	% R	TAJ	09/28/2006
***Tetrachloro-m-xylene	EPA 8082	59.0	% R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	56.2	% R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	51.2	% R	TAJ	09/28/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



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Work Order No.: **0609-00199**

Sample ID: **SP-10 6-8**
Sample Date: **09/16/2006**

Sample No.: **012**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		85.6	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/28/2006
Aroclor 1268	EPA 8082	<1000	ug/kg	TAJ	09/28/2006
Aroclor 1262	EPA 8082	<1000	ug/kg	TAJ	09/28/2006
Aroclor 1260	EPA 8082	<1000	ug/kg	TAJ	09/28/2006
Aroclor 1254	EPA 8082	<1000	ug/kg	TAJ	09/28/2006
Aroclor 1248	EPA 8082	1300	ug/kg	TAJ	09/28/2006
Aroclor 1242/1016	EPA 8082	<1000	ug/kg	TAJ	09/28/2006
Aroclor 1232	EPA 8082	<1000	ug/kg	TAJ	09/28/2006
Aroclor 1221	EPA 8082	<1000	ug/kg	TAJ	09/28/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	65.1	% R	TAJ	09/28/2006
***Tetrachloro-m-xylene	EPA 8082	65.0	% R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	77.8	% R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	81.2	% R	TAJ	09/28/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH STREET, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 8082 ANALYSIS
QUALITY CONTROL SOLID

DATE EXTRACTED: 09/26/06

DATE ANALYZED: 09/27/06

METHOD BLANK	Concentration		Quantitation Limit
POLYCHLORINATED BIPHENYLS as AROCLORS	ug/kg-PPB		ug/kg-PPB
Aroclor 1262	ND		5.0
Aroclor 1260	ND		5.0
Aroclor 1254	ND		5.0
Aroclor 1248	ND		5.0
Aroclor 1242/1016	ND		5.0
Aroclor 1232	ND		5.0
Aroclor 1221	ND		5.0
Surrogates:	(A)	(B)	
Tetrachloro-m-xylene	77.4	85.9	30-150
Decachlorobiphenyl	95.6	100	30-150

LABORATORY CONTROL SAMPLE (LCS)	% Recovery		Acceptance Limits
Aroclor 1016	108	121	40-140
Aroclor 1260	130	133	40-140
Surrogates:			
Tetrachloro-m-xylene	72.1	79.3	30-150
Decachlorobiphenyl	95.6	98.9	30-150

*Matrix Spike/Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

(for lab use only)

NOTES: Preservatives, special reporting limits, known contamination, additional testing parameters, etc.:

PUB-1

TURNAROUND TIME: Standard Rush Days, Approved by: _____ LAB USE: _____
TEMP. OF COOLER 1.3 °C

DATA REPORT ☒ PDF (Adobe) ☐ ASCII ☐ EXCEL Specify State _____

GZA FILE NO: 21-0056196-10 PO. NO. 0945
PROJECT Special Metals H

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(508) 435-9244

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Laboratory Identification Numbers:
MA and ME: MA092 NH: 2028
CT: PH0579 RI: LAO00236
NELAC - NYS DOH: 11063

ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
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Chris Boron

Project No.: 21.0056196.10
Work Order No.: 0609-00200
Date Received: 09/26/2006
Date Reported: 09/29/2006

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
09/16/2006	Solid	0609-00200 001	SP-10 8-10
09/16/2006	Solid	0609-00200 002	SP-12 0-2
09/16/2006	Solid	0609-00200 003	SP-12 2-4
09/16/2006	Solid	0609-00200 004	SP-13 0-2
09/16/2006	Solid	0609-00200 005	SP-13 2-4
09/16/2006	Solid	0609-00200 006	SP-13 4-6
09/16/2006	Solid	0609-00200 007	SP-14 0-2
09/16/2006	Solid	0609-00200 008	SP-15 0-2
09/16/2006	Solid	0609-00200 009	SP-16 0-2



GZA GeoEnvironmental, Inc.
106 South Street
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(781) 278-4700

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ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00200**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 09/26/06 via __GZA courier, __x UPS, __FEDEX, or __hand delivered. The temperature of the __temperature blank/ __x cooler air, was 1.3 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8082 - PCBs

Attach QC 8082 09/26/06 - Solid
Attach QC 8082 09/27/06 - Solid

*The diluted out surrogate recovery is due to the high concentration of Aroclors present in the sample.



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ANALYTICAL REPORT

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Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00200**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:

% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
DO = Diluted Out

Method Key:

Method 8260: The current version of the method is 8260B.
Method 8021: The current version of the method is 8021B.
Method 8270: The current version of the method is 8270C.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

The laboratory report shall not be reproduced except in full without the written consent of the laboratory.

Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00200**

Sample ID: **SP-10 8-10**

Sample No.: **001**

Sample Date: **09/16/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		85.6	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/27/2006
Aroclor 1268	EPA 8082	<8000	ug/kg	TAJ	09/27/2006
Aroclor 1262	EPA 8082	<8000	ug/kg	TAJ	09/27/2006
Aroclor 1260	EPA 8082	<8000	ug/kg	TAJ	09/27/2006
Aroclor 1254	EPA 8082	<8000	ug/kg	TAJ	09/27/2006
Aroclor 1248	EPA 8082	<8000	ug/kg	TAJ	09/27/2006
Aroclor 1242/1016	EPA 8082	8300	ug/kg	TAJ	09/27/2006
Aroclor 1232	EPA 8082	<8000	ug/kg	TAJ	09/27/2006
Aroclor 1221	EPA 8082	<8000	ug/kg	TAJ	09/27/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	120	% R	TAJ	09/27/2006
***Tetrachloro-m-xylene	EPA 8082	94.4	% R	TAJ	09/27/2006
***Decachlorobiphenyl	EPA 8082	118	% R	TAJ	09/27/2006
***Decachlorobiphenyl	EPA 8082	107	% R	TAJ	09/27/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00200**

Sample ID: **SP-12 0-2**

Sample No.: **002**

Sample Date: **09/16/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		86.2	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/27/2006
Aroclor 1268	EPA 8082	<5000	ug/kg	TAJ	09/27/2006
Aroclor 1262	EPA 8082	<5000	ug/kg	TAJ	09/27/2006
Aroclor 1260	EPA 8082	<5000	ug/kg	TAJ	09/27/2006
Aroclor 1254	EPA 8082	<5000	ug/kg	TAJ	09/27/2006
Aroclor 1248	EPA 8082	5200	ug/kg	TAJ	09/27/2006
Aroclor 1242/1016	EPA 8082	<5000	ug/kg	TAJ	09/27/2006
Aroclor 1232	EPA 8082	<5000	ug/kg	TAJ	09/27/2006
Aroclor 1221	EPA 8082	<5000	ug/kg	TAJ	09/27/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	77.3	% R	TAJ	09/27/2006
***Tetrachloro-m-xylene	EPA 8082	81.3	% R	TAJ	09/27/2006
***Decachlorobiphenyl	EPA 8082	106	% R	TAJ	09/27/2006
***Decachlorobiphenyl	EPA 8082	116	% R	TAJ	09/27/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



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ANALYTICAL REPORT

GZA GeoEnvironmental of NY
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Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00200**

Sample ID: **SP-12 2-4**
Sample Date: **09/16/2006**

Sample No.: **003**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		85.9	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/27/2006
Aroclor 1268	EPA 8082	<15000	ug/kg	TAJ	09/27/2006
Aroclor 1262	EPA 8082	<15000	ug/kg	TAJ	09/27/2006
Aroclor 1260	EPA 8082	<15000	ug/kg	TAJ	09/27/2006
Aroclor 1254	EPA 8082	<15000	ug/kg	TAJ	09/27/2006
Aroclor 1248	EPA 8082	16000	ug/kg	TAJ	09/27/2006
Aroclor 1242/1016	EPA 8082	<15000	ug/kg	TAJ	09/27/2006
Aroclor 1232	EPA 8082	<15000	ug/kg	TAJ	09/27/2006
Aroclor 1221	EPA 8082	<15000	ug/kg	TAJ	09/27/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	89.6	% R	TAJ	09/27/2006
***Tetrachloro-m-xylene	EPA 8082	76.1	% R	TAJ	09/27/2006
***Decachlorobiphenyl	EPA 8082	99.7	% R	TAJ	09/27/2006
***Decachlorobiphenyl	EPA 8082	108	% R	TAJ	09/27/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



ANALYTICAL REPORT

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Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00200**

Sample ID: **SP-13 0-2**
Sample Date: **09/16/2006**

Sample No.: **004**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		90.7	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/27/2006
Aroclor 1268	EPA 8082	<110000	ug/kg	TAJ	09/27/2006
Aroclor 1262	EPA 8082	<110000	ug/kg	TAJ	09/27/2006
Aroclor 1260	EPA 8082	<110000	ug/kg	TAJ	09/27/2006
Aroclor 1254	EPA 8082	<110000	ug/kg	TAJ	09/27/2006
Aroclor 1248	EPA 8082	120000	ug/kg	TAJ	09/27/2006
Aroclor 1242/1016	EPA 8082	<110000	ug/kg	TAJ	09/27/2006
Aroclor 1232	EPA 8082	<110000	ug/kg	TAJ	09/27/2006
Aroclor 1221	EPA 8082	<110000	ug/kg	TAJ	09/27/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	09/27/2006
***Tetrachloro-m-xylene	EPA 8082	110	% R	TAJ	09/27/2006
***Decachlorobiphenyl	EPA 8082	101	% R	TAJ	09/27/2006
***Decachlorobiphenyl	EPA 8082	149	% R	TAJ	09/27/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



ANALYTICAL REPORT

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Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00200**

Sample ID: **SP-13 2-4**
Sample Date: **09/16/2006**

Sample No.: **005**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		89.5	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/27/2006
Aroclor 1268	EPA 8082	<55000	ug/kg	TAJ	09/27/2006
Aroclor 1262	EPA 8082	<55000	ug/kg	TAJ	09/27/2006
Aroclor 1260	EPA 8082	<55000	ug/kg	TAJ	09/27/2006
Aroclor 1254	EPA 8082	<55000	ug/kg	TAJ	09/27/2006
Aroclor 1248	EPA 8082	59000	ug/kg	TAJ	09/27/2006
Aroclor 1242/1016	EPA 8082	<55000	ug/kg	TAJ	09/27/2006
Aroclor 1232	EPA 8082	<55000	ug/kg	TAJ	09/27/2006
Aroclor 1221	EPA 8082	<55000	ug/kg	TAJ	09/27/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	09/27/2006
***Tetrachloro-m-xylene	EPA 8082	128	% R	TAJ	09/27/2006
***Decachlorobiphenyl	EPA 8082	126	% R	TAJ	09/27/2006
***Decachlorobiphenyl	EPA 8082	141	% R	TAJ	09/27/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



ANALYTICAL REPORT

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Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00200**

Sample ID: **SP-13 4-6**
Sample Date: **09/16/2006**

Sample No.: **006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		87.8	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/27/2006
Aroclor 1268	EPA 8082	<18000	ug/kg	TAJ	09/27/2006
Aroclor 1262	EPA 8082	<18000	ug/kg	TAJ	09/27/2006
Aroclor 1260	EPA 8082	<18000	ug/kg	TAJ	09/27/2006
Aroclor 1254	EPA 8082	<18000	ug/kg	TAJ	09/27/2006
Aroclor 1248	EPA 8082	22000	ug/kg	TAJ	09/27/2006
Aroclor 1242/1016	EPA 8082	<18000	ug/kg	TAJ	09/27/2006
Aroclor 1232	EPA 8082	<18000	ug/kg	TAJ	09/27/2006
Aroclor 1221	EPA 8082	<18000	ug/kg	TAJ	09/27/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	136	% R	TAJ	09/27/2006
***Tetrachloro-m-xylene	EPA 8082	112	% R	TAJ	09/27/2006
***Decachlorobiphenyl	EPA 8082	143	% R	TAJ	09/27/2006
***Decachlorobiphenyl	EPA 8082	143	% R	TAJ	09/27/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
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Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00200**

Sample ID: **SP-14 0-2**
Sample Date: **09/16/2006**

Sample No.: **007**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		88.6	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/29/2006
Aroclor 1268	EPA 8082	<1800	ug/kg	TAJ	09/29/2006
Aroclor 1262	EPA 8082	<1800	ug/kg	TAJ	09/29/2006
Aroclor 1260	EPA 8082	<1800	ug/kg	TAJ	09/29/2006
Aroclor 1254	EPA 8082	<1800	ug/kg	TAJ	09/29/2006
Aroclor 1248	EPA 8082	2000	ug/kg	TAJ	09/29/2006
Aroclor 1242/1016	EPA 8082	<1800	ug/kg	TAJ	09/29/2006
Aroclor 1232	EPA 8082	<1800	ug/kg	TAJ	09/29/2006
Aroclor 1221	EPA 8082	<1800	ug/kg	TAJ	09/29/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	104	% R	TAJ	09/29/2006
***Tetrachloro-m-xylene	EPA 8082	124	% R	TAJ	09/29/2006
***Decachlorobiphenyl	EPA 8082	123	% R	TAJ	09/29/2006
***Decachlorobiphenyl	EPA 8082	122	% R	TAJ	09/29/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/27/2006



GZA GeoEnvironmental, Inc.
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ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
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Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00200**

Sample ID: **SP-15 0-2**
Sample Date: **09/16/2006**

Sample No.: **008**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		87.2	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/27/2006
Aroclor 1268	EPA 8082	<9000	ug/kg	TAJ	09/27/2006
Aroclor 1262	EPA 8082	<9000	ug/kg	TAJ	09/27/2006
Aroclor 1260	EPA 8082	<9000	ug/kg	TAJ	09/27/2006
Aroclor 1254	EPA 8082	<9000	ug/kg	TAJ	09/27/2006
Aroclor 1248	EPA 8082	10000	ug/kg	TAJ	09/27/2006
Aroclor 1242/1016	EPA 8082	<9000	ug/kg	TAJ	09/27/2006
Aroclor 1232	EPA 8082	<9000	ug/kg	TAJ	09/27/2006
Aroclor 1221	EPA 8082	<9000	ug/kg	TAJ	09/27/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	82.7	% R	TAJ	09/27/2006
***Tetrachloro-m-xylene	EPA 8082	80.8	% R	TAJ	09/27/2006
***Decachlorobiphenyl	EPA 8082	101	% R	TAJ	09/27/2006
***Decachlorobiphenyl	EPA 8082	102	% R	TAJ	09/27/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/26/2006



ANALYTICAL REPORT

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Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **09/26/2006**
Date Reported: **09/29/2006**
Work Order No.: **0609-00200**

Sample ID: **SP-16 0-2**
Sample Date: **09/16/2006**

Sample No.: **009**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		95.1	%	TAJ	09/27/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	09/28/2006
Aroclor 1268	EPA 8082	<30000	ug/kg	TAJ	09/28/2006
Aroclor 1262	EPA 8082	<30000	ug/kg	TAJ	09/28/2006
Aroclor 1260	EPA 8082	<30000	ug/kg	TAJ	09/28/2006
Aroclor 1254	EPA 8082	<30000	ug/kg	TAJ	09/28/2006
Aroclor 1248	EPA 8082	33000	ug/kg	TAJ	09/28/2006
Aroclor 1242/1016	EPA 8082	<30000	ug/kg	TAJ	09/28/2006
Aroclor 1232	EPA 8082	<30000	ug/kg	TAJ	09/28/2006
Aroclor 1221	EPA 8082	<30000	ug/kg	TAJ	09/28/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	99.3	% R	TAJ	09/28/2006
***Tetrachloro-m-xylene	EPA 8082	99.2	% R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	96.9	% R	TAJ	09/28/2006
***Decachlorobiphenyl	EPA 8082	119	% R	TAJ	09/28/2006
Extraction	EPA 3541	1.0	DF	TAJ	09/27/2006

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH STREET, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 8082 ANALYSIS
QUALITY CONTROL SOLID

DATE EXTRACTED: 09/26/06

DATE ANALYZED: 09/26/06

METHOD BLANK	Concentration		Quantitation Limit
POLYCHLORINATED BIPHENYLS as AROCLORS	ug/kg-PPB		ug/kg-PPB
Aroclor 1262	ND		5.0
Aroclor 1260	ND		5.0
Aroclor 1254	ND		5.0
Aroclor 1248	ND		5.0
Aroclor 1242/1016	ND		5.0
Aroclor 1232	ND		5.0
Aroclor 1221	ND		5.0
Surrogates:	(A)	(B)	
Tetrachloro-m-xylene	81.0	80.8	30-150
Decachlorobiphenyl	104	103	30-150

LABORATORY CONTROL SAMPLE (LCS)	% Recovery		Acceptance Limits
Aroclor 1016	107	114	40-140
Aroclor 1260	138	122	40-140
Surrogates:			
Tetrachloro-m-xylene	82.2	83.8	30-150
Decachlorobiphenyl	112	110	30-150

*Matrix Spike/Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH STREET, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 8082 ANALYSIS
QUALITY CONTROL SOLID

DATE EXTRACTED: 09/27/06

DATE ANALYZED: 09/28/06

METHOD BLANK	Concentration		Quantitation Limit
POLYCHLORINATED BIPHENYLS as AROCLORS	ug/kg-PPB		ug/kg-PPB
Aroclor 1262	ND		5.0
Aroclor 1260	ND		5.0
Aroclor 1254	ND		5.0
Aroclor 1248	ND		5.0
Aroclor 1242/1016	ND		5.0
Aroclor 1232	ND		5.0
Aroclor 1221	ND		5.0
Surrogates:	(A)	(B)	
Tetrachloro-m-xylene	73.0	84.1	30-150
Decachlorobiphenyl	98.2	95.1	30-150

LABORATORY CONTROL SAMPLE (LCS)	% Recovery		Acceptance Limits
Aroclor 1016	109	119	40-140
Aroclor 1260	112	110	40-140
Surrogates:			
Tetrachloro-m-xylene	69.1	78.0	30-150
Decachlorobiphenyl	86.9	91.0	30-150

*Matrix Spike/Duplicate Spike performed as per method and reported if assigned on Chain of Custody.



GZA GeoEnvironmental, Inc.
106 South Street
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(781) 278-4700

Laboratory Identification Numbers:
MA and ME: **MA092** NH: **2028**
CT: **PH0579** RI: **LAO00236**
NELAC - NYS DOH: **11063**

ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project No.: **21.0056196.10**
Work Order No.: **0612-00021**
Date Received: **12/05/2006**
Date Reported: **12/11/2006**

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
12/02/2006	Solid	0612-00021 001	SP-17 0-2
12/02/2006	Solid	0612-00021 002	SP-17 2-4
12/02/2006	Solid	0612-00021 003	SP-18 2-4
12/02/2006	Solid	0612-00021 004	SP-19 0-2
12/02/2006	Solid	0612-00021 005	SP-20 0-2
12/02/2006	Solid	0612-00021 006	SP-20 2-4
12/02/2006	Solid	0612-00021 007	SP-21 0-2
12/02/2006	Solid	0612-00021 008	SP-21 2-4
12/02/2006	Solid	0612-00021 009	SP-21 4-6
12/02/2006	Solid	0612-00021 010	SP-22 0-3.6
12/02/2006	Solid	0612-00021 011	SP-23 0-2
12/02/2006	Solid	0612-00021 012	SP-24 0-2
12/02/2006	Solid	0612-00021 013	SP-24 4-6
12/02/2006	Solid	0612-00021 014	SP-25 0-2
12/02/2006	Solid	0612-00021 015	SP-26 0-2
12/02/2006	Solid	0612-00021 016	SP-26 2-4
12/02/2006	Solid	0612-00021 017	SP-26 4-6
12/02/2006	Solid	0612-00021 018	SP-27 0-2
12/02/2006	Solid	0612-00021 019	SP-27 2-4
12/02/2006	Solid	0612-00021 020	SP-27 4-6
12/02/2006	Solid	0612-00021 021	SP-28 0-2

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GZA GeoEnvironmental of NY
364 Nagel Drive
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Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 12/5/06 via GZA courier, x UPS, FEDEX, or hand delivered. The temperature of the temperature blank/ x cooler air, was 0.7 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 1311/6010B - TCLP Metals

Please note that the room temperature changed by more than 23 +/- 2 degrees C during the 16-20 hour leaching procedure.

The minimum temperature was: 19 degrees C.

The maximum temperature was: 21 degrees C.

The method requires that this information is noted on the data report.

Attach QC 1311/6010B 12/06/06 - TCLP

3. EPA Method 8082 - PCBs

Attach QC 8082 12/05/06 - Solid

Attach QC 8082 12/06/06 - Solid

*The LCS recoveries for Aroclor 1260 extracted on 12/06/06 exceed acceptance criteria. The Matrix Spike / Duplicate Spike meet all acceptance criteria and are included with this data report.



GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

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ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:

% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
DO = Diluted Out

Method Key:

Method 8260: The current version of the method is 8260B.
Method 8021: The current version of the method is 8021B.
Method 8270: The current version of the method is 8270C.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

The laboratory report shall not be reproduced except in full without the written consent of the laboratory.

Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.



ANALYTICAL REPORT

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Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-17 0-2**

Sample No.: **001**

Sample Date: **12/02/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		85.4	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<10000	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<10000	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<10000	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<10000	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	33000	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<10000	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<10000	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<10000	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	124	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	139	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	112	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	120	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/05/2006
TCLP Preparation	EPA 1311	1.0	DF	AJY	12/06/2006
Chromium	EPA 1311/6010B	0.014	mg/L	AVD	11/06/2006



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ANALYTICAL REPORT

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Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-17 2-4**

Sample No.: **002**

Sample Date: **12/02/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		85.9	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<200	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<200	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<200	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<200	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	<200	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<200	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<200	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<200	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	89.9	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	102	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	81.2	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	81.3	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/05/2006



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Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-18 2-4**

Sample No.: **003**

Sample Date: **12/02/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		87.3	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<200	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<200	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<200	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<200	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	<200	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<200	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<200	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<200	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	77.1	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	83.3	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	69.0	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	72.2	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/05/2006



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Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-19 0-2**

Sample No.: **004**

Sample Date: **12/02/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		88.1	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	8900	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	93.7	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	92.8	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	82.0	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	82.2	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/05/2006



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Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-20 0-2**
Sample Date: **12/02/2006**

Sample No.: **005**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		90.2	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<20000	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<20000	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<20000	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<20000	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	78000	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<20000	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<20000	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<20000	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	122	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	67.2	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	60.8	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	73.8	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/05/2006
TCLP Preparation	EPA 1311	1.0	DF	AJY	12/06/2006
Chromium	EPA 1311/6010B	0.0070	mg/L	AVD	11/06/2006



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Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-20 2-4**

Sample No.: **006**

Sample Date: **12/02/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		85.1	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	79.2	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	92.0	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	78.5	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	82.6	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/05/2006



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Project Name.: **Specialty Metals Environmental**
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Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-21 0-2**
Sample Date: **12/02/2006**

Sample No.: **007**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		90.5	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	8600	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	81.4	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	78.0	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	68.2	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	70.5	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/05/2006



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Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-21 2-4**

Sample No.: **008**

Sample Date: **12/02/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		88.7	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	7000	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<4000	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	68.1	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	60.2	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	69.0	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	72.7	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/05/2006
TCLP Preparation	EPA 1311	1.0	DF	AJY	12/06/2006
Chromium	EPA 1311/6010B	0.0056	mg/L	AVD	11/06/2006



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Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-21 4-6**

Sample No.: **009**

Sample Date: **12/02/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		91.4	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	81.1	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	87.8	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	71.4	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	77.0	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/05/2006



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Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-22 0-3.6**

Sample No.: **010**

Sample Date: **12/02/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		85.2	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<100	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<100	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<100	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<100	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	<100	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<100	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<100	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<100	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	78.7	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	85.4	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	70.0	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	75.6	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/05/2006



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Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-23 0-2**
Sample Date: **12/02/2006**

Sample No.: **011**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		87.4	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<2000	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<2000	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<2000	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<2000	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	2900	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<2000	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<2000	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<2000	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	68.5	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	71.3	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	74.8	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	79.4	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/05/2006
TCLP Preparation	EPA 1311	1.0	DF	AJY	12/06/2006
Chromium	EPA 1311/6010B	0.012	mg/L	AVD	11/06/2006



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Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-24 0-2**
Sample Date: **12/02/2006**

Sample No.: **012**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		93.4	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<400	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<400	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<400	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<400	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	740	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<400	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<400	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<400	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	88.3	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	98.8	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	61.8	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	66.4	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/05/2006



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-24 4-6**

Sample No.: **013**

Sample Date: **12/02/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		90.5	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	69.4	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	78.2	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	72.2	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	78.7	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/05/2006



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-25 0-2**
Sample Date: **12/02/2006**

Sample No.: **014**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		77.9	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<500	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<500	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<500	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<500	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	1000	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<500	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<500	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<500	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	76.9	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	83.3	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	70.5	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	77.6	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/05/2006
TCLP Preparation	EPA 1311	1.0	DF	AJY	12/06/2006
Chromium	EPA 1311/6010B	<0.0050	mg/L	AVD	11/06/2006



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-26 0-2**
Sample Date: **12/02/2006**

Sample No.: **015**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		93.3	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<10000	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<10000	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<10000	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<10000	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	17000	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<10000	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<10000	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<10000	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	71.6	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	72.2	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	70.7	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	68.0	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/05/2006
TCLP Preparation	EPA 1311	1.0	DF	AJY	12/06/2006
Chromium	EPA 1311/6010B	0.011	mg/L	AVD	11/06/2006



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-26 2-4**
Sample Date: **12/02/2006**

Sample No.: **016**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		86.2	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	86.4	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	94.8	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	82.6	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	95.3	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/06/2006



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-26 4-6**

Sample No.: **017**

Sample Date: **12/02/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		90.2	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	79.3	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	86.7	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	77.6	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	86.7	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/06/2006



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-27 0-2**
Sample Date: **12/02/2006**

Sample No.: **018**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		81.5	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/08/2006
Aroclor 1268	EPA 8082	<2000	ug/kg	TAJ	12/08/2006
Aroclor 1262	EPA 8082	<2000	ug/kg	TAJ	12/08/2006
Aroclor 1260	EPA 8082	<2000	ug/kg	TAJ	12/08/2006
Aroclor 1254	EPA 8082	<2000	ug/kg	TAJ	12/08/2006
Aroclor 1248	EPA 8082	5200	ug/kg	TAJ	12/08/2006
Aroclor 1242/1016	EPA 8082	<2000	ug/kg	TAJ	12/08/2006
Aroclor 1232	EPA 8082	<2000	ug/kg	TAJ	12/08/2006
Aroclor 1221	EPA 8082	<2000	ug/kg	TAJ	12/08/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	82.6	% R	TAJ	12/08/2006
***Tetrachloro-m-xylene	EPA 8082	76.0	% R	TAJ	12/08/2006
***Decachlorobiphenyl	EPA 8082	79.8	% R	TAJ	12/08/2006
***Decachlorobiphenyl	EPA 8082	79.5	% R	TAJ	12/08/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/06/2006
TCLP Preparation	EPA 1311	1.0	DF	AJY	12/06/2006
Chromium	EPA 1311/6010B	0.0068	mg/L	AVD	11/06/2006



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-27 2-4**

Sample No.: **019**

Sample Date: **12/02/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		84.0	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/07/2006
Aroclor 1268	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1262	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1260	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1254	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1248	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1242/1016	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1232	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Aroclor 1221	EPA 8082	<50	ug/kg	TAJ	12/07/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	66.1	% R	TAJ	12/07/2006
***Tetrachloro-m-xylene	EPA 8082	75.6	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	67.2	% R	TAJ	12/07/2006
***Decachlorobiphenyl	EPA 8082	71.3	% R	TAJ	12/07/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/06/2006



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-27 4-6**
Sample Date: **12/02/2006**

Sample No.: **020**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		85.3	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/08/2006
Aroclor 1268	EPA 8082	<50	ug/kg	TAJ	12/08/2006
Aroclor 1262	EPA 8082	<50	ug/kg	TAJ	12/08/2006
Aroclor 1260	EPA 8082	<50	ug/kg	TAJ	12/08/2006
Aroclor 1254	EPA 8082	<50	ug/kg	TAJ	12/08/2006
Aroclor 1248	EPA 8082	77	ug/kg	TAJ	12/08/2006
Aroclor 1242/1016	EPA 8082	<50	ug/kg	TAJ	12/08/2006
Aroclor 1232	EPA 8082	<50	ug/kg	TAJ	12/08/2006
Aroclor 1221	EPA 8082	<50	ug/kg	TAJ	12/08/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	74.5	% R	TAJ	12/08/2006
***Tetrachloro-m-xylene	EPA 8082	80.6	% R	TAJ	12/08/2006
***Decachlorobiphenyl	EPA 8082	67.2	% R	TAJ	12/08/2006
***Decachlorobiphenyl	EPA 8082	76.2	% R	TAJ	12/08/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/06/2006



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/05/2006**
Date Reported: **12/11/2006**
Work Order No.: **0612-00021**

Sample ID: **SP-28 0-2**

Sample No.: **021**

Sample Date: **12/02/2006**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		95.2	%	TAJ	12/06/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/08/2006
Aroclor 1268	EPA 8082	<100	ug/kg	TAJ	12/08/2006
Aroclor 1262	EPA 8082	<100	ug/kg	TAJ	12/08/2006
Aroclor 1260	EPA 8082	<100	ug/kg	TAJ	12/08/2006
Aroclor 1254	EPA 8082	<100	ug/kg	TAJ	12/08/2006
Aroclor 1248	EPA 8082	<100	ug/kg	TAJ	12/08/2006
Aroclor 1242/1016	EPA 8082	<100	ug/kg	TAJ	12/08/2006
Aroclor 1232	EPA 8082	<100	ug/kg	TAJ	12/08/2006
Aroclor 1221	EPA 8082	<100	ug/kg	TAJ	12/08/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	111	% R	TAJ	12/08/2006
***Tetrachloro-m-xylene	EPA 8082	121	% R	TAJ	12/08/2006
***Decachlorobiphenyl	EPA 8082	94.7	% R	TAJ	12/08/2006
***Decachlorobiphenyl	EPA 8082	108	% R	TAJ	12/08/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/06/2006

ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH ST, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 1311/6010B ANALYSIS
Metals by ICP

QUALITY CONTROL - TCLP

DATE PREPARED: 12/6/2006

QC Sample	Method Blank	Lab Control Sample
Units	mg/L	% Recovery
Acceptance Limits	Results	80-120
Analyte		
Silver (Ag)	NA	NA
Aluminum (Al)	NA	NA
Arsenic (As)	NA	NA
Boron (B)	NA	NA
Barium (Ba)	NA	NA
Beryllium (Be)	NA	NA
Calcium (Ca)	NA	NA
Cadmium (Cd)	NA	NA
Cobalt (Co)	NA	NA
Chromium (Cr)	<0.0050	89.9
Copper (Cu)	NA	NA
Iron (Fe)	NA	NA
Magnesium (Mg)	NA	NA
Manganese (Mn)	NA	NA
Molybdenum (Mo)	NA	NA
Nickel (Ni)	NA	NA
Lead (Pb)	NA	NA
Antimony (Sb)	NA	NA
Selenium (Se)	NA	NA
Strontium (Sr)	NA	NA
Titanium (Ti)	NA	NA
Thallium (Tl)	NA	NA
Vanadium (V)	NA	NA
Zinc (Zn)	NA	NA

Matrix Spike / Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH STREET, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 8082 ANALYSIS
QUALITY CONTROL SOLID

DATE EXTRACTED: 12/05/06

DATE ANALYZED: 12/06/06

METHOD BLANK	Concentration		Quantitation Limit
POLYCHLORINATED BIPHENYLS as AROCLORS	ug/kg-PPB		ug/kg-PPB
Aroclor 1262	ND		5.0
Aroclor 1260	ND		5.0
Aroclor 1254	ND		5.0
Aroclor 1248	ND		5.0
Aroclor 1242/1016	ND		5.0
Aroclor 1232	ND		5.0
Aroclor 1221	ND		5.0
Surrogates:	(A)	(B)	
Tetrachloro-m-xylene	81.7	81.1	30-150
Decachlorobiphenyl	92.9	91.2	30-150

LABORATORY CONTROL SAMPLE (LCS)	% Recovery		Acceptance Limits
Aroclor 1016	100	108	40-140
Aroclor 1260	130	110	40-140
Surrogates:			
Tetrachloro-m-xylene	87.3	93.4	30-150
Decachlorobiphenyl	96.4	95.4	30-150

*Matrix Spike/Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH STREET, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 8082 ANALYSIS
QUALITY CONTROL SOLID

DATE EXTRACTED: 12/06/06

DATE ANALYZED: 12/07/06

METHOD BLANK	Concentration		Quantitation Limit
POLYCHLORINATED BIPHENYLS as AROCLORS	ug/kg-PPB		ug/kg-PPB
Aroclor 1262	ND		25
Aroclor 1260	ND		25
Aroclor 1254	ND		25
Aroclor 1248	ND		25
Aroclor 1242/1016	ND		25
Aroclor 1232	ND		25
Aroclor 1221	ND		25
Surrogates:	(A)	(B)	
Tetrachloro-m-xylene	120	134	30-150
Decachlorobiphenyl	118	129	30-150

LABORATORY CONTROL SAMPLE (LCS)	% Recovery		Acceptance Limits
Aroclor 1016	137	139	40-140
Aroclor 1260	142	149	40-140
Surrogates:			
Tetrachloro-m-xylene	91.8	101	30-150
Decachlorobiphenyl	81.6	88.3	30-150

*LCS recoveries for Aroclor 1260 exceed acceptance criteria. The Matrix Spike / Duplicate Spike meet all acceptance criteria and are included with this data report.

Matrix Spike Sample ID: SP-27 2-4
Matrix Spike LIMS ID: 0612-00021-019

MATRIX SPIKE SAMPLE	% Recovery		Acceptance Limits
Aroclor 1016	108	109	40-140
Aroclor 1260	107	103	40-140
Tetrachloro-m-xylene	91.8	103	30-150
Decachlorobiphenyl	88.6	96.8	30-150

MATRIX SPIKE DUPLICATE	% Recovery		Acceptance Limits
Aroclor 1016	133	130	40-140
Aroclor 1260	129	124	40-140
Surrogates:			
Tetrachloro-m-xylene	127	143	30-150
Decachlorobiphenyl	123	134	30-150

RELATIVE PERCENT DIFFERENCE (RPD)	RPD		Acceptance Limits
Aroclor 1016	20.7	17.6	50
Aroclor 1260	18.6	18.5	50

AC/100

[illegible]

Result due 12/12/06

RELINQUISHED BY: <u>Chris Baran</u>	DATE/TIME <u>12/11/06 1800</u>	RECEIVED BY: <u>UPS Pickup</u>
RELINQUISHED BY: <u>UPS</u>	DATE/TIME	RECEIVED BY: <u>Big Yellow 12/5/06 0930</u>
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:

PROJECT MANAGER: <u>C. Baran</u>	EXT: <u>3309</u>
----------------------------------	------------------

GZA GEOENVIRONMENTAL, INC.
LABORATORY
106 South St Hopkinton, MA 01748 (508) 435-9244 FAX (508) 435-9912

NOTES: Preservatives, special reporting limits, known contamination, etc.	
<u>Result done 12/12/06</u>	

TURNAROUND TIME: Standard Rush Days, Approved by	LAB USE TEMP. OF COOLER <u>0.7</u> °C
GZA FILE NO: <u>Z1.D056196.1D</u>	P.O. NO. <u>12/5/06</u> <u>0930</u> <u>12/6</u>
PROJECT <u>Special Metals</u>	
LOCATION <u>Dunkirk, NY</u>	
COLLECTOR(S) <u>CZB, JD</u>	SHEET <u>1</u> OF <u>2</u>

W.O. # 0614-00021
(for lab use only)

CHAIN-OF-CUSTODY RECORD

Sample ID.	Date/Time Sampled (Very Important)	Matrix A=Air S=Soil GW=Ground W. SW=Surface W. WW=Waste W. DW=Drinking W. Other (Specify)	ANALYSIS REQUIRED										Total # of Cont.	Note #									
			WW ONLY																				
SP-24, 4-b	12/16	S	624	601	602	625	524.2	502.1	6260	8260 - "8240" List	8021	8021 - "8010" List	8021 - "8020" List	8270 PAH A A BN	8081 Pest Only	TPH-GC (Mod 8100)	ETPH (CT)	Metals PPM-13 R-8	Metals (List Below)	PLS BDBZ	TECP Chrom	1	
SP-25, 0-2																						2	
SP-26, 0-2																						2	
SP-26, 2-4																						1	
SP-26, 4-b																						1	
SP-27, 0-2																						2	
SP-27, 2-4																						1	
SP-27, 4-b																						1	
SP-28, 0-2																						1	

PRESERVATIVE (CI - HCl, N - HNO₃, S - H₂SO₄, Na - NaOH, O - Other)*

CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*

RELINQUISHED BY: Chris Boren DATE/TIME: 12/16/06 1800 RECEIVED BY: VPs Pickup

RELINQUISHED BY: VPs DATE/TIME: 12/15/06 1930 RECEIVED BY: VPs

RELINQUISHED BY: VPs DATE/TIME: 12/15/06 1930 RECEIVED BY: VPs

PROJECT MANAGER: C. Boren EXT: 3309

GZA GEOENVIRONMENTAL, INC.
LABORATORY

106 South St
Hopkinton, MA 01748
(508) 435-9244
FAX (508) 435-9912

NOTES: Preservatives, special reporting limits, known contamination, etc.

Results due 12/12/06

TURNAROUND TIME: Standard Rush Days, Approved by: CA 05 0614 LAB USE: 12/15/06 TEMP. OF COOLER: 0.7 °C

GZA FILE NO: 21.DDS0616 ID P.O. NO. 11506

PROJECT: Special Metals

LOCATION: Drunk NY

COLLECTOR(S): C28 JD SHEET 2 OF 2



GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: MA092 NH: 2028
CT: PH0579 RI: LAO00236
NELAC - NYS DOH: 11063

ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project No.: 21.0056196.10
Work Order No.: 0612-00202
Date Received: 12/21/2006
Date Reported: 12/29/2006

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
12/20/2006	Solid	0612-00202 001	Trench Stockpile



GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Page 2 of 4

ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/21/2006**
Date Reported: **12/29/2006**
Work Order No.: **0612-00202**

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 12/22/06 via ___GZA courier, XUPS, ___FEDEX, or ___hand delivered. The temperature of the x temperature blank/___cooler air, was 2.1 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8082 - PCBs

Attach QC 8082 12/26/06 - Solid

* The diluted out surrogate recoveries are due to interference from the type and concentration of Aroclors present in the sample.



GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Page 3 of 4

ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/21/2006**
Date Reported: **12/29/2006**
Work Order No.: **0612-00202**

Data Authorized By: _____

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

Abbreviations:

% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
DO = Diluted Out

Method Key:

Method 8260: The current version of the method is 8260B.
Method 8021: The current version of the method is 8021B.
Method 8270: The current version of the method is 8270C.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

The laboratory report shall not be reproduced except in full without the written consent of the laboratory.

Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.



ANALYTICAL REPORT

GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

Chris Boron

Project Name.: **Specialty Metals Environmental**
Project No.: **21.0056196.10**

Date Received: **12/21/2006**
Date Reported: **12/29/2006**
Work Order No.: **0612-00202**

Sample ID: **Trench Stockpile**
Sample Date: **12/20/2006**

Sample No.: **001**

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		84.6	%	TAJ	12/26/2006
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	12/28/2006
Aroclor 1268	EPA 8082	<300000	ug/kg	TAJ	12/28/2006
Aroclor 1262	EPA 8082	<300000	ug/kg	TAJ	12/28/2006
Aroclor 1260	EPA 8082	<300000	ug/kg	TAJ	12/28/2006
Aroclor 1254	EPA 8082	<300000	ug/kg	TAJ	12/28/2006
Aroclor 1248	EPA 8082	<300000	ug/kg	TAJ	12/28/2006
Aroclor 1242/1016	EPA 8082	370000	ug/kg	TAJ	12/28/2006
Aroclor 1232	EPA 8082	<300000	ug/kg	TAJ	12/28/2006
Aroclor 1221	EPA 8082	<300000	ug/kg	TAJ	12/28/2006
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	12/28/2006
***Tetrachloro-m-xylene	EPA 8082	DO	* % R	TAJ	12/28/2006
***Decachlorobiphenyl	EPA 8082	DO	* % R	TAJ	12/28/2006
***Decachlorobiphenyl	EPA 8082	DO	* % R	TAJ	12/28/2006
Extraction	EPA 3541	1.0	DF	TAJ	12/26/2006

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH STREET, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 8082 ANALYSIS
QUALITY CONTROL SOLID

DATE EXTRACTED: 12/26/06

DATE ANALYZED: 12/26/06

METHOD BLANK	Concentration		Quantitation Limit
POLYCHLORINATED BIPHENYLS as AROCLORS	ug/kg-PPB		ug/kg-PPB
Aroclor 1262	ND		5.0
Aroclor 1260	ND		5.0
Aroclor 1254	ND		5.0
Aroclor 1248	ND		5.0
Aroclor 1242/1016	ND		5.0
Aroclor 1232	ND		5.0
Aroclor 1221	ND		5.0
Surrogates:	(A)	(B)	
Tetrachloro-m-xylene	118	125	30-150
Decachlorobiphenyl	120	127	30-150

LABORATORY CONTROL SAMPLE (LCS)	% Recovery		Acceptance Limits
Aroclor 1016	99.5	118	40-140
Aroclor 1260	105	106	40-140
Surrogates:			
Tetrachloro-m-xylene	102	109	30-150
Decachlorobiphenyl	95.9	107	30-150

*Matrix Spike/Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

(for lab use only)

GZAP-032



GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

CONTROL NO: 032413
DATE GENERATED: 12/29/2006
PURCHASE ORDER:

WORK ORDER NO: 0612-00202
DATE RECEIVED: 12/21/2006
CUSTOMER NO: NYB
PROJECT NO: 21.0056196.10 TASK:
PROJECT NAME: Specialty Metals Environment

SUBJECT: Special Metals Dunkirk, NY

Charges for Laboratory Services

Quantity	Parameter	Method	Unit Cost	Extended
1	POLYCHLORINATED BIPHENYLS	EPA 8082	\$60.00	\$60.00
1	PERCENT SOLID		\$0.00	\$0.00

Total Amount Due

\$60.00



CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Attn: Ms. Michelle Mirenda
Engineers and Scientists
106 South Street
Hopkinton, MA 01748

Date Received: 1/3/07
Date Reported: 1/5/07
P.O. #: 8-30462
Work Order #: 0701-00145

DESCRIPTION: GZA FILE# 21.0056196.10 SPECIAL METALS - DURKIRK, NY

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies and all NELAC requirements were met. The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844, NY-11726

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

Mike Hobin
Data Reporting

enc: Chain of Custody

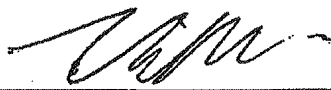
R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs

Date Received: 1/3/07

Work Order #: 0701-00145

Approved by: 

Data Reporting

Sample # 001

SAMPLE DESCRIPTION: TRENCH STOCKPILE

SAMPLE TYPE: COMPOSITE

SAMPLE DATE/TIME: 12/20/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TEMPERATURE UPON RECEIPT AT LAB	9		degrees C	EPA 170.1	1/3/07	ALR
PCB						
Aroclor-1016	<20	20	mg/kg dry	SW-846 8082	1/5/07	MFT
Aroclor-1221	<20	20	mg/kg dry	SW-846 8082	1/5/07	MFT
Aroclor-1232	<20	20	mg/kg dry	SW-846 8082	1/5/07	MFT
Aroclor-1242	1200	200	mg/kg dry	SW-846 8082	1/5/07	MFT
Aroclor-1248	<20	20	mg/kg dry	SW-846 8082	1/5/07	MFT
Aroclor-1254	<20	20	mg/kg dry	SW-846 8082	1/5/07	MFT
Aroclor-1260	<20	20	mg/kg dry	SW-846 8082	1/5/07	MFT
Moisture	15		%	SM2540 G.	1/3/07	MC
Surrogate			RANGE	SW-846 8082	1/5/07	MFT
Tetrachloro-m-xylene (TCMX)	*		30-150%	SW-846 8082	1/5/07	MFT
Decachlorobiphenyl	*		30-150%	SW-846 8082	1/5/07	MFT
Extraction date	Extracted			SW846 3545	1/3/07	MC

Method 8082:

* Surrogates diluted below calibration range due to sample matrix.

ANALYSIS REQUIRED

[illegible]

APPENDIX E

SITE-SPECIFIC HEALTH AND SAFETY PLAN

**SPECIAL METALS CORPORATION
PCB SOIL EXCAVATION PROJECT
DUNKIRK, NEW YORK**

**HEALTH AND SAFETY PLAN
SPECIAL METALS CORPORATION
PCB SOIL REMEDIATION
DUNKIRK, NEW YORK**

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HEALTH AND SAFETY PLAN
SPECIAL METALS CORPORATION
PCB SOIL REMEDIATION
DUNKIRK, NEW YORK

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SPECIAL METALS CORPORATION
PCB SOIL REMEDIATION
DUNKIRK, NEW YORK

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 Site Sign-in Sheet
 GZA Incident Investigation Form

1.0 INTRODUCTION

1.1 OVERVIEW

This Site-Specific Health and Safety Plan (HASP) has been developed by GZA GeoEnvironmental of New York (GZA) to establish the health and safety procedures required to protect on-site personnel, and off-site receptors from potential hazards resulting from activities within the specified scope of work for PCB remedial activities at the Special Metals Corporation, Dunkirk Facility, (SMC) located at 100 Willowbrook Drive in Dunkirk, New York (see Figure 1 of the Work Plan). The provisions of this plan apply to Site personnel involved with the PCB soil remedial activities that may be exposed to safety and/or health hazards related to activities described in Section 3.0 of this document. The procedures in this plan have been developed based on current knowledge regarding the hazards, which are known or anticipated for the operations to be conducted at this Site.

The following sections (1.1.1 to 1.2) present a brief summary of information from the body of this HASP. This information is intended as a guide to assist the reader and is not intended to be all-inclusive.

1.1.1 Project Scope

This project involves the excavation/disposal of PCB impacted soil, sample collection/screening and backfilling of the excavation. Figure 4 within the Work Plan identifies the area of the PCB impacted soil to be excavated and disposed.

1.1.2 Site Hazards

The primary hazards anticipated at the Site are the physical hazards associated with operation of mechanical equipment (e.g., excavator or dump truck) and potential exposure to soil containing hazardous levels of PCBs. Levels of chromium were also detected in soils at concentrations above New York State recommended soil cleanup objectives (RSCOs). The concentration of chromium detected is considered a minor impact. Exposure to the physical hazards by remedial personnel can be controlled by keeping a safe distance from heavy equipment during operation.

Exposure hazards that may potentially result from the presence of hazardous levels of PCBs in the soil will be minimized by wearing proper personnel protective equipment (PPE) while working in and around the excavation area and by conducting air monitoring (particulate and organic vapor) up and down wind of the excavation area.

1.1.3 Levels of Protection

Excavation and monitoring activities described within the scope of this HASP will require Level D protection. Environmental sampling, which may require contact with impacted soil will require a modified Level D protection (i.e., disposable boot covers).

1.2 PROJECT TEAM

The personnel responsible for the completion of this project and monitoring compliance with this HASP are:

Name	Project Title/Assigned Role	Office Phone Numbers	Cellular Phone Numbers
Bob DiFondi	SMC Environmental Coordinator Project Oversight	(315) 768-7530	(315) 525-4340
Chris Boron	GZA - Project Manager (Excavation Oversight, Environmental Monitoring, Sample Collection & Report Preparation)	(716) 685-2300 ext 3309	(716) 570-5990
Dean Cattieu	Waste Technology Services – Project Manger (Waste Disposal Coordination)	(716) 754-5400	(716) 870-6771
Dave Weaver	Pinto Construction – Project Manager (Earthwork Contractor)	(716) 825-6666	(716) 570-7220

Activities covered in this HASP must be conducted in complete compliance with this HASP and with all applicable federal, state and local health and safety regulations, including 29 CFR 1910.120. Each remedial activities employee must sign a copy of the HASP Orientation Verification Form (included in Attachment 1) verifying that he or she has read it and understands its requirements. Personnel covered by this HASP who cannot or will not comply must be excluded from Site activities.

2.0 BACKGROUND

The Site is an approximate 8-acre industrial property in Dunkirk, New York operated by SMC at 100 Willowbrook Avenue. The Site is utilized for the manufacture of alloys for the aerospace industry. An expansion on the western portion of the existing building for the installation of a new rotary forge is currently underway. This expansion, includes construction of a new building addition over an area of about 72-feet (north-south) by 87-feet to the west.

As part of the building expansion, a trench for the placement of an electrical conduit was excavated along the western portion of the property from an electrical pole to the building expansion area (the "Electric Trench"). During the Electric Trench excavation (August 30, 2006), odors were detected within a portion of the trench. SMC requested that its earthwork contractor stockpile the soil excavated from the trench on the asphalt surface and collect soil samples for analytical testing. Two soil samples were collected (designated Electric Trench 1 and Electric Trench 2, see Work Plan Table 1).

Results of the sampling indicated that PCBs were present at a concentration of 140 parts per million (ppm) and 31 ppm in samples Electric Trench 1 and Electric Trench 2, respectively. Other compounds were also detected, including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and metals. The detected levels of VOCs and SVOCs are relatively minor, but the PCB concentration of 140 ppm is above the 50 ppm threshold for the material to be considered hazardous waste in New York. 6 NYCRR § 371.4(e).

Of the metals detected, chromium was the one that posed a concern due to its detection at a concentration above the New York State Department of Environmental Conservation (NYSDEC) RSCO guidance. Subsequent toxicity characteristic leachate procedure (TCLP) testing that was done on samples collected as part of the soil probe delineation did not indicate the presence of chromium above the hazardous waste threshold.

The soil stockpiled from the Electric Trench was placed in a roll-off and disposed of at the landfill facility operated by CWM Chemical Services in Model City, NY on September 22, 2006. Approximately 16 tons (14,545 kg) of soil were disposed and Waste Technology Services, Inc. (WTS) assisted SMC in making the disposal arrangements.

Subsurface soils probes were conducted in the vicinity of the Electric Trench to delineate the extent of the PCB contamination on two separate events. Groundwater was not encountered in any of the soil probe work.

Soil samples were collected in two feet intervals and were field and headspace screened for organic vapors using an organic vapor meter (OVM) equipped with a photoionization detector (PID). No significant headspace readings were noted.

Select soil samples were field screened using a Dexsil L2000 DX PCB Analyzer (see Figure 3 in Work Plan) for a comparison of the field screening results and analytical results). Based on the findings of the field screening, olfactory observations and for broader coverage, 56 soil samples were selected and sent for analysis that included PCBs via USEPA Method 8082, RCRA 8 Metals via USEPA Method 6010B17470, Total Compound List (TCL) VOCs via USEPA Method 8260 and TCLP Chromium via USEPA Method 1311/6010B.

Results of the analysis from the delineation effort were consistent with the Electric Trench samples in that PCBs are the primary parameters of concern. VOC and SVOC contamination was detected but not at levels of concern.

Based on the two rounds of the soil probe delineation work, the area of PCB-impacted soil to be addressed has been identified using the 10 ppm subsurface PCB standard found in TAGM 4046. The remedial area has an approximate 6,400 square foot footprint (see Figure 4 within the Work Plan).

3.0 SCOPE OF WORK

Field activities during this PCB soil remedial project shall be comprised of intrusive activities and non-intrusive activities. Non-intrusive activities will consist of site meetings, utility location, and air monitoring and are not expected to result in significant exposure to contamination. Intrusive activities are those activities that will result excavation and handling of PCB impacted soils (screening and sampling). The field activities planned are briefly described below.

3.1 NON-INTRUSIVE ACTIVITIES

3.1.1 Site Meeting

A Site meeting will be held with the entire project team prior to the start of the project to familiarize the parties involved with the Site and various remedial investigation activities.

3.1.2 Air Monitoring

Air monitoring will be conducted to monitor for particulate (up and down wind of the excavation area) and organic vapors.

3.1.3 Utility Location

Pinto Construction shall be responsible to identify subsurface utilities in the area of the proposed excavation. Utility lines will be marked out approximately one week prior to the start of the excavation activities and the marking will be checked on a daily basis for visibility.

3.2 Intrusive Activities

3.2.1 PCB Soil Excavation

SMC has retained an earthwork subcontractor, Pinto Construction, to perform the PCB soil excavation and backfill. GZA will provide oversight and collect samples for field screening and laboratory analysis. WTS will be responsible for the coordination of the PCB-impacted soil disposal.

A hydraulic excavator will be used to remove soils from the area shown on Figure 4. It is estimated that approximately 1,000 tons of soil will be disposed of as a hazardous waste. Soil excavated will be loaded into trucks for transportation to the disposal facility. Polyethylene sheeting will be placed on the ground beneath the truck loading area. Prior to leaving the AOC, the polyethylene lined loading area along with the tires of the truck will be inspected. Soil observed on the polyethylene sheeting that may contaminate equipment operating on the sheeting will be removed. Trucks will not be allowed to leave the loading area if their tires have contacted contaminated soil without being cleaned.

A GZA field engineer/geologist will observe the excavation efforts, maintain a log of the air monitoring results for organic vapor/particulate, collect field screening and confirmatory samples and maintain a drawing of excavation limits along with the field and confirmatory sample locations. On-Site personnel will be outfitted in modified Level D personnel protection (hardhat, safety glasses, coveralls, work boots and gloves). Work zone air monitoring will be done using an organic vapor meter and particulate monitor. Detections of 5 parts per million (ppm) above background for organic vapors or 150 ug/m³ above background for particulate during air monitoring will require that the excavation be stopped until air monitoring levels decrease to background levels.

4.0 HAZARD ASSESSMENT

The following chemical, physical, and biological hazard assessment applies only to the activities within the specified scope of this HASP.

4.1 CHEMICAL HAZARDS

The potential chemical hazards at the Site are polychlorinated biphenyls, semi-volatile organic compounds and metal compounds based on previous investigation and sampling in the remedial area. The following discusses actual and potential hazards associated with the work to be conducted.

4.1.1 Volatile Organic Compounds

Exposure to the vapors of many VOCs above their respective permissible exposure limits (PELs), as defined by the Occupational Safety and Health Administration (OSHA), may produce irritation of the mucous membranes of the upper respiratory tract, nose and mouth. Overexposure may also result in the depression of the central nervous system. Symptoms of such exposure include drowsiness, headache, fatigue and drunken-like behavior. Some VOCs are considered to be potential human carcinogens.

The vapor pressures of many of these compounds are high enough to generate significant quantities of airborne vapor. On sites where high concentrations of these compounds are present, this can result in a potential inhalation hazard to the field team during subsurface investigations. To reduce the potential for exposure to the vapors of organic compounds, respiratory protection may be required. Because this Site is open and the anticipated quantities of contamination are relatively small, the potential for overexposure is expected to be small.

4.1.1.1 Chlorinated Organic Compounds

Exposure to vapors of many chlorinated organic compounds such as vinyl chloride, tetrachloroethene, 1,1,1 trichloroethane, trichlorethene and 1,2 dichloroethene above their respective PELs will result in similar symptoms. Exposure to chlorinated compounds can cause symptoms such as irritation of the eyes, nose and throat. Over exposure may also result in symptoms such as drowsiness, dizziness, headache, etc. Skin contact with the liquid may cause dermatitis. If splashed in the eyes, the liquid may cause burning, irritation and damage. Vinyl chloride is a known carcinogen.

4.1.1.2 Petroleum Hydrocarbons

Petroleum hydrocarbons (PHCs) such as fuel oil are generally considered to be of low toxicity. Recommended airborne exposure limits have not been established for these vapors. However, inhalation of low concentrations of the vapor may cause mucous membrane irritation. Inhalation of high concentrations of the vapors may cause pulmonary edema. Repeated or prolonged direct skin contact with the oil may produce skin irritation as a result of defatting. Protective measures, such as wearing chemically

resistant gloves, to minimize contact are addressed elsewhere in this plan. Because of relatively low vapor pressures associated with PHCs, an inhalation hazard in outdoor environment is not likely.

4.1.2 Metal Compounds

Overexposure to metals has been associated with a variety of health hazards, both acute and chronic in nature, with chronic effects being most significant. Direct contact with dust of some metal compounds can result in contact or allergic dermatitis. The American Conference of Governmental Industrial Hygienists (ACGIH) has established inhalation exposure limits, expressed as Threshold Limit Values (TLVs), to which most workers can be exposed (on an 8-hour time-weighted average (TWA) basis) without adverse affect. To limit potential exposure visible clouds of dust should be controlled as required and workers and observers will remain upwind of intrusive activities.

Hexavalent chromium compounds, upon contact with the skin can cause ulceration and possibly an allergic reaction. Inhalation of hexavalent chromium dust is irritating and corrosive to the mucous membranes of the upper respiratory tract. Chrome ulcers and chrome dermatitis are common occupational health effects from prolonged and repeated exposure to hexavalent chromium compounds. Acute exposures to hexavalent chromium dusts may cause coughing or weezing, pain on deep inspiration, tearing, inflammation of the conjunctiva, nasal itch and soreness or ulceration of the nasal septum. Certain forms of hexavalent chromium have been found to cause increased respiratory cancer among workers. Inhalation of copper and zinc dusts above their established PEL's may result in flu-like symptoms known as "metal fume fever".

Similarly, ingestion of quantities likely to result in any harmful effects are unlikely to occur within the scope of activities covered in this HASP. Incidental ingestion of minor amounts through hand-to-mouth contact can be avoided with good personal hygiene habits.

The most significant route of exposure is likely to be skin contact with the contaminated soils. Protective measures, such as the wearing of chemically resistant gloves, to minimize contact are addressed in Section 6.0 of this plan.

4.1.3 Polychlorinated Biphenyls

Prolonged skin contact with PCBs may cause a condition known as chloracne. PCBs are considered to be suspect carcinogens and may also cause reproductive damage.

It should be noted that PCBs have extremely low vapor pressures. This makes it unlikely that any significant vapor concentration (i.e. exposures above the OSHA PEL) will be created in the ambient environment. This minimizes the potential for any health hazards to arise due to

inhalation unless the source is heated or generates significant airborne particulate. Based on sample information from previous work done at the Site, hazardous levels of PCBs are present in the area of the investigation.

4.1.4 Pesticides

Pesticides can be grouped into three major categories; organophosphates, carbamate and chlorinated hydrocarbons. The actual PEL as set by OSHA, vary depending on the specific compound. Organophosphates, including Diazinon, Malathion and Parathion, are quickly absorbed into the body by inhalation, ingestion and direct skin contact. The symptoms of exposure include headache, fatigue, dizziness, blurred vision, sweating, cramps, nausea and vomiting. More severe symptoms can include tightness of the chest, muscle spasms, seizures and unconsciousness. It should also be noted that the Malathion and Parathion PELs both carry the *Skin* notation, indicating that these compounds adversely effect or penetrate the skin. OSHA specifies that skin exposure to substances carrying this designation be prevented or reduced through the use of the appropriate personal protective equipment (PPE).

Chlorinated hydrocarbons such as Chlordane, DDT and Heptachlor can cause dizziness, nausea, abdominal pain and vomiting. The more severe symptoms include epileptic like seizures, rapid heart beat, coma and death. These compounds also carry the OSHA *Skin* notation.

The symptoms of exposure to carbamate such as Carbaryl (also known as Sevin), are similar to those described for the organophosphates.

4.1.5 Methane

Methane is an odorless, colorless, tasteless gas, and is a significant fire and explosion hazard. It also acts primarily as a simple asphyxiate when present in high concentrations. Methane has a lower explosive limit (LEL) of 5% and an upper explosive limit of 15%.

4.1.6 Hydrogen Sulfide

Hydrogen sulfide, characterized by its "rotten egg" odor, is produced by decomposition of organic matter. In many instances, hydrogen sulfide is found in the same area as methane gas. An important characteristic of hydrogen sulfide is its ability to cause a decrease in ones ability to detect its presence by smell. So although you may no longer smell it, it still may be present in harmful concentrations.

The symptoms of over exposure include headaches, dizziness, staggering and nausea. Severe over exposure can cause respiratory failure, coma and death. The OSHA PEL is 10 ppm.

4.1.7 Chemicals Subject to OSHA Hazard Communication

Chemicals brought on-Site such as solvents, reagents, decontamination solutions, or other hazardous chemicals must be accompanied by the required labels, Material Safety Data Sheets (MSDS), and employee training documentation (OSHA 1910.120). GZA will maintain these documents on-Site. For additional information refer to the GZA Hazard Communication Program contained in GZA's Health and Safety Program Manual.

4.2 PHYSICAL HAZARDS

Personnel on-Site should be provided with the information and training necessary to avoid accidental injury. This includes assuring that the Site is maintained in such a way that slip, trip and fall hazards as well as cut, puncture and abrasion hazards such as nails, scrap metal, rusted containers and construction debris are recognized and eliminated or controlled. Basic personal protective equipment (i.e, hard hat and safety glasses) is required by SMC prior to entering the Site.

4.2.1 Construction Hazards, Construction Equipment and Excavators

The use of construction equipment represent potentially serious construction hazards. Whenever such equipment is used, personnel in the vicinity should be limited to those who must be there to complete their assigned duties. All personnel must avoid standing within the turning radius of the equipment or below any suspended load. Job sites must be kept as clean, orderly and sanitary as possible. When water is used, care must be taken to avoid creating muddy or slippery conditions. If slippery conditions are unavoidable, barriers and warning signs must be used to warn of these dangers.

Procedures that will be implemented to limit physical hazard impacts include the following. Never turn your back to operating machinery when in the machine's operational area. Never wear loose clothing, jewelry, hair or other personal items around rotating equipment or other equipment that could catch or ensnare loose items. Always stand far enough away from operating machinery to prevent accidental contact which may result from mechanical or human error.

Additionally, the following basic personal protective measures must be observed: Hard Hats must be worn to protect against bumps or falling objects. Safety glasses must be worn by all workers in the vicinity of drill rigs or other sources of flying objects. Goggles, face shields or other forms of eye protection must be worn when necessary to protect against chemicals or other hazards. Steel toed safety shoes or boots are also required. The shoes must be chemically resistant or protected with appropriately selected boots/coverings where necessary. Unless otherwise specified, normal work clothes must be worn. Gloves are also required whenever

necessary to protect against hazardous contact, cuts, abrasions or other possible skin hazards.

4.2.2 Trenching and Excavation

OSHA requires that a competent person, who is trained to recognize the hazards associated with trenching and excavating activities and has authority to control these hazards within the limits established by OSHA Trenching and Excavation Standard (29 CFR 1926.650-652) be present at all times. Trenching and excavating will be done by Pinto Construction. Excavation work will be completed in accordance with OSHA regulations (29 CFR 1926 Subpart P).

4.2.3 Fire and Explosion

The possibility of flammable materials being encountered during field activities must be recognized. Therefore, the appropriate steps necessary to minimize fire and explosion must be observed. This includes situations where excessive organic vapors or free product are encountered. When this occurs, monitoring with a combustible gas indicator (CGI) and OVM, is required.

Excessive organic vapors can cause an explosion hazard. Therefore, whenever excessive organic vapors are detected using an OVM, monitoring should be done for the presence of explosive gases.

Fire, explosion and hazardous chemical release should be regarded as one of, if not the, most significant hazard associated with drilling operations and other intrusive work conducted at sites where possible reactive and/or toxic waste may be encountered. Accordingly, all sources of ignition must be fully controlled. Failure to control ignition sources could result in fire, explosion and pose a serious threat to life and health. Fire extinguishers will be located near each intrusive activity.

4.2.4 Noise

Noise exposure can be affected by many factors including the number and types of noise sources (continuous vs intermittent or impact), and the proximity to noise intensifying structures such as walls or building which cause noise to bounce back or echo. The single most important factor affecting total noise exposure is distance from the source. The closer one is to the source the louder the noise. The operation of an excavator or other mechanical equipment can be sources of significant noise exposure. In order to reduce the exposure to this noise, personnel working in areas of excessive noise must use hearing protectors (ear plugs or ear muffs). If hearing protection is worn, hand signals will be implemented as needed.

4.2.5 Heat and Cold Stress

Overexposure to temperature extremes can represent significant risks to personnel if simple precautions are not observed. Typical control measures designed to prevent heat stress include dressing properly, drinking plenty of the right fluids, and establishing an appropriate work/break regimen. Typical control measures designed to prevent cold stress also include dressing properly, and establishing an appropriate work/break regimen.

4.2.6 Electrical

OSHA regulations require that employees who may be exposed to electrical equipment be trained to recognize the associated hazards and the appropriate control methods. All extension cords used for portable tools or other equipment must be designed for hard or extra usage and be (three wire) grounded. All 120 volt, single-phase 15 and 20 ampere receptacle outlets on construction sites and other locations where moisture/water contact may occur must be equipped with ground-fault circuit interrupters (GFCI) units. GFCI units must be attached directly to or as close as possible to the receptacle. GFCI units located away from the receptacle will not protect any wiring between the receptacle and the GFCI unit. Only the wiring plugged into the GFCI unit and outward will be protected by the GFCI. All (temporary lighting) lamps for general illumination must be protected from accidental breakage. Metal case sockets must be grounded. Portable lighting in wet or conductive locations should be 12 volt or less. GZA does not anticipate the need for temporary lighting for this project. GZA assumes that all the work will be completed during the daylight hours.

4.2.7 Moving Vehicles, Traffic Safety

All vehicular traffic routes which could impact worker safety must be identified and communicated. Whenever necessary, barriers or other methods must be established to prevent injury from moving vehicles. This is particularly important when field activities are conducted in parking lots, driveways, or roadways.

The uncontrolled presence of pedestrians on an excavation site can be hazardous to both pedestrians and site workers. Prior to the initiation of Site activities, the Site should be surveyed to determine if, when and where pedestrians may gain access. This includes walkways, parking lots, gates and doorways. Barriers or caution tape should be used to exclude all pedestrians. Exclusion of pedestrian traffic is intended to prevent injury to the pedestrian and eliminate distractions which could cause injury to GZA personnel or other site workers.

4.2.8 Overhead Utilities and Hazards

Overhead hazards can include low hanging structures which can cause injury due to bumping into them. Other overhead hazards include falling objects, suspended loads, swinging loads and rotating equipment. Hard-hats must be worn by personnel in areas where these types of physical hazards may be encountered. Barriers or other methods must also be used to exclude personnel from these areas where appropriate. Electrical wires are another significant overhead hazard. According to OSHA (29 CFR 1926.550), the minimum clearance which must be maintained from overhead electrical wires is 10 feet from an electrical source rated ≤ 50 kV. Sources rated > 50 kV require a minimum clearance of 10 feet plus 0.4 inches per kV above 50 kV.

4.2.9 Underground Utilities and Hazards

The identification of underground pipes, utilities and other underground hazards is critically important prior to excavating and other intrusive activities. In accordance with OSHA 29 CFR 1926.650, the estimated location of utility installations, such as sewer, telephone, electric, water lines and other underground installations that may reasonably be expected to be encountered during excavation work, must be determined prior to opening an excavation. In New York State, the "Dig Safe" notification phone number is 1-800-962-7962. Additionally, a utility locating company will be subcontracted to assist in identifying on-Site utilities prior to the start of the excavation work. The mark-outs provided by the utility subcontractor will be maintained on a regular basis until the excavation work is complete.

4.2.10 Confined Space

Confined space entry activities, such as entering sewer systems requires specialized procedures beyond the scope of this plan. Therefore, if circumstances require such activities, this plan must be modified accordingly.

4.3 BIOLOGICAL HAZARDS

All personnel on site should be provided with the information and training necessary to avoid accidental injury or illness which can result from exposure to biological hazards. This includes assuring that the Site is carefully assessed so that the hazards associated with poisonous plants, insects or other sources of biological contamination (i.e., septic systems) are recognized and eliminated or controlled. In most cases this can be done by using proper PPE. Due to the current site conditions and time of year, biological hazards are not expected to be encountered.

5.0 AIR MONITORING

Air Monitoring falls into three separate categories; real time monitoring, community air monitoring and personal exposure monitoring. Real time monitoring will be conducted within the exclusion zone (EZ). Community air monitoring will be done at the down wind perimeter of the EZ. Table 1 summarizes the type of environmental monitoring as well as appropriate response actions applicable to the Site. Additional details regarding air monitoring are presented below.

5.1 REAL TIME MONITORING

The real time monitoring required to determine the airborne concentrations of the representative compounds and the corresponding response action for the Site, will be conducted using the instruments indicated in Table 1. Although the data provided by these instruments can be used to determine the appropriate control actions and PPE requirements, the data may be inappropriate for use in determining employee time weighted average exposures as required by OSHA.

Monitoring with the specified instruments will be conducted at a frequency necessary to adequately characterize airborne contamination levels around the excavation area. Initial monitoring will be most frequent and will be either continuous or at intervals of once every 15 minutes as directed by the GZA's field representative. Monitoring shall be conducted in close proximity to the excavation as described in this HASP. If instruments indicate the presence of elevated levels of organic vapors or particulate in the work area, the general breathing zone in the EZ should then be monitored to determine appropriate response action in accordance with the action levels specified in this section.

Equipment calibration must be performed in accordance with the manufacturer's instructions. Field checks using the appropriate reference standards must be made on-Site at the minimum frequency of twice per shift (pre- and post-sampling). A daily log of all instrument readings, as well as all field reference checks and calibration information, and corrective actions must be maintained.

5.1.1 Total Volatiles Organics

An OVM with a PID, equipped with a 10.2 ev lamp calibrated to a standard referenced to benzene in air, will be used to monitor the breathing zone of workers performing remedial activities to assess the potential presence of organic vapors. If elevated levels (> 5 ppm) are sustained (greater than 1 minute) in the work area, work will be suspended until the situation can be assessed and the potential source of the organic vapors determined.

5.1.2 Particulate Monitoring

Particulate monitoring will be done using one up wind monitor to establish background concentrations and two down wind monitoring locations. If particulate monitoring data exceeds 150 ug/m³ above background, dust control be used (i.e., wet down the material).

5.2 COMMUNITY AIR MONITORING

Real-time air monitoring, for organic compound levels at the perimeter of the work area will be conducted as follows. Volatile organic compounds shall be monitored at the downwind perimeter of the work area at a minimum of once per hour. If total organic vapor levels exceed 5 ppm above background, work activities must be halted and monitoring continued under the provisions of a Vapor Emission Response Plan. All readings shall be recorded and will be available for review.

5.2.1 Vapor Emission Response Plan

If the ambient air concentration of organic vapors exceeds 5 ppm above background at the perimeter of the work area, activities will be halted and monitoring continued. If the organic vapor level decreases below 5 ppm above background, work activities can resume. If the organic vapor levels are greater the 5 ppm over background but less then 25 ppm over background at the perimeter of the work area, activities can resume provided that the organic vapor level 200 ft. downwind of the work area or half the distance to the nearest residential or commercial structure, whichever is less, is below 5 ppm over background.

If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown. When work shutdown occurs, downwind air monitoring as directed by the GZA's field representative will be implemented.

5.2.2 Major Vapor Emissions

If any organic levels greater than 5 ppm over background are identified 200 feet downwind from the work area or half the distance to the nearest residential or commercial property, whichever is less, work activities must be halted.

If, following the cessation of the work activities, or as a result of an emergency, organic levels persist above 5 ppm above background 200 feet downwind or half the distance to the nearest residential or commercial property from the work area, then the air quality must be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20 Foot Zone).

If efforts to abate the emission source are unsuccessful and levels above 5 ppm above background persist for more than 30 minutes in the 20 Foot Zone, then the Major Vapor Emission Response Plan shall automatically be placed into effect (See Section 5.2.3).

5.2.3 Major Vapor Emission Response Plan

Upon activation, the following activities will be undertaken.

1. All Emergency Response Contacts as listed in the Health and Safety Plan will go into effect (See Section 11.2).
2. The local police authorities will immediately be contacted and advised of the situation.
3. Frequent air monitoring will be conducted at 30 minute intervals within the 20 Foot Zone. If two successive readings below action levels are measured, air monitoring may be halted or modified.

5.3 PERSONAL EXPOSURE MONITORING

Determinations regarding individual exposure potentials will be based on the work area monitoring described above. Separate personal air sampling will not be conducted.

6.0 PERSONAL PROTECTIVE EQUIPMENT

PPE will be donned as described below for the activities covered by this HASP. Non-intrusive activities within the scope of this HASP will require Level D protection. All intrusive activities will be initiated in modified Level D which will include boot covers or Tyvek coveralls for personnel working in the excavation. Level C protection is outside the scope of this HASP.

6.1 NON-INTRUSIVE ACTIVITIES

Non-intrusive activities, which include Site meetings, air monitoring and utility location will require Level D protective equipment. This equipment is defined as:

- Hard hat;
- Steel-toed work boots;
- Work clothes;
- Hearing protection (if necessary); and,
- Eye protection - contact lenses may not be worn on site.

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- Disposable latex gloves (as needed).

6.2 INTRUSIVE ACTIVITIES

Intrusive activities, which includes excavation of PCB impacted soil will require modified Level D protective equipment for personnel working in the excavation. This equipment is defined as:

- Hard hat;
- Boot covers or Tyvek coveralls;
- Steel-toed work boots;
- Disposable latex gloves;
- Eye protection; and,
- Hearing protection (see Section 4.2.4).

If air monitoring results indicate the need to upgrade to Level C respiratory protection, work will be stopped and the excavation covered with polyethylene sheeting until the situation can be assessed. Due to number of employees and construction workers at the Site, unrelated to the PCB excavation work, an update to Level C would not be prudent until the situation can be properly assessed and the well being of the entire work force at the Site be taken into consideration.

7.0 SITE CONTROL

To prevent both exposure of unprotected personnel and migration of contamination due to tracking by personnel or equipment, work areas along with personal protective equipment requirements will be clearly identified as suggested in the "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities," NIOSH/OSHA/USCG/EPA, November, 1985. They recommend the area surrounding the work areas to be divided into three zones; the exclusion or "Hot" zone, contamination reduction zone (CRZ), and the support zone.

7.1 EXCLUSION ZONE

Due to size of the excavation in the limited area in the southwest corner of the Site, this portion of the Site will be closed to workers and activities unrelated to the PCB soil removal. Therefore, the exclusion zones (EZ) are to consist of the limits of the excavation and the truck loading area. Site personnel will be advised of these locations as part of the routine Site safety meetings described in Section 9.0.

The EZ will consist of the active work area where excavation and soil loading are taking place.

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A 15-foot radius will attempt to be established around the perimeter of this zone; however, this may be decrease due to the limited area in the southeastern corner of the Site and to minimize disruption to ongoing Site operations. The perimeter of the zone will be established using concrete barriers. All personnel entering these areas must wear the prescribed level of protective equipment.

7.2 CONTAMINATION REDUCTION ZONE

The contamination reduction zone (CRZ) will be a clearly marked area between the exclusion and support zone. The actual location of the CRZ area will be north of the excavation area where soil is not expected to be excavated. The CRZ is where personnel will begin the sequential decontamination process when exiting the EZ. To prevent cross contamination and for accountability purposes, all personnel must enter and leave the exclusion zone through the CRZ. A separate heavy equipment decontamination zone will also be established at the Site.

7.3 SUPPORT ZONE

The support zone (SZ) will coincide with the project command post, and will consist of an area outside the exclusion zone and CRZ where support equipment will be staged. Eating, drinking and smoking will be allowed only in this area. Sanitary facilities will be located within the SZ. In addition, potable water and water and soap for hand washing will be available at the site, along with containers for solid waste for use by the PCB excavation personnel. The containers will be removed from the Site and properly disposed. Hazardous, or potentially hazardous, materials (i.e., new waste stream, water in contact with impacted soils) will be containerized, labeled and stored for future disposal. Latex gloves and Tyvek suits will be disposed with the soil that is taken to the landfill on a daily basis.

7.4 OTHER SITE CONTROL AND SAFETY MEASURES

The following measures are designed to augment the specific health and safety guidelines provided in this plan.

- The "buddy system" will be used at all times by all field personnel. No one is to perform field work alone. The standby project team member must be intimately familiar with the procedures for initiating an emergency response.
- Avoidance of contamination is of the utmost importance. Whenever possible, avoid contact with contaminated (or potentially contaminated) surfaces or materials. Walk around (not through) puddles and discolored surfaces. Do not kneel on the ground or set equipment on the ground. Protect air monitoring equipment from water by bagging.

- Hands and face must be thoroughly washed upon leaving the work area and before eating, drinking or any other activities.
- Eating, drinking, chewing gum or tobacco, smoking or any practice that increases the probability of hand-to-mouth transfer and ingestion of materials is prohibited except in the support zone after proper decontamination.
- The use of alcohol or drugs is prohibited during the conduct of field operations.
- All equipment must be decontaminated or properly discarded before leaving the Site.
- Safety equipment (PPE) described in Section 6.0 will be required for all field personnel unless otherwise approved by the local/regional health and safety representative.

7.5 SITE SECURITY

SMC has on-Site 24 hours a day, seven days a week and all personnel entering and exiting the Site are required to sign in and out.

Equipment left on-Site during off hours must be locked, immobilized and/or otherwise secured to prevent theft or unauthorized use or access.

8.0 DECONTAMINATION

To the extent possible, the sampling methods and equipment have been selected to minimize both the need for decontamination and the volume of waste material to be generated. Used PPE will be disposed on a daily basis with the PCB impacted soil.

8.1 PERSONNEL DECONTAMINATION

Personnel decontamination will be accomplished by following a systematic procedure of cleaning and removal personal protective clothing (PPE). Contaminated PPE such as latex gloves, boot covers or Tyvek coveralls will be removed in the CRZ and disposed of. The following decontamination sequence in the re-useable PPE

8.1.1 Decontamination Sequence

Steps required will depend on the level of protection worn in accordance with Section 6.0:

1. Remove and wipe clean hard hat.
- 2a. Rinse outer boots and outer gloves (if used) of gross contamination.
- 2b. Scrub boots and gloves clean.
- 2c. Rinse boots and gloves.
3. Remove outer protective boots .
4. Remove outer gloves.
5. Remove tyvek coveralls.
6. Remove respirator, wipe clean and store.
7. Remove inner gloves.

Boots that have been decontaminated or protected with disposable boot covers can be worn into the support zone.

8.2 EQUIPMENT DECONTAMINATION

To the extent possible, measures should be taken to prevent contamination of sampling and monitoring equipment. Sampling devices become contaminated, but monitoring instruments, unless they are splashed, usually do not. Once contaminated, instruments are difficult to clean without damaging them. Delicate instrument which cannot be easily decontaminated should be protected while it is being used. It should be placed in a clear plastic bag, and the bag taped and secured around the instrument. Openings are made in the bag for sample intake and exhaust.

If solvents are used for decontamination of equipment all safety precautions specified on the manufacturer's warning label and MSDS must be observed. Rinsate generated during the decontamination process will be containerized, labeled, sampled and properly disposed.

The excavator to be used to complete the soil excavation can be difficult to decontaminate. The method generally used is to wash them with water under high pressure or to scrub accessible parts with detergent/water solution under pressure. To minimize the amount of decontamination necessary, the following procedures will be used.

- A decontamination pad will be constructed on-site for the bucket of the excavators and equipment decontamination.
- A separate excavator bucket will be used to place clean backfill. The PCB soil excavation bucket will be placed in the decontamination pad until it is needed again to remove impacted soil. The backfill excavation bucket will be kept in an area where it

- will not be exposed to impacted soil or materials.
- Polyethylene sheeting or plywood will be placed in the excavation, if the excavator is required to enter the excavation and may contact impacted soil.
 - Once the excavation is complete, shovels, buckets, etc will require complete contamination prior to leaving the Site. Water andalconox will be used to decontaminate the equipment and a water rinse will be used to remove the detergent and remaining contamination. Particular care must be given to those components in direct contact with contaminants. Personnel doing the decontamination must be adequately protected for the methods used since these can generate contaminated mists or splashing.

9.0 MEDICAL MONITORING AND TRAINING REQUIREMENTS

9.1 MEDICAL

All personnel covered by this HASP must comply with 29 CFR 1910.120(f). Each individual must have completed an annual surveillance examination and/or an initial baseline examination within the last year prior to performing any work on the Site covered by this HASP. Documentation of the examination must include a physician's statement indicating the employee is fit and capable of performing their duties.

9.2 TRAINING

All personnel covered by this HASP must have completed the appropriate training requirements specified in 29 CFR 1910.120 Hazard Communication and 29 CFR 1910.120(e). Each individual must have completed an annual 8-hour refresher training course and/or initial 40-hour training course within the last year prior to performing any work on the Site covered by this HASP.

9.3 SUBCONTRACTORS

Subcontractors to SMC will be required to provide to GZA specific written documentation that each individual assigned to this project has completed the medical monitoring and training requirements specified above. This information must be provided prior to their performing any work on site.

9.4 SITE SAFETY MEETINGS

Prior to the commencement of the soil excavation, a Site safety meeting will be held to review the specific requirements of this HASP. Sign-off sheets will be collected at this meeting. Short

safety refresher meetings will be conducted by GZA weekly (at a minimum) or as needed throughout the duration of excavation work. In addition, the GZA will ensure that Site visitors have had the required training in accordance with 29 CFR 1910.120 and will provide pre-entry safety briefings.

10.0 EMERGENCY ACTION PLAN

11.1 GENERAL REQUIREMENTS

OSHA defines emergency response as any "response effort by employees from outside the immediate release area or by other designated responders (i.e., mutual-aid groups, local fire departments, etc.) to an occurrence which results, or is likely to result in an uncontrolled release of a hazardous substance." Project personnel covered by this HASP may not participate in any emergency response where there are potential safety or health hazards (i.e., fire, explosion, or chemical exposure). Response actions will be limited to evacuation and medical/first aid as described within this section below.

The basic elements of an emergency evacuation plan include employee training, alarm systems, escape routes, escape procedures, critical operations or equipment, rescue and medical duty assignments, designation of responsible parties, emergency reporting procedures, and methods to account for all employees after evacuation.

11.1.1 Employee Information

General training regarding emergency evacuation procedures are included in the initial and refresher training courses as described above in Section 9.2 of this HASP. Also as described above in Section 9.4, employees must be instructed in the specific aspects of emergency evacuation applicable to the Site as part of the site safety meeting prior to the commencement of all on-Site activities. On-site refresher or update training is required anytime escape routes or procedures are modified or personnel assignments are changed.

11.1.2 Emergency Signal and Alarm Systems

An emergency communication system must be in effect at the Site. The most simple and effective emergency communication system in many situations will be direct verbal communications. The work area must be assessed at the time of initial site activity and periodically as the work progresses. Verbal communications must be supplemented anytime voices can not be clearly perceived above ambient noise levels (i.e., noise from heavy equipment, drilling rigs, etc.) and anytime a clear line-of-sight can not be easily maintained amongst project

personnel because of distance, terrain or other obstructions. When verbal communications must be supplemented, emergency signals (using hand-held portable airhorns) must be implemented.

11.2 EMERGENCY CONTACTS

In the event of an emergency, assistance may be requested using the following telephone numbers:

Police	911
Fire	911
Ambulance	911
Hospital	(716) 366-1111

Hospital Location

The hospital is Brooks Memorial Medical Center located at 529 Central Avenue, Dunkirk, New York. See Figure E-1 (Map of Route to Hospital).

Other Emergency Contact Information

Special Metals Corporation – Bob Difondi (Primary)	315-768-7530 (office) 315-525-4340 (cell)
Special Metals Corporation – Don Borowski (Secondary)	716-336-5663 ext. 229 (office) 716-410-0741 (cell)
GZA GeoEnvironmental – Chris Boron	716-685-2300 ext. 3309 (office); 716-570-5990 (cell)
Dave Weaver – Pinto Construction	716-825-6666 (office) 716-570-7220 (cell)

11.3 INCIDENT REPORTING PROCEDURES

Any incident (other than minor first aid treatment) resulting in injury, illness or property damage requires an accident investigation and report. The investigation should be initiated as soon as emergency conditions are under control. The purpose of this investigation is not to attribute blame but to determine the pertinent facts so that repeat or similar occurrences can be avoided. A copy of the Project Incident Investigation Form is included in Attachment 1.

The investigation should begin while details are still fresh in the mind of anyone involved. The

person administering first aid may be able to start the fact gathering process if the injured are able to speak. Pertinent facts must be determined. Questions beginning with who, what, when, where, and how are usually most effective to discover ways to improve job performance in terms of efficiency and quality of work, as well as safety and health concerns.

TABLE

TABLE E-1
ACTION LEVELS

	Monitoring Type	Concentration	Instrument	Monitoring Location	Monitoring Frequency	Required Action
Real time Monitoring	Total VOCs	< 1 ppm	PID (10.2 ev)	EZ	At least every 15 minutes	Continue monitoring
Real time Monitoring	Total VOCs	> 5 ppm	PID (10.2 ev)	EZ	Continuous	Stop work and assess situation.
Community Air Monitoring (intrusive activities only)	Total VOCs	< 5 ppm above background	PID (10.2 ev)	Down wind of EZ	At least every 1 hour	Continue monitoring of EZ (potential source) and down wind perimeter of the EZ (work zone).
Community Air Monitoring (intrusive activities only)	Total VOCs	> 5 ppm above background	PID (10.2 ev)	Down wind of EZ	Continuous	Stop work. If organic vapors levels are >5ppm over background but less than 25 ppm over background at the perimeter of the work area than work can resume provided the organic vapor level 200 feet down wind of the work area or half the distance to the nearest structure is < 5ppm. If the level is > 5 ppm 200 feet downwind, follow procedures outlined in section 5.2.2 (Major Vapor Emissions) of this plan.
Community Air Monitoring (intrusive activities only)	Total VOCs	> 25 ppm above background	PID (10.2 ev)	Down wind of EZ	Continuous	Stop work. Follow air monitoring procedures outline in section 5.2.2 (Major Vapor Emissions) of this plan.
Real Time Monitoring	Particulate	150 ug/m3 above background	Thermo Anderson pDR-1000AN	One upwind location from EZ and two down wind locations from work area	Continuous	Stop work and reduce dust by wetting the area or changing operation.

EZ= Exclusion Zone (work zone).

VOCs=Volatile organic compounds.

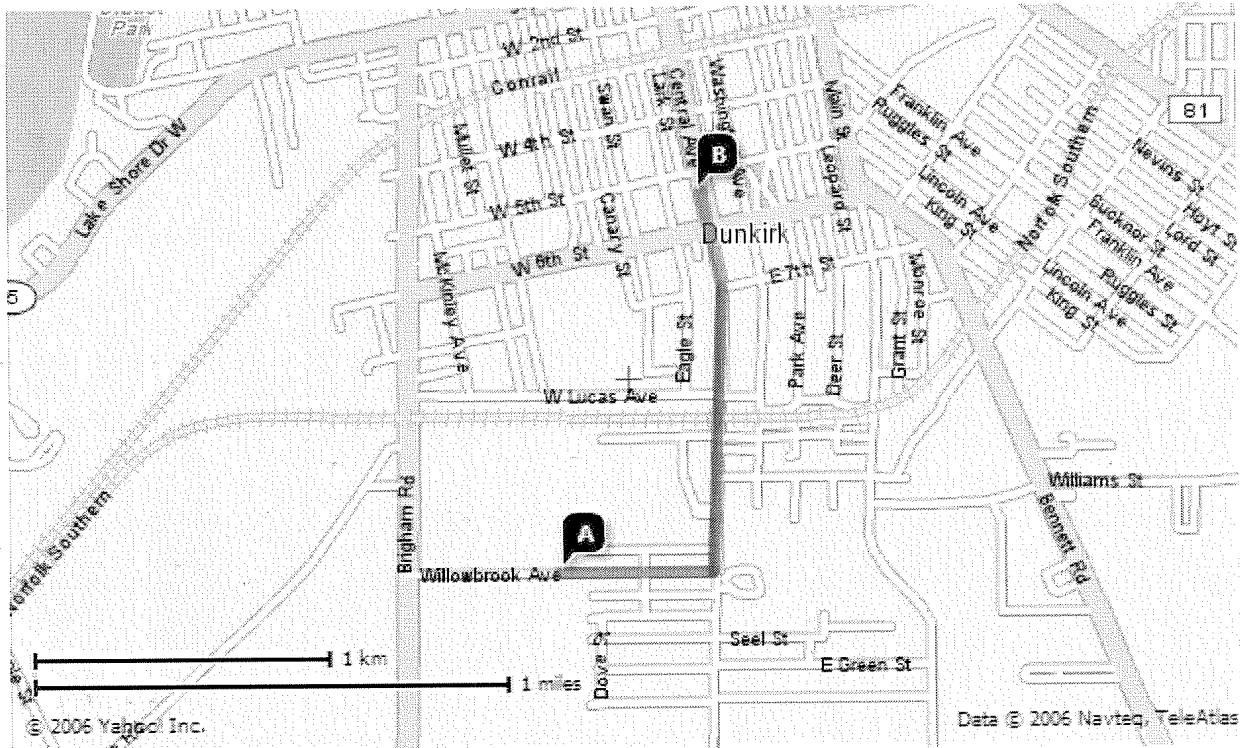
FIGURE

YAHOO! DRIVING DIRECTIONS

A Special Metals Corporation (716) 366-5663
100 Willowbrook Ave., Dunkirk NY

B Brooks Memorial Hospital (716) 366-1111 ★★★★★
529 Central Ave., Dunkirk, NY

Total Distance: NaN miles, Total Travel Time: NaN hours NaN mins



When using any driving directions or map, it's a good idea to do a reality check and make sure the road still exists, watch out for construction, and follow all traffic safety precautions. This is only to be used as an aid in planning.

ATTACHMENT 1

HEALTH AND SAFETY BRIEFING/SITE ORIENTATION RECORD

PROJECT INCIDENT INVESTIGATION FORM

Health and Safety Briefing /Site Orientation Record

Special Metal Corporation
PCB Soil Excavation
Dunkirk, New York

This is to verify that I, the undersigned, have been provided with a site (orientation) briefing regarding the safety and health considerations for the PCB Soil Excavation at the Special Metals Corporation Site, in Dunkirk, New York. I agree to abide by my project site-specific safety and health plan and other safety or health requirements applicable to the site.

Name (Print)

Signature

Company

Date

Site (orientation) briefing conducted by: _____ Date: _____

PROJECT INCIDENT INVESTIGATION FORM

Employee's Name

Company Name

Project Name

Project Location

Project Number

Building

Room

Other

Time Incident Occurred

Date

Supervisor's Name

Type of Case:

First Aid

Medical Treatment

Lost Time

Fatality

Property Damage

Occupational Illness

Describe the incident (What happened):

Describe the type of first aid or medical treatment provided:

Describe employee activity at time of incident:

Describe any tools or machinery involved:

Describe any personal protective equipment used by employee:

In your opinion, what the probable causes of the incident are:

In your opinion, how this incident could have been prevented:

Changes in process, procedure, or equipment that you would recommend:

How you would classify the apparent causes of this incident:

Human error

Equipment

Material

Personal Protective Equipment

Real Time

Other

Name and signature of person preparing this form:

Distribution:

Branch/Regional Office Manager:

Regional Health and Safety Coordinator:

Corporate Director of Health and Safety:

Other:

Note: If the space provided on this form is insufficient, provide additional information on separate paper and attach.