MACTEC

engineering and constructing a better tomorrow

December 15, 2014

Mr. Ian Beilby
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7012

Subject: **Previous Activities Summary - Addendum**
Al Tech Specialty Steel – Colonie, NY (Site 401003)
MACTEC Engineering and Consulting, P.C., Project # 3612122256

Dear Mr. Beilby:

This Addendum to the Previous Activities Summary (Summary) for the AL Tech Specialty Steel site in Colonie, NY (Site 401003) has been prepared by MACTEC Engineering and Consulting, P.C. (MACTEC) supporting the New York State Department of Environmental Conservation (NYSDEC) under Work Assignment No. D007619-19 dated August 15, 2012 and the April 2011 Superfund Standby Contract No. D007619 between MACTEC and the NYSDEC.

This Addendum provides an update to the Unit Summary Tables which incorporates data collected during the 2014 Main Plan Area (MPA) Investigation. The objective of the Summary Update is to provide the NYSDEC with a current assessment of the status of each Resource Conservation and Recovery Act (RCRA) unit and a recommendation for further action.

This Summary Update includes the following components:

- Master Sheet - lists the RCRA Units which were reviewed for this summary and MACTECs assessment regarding further action.
- Unit Summary Tables – have been updated to include the 2014 MPA Investigation Activities, Findings, Conclusions and Recommendations, the key findings from those documents, and also provides a MACTEC assessment of the RCRA Unit.
- Acronym List - a list of acronyms used in this Summary.

- Reference List - a list of references used to prepare this Summary.
- Attachments-

  Attachment 1: 2014 MPA Investigation Sample Location Figure
  Attachment 2: 2014 MPA Investigation Report Tables
  Attachment 3: Transformer Field Observations
  Attachment 4: Tank Inventory
  Attachment 5: Fuel Distribution Field Observations
  Attachment 6: Radiation Measurements Observed Above Background

MACTEC appreciates the opportunity to support the NYSDEC with this assessment.

If you have any questions on the material provided herein, please feel free to contact us.

Sincerely,

MACTEC Engineering and Consulting, P.C.

Jayme P. Connolly
Project Manager

Eric Sandin
Senior Professional

Enclosures (5)

Attachment 1: 2014 MPA Investigation Sample Location Figure
Attachment 2: 2014 MPA Investigation Report Tables
Attachment 3: Transformer Field Observations
Attachment 4: Tank Inventory
Attachment 5: Fuel Distribution Field Observations
Attachment 6: Radiation Measurements Observed Above Background

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

AOC	Area of Concern
AOD	Argon-Oxygen Decarburization
AST	Aboveground Storage Tank
AWQ	Ambient Water Quality
bgs	below ground surface
CAMU	Corrective Action Management Unit
COPC	Contaminant of Potential Concern
CMS	Corrective Measure Study
EAF	Electric Arc Furnace
EPA	Environmental Protection Agency
HDPE	High Density Polyethylene
ICM	Interim Corrective Measure
IRM	Interim Remedial Measure
ISMP	Interim Site Management Plan
LNAPL	Light Non Aqueous Phase Liquid
MCL	Maximum Contaminant Level
MACTEC	MACTEC Engineering and Consulting, P.C.
MPA	Main Plant Area
NYSDEC	New York State Department of Environmental Conservation
NYCRR	New York Codes, Rules and Regulation

GLOSSARY OF ACRONYMS AND ABBREVIATIONS (CONTINUED)

PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyls
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI	Remedial Investigation
SCO	Soil Cleanup Objectives
SMSA FS	Scrap Metal Storage Area Feasibility Study
STARS	Spill Technology and Remediation Series
Summary	Previous Activities Summary
SVOC	Semi Volatile Organic Compound
SWMU	Solid Waste Management Unit
TAL	Target Analyte List
TAGM	Technical and Administrative Guidance Memorandum
TC	Toxicity Characteristic
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
TOC	Total Organic Carbon
TOGS	Technical and Operational Guidance Series
TPH	Total Petroleum Hydrocarbon
UST	Underground Storage Tank
VAR	Vacuum Arc Remelting
VOC	Volatile Organic Compound
WWTP	Waste Water Treatment Plant

REFERENCES

Department of Energy. Certification Docket for AL Tech Specialty Steel Corporation Watervliet, New York and Offsite Property in Dunkirk, New York. (undated). http://www.lm.doe.gov/Considered_Sites/Allegheny-Ludlum_Steel_Corp_-_NY_01/

US Environmental Protection Agency (US EPA), 1990 "EPA MCLs for drinking water, Corrective Action for Solid Waste Management Units in Hazardous Waste Management Facilities; Proposed Rule" 55 FR 30798 (Subpart S). July 27, 1990.

McLaren/Hart Environmental Engineering Corporation (McLaren/Hart), 1991, "RCRA Facility Assessment Report, AL Tech Specialty Steel, Watervliet, New York." November 6, 1991. (Revised January 17, 1992).

McLaren/Hart Environmental Engineering Corporation (McLaren/Hart), 1991, "RCRA Facility Investigation, Description of Current Conditions Report, Al Tech Specialty Steel, Watervliet, New York." November 6, 1991.

New York State Department of Environmental Conservation (NYSDEC), 1991, "Draft Cleanup Policy and Guidelines" (NYSDEC Ambient Water Quality Standards [AWQ])." 1991

New York State Department of Environmental Conservation (NYSDEC), 1992. November 30, 1992, "Technical and Administrative Guidance Memorandum (TAGM) 3028, Criteria for Environmental Media: Soil Action Levels." (Revised August 1997).

New York State Department of Environmental Conservation (NYSDEC), 1992, "Technical and Administrative Guidance Memorandum (TAGM) 4046, Recommended Soil Cleanup Objectives." (Revised January 24, 1994).

New York State Department of Environmental Conservation (NYSDEC), 1992. "Spills Technology and Remediation Series (STARS), Petroleum – Contaminated Soil Guidance Document" August 1992.

New York State Department of Environmental Conservation (NYSDEC), 1992. "New York Codes, Rules and Regulations (NYCRR), Title 6, Part 373 Permit, AL Tech Specialty Steel Corporation, Watervliet, New York; NYSDEC No. 4-1026-11/27-0." December 10, 1992.

New York State Department of Environmental Conservation (NYSDEC), 1992. "Water Quality Regulations, Surface Water and Groundwater Classifications and Standards, New York Codes, Rules and Regulations (NYCRR), Title 6, Chapter X, Parts 700-706." (Revised April 1999)

40 Code of Federal Regulations (CFR), 1993 Parts 141-143, Safe Drinking Water Act. "Final Maximum Contaminant Levels." (Revised July 1, 2003).

40 Code of Federal Regulations (CFR), 1993 Part 261, Appendix II. "Method 1311 Toxicity Characteristic Leaching Procedure." (Revised July 1, 2003).

40 Code of Federal Regulations (CFR), 1993 Part 761.125. "Requirements for PCB Spills Cleanup." (Revised July 1, 2003).

New York State Department of Environmental Conservation (NYSDEC), 1993, "Technical Guidance for Screening Contaminated Sediments." (Revised January 25, 1999).

New York State Department of Environmental Conservation (NYSDEC), 1994. "AL Tech Specialty Steel, Watervliet, New York; Interim Remedial Order on Consent No. R4-1781-94-11." November 29, 1994.

New York State Department of Environmental Conservation (NYSDEC), 1995. "AL Tech Specialty Steel, Watervliet, New York; Order on Consent No. R4-1467-93-02." August 8, 1995.

Remcor (Remcor), 1995, "Interim Groundwater Recovery System Evaluation Report, AL Tech Specialty Steel Corporation, Watervliet, New York." January 13, 1995.

Environmental Strategies Corporation (ESC), 1995a. "Draft Phase I RCRA Facility Investigation Report, AL Tech Specialty Steel Corporation, Watervliet, New York." August 11, 1995a.

Environmental Strategies Corporation (ESC), 1995b. "Groundwater ICM Technical Memorandum, AL Tech Specialty Steel Corporation, Watervliet, New York." September 11, 1995b.

US Environmental Protection Agency (US EPA), 1995, "Maximum Contaminant levels for drinking water." 1995.

New York State Department of Environmental Conservation (NYSDEC), 1998, "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations." Division of water, Technical and Operational Guidance Series (TOGS) (NYS Water Quality Standards for Class GA Water). June 1998.

Environmental Strategies Corporation (ESC), 1998, "Phase II RCRA Facility Investigation Report, AL Tech Specialty Steel Corporation, Watervliet, New York." December 30, 1998.

Malcolm Pirnie, Inc. (Malcolm Pirnie), 2001, "Construction Certification Report, LNAPL Cutoff/Collection Trench. Watervliet, New York." April 2001.

New York State Department of Environmental Conservation (NYSDEC), 2002 "Order on Consent R4-2002-0426-58" Realco, Inc, Watervliet, New York." May 30 2002.

Realco Inc. (Realco), 2004, "Decontamination and Demolition of Melt Shop/Baghouse/Caster Building. Former AL Tech Specialty Steel Corporation Facility, Watervliet, New York." March 29, 2004

New York State Department of Environmental Conservation (NYSDEC), 2006. "Water Quality Regulations, Surface Water and Groundwater Classifications and Standards, New York Codes, Rules and Regulations (NYCRR), Title 6, Parts 375." December 2006.

MACTEC Engineering and Consulting, P.C. (MACTEC), 2007, "Transformer Surface Soil Sampling and Analysis Report, AL Tech Specialty Steel, Watervliet, New York." July 16, 2007.

Precision Environmental Services, Inc. (PES), 2008. "Limited Subsurface Investigation Report", former AL Tech Specialty Steel, Watervliet, New York. August 2008.

New York State Department of Environmental Conservation (NYSDEC), 2010, "CP-51 / Soil Cleanup Objectives." October 21, 2010.

40 Code of Federal Regulations (CFR), 2012, "Part 50.6 National Primary and Secondary Ambient Air Quality Standards for PM10." July 1, 2012.

MACTEC Engineering and Consulting, P.C. (MACTEC), 2012, "Interim Site Management Plan, AL Tech Specialty Steel, Watervliet, New York." July 2012.

MACTEC Engineering and Consulting, P.C. (MACTEC), 2014, "Waste Acid Pit Direct Push Investigation, AL Tech Specialty Steel, Watervliet, New York." March 6, 2014.

AOC/SWMU/CAMU
Master Sheet (updated December 2014)

RCRA Unit	Unit Description	MACTEC Recommendation	Media	MACTEC Recommendation Update (December 2014)
Solid Waste Management Unit (SWMU)				
1	Waste Acid Pits	Remediation	Soil	NA
2	Extrusion Pit (Extrusion/Slippery Water CAMU) - Same as AOC 2g	Investigation	See CAMU 1	Investigation
3a	Container Storage Area - Extrusion Region	No Further Action	--	NA
3b	Container Storage Area- Rolling Mill Region (Boring B-10)	Investigation	Floor	Investigation
4	Lime-Neutralized Waste Pickle Liquor Sludge (LNWPLS) Containers	No Further Action	--	NA
5	Waste Management Area	NA	--	NA
6	Northeast Quadrant Fill Area (Boring B-10)	Investigation	See Boring B-10	Investigation
7	South Lagoon	NA		NA
8	Electric Arc Furnace (EAF) Baghouse and Melt Shop	Investigation	Soil/GW	Investigation
9	Scrap Metal Storage Area	NA	--	NA
10	Wastewater Treatment Plant	No Further Action	--	NA
11	Hydromation Plant	Investigation	Soil	Investigation
12	Transportation Building Waste Oil	Investigation	Soil	Investigation
13	Drum Crushing/Waste Oil Accumulation Area (Boring B-10)	Investigation	Floor	Investigation
14	Waste Fuel Oil Storage Area	Investigation	Soil (Visual)	Investigation
15	Calow Unit	Investigation	Soil/GW/Floor	Investigation
16	Lime Storage Vessel (Melt Shop Region SW)	Investigation	Soil/GW	No Further Action
17	Lime Storage Vessel (Melt Shop Region NW)	Investigation	Soil/GW	No Further Action
18	Extrusion Slippery Water System (Extrusion/Slippery Water CAMU)	No Further Action	--	NA
19	Maintenance Steam Cleaning Pad	Investigation	Soil	Investigation
20	Process Discharge Piping	Investigation	Sediment (See AOC11b)	NA
Area of Concern (AOC)				
1a.	Transformer/Capacitor Area T1 and T3 through T13	Remediation Investigation	Soil Soil (Visual)	Investigation
1b.	Transformer/Capacitor Area T2	No Further Action	--	NA
1c.	Transformer/Capacitor Area T14	Remediation	Soil	Investigation
2a.	Hot and Cold Well Tanks for the Extrusion Cooling Tower	No Further Action	See CAMU 1	NA
2b.	Slippery Water Tank (Extrusion/Slippery Water CAMU)	No Further Action	See CAMU 1	NA
2c.	Leachate Pit	Investigation	Visual/GPR	NA
2d.	Surge Pit	No Further Action	--	No Further Action
2e.	Forge Press Pit	Investigation	Soil/Floor	Investigation
2f.	Rolling Mill Pit	Investigation	Soil/Floor	Investigation
2g.	Extrusion Pit - Same as SWMU 2	Investigation	See SWMU 2	NA
2h.	Caster Pit	Investigation	Floor	No Further Action
3	Septic Tank	No Further Action	--	NA
4	Pickling Room	No Further Action	--	NA
5	Thompson Etch Room	Investigation	Soil/GW	Investigation
6	Closed Gasoline Underground Storage Tank	No Further Action	--	NA
7	Closed Anneal Underground Storage Tank	Investigation	GPR/Soil/GW	Investigation
8	Closed Fuel Oil Underground Storage Tanks	Investigation	GPR/Soil/GW	No Further Action
9	Fuel Oil Storage Tank and Distribution System	Investigation	Soil	Investigation
10	Former Coal Storage Area	Investigation	Soil	No Further Action
11a.	Kromma Kill Surface Water	Investigation	Surface Water	Investigation
11b.	Kromma Kill Sediment	Investigation	Sediment	Investigation
12	Oiled Roads	Investigation	Soil	No Further Action
13	Extrusion Cooling Tower (Extrusion/Slippery Water CAMU)	No Further Action	See CAMU 1	NA
14	Continuous Casting Process Cooling Tower	No Further Action	--	NA
Corrective Action Management Units (CAMU)				
1	Extrusion/Slippery Water	No Further Action	Floor	Investigation
2	Groundwater	Investigation	GW- Ongoing LTM/LNAPL Investigation	Investigation
Additional Concerns				
	API Oil/Water Separator	Investigation	Sediment	Investigation
	Boring B-10	Investigation	Soil- RI Grid	Investigation
	Uranium	No Further Action	Soil - pending further evaluation	No Further Action
	Pilger Mill	Investigation	Soil/GW (Visual)	Investigation

NA= Not included in this review
Note: This Master Sheet is an attachment to the "Previous Activities Summary - March 2014."
-- no media will be evaluated

SWMU 1: Waste Acid Pits

RFA Description

• **Process:** Spent pickling liquors (spent acids containing heavy metal impurities) were pumped into waste acid pits located outside the Pickle Room. The waste acid pits was comprised of two 8' x 15' x 15' deep sections constructed of acid brick and bituminous-coated concrete walls 24" thick with a usable capacity of 18,000 gallons. The concentrated acid caused a breakdown of the alkaline concrete mixture and, absent of periodic preventative maintenance. The concrete deteriorated and resulted in an acid release to the environment. Acids spilled in the Pickle House were directed to the waste acid pits. Waste from the pits discharged into the waste water treatment plant.
• **Unit Description:** Releases from extrusion pickle house waste acid pit(s).
• **Date of Operation:** 1951->1992
• **Materials Handled/Contaminants Suspected:** Waste Acids, Heavy Metals
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Interim Remedial Order on Consent # R4-1781-94-11 (Pickle House)	11/25/1994	Groundwater ICM	Groundwater	chromium, lead, copper, cadmium, cyanide, beryllium	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	Groundwater and Soils	Metals and pH	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined with CAMU 2	Groundwater and soils	Waste Acids and Metals	• Collected groundwater/ soil samples from MW-4/MW-4B which were analyzed for PCBs, TAL inorganics, TPH, Total Phenols, pH, VOC, SVOC,TCLP, TOC; • AP-1, AP-2 for VOC, SVOC, TCL PCBs, Pesticides, TAL Inorganics (metals), TCLP, TPH, Total Phenols, pH.	• NYSDEC TAGM 3028 11/30/1992. • NYCRR title 6, Chapter X, Parts 700-705 1992. • NYSDEC AWQ October 1991. • US EPA MCLs for drinking water 7/27/1990.	• Exceedance of metals in groundwater. • Delineated pH in groundwater.
MACTEC - Waste Acid Pit Investigation	Feb-14	Further Remediation Needed	Soil	Metals and pH	11 Soil samples were collected for full suite parameters.	NYSDEC Title 6, Part 375. December 2006	Chromium, manganese and nickel in soil exceed the SCOs for all three scenarios. Several PAHs and hexavalent chromium exceeded the residential SCO.

MACTEC Assessment:

NYSDEC conducted soil sampling in 2012 and 2013 to assess current conditions (MACTEC - Waste Acid Pit Investigation, 2014). Several soil samples collected have metals exceeding SCOs for all three scenarios. See CAMU 2 for groundwater assessment.

Media	Impacted	Recommendation
Soil	Yes	Remediation- metals exceed SCOs
Groundwater	Yes	NFA- See CAMU 2
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

No sampling was conducted specific to the Waste Acid Pits in 2014, since recent sampling yielded a recommendation that soil is impacted and remediation is needed.

Back to master sheet

SWMU 2: Extrusion Pit (Same as AOC 2g) (Extrusion/Slippery Water CAMU)

RFA Description

• **Process:** The Slippery Water system was a hydraulic system where water from the extrusion press was treated to remove oils. This process occurred in the Slippery Water Room a small concrete-floored room accessible only from the outside (i.e.; not accessible from the Extrusion Department), an adjunct of the Extrusion Building. The system consisted of underground and aboveground storage/holding tanks, a series of settling tanks, surface skimmers, and ancillary piping, valves and pumps. Oil skimmed from the surface of the settling tanks was collected in a 250 gallon container. When filled, the container is transported to the central waste oil collection tank. A metal containment dike that surrounds the skimming tanks prevents the release of any spilled oil to the environment. Treated water is recycled to the extrusion press (i.e.; this was a closed loop coolant system). A UST located to the west of the Extrusion Building was used to increase the holding capacity of the coolant system.

The Extrusion Pit was an integral part of the closed-loop recirculation system for the Extrusion Press. This pit is an irregularly-shaped concrete pit that extends into the elevation of the ground water table. The pits collected:

-process water prior to recirculating through the system
-oils that leak from the equipment
-dielectric fluid from capacitors located in the area of the pit which occasionally exploded

Process waters generated from the extrusion press were previously discharged to the south lagoon. Nine samples collected on September 18, 1989 from soils surrounding the south lagoon were shown to contain PCBs. The south lagoon was closed in October 1990. Since this date, all wastewaters from the extrusion building have been discharged to the new oil/water separator. A circular sump (4 foot in diameter x 4 feet deep) is located in the southern end of the pit. The integrity of the pit was investigated during the Phase I RFI. The bottom of the sump was weathered and a previously repaired crack was identified.

• **Unit Description:** Potential spillage of cooling water in the Slippery Water Room and potential for a release from the UST
• **Date of Operation:** 1951->1992
• **Materials Handled/Suspected Contaminants:** Oil, PCBs, Metals
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined into CAMU 1*	Soil and Groundwater	Oil, PCBs, and Metals	• Collected groundwater and soil samples from MW-3/MW-3B. (TCL PCBs, TAL Inorganics, TPH, Total Phenols, pH) soil - (TCL VOCs, TCL SVOCs, TCL PCBs, TAL Inorganics, TPH, Total Phenols) Groundwater • Conducted a visual inspection of the Extrusion Pit.	• NYSDEC TAGM 3028 11/30/1992. • NYCRR, title 6, Chapter X, Parts700-705 1992. • NYSDEC TAGM 4046 1/24/1994. • NYSDEC AWQ October 1991.	• There were exeedances of criteria for metals in groundwater. • Infiltration of ground water was not observed during inspection a repaired crack in the west wall was noted. Seepage into the pit via this repaired crack was not observed. The bottom of the sump appeared very weathered however no cracks were observed. • Based on the inspection this pit it was intact and does not appear to represent a potential impact to groundwater or soil.

MACTEC Assessment:

High levels of PCBs were detected in samples from the South Lagoon which received wastes from the Extrusion Pit. A sample of the concrete from the bottom of the pit should be collected during remedial investigation. See CAMU 1.

Media	Impacted	Recommendation
Soil	Not sampled	NFA- unless concrete sample indicates contaminants are present, subslab soil samples will not be collected
Groundwater	No	NFA - unlikely to be an ongoing source of contamination to GW.
Other	Unk	Investigation - concrete sampling to assess potential PCBs in the extrusion pit.

MACTEC 2014 MPA Investigation Activities:

Concrete samples were collected to asses PCB impact in the area of the Extrusion Pit. Hollow stem auger borings were completed at two locations in the Extrusion pit area; soil and groundwater samples were collected. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Concrete	FC D6-01	0 - 0.1
	FC F6-02	0 - 0.1
	FC E6-03	0 - 0.1
	FC E7-03	0 - 0.1
Soil	SB F6-04	1 , 8 , 22
	SB E6-05	1 , 8 , 13
Groundwater	MW F6-04	7.8 - 17.8

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Analysis	Findings
Concrete	PCB	PCBs were detected at two locations at concentrations exceeding the Commercial SCO. Matrix interferences at the other two locations resulted in elevated reporting limits above the SCOs.
Soil	Metals	Metals were detected at concentrations exceeding the commercial SCO at two intervals at one location.
Groundwater	PCB	PCBs were detected at a concentration exceeding the GA standard.

MACTEC 2014 MPA Conclusions/Recommendations:

Further investigation is warranted to evaluate the extent of PCB contamination in the vicinity of the Extrusion Pit.

Back to master sheet

*- This SWMU is listed as "No Further Action" in the Phase I Table 1-2 however, the Phase I *Findings* recommend additional investigation during Phase II.

SWMU 3a: Container Storage Area - Extrusion Region

RFA Description

• **Process:** This was the container storage located at the Pickle House used to store waste acids from the Pickle house as well as acids from the Thompson Etching Room. Each (Thompson Room and Pickle House) had their own accumulation areas located inside the respective buildings, on concrete loading platforms, equipped with acid brick flooring. Used Acid Hydrochloric and nitric acids used in the etching processes (accumulated in 55 and 30 gallon containers) adjacent to the Thompson Room where etching was conducted. The drums were periodically transported to the Pickle House, where the acids were reused in the wastewater treatment/neutralization system. At the time of the RFA the flooring was free from cracks and drains. Acids spilled in the Pickle House were directed to the surge pits and eventually the treatment plant.

• **Unit Description: U**sed acid stored on-site for reuse in wastewater treatment/neutralization system.
• **Date of Operation:** 1951->1992
• **Materials Handled/Contaminants Suspected:** Acids
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	Surface Soil and Groundwater	Acids	None	N/A	• Not identified as a source because this unit had secondary containment and a spill plan.

MACTEC Assessment:

If acids were released in this area they would have been directed to the waste acid pits.

Media	Impacted	Recommendation
Soil	No	NFA- unlikely to have contaminated soil beneath the slab
Groundwater	Unk	NFA - unlikely an ongoing source of contamination to GW.
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

No sampling was conducted specific to the Extrusion Region Container Storage Area based on MACTEC's recommendation for No Further Action.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

SWMU 3b: Container Storage Area - Rolling Mill Region (Boring B-10)

RFA Description

• **Process:** Hazardous wastes generated on-site were accumulated in the southeast corner of Building 11 adjacent to the drum crushing station. The accumulation area was designated strictly for hazardous wastes. Accumulated wastes were removed for offsite disposal by a licensed transporter on a regular basis so that no waste containers accumulated for more than 90 days. A written management plan designated procedures for hazardous waste accumulation, handling, transport and disposal. The accumulation area was located indoors, on a concrete floor. No obvious cracks or floor drains were present in the floor at the time of the RFA. A berm was present to control spilled fluids from spreading throughout the building. Wastes accumulated in the area included oil-contaminated acids, spill clean-up residuals, chrome or nickel contaminated sludges from pickle tank cleaning, PCB-contaminated material, expired chemicals and spent cleaning solvents. The quantity of wastes accumulated was up to 40, 55-gallon drums. Additionally, PCB articles removed from service were stored in a steel vessel (approximately 2' x 3' x 5') located within this area.

• **Unit Description:** Hazardous wastes generated on-site for disposal off-site and used acid stored on-site for reuse in wastewater treatment/neutralization system.
• **Date of Operation:** 1951->1992
• **Materials Handled/Contaminants Suspected:** Oils/Acids, Chrome or Nickel Sludge, PCBs, expired chemicals, Spent Cleaning Solvent
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined into the Boring B-10 Area	Surface, Subsurface Soil and Groundwater	Oils, Acids, Chrome or Nickel Sludges, PCBs, Expired Chemicals, and Spent Cleaning Solvents	• Samples collected from B-10 (Soil) were analyzed for select list of organic compounds (VOC), SVOCs, PCBs, TCLP, TPH, Total Phenols, and pH. MW--5/MW-5B, MW-A1, and MW-A2 (Groundwater) samples were analyzed for TCL VOC, TCL SVOC, TCL PCBs, Total and dissolved TAL Inorganics plus molybdenum, TPH, Phenols, and miscellaneous parameters.	• NYSDEC TAGM 3028 11/30/1992. • NYSDEC TAGM 3028 groundwater. • NYCRR, title 6, Chapter X, Parts 700-705 1992. • NYSDEC AWQ October 1991.	• PCBs were detected in surface soils at B-10. • The source and extent of the PCB impact have not been defined. • AL Tech proposed to eliminate potential migration and exposure of the PCB contaminated surface soil through a soil removal ICM.

MACTEC Assessment:

No obvious staining identified in the storage area inside the building during the RFA; no samples were collected from inside the building (the actual storage area).. This Unit was combined with B-10 Area during Phase II because of soil contamination outside and downgradient of this area.

Media	Impacted	Recommendation
Soil	Not sampled	NFA- unless concrete sample indicates contaminants are present, subslab soil samples will not be collected
Groundwater	Unk	NFA- unlikely to be an ongoing source of contamination
Other	Unk	Investigation - concrete sampling to assess potential PCBs

MACTEC 2014 MPA Investigation Activities:

A concrete sample was collected to asses PCB impact in the area of the Rolling Mill Region Container Storage Area. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Concrete	FC L6-01	0 - 0.1

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included inAttachment 2.

Media	Analysis	Findings
Concrete	PCB	PCBs were detected at concentrations exceeding the Industrial SCO.

MACTEC 2014 MPA Conclusions/Recommendations:

Further Investigation is warranted to evaluate the extent of PCB contamination related to this SWMU.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

SWMU 4: Lime-Neutralized Waste Pickle Liquor Sludge Containers

RFA Description

• **Process:** Temporary storage of a lime stabilized sludge which was generated through the treatment process near the WWTP inside the Neutralizer Building. Sludge was then collected in a steel container. The sludge was considered a hazardous waste according to the Toxicity Characteristic Leaching Procedure (TCLP) (chromium > 5 ppm) and was, accordingly, disposed off-site. Prior to introduction of the TCLP procedure the sludge was not considered a hazardous waste and was disposed in the on-site landfill. The concrete floor of the building, impervious to the sludge, provided a secondary barrier to the environment. No floor drains are located in the dewatering area.

• **Unit Description:** Spilled sludge in roll-off storage area.
• **Date of Operation:** 1972->1992
• **Materials Handled/Contaminants Suspected:** Hexavalent chromium
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
McLaren/Hart - RCRA Facility Assessment Report	11/6/1991	No Further Action	Soil and Groundwater	Oils, Metals, pH, Chromium, Lead, Copper, Cadmium, Cyanide, and Beryllium.	None	N/A	No Further Action was recommended for this SWMU however it is noted that this SWMU will be investigated with other units located in the vicinity of the WWTP. See CAMU 2.
YSDEC Interim remedial Order on Consent # R4-1781-94-	11/25/1994	No Further Action	Groundwater	Oils, Metals, pH, Chromium, Lead, Copper, Cadmium, Cyanide, and Beryllium.	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	Groundwater	Oils, Metals, pH, Chromium, Lead, Copper, Cadmium, Cyanide, and Beryllium.	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Not Identified as a Source	Groundwater	Oils, Metals, pH, Chromium, Lead, Copper, Cadmium, Cyanide, and Beryllium.	None	N/A	N/A

MACTEC Assessment:

This SWMU was a dewatered sludge temporarily stored in roll-offs. This is located adjacent to the Waste Acid Pit which was investigated in 2013. See SWMU 1 and CAMU 2.

Media	Impacted	Recommendation
Soil	Suspected (metals)	NFA- unlikely an ongoing source of contamination. Co-located with SWMU-1
Groundwater	Unk	NFA - unlikely an ongoing source of contamination to GW. See CAMU 2. Ongoing LTM
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

No sampling was conducted specific to the Lime-Neutralized Waste Pickle Liquor Sludge Containers based on MACTEC's recommendation for No Further Action.

Back to master sheet

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

SWMU 6: Northeast Quadrant Fill Area (Boring B-10)

RFA Description

• **Process:** Prior to the development of the on-site landfill, an area in the northeast quadrant of the main plant area was used for the disposal of by-product waste, during the Early Period (1901-1920). Visual observations of excavations in this area indicates that by-products from the melting operations including slag, mold hot taps and bottom plugs, demolition debris, furnace lining refractory and metal components is present. Additional materials suspected to be in the area include hot finishing by-products such as grinding dust clay and sand, mill scale and hose metal fines. The course of the Kromma Kill may have been altered to its present location by filling activities. Only solid wastes are believed to have been landfilled, and liquid wastes would have been discharged to the Kromma Kill.

• **Unit Description:** disposal of wastes including slag, metal scrap, electric arc furnace dust, wastewater treatment sludge, and demolition debris.
• **Date of Operation:** 1907-1917;1957-; 1979-1988
• **Materials Handled/Contaminants Suspected:** Heavy metals
• **Additional Info:**

Document	Date	Decision Point		Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI		N/A	N/A	None	N/A	N/A
NYSDEC Interim Remedial Order on Consent # R4-1781-94-11	11/25/1994	Groundwater ICM		groundwater	Oils, Metals, pH, Chromium, Lead, Copper, Cadmium, Cyanide, and Beryllium.	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI		Soil and Groundwater	Oils, Metals, pH, Chromium, Lead, Copper, Cadmium, Cyanide, and Beryllium.	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined into the Boring B-10 Area	Combined into CAMU 2	Soil and Groundwater	PCBs, Oils, Metals, pH, Chromium, Lead, Copper, Cadmium, Cyanide, and Beryllium.	• Collected soil samples from B-9 and B-10 (full suite parameters) • Collected groundwater samples from MW-5/MW-5B (full suite parameters). • Cover with polyethylene sheeting and gravel cover as an ICM	• NYSDEC TAGM 3028 11/30/1992. • NYSDEC STARS August 1992. • NYSDEC TAGM 4046 1/24/1994. • NYCRR, title 6, Chapter X, Parts 700-705 1992. • NYSDEC AWQ October 1991.	PCBs, nickel and PAHs were detected in soils exceeding criteria. Metals were detected in groundwater at levels exceeding criteria. Source and extent of impact have not been defined.

MACTEC Assessment:

This SWMU was a disposal unit for wastes generated across the site. Contaminants are likely present in the soils and are potentially impacting groundwater.

Media	Impacted	Recommendation
Soil	Yes	Investigation- confirm IRM results and characterize area soil.
Groundwater	Yes	NFA - evaluated as part of CAMU 2. Ongoing LTM.
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

Soil samples were collected to assess the impact from wastes disposed in the Northeast Fill Quadrant. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Soil	SS K7-02 SB-K7-02	0-0.2 1 , 7 , 8
	SS M7-01 SB- M7-01	0-0.2 1 , 12
	SS M6-01 SB M6-01	0-0.2 1 , 4 , 8
	SS J6-01 SB J6-01	0-0.2 1 , 4 , 12
	SS K6-01 SB K6-01	0-0.2 1 , 8 , 16
	SS M5-01 SB M5-01	0-0.2 1 , 4 , 8
	SS L5-01 SB L5-01	0-0.2 1 , 6 , 8

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Analysis	Findings
Soil	Pests	No pesticides detected exceeding SCOs.
	PCB	PCBs were detected exceeding the Commercial SCOs at three locations.
	VOC	No VOCs were detected exceeding the SCOs.
	SVOC	SVOCs were detected at concentrations exceeding the Industrial SCO at one location.
	Metals	Metals were detected at concentrations exceeding the industrial SCO 7 locations.
	Cr+6	Cr+6 was not detected exceeding the SCOs.

MACTEC 2014 MPA Conclusions/Recommendations:

Additional investigation is warranted to evaluate the extent of contamination related to this SWMU. All results reported above SCOs were from samples generally collected within the fill material.

Back to master sheet

SWMU 8: Electric Arc-Furnace Baghouse and Melt Shop

RFA Description

• Process: The melting process in the electric arc furnace (EAF) generated considerable quantities of a finely dispersed dust. A baghouse and dust collection system was constructed in 1970 to collect the dust. Following collection in the baghouse the dust was placed in containers for eventual disposal. Originally when cleaning was impractical these bags were periodically disposed of through on-site incineration in the EAF, subsequently they were sent to a hazardous waste disposal facility (IMETCO). Prior to the baghouse installation (1951-1970), EAF dust was not collected, but dispersed in and around the melt shop building. Some of this material had been landfilled, although some residual dust remained on building components and the soil base floor at the time of the RFA.

Melting processes that transform scrap steel and alloys into specialty steel intermediates are conducted in the melt shop and the vacuum arc remelting (VAR) buildings located at the northwest section of the facility. Scrap metals, alloys and lime (to remove impurities) are added to one of two electric arc furnaces (EAF) where a high voltage generates adequate heat to melt the raw materials. A fine metal dust (K061), rich in iron oxides, chromium and nickel, is generated by the process. This dust is handled as a hazardous waste due to its metal content. Impurities of the steel accumulate at the surface of the molten steel during the melting process (slag). Molten metal from the EAF is next processed in one of two argon-oxygen decarburization (AOD) refining units. These units are located on either side of the EAF units. Argon and oxygen are introduced in gaseous form to remove impurities of the melt. The molten steel is either poured into ingots or sent to the continuous caster.

• Unit Description: EAF dust spillage under baghouse
• Date of Operation: 1970-1996, Melt Shop 1951-1996
• Materials Handled/Contaminants Suspected: Heavy Metals
• Additional Info:

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	Groundwater and Soils	Metals	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Phase II RFI	Soil, Groundwater, Air	Metals	• Collected soil samples from B-1 (PCBs, metals, total phenols) and MW-9B (PCBs, metals, TPH, phenols, pH). • Groundwater sample MW-11 (VOCs, SVOCs, PCBs, TPH, phenols). • Air Pathways Analysis - modeling using wind emissions data to determine contaminant concentrations at the site boundary.	• NYSDEC TAGM 3028 11/30/1992. • NYCRR title 6, Chapter X, Parts 700-705 1992. • NYSDEC AWQ October 1991. • 40 CFR 50.6.	• Metals (nickel, manganese) exceeded criteria for soil. • Groundwater results did not show exceedances of groundwater criteria. • Air model predicted no exceedance of criteria at the site boundary.
Environmental Strategies Corporation - Phase II RFI	12/30/1998	Soil removal CMS/ICM	Surface Soil	Metals	7 surface soil samples collected for metals	• Site-specific risk-based action levels were generated for metals in soils.	Exceedance of cadmium in TC extract and the presence of lead above the site-specific risk-based action level in surface samples. Groundwater will be monitored at the nearest downgradient well MW-11 to evaluate groundwater potentially impacted by metals.
Realco Inc. - Construction Certification Report - Decontamination and Demolition of Melt Shop/Baghouse/Caster Building	3/29/2004	Demolition Complete		EAF dust (listed hazardous waste K061), asbestos containing materials, hexavalent chromium,	Decontamination and Demolition of Melt Shop, Baghouse and Caster Building.	N/A	The buildings were demolished and materials disposed of off site.

MACTEC Assessment:

EAF dust was released into the environment from this Unit between 1951 and 1996 when the baghouse was installed. A soil IRM was recommended after the Phase II. No documentation regarding removal of soils in this area was available.

Media	Impacted	Recommendation
Soil	Yes	Investigation- soil sampling to evaluate potential releases of metals.
Groundwater	Unk	Investigation- additional MW needed to evaluate potential impacts of metals and pH.
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

Soil samples were collected to evaluate potential metal and pH impacts from Electric Arc-Furnace Baghouse and Melt Shop. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Soil	SS H2-01 SB H2-01	0 - 0.2 1 , 4 , 7
	SS H3-01 SB H3-01	0 - 0.2 1 , 4 , 7
	SS H3-02 TP H3-02	0 - 0.2 1 , 3 , 5
	SS I1-01	0 - 0.2
	SS I3-01 TP I3-01	0 -0. 2 1 , 5
	SS J1-01 SB J1-01	0 -0. 2 1 , 8
	SS J3-01 TP J3-01	0-0.2 1 , 4 , 9
	SS K1-01 SB K1-01	0 - 0.2 1 , 8 , 12
	SS K2-01 SB K2-01	0 - 0.2 1 , 4 , 8
	SS K3-01 TP K3-01	0 - 2 1 , 5 , 7
Groundwater	MW H3-01	1.5 - 6.5

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Analysis	Findings
Soil	Pests	No pesticides detected exceeding SCOs.
	PCB	PCBs were detected exceeding the Commercial SCOs at two locations.
	VOC	No VOCs were detected exceeding the SCOs.
	SVOC	SVOCs were detected at concentrations exceeding the Residential SCO at one location.
	Metals	Metals were detected at concentrations exceeding the Industrial SCO 9 locations.
	Cr+6	No Cr+6 was detected exceeding the SCOs.
Groundwater	VOCs	No VOCs were detected exceeding the SCOs.

MACTEC 2014 MPA Conclusions/Recommendations:

Additional investigation is warranted to evaluate the extent of contamination related to this SWMU. Widespread metal (Cr, Ni) contamination was observed in the area exceeding the SCOs.

Back to master sheet

SWMU 10: Wastewater Treatment Plant

RFA Description

• **Process:** The wastewater treatment plant is located just north of the extrusion building pickle facility, and was installed in 1972. Waste acids, spent pickle liquor, pickle rinse water, and landfill leachate were treated through a chrome reduction, neutralization and clarification (through sedimentation). A failure or overload of the treatment facility could have lead to spills of these materials of potentially significant impact to the nearby Kromma Kill via overland flow or the normal treatment plant discharge path through outfall 009A. The potential primary contaminants of concern and sources included hexavalent chrome from landfill leachate, PCBs, fuel oil from the contaminated groundwater, waste lubricating oil from process wastewater, and metals from the waste water treatment plant.

• **Unit Description:** Wastewater treatment plant used for site related activities
• **Date of Operation:** 1972-2002
• **Materials Handled/Contaminants Suspected:** Landfill Leachate, Waste Pickling Acids, Boiler Condensate, Pickling Process Wash Water, Metals, Oils, Solvents
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	Groundwater	Landfill Leachate, Waste Pickling Acid, Boiler Condensate, Pickling Process Wash water, Metals, Oils, Solvents	None	N/A	N/A

MACTEC Assessment:

This SWMU has not been investigated; however, soils were investigated as part of SWMU-1 and groundwater in this area has been investigated (CAMU-2).

Media	Impacted	Recommendation
Soil	Not sampled	NFA- nearby soils characterized by SWMU-1
Groundwater	Unk	NFA- unlikely to be an ongoing source of contamination. See CAMU 2. Ongoing LTM.
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

No sampling was conducted specific to the Wastewater Treatment Plant based on MACTEC's recommendation for No Further Action.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

SWMU 11: Hydromation Plant

RFA Description

• **Process:** Oil-contaminated process water, primarily cooling water from the 21 inch and 22 inch mills, was treated in the Hydromation Plant to remove the oil. The plant consisted of two aboveground storage tanks and two oil skimming units. Water/oil skimmed from the top of the storage tank(s) flowed through the two oil skimming devices located inside the hydromation building. After passing through a sand filter, the effluent water discharged to the API separator for final treatment. Oil separated via the hydromation unit was collected in drums and transported to a centrally located waste oil collection tank. The building did not have the capacity to contain a large release from these units (i.e. complete tank failure), such an incident would have result in a release to the environment. Smaller releases would be have been directed to a drain within the building which discharged to the API oil/water separator system. Reportedly, no such releases had occurred within the plant.

• **Unit Description:** Oil staining around drum accumulation area
• **Date of Operation:** 1976->1992
• **Materials Handled/Contaminants Suspected:** Oil, Metal
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	Groundwater and Soils	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	Groundwater and Soils	Oil and Metals	None	N/A	• Facility conditions do not indicate a need for any unit-specific actions. • NYSDEC requested further investigation to evaluate NFA decision.
Environmental Strategies Corporation - Phase II RFI	12/30/1998	No Further Action	Soils	Oil and PCB	• 7 surface soil samples collected based upon visual staining for PCB and TPH. • No analysis for metals.	• Site-specific risk-based action levels were generated for metals in soils. • NYSDEC 1992 TAGM 3028 (Revised 1997). • NYSDEC TOGS 1998 • US EPA MCLs for drinking water 7/27/1990.	• No TPH or PCBs found in the soil samples. • Soils not tested for metals.

MACTEC Assessment:

Staining was observed in this area around drum storage area. Soil samples were collected in this are however they were not analyzed for metals.

Media	Impacted	Recommendation
Soil	Yes	Investigation- surface soil
Groundwater	Unk	NFA - unlikely an ongoing source
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

Soil samples were collected to evaluate potential releases of contaminants of concern from the Hydromation Plant. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Soil	SS M3-01 SB M3-01	0 - 0.2 1 , 4 , 8
Concrete	FC M3-02	0 - 0.1

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Analysis	Findings
Soil	PCB VOC SVOC Metals	No PCBs were detected exceeding SCOs. No VOCs were detected exceeding SCOs. No SVOCs detected exceeding SCOs. Metals were detected at concentrations exceeding the Industrial SCO.
Concrete	PCB	No PCBs were detected exceeding SCOs

MACTEC 2014 MPA Conclusions/Recommendations:

Additional investigation is warranted to evaluate the extent of metals contamination in soil related to this SWMU.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

SWMU 12: Transportation Building Waste Oil

RFA Description

• **Process:** At the Transportation Building waste oils resulting from vehicle maintenance were accumulated both inside and outside in drums and a tank, respectively. The drums were stored atop concrete away from any drains. At the time of the RFA staining within the building was observed, however, no release to the environment has been documented nor is expected with respect to observed staining of concrete. The 275 gallon aboveground tank was located outside the northeast comer of the building, did not have secondary containment and was stored directly atop soil. Staining of soil was observed though no drains exist in the vicinity of this tank.

• **Unit Description:** Waste oil generated at the Transportation Building. (The RFA does not call this Unit out as a specific SWMU, it is included in the Waste Fuel Oil Storage SWMU.)
• **Date of Operation:** pre 1970- >1992
• **Materials Handled/Contaminants Suspected:** Oils, metals, degreasers
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined into CAMU 2	Soil and Groundwater	Oils, Metals, and Halogenated Compounds	• Collected soil samples B-12 (full suite parameters), • Groundwater MW-6/MW-6B (full suite parameters)	• NYSDEC TAGM 3028 11/30/1992. • NYSDEC STARS August 1992. • NYSDEC TAGM 4046 1/24/1994. • NYCRR, title 6, Chapter X, Parts 700-705 1992 • NYSDEC AWQ October 1991. • US EPA MCLs for drinking water 7/27/1990.	• Both soil and groundwater exceeded criteria for metals (including chromium, nickel, arsenic) and Organic Compounds. • LNAPL found in several locations and wells.

MACTEC Assessment:

Soil and groundwater exceed criteria. Extent of contamination is unknown.

Media	Impacted	Recommendation
Soil	Yes	Investigation- characterize current soil conditions outside the building.
Groundwater	Unk	NFA - unlikely an ongoing source. Evaluated as part of CAMU 2. Ongoing LTM.
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

Sampling was conducted to evaluate potential releases of contaminants of concern associated with the historic waste oil storage in the vicinity of the Transportation Building. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Soil	SS J7-01 SB J7-01	0 - 0. 2 1 , 8 , 12
Concrete	FC J7-06	0 - 0.1

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Analysis	Findings
Soil	PCB VOC SVOC Metals	No PCBs were detected at concentrations exceeding SCOs. PCE was detected exceeding Residential SCO. One SVOC was detected at a concentration exceeding Residential SCO. Metals were detected at concentrations exceeding the Industrial SCO at one location.
Concrete	PCB	PCBs were detected at concentrations exceeding the commercial SCO.

MACTEC 2014 MPA Conclusions/Recommendations:

Additional investigation is warranted to evaluate the extent of contamination related to this SWMU. SCOs were exceeded in soils and concrete at this SWMU.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

SWMU 13: Drum Crushing/Waste Oil Accumulation Area (Boring B-10):

RFA Description

• **Process:** The drum crushing area was located within building 11 and adjacent to, though spatially separated from, the hazardous waste drum storage area. Waste residual oils were accumulated in this area as a result of drum crushing activities. The oil was accumulated in drums until they were transported to the centrally located waste oil tank located south of Annealing. The storage area within drum crushing was located indoors atop a concrete floor.

• **Unit Description:** Waste oil generated at the Transportation Building. (The RFA does not call this Unit out as a specific SWMU however t is included in the Waste Fuel Oil Storage SWMU).
• **Date of Operation:** Pre 1970s- > 1992
• **Materials Handled/Contaminants Suspected:** Waste oil, metals, halogenated hydrocarbons
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	Groundwater and Soils	Oils, Metals, and Halogenated Compounds	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined into the Boring B-10 Area	Subsurface Soils	Oils, Metals, and Halogenated Compounds	• Collected soil sample B-10 (full suite parameters) • Collected groundwater samples from MW-5/MW-5B (full suite parameters).	• NYSDEC TAGM 3028 11/30/1992. • NYSDEC STARS August 1992. • NYSDEC TAGM 4046 1/24/1994.	Source and extent of impact have not been defined.

MACTEC Assessment:

This SWMU is located adjacent to the container storage area (SWMU 3b) inside building 11; no samples were collected inside the building. This was combined with the Boring B-10 investigation for soils located outside this area.

Media	Impacted	Recommendation
Soil	Not sampled	NFA- unless concrete sample indicates contaminants are present, subslab soil samples will not be collected
Groundwater	Unk	NFA- unlikely to be an ongoing source of contamination. Evaluated with CAMU-2. Ongoing LTM
Other	Unk	Investigation - concrete sampling to assess potential PCBs in interior of building.

MACTEC 2014 MPA Investigation Activities:

A concrete sample was collected to assess PCB impact in the area of the Drum Crushing/Waste Oil Area. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Concrete	FC L6-01	0 - 0.1

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Analysis	Findings
Concrete	PCB	PCBs were detected at concentrations exceeding the industrial SCO.

MACTEC 2014 MPA Conclusions/Recommendations:

Additional investigation is warranted to evaluate the extent of PCB contamination related to this SWMU.

Back to master sheet

SWMU 14: Waste Fuel Oil Storage Area

RFA Description

• **Process:** Waste oil generated throughout the site (vehicle maintenance, process water and oil treatment) was temporarily accumulated at seven primary points of generation in 55 to 4,000 gallon containers and then transported to a centrally located 6,700 (from RFA) gallon storage tank. The seven primary generation and accumulation areas included:

-Transportation Building, (275 g AST - waste fuel- no secondary containment- became SWMU12)
-Drum Crushing, (oil from processes stored in drums inside building- became SWMU13)
-Pilger Mill, (4000 g AST- halogenated paraffin oil- reclaimed off site- secondary containment)
-Annealing, (6,000 g AST-quenching oil- secondary containment)
-Central Waste Oil Storage Tank, (6,700 or 8,000 g AST [from DCC] south of Annealing bldg- secondary containment)
-Forge Press Tank, and (4,000 g AST inside the bldg)
-Waste Fuel Oil Storage Tank. (10,000 g AST to collect spills from the 300,000 g AST- PCBs found in soil sample- clay lined secondary containment)

• **Unit Description:** Waste oil generated from vehicle maintenance and process oil and prior water treatment accumulation and storage areas.
• **Date of Operation:** pre 1970->1992
• **Materials Handled/Contaminants Suspected:** Oils/acids, chrome or nickel sludges, PCBs, expired chemicals, spent cleaning solvent.
• **Additional Info:** During the Phase I RFI SWMU 12 (Transportation Building waste oil) and SWMU 13 (Drum Crushing Waste Oil Accumulation Area) become their own individual units.

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
McLaren/Hart - RCRA Facility Assessment Report	11/6/1991	No Further Action	Soil and Groundwater	Fuel Oil	None	N/A	10,000 gallon steel storage tank and collection sump to collect and store spilled fuel oils. Clay lined secondary containment dike. Soil sample contained PCB's. Source is unknown. No reported spills from failure or overfilling.
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	N/A	Oils, Metals, and Halogenated Compounds	None	N/A	Facility conditions do not indicate a need for any unit-specific actions.

MACTEC Assessment:

This SWMU includes ASTs located throughout the site. These tank areas need to be identified and evaluated.

Media	Impacted	Recommendation
Soil	Unk	Investigation- are ASTs still onsite, visual evidence/ likelihood of release.
Groundwater	Unk	Investigation- tanks which are not located in the CAMU-2 area should be investigated.
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

MACTEC conducted a Tank Inventory (see Attachment 3) to visually assess presence, condition, and contents of previously identified tanks.

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2. A tank inventory is included in Attachment 3. Several tanks were observed on Site and were noted as containing product.

MACTEC 2014 MPA Conclusions/Recommendations:

Tanks containing oils are still present onsite. Staining was observed. Additional investigation is warranted to evaluate the extent of contamination related to this SWMU.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

SWMU 15: Calow Unit

RFA Description

• **Process:** Coolant used with the Calow turning process was treated to remove oily contaminants. The process included a storage/holding tank, a settling tank with a surface skimming device and ancillary piping, valves and pumps. Treated coolant was recycled to the Calow unit. Oil, skimmed from the surface of the settling tank, was collected in a 100 gallon tank with secondary containment located along the outer east wall of bar finishing. This oil was later transferred to the central waste oil storage tank. A the time of the RFA minor staining was observed on the concrete surrounding the tank. Contaminants of concern were waste oil, metals, and possibly halogenated non-purgeable organics. The Calow oil removal unit was located in the Finishing Department on a concrete floor. A concrete dike surrounded the unit, preventing any leakage or spillage from escaping the building. Based on field observations at the time of the RFA, the extent of releases from this unit was minimal. Vertical migration of contaminants would have been hampered due to the concrete. Storm drains in the area are directed to the oil/water separator. Collection and transport of waste oil was controlled by a written management plan. No signs of oil spills or releases were evident during past inspections. No significant spills have been reported from the Calow oil storage area.

• **Unit Description:** Coolant recirculation/oil separation unit associated with bar finishing operation.
• **Date of Operation:** 1966->1992
• **Materials Handled/Contaminants Suspected:** Coolant/emulsified oils, halogenated organics
• **Additional Info:**

Document	Date	Decision Point	Pathway	COCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
McLaren/Hart - RCRA Facility Assessment Report	11/6/1991	No Further Action	N/A	N/A	None	N/A	Due to the concrete floor, the dike surrounding the unit, and no signs of large spills or leaks evident in past inspections a minimal chance of release to the environment is expected.
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	Subsurface Soil and Groundwater	Coolant, Emulsified Oils, and Halogenated Organics, Metals	Sample MW-10B (Soil and Groundwater), collected for SVOCs and metals	• NYSDEC TAGM 3028 groundwater 11/30/1992. • NYCRR title 6, Chapter X, Parts 700-705 1992. • NYSDEC AWQ October 1991.	Not identified as a source.

MACTEC Assessment:

Staining was noted in this area. The chemical constituents of the coolant are unknown.

Media	Impacted	Recommendation
Soil	Not sampled for VOC	Investigation- there is a potential that halogenated VOCs were used in the process.
Groundwater	Not sampled for VOC	Investigation- GW should be sampled for VOCs.
Other	Unk	Investigation - concrete sampling to assess potential PCBs

MACTEC 2014 MPA Investigation Activities:

Concrete, surface soil, product, sediment and soil boring sampling were conducted to evaluate potential release and contamination from the Callow Unit. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Concrete	FC G4-05	0 - 0.1
Soil	SS G4-03	0 - 1
	SS G4-01 SB G4-01	0 - 0.2 1 , 4 , 8
Groundwater	MW G4-01	1 - 6

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Analysis	Results
Concrete	PCB	No PCBs were detected exceeding SCOs.
Soil	PCB	PCBs were detected at concentrations exceeding the commercial SCO in one floor sample.
	VOC	No VOCs were detected exceeding SCOs.
Groundwater	VOC	No VOCs were detected exceeding the GA Standard.

MACTEC 2014 MPA Conclusions/Recommendations:

Additional investigation is warranted to evaluate the extent of contamination related to this SWMU. PCB impact was detected only in one floor location representing accumulated dirt and debris within the sample.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

SWMU 16: Lime Storage Vessel Southwest

RFA Description

• **Process:** Hydrated lime was stored in two above ground storage vessels located at the southwest corner of the melt shop. The vessels, with approximately 6,500 cubic feet capacity, were installed in 1951 during the original construction of the melt shop. Lime was blown into the tanks without a bag filter to collect fugitive dust. A baghouse is proposed for installation in 1991.

• **Unit Description:** Spilled lime around storage vessels.
• **Date of Operation:** 1952->1992
• **Materials Handled/Contaminants Suspected:** Lime
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
McLaren/Hart - RCRA Facility Assessment Report	11/6/1991	Phase I RFI	N/A	N/A	None	N/A	Relative low impact potential of lime. The natural neutralizing capabilities of the soil, surface waters that would come in contact with the soil, contribute to the conclusion that this CAMU presents no apparent risk to human health or the environment.
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI			None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	Soil and Groundwater	Lime	Sample B-1 (Soil) analyzed for metals and pH, and MW-9B (soil) and MW-11 (groundwater)	• NYSDEC TAGM 3028 11/30/1992. • NYCRR, title 6, Chapter X, Parts 700-705 1992. • NYSDEC AWQ October 1991. • US EPA MCLs for drinking water 7/27/1990.	• Nickel exceeded criteria in soil. • Manganese exceeded criteria in groundwater.

MACTEC Assessment:

Lime dust may have been released during off-loading to storage vessels. Limited soil samples were collected during the Phase I investigation. Groundwater monitoring wells used to evaluate this SWMU were not located appropriately to evaluate impacts.

Media	Impacted	Recommendation
Soil	Yes	Investigation- evaluate pH due to its ability to mobilize metals.
Groundwater	Unk	Investigation- additional MW needed to evaluate potential impacts of metals and pH.
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

Soil and groundwater samples were collected to evaluate potential metals and pH impacts from the Lime Storage Vessel. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Soil	SS I1-01	0 - 0.2
	SS H2-01 SB H2-01	0 - 0.2 1 , 4 , 7

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Analysis	Findings
Soil	Metals	Metals were detected at concentrations exceeding the industrial SCO at one locations.
	Cr+6	No Cr+6 was detected exceeding the SCOs.
	pH	pH ranged from 7.66 to 8.35.

MACTEC 2014 MPA Conclusions/Recommendations:

Additional investigation is not warranted. pH is within typical range for limestone; metals reported in soils above SCOs are similar to those present across Melt Shop Region (e.g. Cr, Cu, Ni).

Back to master sheet

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

SWMU 17: Lime Storage Vessel Northwest

RFA Description
• **Process:** A lime storage vessel installed in 1975 located at the north end of the melt shop. Lime was delivered in bulk (rail car and tanker) and blown into the storage vessels using compressed air. A baghouse system was installed on the north vessel to capture any particulate discharged during loading operations.

• **Unit Description:** Lime storage vessel installed in 1975 is located at the north end of the melt shop
• **Date of Operation:** 1975->1992
• **Materials Handled/Contaminants Suspected:** Lime
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
McLaren/Hart - RCRA Facility Assessment Report	11/6/1991	Phase I RFI	N/A	N/A	None	N/A	Due to the relatively low impact potential of lime, the natural neutralizing capabilities of the soil and surface waters that would come in contact with the soil, support the conclusion that this CAMU presents no apparent risk to human health or the environment.
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	Soil and Groundwater	Lime	none	N/A	Facility conditions do not indicate a need for any unit-specific actions.

MACTEC Assessment:

Lime dust may have been released during transfer to vessels. Limited soil samples were collected during the Phase I investigation. Groundwater monitoring wells used to evaluate this SWMU were not located appropriately to evaluate impacts.

Media	Impacted	Recommendation
Soil	Yes	Investigation- evaluate pH due to its ability to mobilize metals.
Groundwater	Unk	Investigation- additional MW needed to evaluate potential impacts of metals and pH
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

Soil samples were collected to evaluate potential metals and pH impacts from the Lime Storage Vessel. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Soil	SS K1-01	0 - 0.2
	SB K1-01	1 , 8 , 12
	SS J1-01	0 - 0.2
	SB J1-01	1 , 8

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Analysis	Findings
Soil	Metals	Metals were detected at concentrations exceeding the industrial SCO.
	Cr+6	No Cr+6 was detected exceeding the SCOs.
	pH	pH ranged from 7.2 to 8

MACTEC 2014 MPA Conclusions/Recommendations:

Additional investigation is not warranted. pH is within typical range for limestone; metals reported in soils above SCOs are similar to those present across Melt Shop Region (e.g. Cr, Cu, Ni).

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

SWMU 18: Extrusion Slippery Water System (Extrusion/Slippery Water CAMU)

RFA Description

• **Process:** The Slippery Water system was a hydraulic system where water from the extrusion press was treated to remove oils. This process occurred in the Slippery Water Room a small concrete-floored room accessible only from the outside (i.e.; not accessible from the Extrusion Department), an adjunct of the Extrusion Building. The system consisted of underground and aboveground storage/holding tanks, a series of settling tanks, surface skimmers, and ancillary piping, valves and pumps. Oil skimmed from the surface of the settling tanks was collected in a 250 gallon container. When filled, the container was transported to the central waste oil collection tank. A metal containment dike that surrounded the skimming tanks prevented the release of any spilled oil to the environment. Treated water was recycled to the extrusion press (i.e. a closed loop coolant system). A UST located to the west of the Extrusion Building was used to increase the holding capacity of the coolant system.

• **Unit Description:** Potential spillage of cooling water in the Slippery Water Room and potential release from UST.
• **Date of Operation:** 1951->1992
• **Materials Handled/Contaminants Suspected:** Oils, Coolants, Metals, PCBs
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	• No contaminants above site criteria were detected. • The absence of apparent impact to soil suggests that no further evaluation of groundwater in this area is necessary.
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined into CAMU 1	Groundwater	Oils, Coolant, Metals, and PCBs	Collected groundwater samples from MW-3/MW-3B and MW-4/MW-4B. Samples were analyzed for TCL VOCs, TCL SVOCs, TCL PCBs, TAL Inorganics, TPH, Total Phenols.	• NYSDEC TAGM 3028 11/30/1992. • NYCRR, title 6, Chapter X, Parts 700-705 1992 • NYSDEC AWQ October 1991. • US EPA MCLs for drinking water 7/27/1990.	• Infiltration of groundwater into the slippery water tank. There were PCBs in the sediment collected from the slippery water tank. • There were no PCBs in water.

MACTEC Assessment:

See CAMU 1
Same as SWMU-2

MACTEC 2014 MPA Investigation Activities:

Concrete sampling and hollow stem auger sampling were conducted to asses potential PCB contamination in Extrusion Pit.
See CAMU 1
Same as SWMU-2

MACTEC 2014 MPA Investigation Findings:

See CAMU 1
Same as SWMU-2

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

SWMU 19: Maintenance Steam Cleaning Pad

RFA Description

• **Process:** Steam cleaning operations were conducted on a concrete pad located to the east of Transportation Building. The concrete pad is approximately 15 ft by 15 ft and has a trench to collect wash fluids generated during cleaning operations. The trench which collected both solids and liquids use to drain via a pipeline to the Kromma Kill approximately 50 ft to the south of the pad. In the mid 1980s the trench was connected to the sanitary sewer system. The pad is not sheltered from precipitation and is slightly elevated above the surrounding grade, and is sloped towards the collection trench.

• **Unit Description:** Outdoor vehicle and equipment cleaning pad.
• **Date of Operation:** 1979-1985
• **Materials Handled/Contaminants Suspected:** Oils, Metals, Degreasers
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Interim Remedial Order on Consent # R4-1781-94-11	11/25/1994	Groundwater ICM	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined into CAMU 2	Soil and Groundwater	Oils, Metals, and Degreaser	Collected samples from B-11 and MW-6/MW-6B (Soil), MW-6/MW-6B, MW-B, and MW-C (Groundwater)	• NYSDEC TAGM 3028 11/30/1992. • NYSDEC STARS August 1992. • NYSDEC TAGM 4046 1/24/1994. • NYCRR, title 6, Chapter X, Parts 700-705 1992. • NYSDEC AWQ October 1991. • US EPA MCLs for drinking water 7/27/1990.	Metals and PCBs exceeded criteria.

MACTEC Assessment:

The one soil sample collected to evaluate the contaminants from this AOC showed levels of metals exceeding criteria. See CAMU 2. Sample locations are shown on Figure 2.

Media	Impacted	Recommendation
Soil	Yes	Investigation- the area surrounding pad may have been impacted from over spray or run-off
Groundwater	Unk	NFA- unlikely to be an ongoing source of contamination. Evaluated with CAMU-2. Ongoing LTM.
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

Surface soil samples were collected to evaluate potential impacts associated with contaminants from steam cleaning. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Soil	SS J7-02	0 - 1
	SS J7-03	0 - 1
	SS J7-04	0 - 1
	SS J7-05	0 - 1

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Analysis	Findings
Soil	PCB	PCBs were detected at concentrations exceeding the commercial SCO at 3 locations.
	VOC	No VOCs was detected exceeding the SCOs.
	SVOC	SVOCs were detected at concentrations exceeding the industrial SCO at one location.
	Metals	Metals were detected at concentrations exceeding the industrial SCO at 4 locations.

MACTEC 2014 MPA Conclusions/Recommendations:

Additional investigation is warranted to evaluate the extent of contamination related to this SWMU. Metals, PCBs, and SVOCs were observed exceeding the SCOs.

Back to master sheet

SWMU 20: Process Discharge Piping

RFA Description

• **Process:** Fluid discharge piping systems associated with different process units located throughout the facility collectively comprise SWMU. Piping systems considered in this SWMU discharged into the API oil/water separator or the WWTP by 1992. Prior to construction of the API separator, the piping systems discharged into the Kromma Kill, either directly or indirectly, via outfalls 6 through 11. After connecting to the API portions of these piping systems were disconnected but remained in place.

Contact cooling water systems include:
Anneal Building processes
Caster Building quench tank waste waters
Hydromation Buildings process water oil skimmer effluent (SWMU
Consutrode (VAR) buildings sump drain
Extrusion Building Selas furnace
Extrusion Press spray down wastewater and hydrostatic test effluent

Non contact cooling water system include:
Press shop furnace
Melt shop furnace
VAR furnace
Extrusions Pilger Mill

• **Unit Description:** Pipelines used to convey wastewaters to API-Type oil/water separator and wastewater treatment plant
• **Date of Operation:** 1935->1992
• **Materials Handled/Contaminants Suspected:** Contact, non-contact cooling water, Oils, Metals
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Interim Remedial Order on Consent # R4-1781-94-11	11/25/1994	Groundwater ICM	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined into CAMU 2	Groundwater	Contact and Non-Contact Cooling Waters, oils metals	None	N/A	N/A

MACTEC Assessment:

Process piping which transmitted contact and non-contact cooling water to the wastewater treatment plant or API oil water separator. Low probability of residual soil source. See CAMU 2

Media	Impacted	Recommendation
Soil	Unk	NFA- although pipes may have leaked, cooling water associated with these process are not likely to have high levels of contaminants.
Groundwater	Unk	NFA- unlikely to be an ongoing source of contamination. Evaluated with CAMU-2. Ongoing LTM.
Other	Unk	The Kromma Kill will be inspected for the presence of outfalls from this Unit. Sediment samples will be collected as part of AOC 11B to evaluate potential discharge areas.

MACTEC 2014 MPA Investigation Activities:

MACTEC conducted a visual inspection of the Kromma Kill and identified five discharge pipes entering adjacent to the eastern portion of the Site. Surface water and sediment sampling were conducted adjacent to these pipes to asses potential contamination from Process Discharge areas.
See AOC 11a
See AOC 11b

MACTEC 2014 MPA Investigation Findings:

See AOC 11a
See AOC 11b

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

AOC 1a: Transformer/Capacitor Areas T1 and T3 through T13

RFA Description

• **Process:** All electrical transformers on-site where tested for the presence of polychlorinated biphenyls (PCBs). During the RFA, 10 transformers identified with >500ppm PCBs and 25 transformers with 50 ppm-500 ppm remained on-site. Transport of contaminated surface soils via storm runoff or high winds could occur. The ultimate off-site receptor of stormwater transported PCBs is the Kromma Kill.

• **Unit Description:** Releases from various units facility-wide.
• **Date of Operation:** 1950->1992
• **Materials Handled/Contaminants Suspected:** PCBs, Oils
• **Additional Info:**

Document	Date	Decision Point	Pathway	COCs	Activities Conducted	Standards/ Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	Surface Soils	PCBs and Oils	Sampled surface soils from T1 - T-4 and T6 - T14 - for TCL VOCs, SVOCs, PCBs, and inorganics	• NYSDEC TAGM 3028 11/30/1992. • NYSDEC TAGM 4046 1/24/1994.	Not identified as a source. T1, T4, T6, T8, T11, T12, and T13 had low concentrations of PCBs (less than 50mg/kg)
Environmental Strategies Corporation - Phase II RFI	12/30/1998	Further investigation - CMS	surface soils	lead	6 surface soil samples collected from around transformers.	• Site-specific risk-based action levels were generated for metals in soils.	Exceedance of TC lead limit and of the site-specific risk-based action levels for arsenic and lead.
Transformer Surface Soil Sampling and Analysis Report - MACTEC	Jul-07	Needs Remediation	surface soils	PCBs	Surface soil samples collected for PCB immunoassay testing from 18 locations at or surrounding the locations of former transformers	CP-51 1 mg/kg PCB residential SCO 10 mg/kg PCB Commercial SCO 25 mg/kg PCB Industrial SCO	PCB concentrations detected above 1 mg/kg observed at T1 (22 mg/kg), T8 (2.1, 3.8 mg/kg), T9 (2.6 mg/kg), T11 (2 mg/kg), T12 (68 mg/kg), T13 (23 mg/kg)

MACTEC Assessment:

Although no further action was determined in Phase I these were included as part of the investigation in Phase II. During the MACTEC assessment, PCB concentrations were detected above the commercial and industrial SCOs

Media	Impacted	Recommendation
Soil	Yes	Remediation- PCB in soil are greater than the Industrial SCO. Investigation- T6 has been vandalized. PCBs in soil will evaluated.
Groundwater	No	NFA- PCBs are unlikely to migrate to GW. PCBs not detected in ongoing LTM.
Other	N/A	Visual Inspection of the remaining transformers to evaluate the need for further investigation.

MACTEC 2014 MPA Investigation Activities:

Product and soil samples were collected to evaluate releases from transformers associated with this AOC. See Attachment 1 for sample locations and Attachment 3 for transformer field observations.

Transformer	Media	Sample number	Sample Depth (feet bgs.)
T 6	Soil Product	SS E5-02 PS E5-03	0 - 1 NA
T 9	Product Soil Soil	PS L4-03 SS L4-01 SB L4-01	NA 0 - 0.2 1 , 5, 8

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Transformer	Results	Findings
T6	PCB	PCBs were detected at concentrations exceeding the Industrial SCOs in soil, and PCBs were detected in product sampled at this location.
T 9	PCB	PCBs were detected at concentrations exceeding the Commercial SCOs. PCBs were not detected in product sampled at this location.

MACTEC 2014 MPA Conclusions/Recommendations:

Additional investigation is warranted to evaluate the extent of contamination related to this AOC, when considered in conjuction with the 2007 sampling, seven transformer locations have been documented with PCB impact in soil at levels above 1.0 mg/kg.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

AOC 1b: Transformer/Capacitor Area T2

RFA Description

• **Process:** All electrical transformers on-site where tested for the presence of polychlorinated biphenyls (PCBs). During the RFA, 10 transformers identified with >500ppm PCBs and 25 transformers with 50 ppm-500 ppm remained on-site. Transport of contaminated surface soils via storm runoff or high winds could occur. The ultimate off-site receptor of stormwater transported PCBs is the Kromma Kill.

• **Unit Description:** Releases from various units facility-wide.
• **Date of Operation:** 1950-> 1992
• **Materials Handled/Contaminants Suspected:** PCBs, Oils
• **Additional Info:**

Document	Date	Decision Point	Pathway	COCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	ICM	Surface Soils	PCBs and Oils	Sampled surface soils for TCL VOCs, SVOCs, PCBs, and inorganics	• NYSDEC TAGM 3028 11/30/1992. • NYSDEC TAGM 4046 1/24/1994.	Identified as a source, the lateral and vertical extent of impact qualified for ICM (PCBs 50 mg/kg). This sample location was mislabeled and collected from location T13 (indoor location underlain by concrete).
Interim Corrective Measures Work Plan	1996/1997	Phase II RFI	surface soils	PCBs and metals	None	N/A	NA
Environmental Strategies Corporation - Phase II RFI	12/30/1998	No Further Action	surface soils	lead	Electricity cut off. Soil removed from surface. Floors and walls scrubbed with surfactant and water. Concrete chip samples collected. Cleaning repeated in areas until PCBs<10mg/kg.	• Site-specific risk-based action levels were generated for metals in soils from sample data generated during both phases of the RFI	Area cleaned-up to <10mg/kg.
Transformer Surface Soil Sampling and Analysis Report - MACTEC	7/16/2007	No Further Action	surface soils	PCBs	Surface soil samples collected for PCB immunoassay testing from 18 locations at or surrounding the locations of former transformers	CP-51 1 mg/kg PCB residential SCO 10 mg/kg PCB Commercial SCO 25 mg/kg PCB Industrial SCO	T-2 is located outside the building. PCB concentrations detected below 1 mg/kg at T2 (0.52 mg/kg)

MACTEC Assessment:

The sample collected from this location is below the Residential SCOs of 1 mg/kg PCB. See Attachment 3 for transformer field observations.

Media	Impacted	Recommendation
Soil	No	NFA- PCB levels in confirmation samples and 2007 samples are less than the SCO.
Groundwater	No	NFA- PCBs are unlikely to migrate to GW. PCBs not detected in the ongoing LTM.
Other		

MACTEC 2014 MPA Investigation Activities:

No sampling was conducted specific to the Transformer/Capacitor Area T2 based on MACTEC's recommendations for No Further Action.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

AOC 1c: Transformer/Capacitor Area T14

RFA Description

• **Process:** All electrical transformers on-site where tested for the presence of polychlorinated biphenyls (PCBs). During the RFA, 10 transformers identified with >500ppm PCBs and 25 transformers with 50 ppm-500 ppm remained on-site. Transport of contaminated surface soils via storm runoff or high winds could occur. The ultimate off-site receptor of stormwater transported PCBs is the Kromma Kill.

• **Unit Description:** Releases from various units facility-wide.
• **Date of Operation:** 1950-
• **Materials Handled/Contaminants Suspected:** PCBs, Oils
• **Additional Info:**

Document	Date	Decision Point	Pathway	COCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI					
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Phase II RFI	Surface Soils	PCBs and Oils	3 surface soil samples collected at and around the former Transformer location. Sampled surface soils for TCL VOCs, SVOCs, PCBs, and inorganics	• NYSDEC TAGM 3028 11/30/1992.	Total concentrations of antimony, lead, and nickel exceeded one or more potentially applicable criteria. No indication of impact to groundwater downgradient, no potential exposure of onsite workers to soils - therefore no action was required, further investigation recommended Phase II
Environmental Strategies Corporation - Phase II RFI	12/30/1998	Further investigation - CMS	soils	arsenic, cadmium, chromium, lead, molybdenum, nickel	6 soil samples collected at and around the former Transformer location	• Site-specific risk-based action levels were generated for metals in soils.	Exceedance of TC lead limit and of the site-specific risk based action levels for arsenic and lead.
Transformer Surface Soil Sampling and Analysis Report - MACTEC	7/16/2007	Needs Remediation	surface soils	PCBs	Surface soil samples collected for PCB immunoassay testing from 18 locations at or surrounding the locations of former transformers	CP-51 1 mg/kg PCB residential SCO 10 mg/kg PCB Commercial SCO 25 mg/kg PCB Industrial SCO	PCB concentrations detected above 1 mg/kg observed at T14 (9.5 mg/kg)

MACTEC Assessment:

The sample collected from this location has 9.5 mg/kg PCBs which is close to the commercial SCO of 10 mg/kg and should be included in the SMSA FS.

Media	Impacted	Recommendation
Soil	Yes	Remediation- PCB levels exceed the commercial SCO.
Groundwater	No	NFA- PCBs are unlikely to migrate to GW. PCBs not detected in the ongoing LTM.
Other		

MACTEC 2014 MPA Investigation Activities:

A soil boring conducted to evaluate potential release from Transformer 14. The sample location is shown on Figure 2, and

Media	Sample number	Sample Depth (feet bgs.)
Soil	SS K4-01 SB K4-01	0 - 0.2 1 , 3 , 8
Concrete	FC K4-09	0 - 0.1
Product	PS K4-04	NA

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2, and Attachment 3 shows the transformer field observations.

Media	Analysis	Findings
Soil	PCB	PCBs were detected at concentrations exceeding the commercial SCO at one location.
Concrete	PCB	PCBs were not detected exceeding the SCOs.
Product	PCB	PCBs were not detected exceeding the SCOs.

MACTEC 2014 MPA Conclusions/Recommendations:

Additional investigation is warranted to evaluate the extent of contamination related to this AOC.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

AOC 2a: Hot and Cold Well Tanks for the Extrusion Cooling Tower

RFA Description

• Process: The hot and cold well USTs were stainless steel storage vessels that contain cooling water which may have historically contained water treatment chemicals. The tanks were oval-shaped and have heights of approximately 4 feet, 6 inches and widths of approximately 7 feet, 6 inches. The approximate length of the hot well tank is 24 feet and the approximate length of the cold well tank is 41 feet. Both the hot and cold well tanks were situated above the water table (approximately 13 ft-bgs). This appears to be part of the slippery water process.

• Unit Description: Potential releases from the Hot and Cold Well Tanks
• Date of Operation: 1950- >1992
• Materials Handled: Oils, Metals, PCBs
• Additional Info:

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	soil and groundwater	Oils, Metals, and PCBs	• Visual Inspection during cleaning process. • Exfiltration leak test was performed on hot and cold well tanks.(tanks were generally watertight) The infiltration rate was sufficient enough to prohibit personnel from entry and direct inspection.	N/A	• Tanks do not appear to represent a potential source of impact on soil and ground water. • No holes or cracks were discovered during cleaning. • A leaking pipe was discovered in the cold well tank.

MACTEC Assessment:

See CAMU 1
Same as SWMU-2

MACTEC 2014 MPA Investigation Activities:

Concrete sampling and hollow stem auger sampling was conducted downgradient (east) of these tanks as part of SWMU 2.
See CAMU 1
Same as SWMU-2

MACTEC 2014 MPA Investigation Findings:

See CAMU 1
Same as SWMU-2

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

AOC 2b: Slippery Water Tank (Extrusion/Slippery Water CAMU)

RFA Description

• **Process:** The Slippery Water system was a hydraulic system where water from the extrusion press was treated to remove oils. This process occurred in the Slippery Water Room a small concrete-floored room accessible only from the outside (i.e. not accessible from the Extrusion Department), an adjunct of the Extrusion Building. The system consisted of underground and aboveground storage/holding tanks, a series of settling tanks, surface skimmers, and ancillary piping, valves and pumps. Oil skimmed from the surface of the settling tanks was collected in a 250 gallon container. When filled, the container was transported to the central waste oil collection tank. A metal containment dike that surrounded the skimming tanks prevented the release of any spilled oil to the environment. Treated water was recycled to the extrusion press (i.e. a closed loop coolant system).

The Slippery Water Tank was an UST located to the west of the Extrusion Building that was used to increase the holding capacity of the coolant system. Sludge that accumulated at the bottom of the UST was tested in July of 1990 and found to contain PCBs. Heavy metals were also expected to be present in the sludge.

• **Unit Description:** Potential releases from the Slippery Water Tank
• **Date of Operation:** 1950->1992
• **Materials Handled/Contaminants Suspected:** Oils, Metals, PCBs
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI					
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined into CAMU 1	Soil and Groundwater	Oils, Metals, and PCBs	Collected soil and water samples from the extrusion slippery water tank to test for PCBs.	• NYDEC. TAGM 3028. November 30, 1992 • NYSDEC AWQ October 1991. • US EPA MCLs for drinking water 7/27/1990.	• PCBs were detected in the sediment sample collected in the tank but not the water sample. • Based on infiltration of ground water and the historic use of the Slippery Water Tank, this is a potential source of impact of PCBs to soil and groundwater on the site.

MACTEC Assessment:

See CAMU 1
Same as SWMU-2

MACTEC 2014 MPA Investigation Activities:

Concrete sampling and hollow stem auger sampling was conducted downgradient (east) of these tanks as part of SWMU 2.
See CAMU 1
Same as SWMU-2

MACTEC 2014 MPA Investigation Findings:

See CAMU 1
Same as SWMU-2

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

AOC 2c: Leachate Pit

RFA Description

• **Process:** The Leachate Pit was a 13 foot wide by 15 feet long by of 21 feet deep (extending into the groundwater table) pit associated with the WWTP. The concrete is coated with a vinyl ester material that protects the concrete from the leachate.

• **Unit Description:** Potential releases from the Leachate Pit
• **Date of Operation:** 1970- >1992
• **Materials Handled/Contaminants Suspected:** Oils, Metals, PCBs
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	Soil and Groundwater	Oils, Metals, and PCBs	Visual Inspection carried out.	N/A	• No cracks were observed in concrete and there is no groundwater infiltration into the pit. • Vinyl ester coating appeared in good condition. • Leachate Pit does not appear to represent a potential source of impact to soil or ground water

MACTEC Assessment:

This AOC is located in the vicinity of the WWTP and waste acid pits therefore any potential unidentified issues would have been addressed through investigations of nearby AOCs and SWMUs.

Media	Impacted	Recommendation
Soil	Unk	NFA- Nearby soils were characterized as part of SWMU 1.
Groundwater	Unk	NFA- unlikely to be an ongoing source of contamination. Evaluated with CAMU-2. Ongoing LTM.
Other	Unk	Conduct a visual and/or GPR inspection to locate this pit.

MACTEC 2014 MPA Investigation Activities:

No sampling was conducted specific to the Leachate Pit. Subsequent information identified this AOC as a concrete pit adjacent to Building 36.
The leachate pit was identified during the 2014 MPA Investigation Site walk over; therefore, the GPR inspection wasn't performed. The pit was observed to contain water. This pit is located in the vicinity of the waste acid pit (SWMU 1); therefore no further investigation was warranted.

Back to master sheet

AOC 2d: Surge Pit

RFA Description

• Process: The Surge Pit was used for temporary accumulation and equalization of Pickle House process water. The Surge Pit was constructed of concrete and had an overall internal dimensions of 13 feet in depth, 14 feet in width, and 17 feet in length. A vertical wall (7.5 feet in height) bisected the Surge Pit creating a parallel flow system. The Surge Pit extended into the elevation of the ground water table. The concrete was lined with a high-density polyethylene (HDPE) flexible membrane liner. Piping conveyed process water from its collection in the Pickle House to the Surge Pit; from the Surge Pit, the water was passed through the flash mix tank for chromium reduction and then into the remainder of the treatment plant. Water generated from Wells AP-1 and AP-2 were discharged directly to the WWTP Surge Pit.

• Unit Description: Potential releases from the Surge Pit.
• Date of Operation: 1950- >1992
• Materials Handled/Contaminants Suspected: Oils, Metals, PCBs
• Additional Info:

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	Soil and Groundwater	Oils, Metals, and PCBs	• Visual inspection during cleaning activities. • Leak detection system monitored. • PH evaluation	N/A	• HDPE liner was inspected for hole and tears, none observed. • Leak detection system was monitored during the inspection. • Water level monitoring was employed to evaluate conditions during two different water stages in pit resulting in a suspected leak in HDPE liner. • It was determined that the rainwater could enter into the leak detection system. • Contents within surge pit were acidic (pH of 4.0 or less) the pH in the leak detection system was greater than 8.0 showing that the surge pit contents were separate from the leak detection system. • Does not appear to represent a potential source of impact to soil or ground water.

MACTEC Assessment:

This is in the vicinity of the WWTP and Waste Acid Pits. Groundwater likely entered the pit beneath the HDPE liner but does not come in contact with the contents of the pit as evidenced by pH.

Media	Impacted	Recommendation
Soil	Not sampled	NFA- Nearby soils were characterized as part of SWMU 1.
Groundwater	No	NFA- unlikely to be an ongoing source of contamination. Evaluated with CAMU-2. Ongoing LTM.
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

No sampling was conducted specific to the Leachate Pit. Subsequent information identified this AOC as a concrete pit adjacent to Building 36.
The leachate pit was identified during the 2014 MPA Investigation Site walk over; therefore, the GPR inspection wasn't performed. The pit was observed to contain water. This pit is located in the vicinity of the waste acid pit (SWMU 1); therefore no further investigation was warranted.

Back to master sheet

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

AOC 2e: Forge Press Pit

RFA Description

• **Process:** The Forge Press Pit was located within the building foundations for the Forge Press and was used exclusively for equipment housing. The forge press operation was conducted in the south end of the Forge Press/Grinding Building. The forge press exerted a compressive force on heated steel which forced it through a die. Hydraulic oil which was used during this process was recycled in five (5) hydraulic oil tanks: two (2) 1,500 gallon hydraulic tanks and three (3) 1,000 gallon AW-68 hydraulic oil tanks. A 4,000 gallon tank was used to store waste oil from press leakage which was collected under the Forge Press. All tanks were located inside the building and were equipped with secondary containment.

• **Unit Description:** Releases of contaminants from the Forge Press Pit.
• **Date of Operation:** 1950s->1992
• **Materials Handled/Contaminants Suspected:** Oils, Metals, PCBs
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	Soil and Groundwater	Oils, Metals, and PCBs	Visual Inspection carried out.	N/A	• No holes, cracks or infiltrating ground water was observed in this pit. • The forge pit does not appear to represent a potential source of impact to soil or ground water

MACTEC Assessment:

This is an unlined pit and the discharge point unknown. PCBs in soil and concrete should be investigated.

Media	Impacted	Recommendation
Soil	Not sampled	Investigation- soils beneath the pit should be sampled. If the pit is submerged or not readily accessible, alternative options for sampling should be evaluated.
Groundwater	Unk	NFA- unlikely to be an ongoing source of contamination. Evaluated with CAMU-2. Ongoing LTM.
Other	Unk	Investigation- sample pit floor for PCBs. If the pit is submerged or not readily accessible, alternative options for sampling should be evaluated.

MACTEC 2014 MPA Investigation Activities:

Concrete, soil and product samples were collected to evaluate contaminants associated with this AOC. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Concrete	FC J6-05	0 - 0.1
Product	PS J6-02 PS J6-03 PS J6-06	NA
Sediment in pit	SD J6-04	NA

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Analysis	Findings
Concrete	PCB	No PCBs were detected exceeding the SCOs.
Product	Hydrocarbon PCB VOC SVOC Metals	Product samples appear to be fuels.
Sediment in pit	PCB VOC SVOC Metals	PCB were not detected exceeding SCOs. No VOCs were detected exceeding SCOs. No SVOCs were detected exceeding SCOs. Metals were detected exceeding the Industrial SCO.

MACTEC 2014 MPA Conclusions/Recommendations:

Evidence of oil was observed; further investigation is warrented to evaluate the extent of fuel and metals contamination related to this AOC.

Back to master sheet

AOC 2f: Rolling Mill Pit

RFA Description

• **Process:** The rolling mill pit was used to collect mill scale, process cooling water, and lubricating oils. The processes that directed flow to the pit were idled in 1994. The Rolling Mill Pit was constructed of concrete and was approximately 12 feet deep. A sump located in the northwest corner of the pit was approximately 15 feet bgs, which is below the water table. During the inspection, groundwater infiltration into the pit was observed in the vicinity of the sump. Additionally, water was observed to be infiltrating near the steps above the water table. Consequently, this water was believed to emanate from a leaking underground water pipe. From the sump, pumps transfer the water through the plant's hydromation system and discharge through the API Oil/Water Separator.

• **Unit Description:** Potential releases from the Rolling Mill Pit.
• **Date of Operation:** 1950- 1994
• **Materials Handled/Contaminants Suspected:** Oils, Metals, PCBs
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Phase II RFI	Soil	Oils, Metals, and PCBs	Visual Inspection carried out.	• NYSDEC TAGM 3028 11/30/1992. • NYCRR title 6, Chapter X, Parts 700-705 1992. • NYSDEC AWQ October 1991.	Water was found to be infiltrating into the tank at an elevation above the water table - therefore it was believed that it was from a leaking underground water pipe.
Environmental Strategies Corporation - Phase II RFI	12/30/1998	No Further Action	Soil	Oils, Metals, and PCBs	none	N/A	The leaking water supply line near the Rolling Mill Pit (AOC 2) can be repaired as part of facility maintenance. Consequently, no further action is recommended pursuant to the RCRA Corrective Action Program.

MACTEC Assessment:

Waste oils were generated in the rolling mill and collected in the Rolling Mill Pit may have contained PCBs. PCBs in soil and concrete should be investigated.

Media	Impacted	Recommendation
Soil	Not sampled	Investigation- soils beneath the pit should be sampled. If the pit is submerged or not readily accessible, alternative options for sampling should be evaluated.
Groundwater	Not sampled	NFA- unlikely to be an ongoing source of contamination. Evaluated with CAMU-2. Ongoing LTM.
Other	Unk	Investigation- sample pit floor for PCBs. If the pit is submerged or not readily accessible, alternative options for sampling should be evaluated.

MACTEC 2014 MPA Investigation Activities:

See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Floor soil	FS M4-01	0 -0. 2 , 1 - 2
Product	FC M4-02	NA

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Results	Findings
Floor soil	Hydrocarbon	Hydrocarbons were detected.
	PCB	PCBs were not detected exceeding SCOs.
	VOC	No VOCs were detected exceeding SCOs.
	SVOC	No SVOCs were detected exceeding SCOs.
	Metals	Metals were detected at concentrations exceeding the industrial SCOs.
	Cr+6	Cr+6 was not detected exceeding SCOs.
Product	PCB	PCBs were not detected exceeding SCOs.

MACTEC 2014 MPA Conclusions/Recommendations:

Additional investigation is warranted to evaluate the extent of soil metals contamination related to this AOC.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

AOC 2g: Extrusion Pit (Same as SWMU 2)

RFA Description

• **Process:** The Slippery Water system was a hydraulic system where water from the extrusion press was treated to remove oils. This process occurred in the Slippery Water Room a small concrete-floored room accessible only from the outside (i.e. not accessible from the Extrusion Department), an adjunct of the Extrusion Building. The system consisted of underground and aboveground storage/holding tanks, a series of settling tanks, surface skimmers, and ancillary piping, valves and pumps. Oil skimmed from the surface of the settling tanks was collected in a 250 gallon container. When filled, the container was transported to the central waste oil collection tank. A metal containment dike that surrounds the skimming tanks prevents the release of any spilled oil to the environment. Treated water was recycled to the extrusion press (i.e. a closed loop coolant system). A UST located to the west of the Extrusion Building was used to increase the holding capacity of the coolant system.

The Extrusion Pit was an integral part of the closed-loop recirculation system for the Extrusion Press. This pit is an irregularly-shaped concrete pit that extends into the elevation of the ground water table and collected:

-process water prior to recirculating through the system
-oils that leaked from the equipment
-dielectric fluid from capacitors located in the area of the pit which occasionally exploded

Process waters generated from the extrusion press were previously discharged to the south lagoon. Nine samples collected on September 18, 1989 from soils surrounding the south lagoon were shown to contain PCBs. The south lagoon was closed in October 1990. Since this date, all wastewaters from the extrusion building were discharged to the new oil/water separator. A circular sump (4 foot in diameter x 4 feet deep) was located in the southern end of the pit. The integrity of the pit was investigated during the Phase I RFI. The bottom of the sump was weathered and a previously repaired crack was identified.

• **Unit Description:** Releases from the Extrusion Pit
• **Date of Operation:** 1950's->1992
• **Materials Handled/Contaminants Suspected:** Oils, Metals, PCBs
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A

MACTEC Assessment:

See CAMU 1
Same as SWMU-2

MACTEC 2014 MPA Investigation Activities:

Concrete sampling and hollow stem auger sampling were conducted to asses potential PCB contamination in the area of the Extrusion Pit.
See CAMU 1
Same as SWMU-2

MACTEC 2014 MPA Investigation Conclusions:

See CAMU 1
Same as SWMU-2

Back to master sheet

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

AOC 2h: Caster Pit

RFA Description

- **Process:** The Continuous Caster produced a continuous strand of billet approximately 4.5 inches square. Molten steel was cast into a mold at the top of the caster and gradually cooled by a continuous stream of water.
- **Unit Description:** Caster Pit, located immediately east of the Caster Building was to be evaluated
- **Date of Operation:** 1950-1996
- **Materials Handled/Contaminants Suspected:** Oils, Metals, PCBs
- **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	Soil and Groundwater	Oils, Metals, and PCBs	• Evaluation of this pit would have required the shutdown of an active operation and cleaning of the pit. In lieu of this action monitoring Well MW-11 was installed in a boring offset approximately five feet from Soil Boring B-2. • Groundwater sample collected from MW-11 (full suite parameters). • Soil boring B-2 (metals, pH, pest).	• NYSDEC TAGM 3028 11/30/1992. • NYCRR, title 6, Chapter X, Parts 700-705 1992. • NYSDEC AWQ October 1991.	• MW-11 exceeded criteria for manganese and sodium. • B-2 exceeded criteria for nickel and antimony.

MACTEC Assessment:

Although samples of soil and groundwater downgradient of this AOC showed contaminants exceeding criteria it is unknown if the AOC is the source of the contamination due to the proximity to the Melt Shop building.

Media	Impacted	Recommendation
Soil	Not sampled	NFA- unless concrete sample indicates contaminants are present, subslab soil samples will not be collected
Groundwater	Unk	NFA- unlikely to be an ongoing source of contamination
Other	Unk	Investigation - floor sampling to assess potential PCBs. If the pit has been filled in- conduct a GPR survey to locate and evaluate the potential for conducting a boring in this area.

MACTEC 2014 MPA Investigation Activities:

A pit was identified in the area near the Caster Building. The pit was dry and empty and not entered due to limited access. There was no accumulated sediment or water in the pit.

MACTEC 2014 MPA Investigation Findings:

No sampling was conducted specific to the Caster Pit. Access to the pit is limited and there were no accumulated sediments in the pit. No further action is recommended for this AOC.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

AOC 3: Septic Tank

RFA Description

• **Process:** There were ten septic tanks used at the Site to collect sanitary sewage. Seven tanks discharged to the Kromma Kill at six separate locations and three tanks acted as dry wells. Most of the septic tanks were disconnected during the early 1970's. A few tanks that many have been remaining in service in 1992 were connected to the city sanitary system. The septic tanks had been used for the collection of sanitary wastes generated at the restrooms at several locations around the facility. Sanitary wastes are the only known wastes discharged to these systems. Historical records reviewed do not indicate that improper disposal occurred. Visual observations of restroom facilities were inconclusive but the facilities did not have empty chemical containers or stained fixtures.

• **Unit Description:** Discharge of sanitary sewer to Kromma Kill and dry wells (RFA). Thompson Etch Room septic tank investigated under RFA I and RFA II.

• **Date of Operation:** 1940-1973

• **Materials Handled/Contaminants Suspected:** Sewage, Oils, Metals, Aromatic and Halogenated Compounds

• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
McLaren/Hart - RCRA Facility Assessment Report	11/6/1991	No Further Action	Soil	None	None	N/A	• None of the septic systems have received industrial, chemical or hazardous wastes, no related contamination is indicated. • No seeps or discharges into the Kromma Kill have been identified.
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Phase II RFI	Subsurface Soil	Sewage, Oils, Metals, Aromatic and Halogenated Compounds	• Test Pit 12 and Test Pit 9 were conducted outside the Thompson Etch Room (AOC 5) to identify a septic tank and associated piping. • One soil sample collected form TP-9 for PCB's, phenols, pH, metals.	• NYSDEC TAGM 3028 11/30/1992	• The tank and associated piping were not located during the excavation of the test pit TP-9 & TP-12 was completed along a line parallel to the bar finishing area to further try & located this tank. • Phase II RFI work scope will include additional excavation in accessible areas in proximity to the anticipated tank location.
Environmental Strategies Corporation - Phase II RFI	12/30/1998	No Further Action	Soil	Sewage, Oils, Metals, Aromatic and Halogenated Compounds	One pit (TP-14) was excavated immediately east of the barrier and perpendicular to the wall vent at the location of the restroom previously discharging to the septic tank. Soil samples collected from TP-14 during the Phase II RFI were submitted for analysis of VOCs, SVOCs, and TPH/Pet I.D.	NA	• TPH of 19 ppm was found samples of TP 14 • The soil sample containing the highest total chromium (860 mg/kg) was submitted for TCLP extraction and analysis. The reported concentration was less than the TC limit for chromium of 5 mg/l. This indicates that chromium and most likely all other metals do not pose a potential to impact groundwater quality. Al Tech recommends no further action for this area based on: • The absence of the tank during the Phase 1 RFI activities • The absence apparent impact from the nearby Thompson Etch Room • The limited exceedances of site specific background metals concentrations in soils • The apparent absence of a potential for metals in the soil to impact groundwater quality. • The absence of significant fuel oil impact

MACTEC Assessment:

The Thompson Etch Room septic tank was not found during two investigations however, an apparent tank grave was identified during the Phase II RFI. Soil contamination was found in this area which is likely not associated with the septic tank but rather with the Thompson Etch Room.

Media	Impacted	Recommendation
Soil	Unk	NFA- soil contamination in this area is unlikely to be associated with the septic tank.
Groundwater	Not sampled	NFA- unlikely an ongoing source of contamination.
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

No sampling was conducted specific to the Septic Tank based on MACTEC's recommendation for No Further Action.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

AOC 4: Pickling Room (aka Pickle House)

RFA Description

• **Process:** Spent pickling liquors were pumped into a waste acid pits located outside the Pickle Room. The waste acid pit was comprised of two 8' x 15' x 15' deep sections constructed of acid brick and bituminous-coated concrete walls 24" thick. The pits had a usable capacity of 18,000 gallons. The pits discharged into the waste water treatment plant. The pits contained spent acids, which are highly corrosive, and contain heavy metal impurities. The concentrated acid caused a breakdown of the alkaline concrete mixture. Absent of periodic preventative maintenance, the concrete deteriorated and eventually resulted in an acid releases to the environment. An investigation performed in 1989 by HART revealed that the exterior walls of these pits were in direct contact with the local groundwater. During the investigation, elevated metals concentrations were identified in three soil borings Cd, Cr, Hg, and Ni) and in two monitoring wells (Ar, Cd, Cr, Be, Pb, An, and Ni) adjacent to the waste acid pits. The source of the contamination appeared to have been a leaking acid pit. Groundwater transport presented the only potential pathway for contaminants that may have been released via tank leakage.

• **Unit Description:** Lined concrete pits containing process tanks.
• **Date of Operation:** 1951->1992
• **Materials Handled/Contaminants Suspected:** Metals, Acids, Caustics
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Interim Remedial Order on Consent # R4-1781-94-11	11/25/1994	Groundwater ICM	Groundwater	TAL metals, pH, nitrate, oil, grease	None	N/A	The pH levels field measured at less than 5 standard units.
Remcor - Interim Groundwater Recovery System Evaluation Report	1/13/1995	Order on Consent	Groundwater	pH, nitrates, selected metals, cyanide	None	N/A	System appeared to be functioning correctly.
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined into CAMU 2	Soil and Groundwater	Metals, Acids, and Caustics	Sample collected from MW-4/MW-4B (Soil and Groundwater) AP-1 and AP-2 (Groundwater), effluent line mapped	• NYSDEC TAGM 3028 11/30/1992. • NYCRR title 6, Chapter X, Parts 700-705 1992. • NYSDEC AWQ October 1991. • US EPA MCLs for drinking water 7/27/1990.	Metals and pH exceeded criteria.

MACTEC Assessment:

This Unit is adjacent to the Waste Acid Pits and is included in CAMU2.

Media	Impacted	Recommendation
Soil	Not Sampled	NFA- nearby soils characterized by SWMU-1
Groundwater	Yes	NFA- unlikely to be an ongoing source of contamination. See CAMU 2. Ongoing LTM.
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

See CAMU2

MACTEC 2014 MPA Investigation Findings:

See CAMU2

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

AOC 5: Thompson Etch Room

RFA Description

• **Process:** The pickling process which occurred within the Extrusion Building (AOC 9A) and formerly in the Thompson Etch Room (AOC 9B) involved dipping of bar stock into various acid and rinse tanks. There have been known releases of pickling acids from these process tanks which were typically contained within lined concrete sumps located beneath these tanks.

The location of pickling activities within the Thompson Etch Room is unknown.

• **Unit Description:** Lined concrete pits containing process tanks.
• **Date of Operation:** 1920-1951; 1951-
• **Materials Handled/Contaminants Suspected:** Metals, Acids, Caustics
• **Additional Info:** The Thompson Etching room is a storage area is also located in the Rolling Mill Region (identified in the RFA) however, it does not appear to have been investigated as part of this unit.

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria/ Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	Subsurface Soil	Metals, Acids, and Caustics	• Test Pit 12 and Test Pit 9 were conducted outside the Thompson Etch Room to identify a septic tank and associated piping. • TP9 soil was tested for TCL PCB's, Metals, TPH, Phenols, pH	• NYSDEC TAGM 3028 11/30/1992. • NYSDEC STARS August 1992. • NYSDEC TAGM 4046 1/24/1994. • NYCRR title 6, Chapter X, Parts 700-705 1992. • NYSDEC AWQ October 1991.	• Non-exceedance of potentially applicable criteria in Test Pit 9. No UST or associated piping found in this area.

MACTEC Assessment:

Pickling was conducted at this AOC at some point in the history of the site. The exact location of the operation within the Thompson Etch Room has not been identified. Chromium was detected in soils outside the room above criteria during the investigation of the former septic tank (AOC 3) which may have been from pickling activities.

Media	Impacted	Recommendation
Soil	Not sampled	Investigation- soils downgradient of this AOC should be evaluated
Groundwater	Not sampled	Investigation- groundwater sample should be collected closer to the etching room
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

Soil sampling to evaluate potential releases from pickling operations which historically occurred in the Thompson Etch Room. See Attachment 1 for sample locations, and Attachment 4 for a tank inventory.

Media	Sample number	Sample Depth (feet bgs.)
Soil	SS J5-01 SB J5-01	0 - 0.2 1 , 4 , 12
Groundwater	MW J5-01	7 - 1 7

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Results	Findings
Soil	Metals Cr+6 pH	Metals were detected at concentrations exceeding the Industrial SCO. No Cr+6 was detected exceeding SCOs. pH was 8.23
Groundwater	Metals Cr+6 pH	Iron and manganese were detected exceeding the GA standard. Cr+6 was not detected. The pH in this well was 7.1.

MACTEC 2014 MPA Conclusions/Recommendations:

Additional investigation is warranted to evaluate the extent of contamination related to this AOC; metals were detected above SCOs.

Back to master sheet

AOC 6: Closed Gasoline Underground Storage Tank

RFA Description

- **Process:** This AOC is a 6,000 gallon gasoline tank (which was located southeast of the Main Office) removed in 1981.
- **Unit Description:** Removed 6,000 gallon gas UST
- **Date of Operation:** 1940-1988
- **Materials Handled/Contaminants Suspected:** Oils, Gas
- **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards/ Criteria /Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Not Identified as a Source	Subsurface Soil and Groundwater	Oils and Gasoline	• Sample B-13 (Soil) analyzed for TCL PCB's, metals, TPH, phenols, and pH	• **NYSDEC TAGM 3028 11/30/1992.** • NYSDEC STARS August 1992. • NYSDEC TAGM 4046 1/24/1994. • NYCRR title 6, Chapter X, Parts 700-705 1992. • NYSDEC AWQ October 1991.	• Chromium, cobalt, copper, iron, lead, molybdenum, nickel, potassium, vanadium, and zinc and TPH detected • Not identified as a source. No groundwater collected here.

MACTEC Assessment:

This tank was removed in 1981. It was located in the area where LNAPL recovery is ongoing.

Media	Impacted	Recommendation
Soil	Unk	NFA- located within CAMU 2
Groundwater	Unk	NFA- evaluated with CAMU-2. Ongoing LTM
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

The area was surveyed with GPR and no tank was identified.
No sampling was conducted specific to the Closed Gasoline Underground Storage Tank based on MACTEC's recommendation for No Further Action.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

AOC 7: Closed Anneal Underground Storage Tank

RFA Description
- **Process:** This AOC is a 1,000 gallon UST (which was located south of the Anneal Building) used for storage of anneal oil. This tank was closed in place in 1988.
- **Unit Description:** Closed Anneal UST abandoned in place in 1988.
- **Date of Operation:** 1940-1988
- **Materials Handled/Contaminants Suspected:** Oils
- **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Interim Order on Consent # R4-1781-94-11	11/25/1994	Groundwater ICM	N/A	N/A	None	N/A	N/A
Remcor - Interim Groundwater Recovery System Evaluation Report	1/13/1995	Order on Consent	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined into CAMU 2	Soil	Oils	Sub-surface soil samples collected from TP-10 and TP-13 (Soil) for full suite parameters.	• NYSDEC TAGM 3028 11/30/1992. • NYSDEC STARS August 1992. • NYSDEC TAGM 4046 1/24/1994.	BTEX compounds and naphthalene were detected at significant concentrations.

MACTEC Assessment:

This tank was closed in place in 1988. Limited soil samples collected showed significant fuel contamination.

Media	Impacted	Recommendation
Soil	Yes	Investigation- evaluate extent of petroleum contamination.
Groundwater	Unk	Investigation - install MW to evaluate if this is an ongoing source of fuel to the LNAPL plume.
Other	N/A	GPR survey

MACTEC 2014 MPA Investigation Activities:

A GPR survey performed in the area did not locate a tank; however, the entire area could not be surveyed due to several piles of debris. Soil samples were collected and a monitoring well installed to evaluate potential releases from this AOC.
See Attachment 1 for sample locations, and Attachment 4 for a tank inventory.

Media	Sample number	Sample Depth (feet bgs.)
Soil	SS I5-01 SB I5-01	0 - 0.2 1 , 4 , 7

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Results	Findings
Soil	PCB	PCBs were detected exceeding the commercial SCOs.
	VOC	No VOCs detected exceeding SCOs.
	SVOC	No SVOCs detected exceeding SCOs.

MACTEC 2014 MPA Conclusions/Recommendations:

The 2014 MPA investigation did not locate the tank which was reportedly closed in place. PCBs were detected in shallow soil (0-1') and the extent of impact has not been determined. Additional investigation is warranted to evaluate the extent of contamination related to this AOC.

Back to master sheet

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

AOC 8: Closed Fuel Oil Underground Storage Tanks

RFA Description
- **Process:** This AOC is seven former USTs located southwest of the north gate. All of these tanks were closed in place between 1987 and 1988.
- **Unit Description:** Seven **c**losed UST's abandoned in place between 1987 and 1988.
- **Date of Operation:** 1940-1988
- **Materials Handled/Contaminants Suspected:** Oils, Gas
- **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Interim Remedial Order on Consent # R4-1781-94-11	11/25/1994	Groundwater ICM	N/A	N/A	• Install Recovery Wells RW-5, RW-6, and RW-7, RW-8 and RW-9. • Bedrock Recovery Wells RW-1B and RW-2B. •Water goes to the wastewater treatment plant.	N/A	N/A
Remcor - Interim Groundwater Recovery System Evaluation Report	1/13/1995	Order on Consent	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined into CAMU 2	Subsurface Soil and Groundwater	Oil	Collected samples from TP-7, TP-8, and TP-11 (Soil), TF-1 (Groundwater) for full suite parameters.	• NYSDEC TAGM 3028 11/30/1992. • NYSDEC STARS August 1992. • NYSDEC TAGM 4046 1/24/1994. • NYCRR title 6, Chapter X, Parts 700-705 1992. • NYSDEC AWQ October 1991.	Fuel related compounds detected at significant concentrations. Black staining and "oily water" noted.
Precision Environmental Services- Limited Investigation Report	8/1/2008	Further Investigation Further Remediation	Soil Groundwater	Oil	Soil samples - VOC and SVOC Water- VOC and SVOCs	• NYSDEC TAGM 4046 01/24/1994.	Soil and groundwater in the Melt shop Area is in non-compliance with SCOs

MACTEC Assessment:

Fuel oil ICM and groundwater ICM were implemented. LNAPL recovery is ongoing. LTM is on going see CAMU 2. Extent of soil contamination is a potential data gap.

Media	Impacted	Recommendation
Soil	Yes	Investigation- evaluate extent of petroleum contamination north of PES-2 toward Spring Street Road.
Groundwater	Unk	NFA- evaluated with CAMU-2. Ongoing LTM
Other	N/A	GPR Survey

MACTEC 2014 MPA Investigation Activities:

These tanks were located using a GPR. Soil sampling was conducted to evaluate the potential releases from the seven abandoned USTs. See Attachment 1 for sample locations, and Attachment 4 for a tank inventory.

Media	Sample number	Sample Depth (feet bgs.)
Soil	SB L2-01 SB M2-01 SB M2-02	6 , 8 4 8

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Analysis	Findings
Soil	Hydrocarbon	Visual and PID evidence of hydrocarbons were observed during field activities. Fuel was detected at location M2-01.
	SVOC	SVOCs were not detected exceeding the SCOs

MACTEC 2014 MPA Conclusions/Recommendations:

No further action is warrented related to this AOC. Further investigation is reccommended for site wide petroleum groundwater contamination (see CAMU 2).

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

AOC 9: Fuel Oil Storage Tank and Distribution System

RFA Description

• Process: AL Tech utilized a 300,000 gallon aboveground steel tank for the storage of fuel oil once used in boilers and furnaces throughout the facility. The tank, installed in the 1940's, was located on the western edge of the plant on a steep slope cut. Oil was piped to the tank from a pump house located at the bottom of the slope, where a fuel truck dispensing station was located. Prior to installation of the current pumping facility, the oil was delivered to a pumping facility located near the main gate. In 1988, during an investigation of potential sources of oil contamination at Outfall 008, test pits were dug revealin a significant free petroleum product layer floating on the groundwater surface. Subsequent groundwater observation, via monitoring wells, established that an area approximately 11 acres in size was contaminated. A recovery well was installed in 1989. AL Tech attributed the release to leaks in the original o supply pipelines, the main tank, and closed buried tanks. In 1992, on-going monitoring indicated that the oil plume was migrating to the southeast with local groundwater flow. Oil had appeared at Outfall 008 and along the banks of the Kromrna Kill. In 1989 it was determined that the greatest concentration of oil was in observation wells OW-I and OW-2 and in recovery well RW-2, located between the Rolling Mill and Outfall 008. This study also confirmed that the free product layer was comprised of fuel oil; gasoline, kerosene and lube oil were not detected.

• Unit Description: 300,000 gallon fuel oil tank and piping system for furnace/boilers facility-wide.
• Date of Operation: 1937-1991
• Materials Handled/Contaminants Suspected: Fuel oil
• Additional Info:

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Interim Remedial Order on Consent # R4-1781-94-11	11/25/1994	Groundwater ICM	N/A	N/A	None	N/A	N/A
Remcor - Interim Groundwater Recovery System Evaluation Report	1/13/1995	Order on Consent	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined into CAMU 2	subsurface soil and groundwater	petroleum hydrocarbons	None	N/A	Groundwater/Organic Compounds

MACTEC Assessment:

Fuel oil ICM and groundwater ICM were implemented. Spills have been recorded back to the 1980s and is most likely a significant source to the LNAPL plume in CAMU2. LNAPL recovery is ongoing. LTM is on going. See CAMU 2.

Media	Impacted	Recommendation
Soil	Yes	Investigation- screen for areas of previously unknown petroleum impacts associated with the distribution lines.
Groundwater	Yes	Investigation- evaluate groundwater in the vicinity for petroleum impacts.
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

Soil sampling was conducted to evaluate the potential releases from the former 300,000 gallon fuel oil AST and associated piping distribution. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Soil	SB F3-01	4 , 9.5
	SB F4-01	4 , 8
	SB G5-01	8 , 16
	SB J6-01	12
	SB K6-01	8 , 16
	SB J4-01	4 , 8
	SB J5-01	4 , 12
Groundwater	MW G5-01	6 - 16
	MW J5-01	7 - 17

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2. See Attachment 5 for PID readings.

Media	Analysis	Findings
Soil	Hydrocarbon SVOC	Visual and PID evidence of fuel were observed during the field investigation . No SVOCs detected exceeding SCOs.
Groundwater	Hydrocarbon SVOC	No hydrocarbons were detected. No SVOCs were detected exceeding the SCOs.

MACTEC 2014 MPA Conclusions/Recommendations:

Additional investigation is warranted to evaluate the extent of contamination related to this AOC.

Back to master sheet

AOC 10: Former Coal Storage Area

RFA Description

• **Process:** Until 1930-1940 large quantities of coal for use in firing furnaces was stockpiled south of the VAR Shop. At the time of the RFA a visual inspection of the area indicated that stockpiling of this material no longer existed. The coal was stored uncovered, outdoors on the bare earth and may have released base neutral extractable aromatic hydrocarbon compounds into the soil, surface waters and/or groundwater. While the potential for such contamination exists, the extent and concentration of such contamination is anticipated to be relatively minor.

• **Unit Description:** Former location of stock-piled coal for firing furnaces.
• **Date of Operation:** 1920-1938
• **Materials Handled/Contaminants Suspected:** Base neutral extractable aromatic hydrocarbon compounds.
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Interim Remedial Order on Consent # R4-1781-94-11	11/25/1994	Groundwater ICM	N/A	N/A	None	N/A	N/A
Remcor - Interim Groundwater Recovery System Evaluation Report	1/13/1995	Order on Consent					
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined into CAMU 2	Soil	Base Neutral Extractable Aromatic Hydrocarbon Compounds, metals	Collected sample from B-6 (Soil) for SVOCs, metals, phenols, pH, TPH.	• NYSDEC TAGM 3028 11/30/1992. • NYSDEC STARS August 1992.	Petroleum odor to sample at 8-16'bgs, no PCBs found in sample, pH was high (10.09), VOCs detected (believed to be from migration not from AOC), SVOCs (PAH) detected, Antimony, Lead

MACTEC Assessment:

Sampling in this area identified PAHs, VOCs and metals. The PAHs may be related to the coal storage or petroleum releases in the area.

Media	Impacted	Recommendation
Soil	Yes	Investigation- evaluate extent of PAHs in surface soils.
Groundwater	Unk	NFA- unlikely to be an ongoing source of contamination. Evaluated with CAMU-2. Ongoing LTM.
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

Soil samples were collected in the two coal storage areas to evaluate if contaminants are present. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Soil	SS H5-01 TP H5-01	0 - 0.5 1 , 3 , 4
	SS J5-03	0 - 0.2

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Analysis	Findings
Soil	PAHs	No PAHs detected exceeding SCOs

MACTEC 2014 MPA Conclusions/Recommendations:

No additional investigation is warranted to evaluate contamination related to this AOC.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

AOC 11a: Kromma Kill Surface Water

RFA Description

• **Process:** The principal surface body in the vicinity of the landfill and plant sites is the Kromma Kill which is a perennial stream. The Kromma Kill flows through the 2014 MPA begins just south of Spring Street where the water is ponded in a small reservoir, located just west of the administration office, before bending southward along the southern plant property boundary where the creek exits the site just east of the main gate. While the plant was operating the stream receives NYSDEC-permitted treated wastewater discharges and stormwater. The Kromma Kill discharge to the Hudson River approximately two miles downstream.
• **Unit Description:** Receiving streams of various contaminant sources including the landfill, capacitors, fuel oil contaminated groundwater, septic tanks, etc.
• **Date of Operation:** 1907- present
• **Materials Handled/Contaminants Suspected:** Oils, Metals, PCBs, Sewage
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	Surface Water	Oils, Metals, PCBs, and Sewage	• Collected samples from S-1 through S-15 (excluding S-6 for surface water) for full suite parameters. • S-4 and S-3 collected at the 2014 MPA.	• NYSDEC AWQ October 1991.	No exceedance of surface water criteria was detected.

MACTEC Assessment:

Although the site has not been in operation since the early 2000's, surface water runoff, groundwater and stormwater which may be contaminated discharge to the Kromma Kill .

Media	Impacted	Recommendation
Surface Water	Unk	Investigation- evaluate ongoing discharges from the site.

MACTEC 2014 MPA Investigation Activities:

Surface water samples were collected in the Kromma Kill to evaluate ongoing releases form sources onsite. See Attachment 1 for sample locations.

Media	Sample number
Surface water	SW H8-01 SW I7-03 SW K7-03 SW K7-04 SW L7-03 SW L7-04 SW M6-03

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included inAttachment 2.

Media	Analysis	Findings
Surface water	Pest	Pesticides were detected exceeding Class C SW Criteria.
	PCB	PCBs were detected exceeding Class C SW Criteria.
	VOC	No VOCs were detected exceeding Class C SW Criteria.
	SVOC	SVOCs were detected exceeding Class C SW Criteria.
	Metals	Metals were detected exceeding Class C SW Criteria.
	Cr+6	Cr+6 was not detected exceeding Class C SW Criteria.

MACTEC 2014 MPA Conclusions/Recommendations:

Additional investigation is warranted to evaluate the extent on going discharge to the Kromma Kill.

Back to master sheet

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

AOC 11b: Kromma Kill Sediments

RFA Description

• **Process:** The principal surface body in the vicinity of the landfill and plant sites is the Kromma Kill which is a perennial stream. The Kromma Kill flows through the 2014 MPA begins just south of Spring Street where the water is ponded in a small reservoir, located just west of the administration office, before bending southward along the southern plant property boundary where the creek exits the site just east of the main gate. While the plant was operating the stream receives NYSDEC-permitted treated wastewater discharges and stormwater. The Kromma Kill discharge to the Hudson River approximately two miles downstream.

• **Unit Description:** Receiving streams of various contaminant sources including the landfill, capacitors, fuel oil contaminated groundwater, septic tanks, etc.
• **Date of Operation:** 1907-Present
• **Materials Handled/Contaminants Suspected:** Oils, Metals, PCBs, Sewage
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Phase II RFI	Sediment	Oils, Metals, PCBs, and Sewage	• Collected samples from S-1 through S-15 for full suite parameters. • Samples S-3 and S-4 collected at the 2014 MPA.	• NYSDEC "Technical Guidance for Screening Contaminated Sediments." July 1994	• Cadmium, chromium, nickel, copper, lead exceeded criteria in sediment collected adjacent to the 2014 MPA. • Chromium and nickel exceeded the severe effect level (SEL)
Environmental Strategies Corporation - Phase II RFI	12/30/1998	CMS	Sediment	Oils, Metals, PCBs, and Sewage	None	N/A	Clean up action will not be evaluated until metals reclamation at the WMA is complete.

MACTEC Assessment:

Although the site has not been in operation since the early 2000's, surface water runoff, groundwater and stormwater which may be contaminated discharge to the Kromma Kill .

Media	Impacted	Recommendation
Sediment	Yes	Investigation- evaluate current levels of contaminants in the sediments.

MACTEC 2014 MPA Investigation Activities:

Sediment samples were collected from the Kromma Kill to evaluate if site related contaminants have been released to the stream. See Attachment 1 for sample locations.

Media	Sample number
Sediment	SD H8-01 SD I1-03 SD K7-03 SD K7-04 SD L7-03 SD L7-04 SD M6-03

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Results	Findings
Sediment	PCB	PCBs were detected at levels with in the Class B range of the SGVs.
	VOC	No VOCs detected exceeding Sediment Class A Standards.
	SVOC	No SVOCs detected exceeding Sediment Class A Standards.
	Metals	Metals were detected exceeding Sediment Class C Standards at 6 locations.
	Cr+6	No Cr+6 were detected exceeding Sediment Class A Standards.

MACTEC 2014 MPA Conclusions/Recommendations:

PCBs and metals detected above SGVs; additional investigation is warranted to evaluate the extent of contamination.

Back to master sheet

AOC 12: Oiled Roads

RFA Description

• **Process:** In the past, until the mid 1970's, oils collected from on-site operations were applied as a means of controlling dust from the facility's vehicular roadways. Based on historical documentation it appears that most of the roadways that could have been oiled are located in similar locations to those roadways which exist today. Since considerable oil contamination of the site's groundwater has already been established, the relatively minor amounts of oil involved in dust control with respect to petroleum hydrocarbons should be of little concern. However, since the exact origin of these waste oils is uncertain it is possible that they could have contained PCBs or halogenated aromatic compounds. While any PCBs would likely be contained within relatively shallow soils, any halogenated compounds could have readily migrated to groundwater and possibly the Kromma Kill.

• **Unit Description:** Oil laid on roads as means of dust control.

• **Date of Operation:** 1940-1972

• **Materials Handled/Contaminants Suspected:** PCBs, Aromatic halogenated compounds

• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	No contaminants above site criteria were detected. The absence of apparent impact to soil suggests that no further evaluation of groundwater in this area is necessary.
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	Soil and Surface Water	PCBs, Aromatic and Halogenated Compounds	None	N/A	Facility conditions do not indicate a need for any unit-specific actions.

MACTEC Assessment:

Oils used for dust suppression on roads was most likely waste oil from site processes that may have contained PCBs. Locations of oiled roads have not been specifically identified.

Media	Impacted	Recommendation
Soil	Yes	Investigation- evaluate roads for PCB
Groundwater	No (PCBs)	NFA- PCBs are unlikely to migrate to GW. PCBs not detected in the ongoing LTM.
Other		

MACTEC 2014 MPA Investigation Activities:

Soil samples were collected from locations near roads where waste oil may have been used for dust suppression. See Attachment 1 for sample locations.

Media	Sample Number	Sample Depth
Soil	SS F5-01 TP F5-01	0 - 0.2 1
	SS I6-01 TP I6-01	0 - 0.2 1
	SS I7-01 TP I7-01	0 - 0.2 1
	SS D7-01 TP D7-01	0 - 0.2 1
	SS J6-01 SB J6-01	0 - 0.2 1
	SS J4-01 SB J4-01	0 - 0.2 1
	SS K6-01 SB K6-01	0 - 0.2 1

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included inAttachment 2.

Media	Analysis	Findings
Soil	PCB	PCBs were detected exceeding commercial SCOs at 2 locations

MACTEC 2014 MPA Conclusions/Recommendations:

Although PCBs were detected exceeding the commercial SCO at two locations near roads it is likely that the contamination is associated with fill materials used at the site. The 2014 MPA investigation has documented the widespread but sporadic presence of PCBs across the MPA in surface soils. MACTEC recommends No Further Action to AOC 12; however, PCBs in shallow soils should be investigated as part of broader site strategy.

Back to master sheet

AOC 13: Extrusion Cooling Tower (Extrusion/Slippery Water CAMU)

RFA Description

• Process: An above ground cooling tower was used in Extrusion Building Slippery Water process. Additives such as fungicides, herbicides and corrosion inhibitors were introduced into the systems to control bacterial growth and aggressiveness of the process waters. Two underground tanks, provided the holding capacity of the induction cooling system located west of the extrusion building believed to be manifolded (12,800 gallons total capacity), add to the holding capacity of the extrusion system. Historical records did not indicate whether spills or leaks had occurred at this cooling tower. Visual inspections of the tower were inconclusive since the liquid is generally colorless and staining is difficult to ascertain. Despite the absence of spill documentation there remains the potential that soils and groundwater, in the vicinity of these towers could contain metal compounds and fungicides as a result of overflow and overspray, or leakage. Any contaminants in the groundwater would be transported by the groundwater which has been shown to be moving in an easterly direction.

• Unit Description: Overspray releases from cooling towers and potential release associated with the cooling tower system.
• Date of Operation: 1951->1992
• Materials Handled/Contaminants Suspected: Coolants, Oil
• Additional Info:

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined into CAMU 1	Soil and Groundwater	Coolants and Oils	Collected samples from B-4 and B-5 (Soil), MW-3/MW-3B (Groundwater)	• NYSDEC TAGM 3028 11/30/1992. • NYSDEC TAGM 4046 1/24/1994. • NYCRR title 6, Chapter X, Parts 700-705 1992. • NYSDEC AWQ October 1991.	• PCBs and metals exceeded soil criteria.

MACTEC Assessment:

See CAMU 1
Same as SWMU-2

MACTEC 2014 MPA Investigation Activities:

No sampling was conducted specific to the Extrusion Region Container Storage Area based on MACTEC's recommendation for No Further Action.
See CAMU 1
Same as SWMU-2

MACTEC 2014 MPA Investigation Findings:

See CAMU 1
Same as SWMU-2

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

AOC 14: Continuous Casting Process Cooling Tower

RFA Description

• **Process:** The continuous casting cooling tower (aboveground tank inside building) was used to temporarily store cooling waters from the casting operation. Water was collected in concrete sumps located to the south of the building. Water was then pumped into a tank for return to the continuous caster for reuse after cooling. Additives such as fungicides, herbicides and corrosion inhibitors are introduced into the systems to control bacterial growth and aggressiveness of the process waters. Historical records did not indicate whether spills or leaks had occurred at this cooling tower. Visual inspections of the tower were inconclusive since the liquid is generally colorless and staining is difficult to ascertain. Despite the absence of spill documentation there remains the potential that soils and groundwater, in the vicinity of these towers could contain metal compounds and fungicides as a result of overflow and overspray, or leakage. Any contaminants in the groundwater would be transported by the groundwater which has been shown to be moving in an easterly direction.

• **Unit Description:** Overspray releases from cooling towers and potential release associated with the cooling tower system.
• **Date of Operation:** 1951->1992
• **Materials Handled/Contaminants Suspected:** Coolants, Oil
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
McLaren/Hart - RCRA Facility Assessment Report	11/6/1991	No Further Action	Soil	None	None	N/A	The bacterial growth inhibitors and pH control additives are potentially harmful as undiluted concentrates, however, under the dilution factors used in the cooling water applications these compounds are not expected to present a significant environmental or health risk. No further action or study on this AOC is recommended.
NYSDEC Order on Consent # R4-1467-93-02	8/8/1995	Phase I RFI	N/A	N/A	None	N/A	N/A
Environmental Strategies Corporation - Phase I RFI	8/11/1995	No Further Action	Soil and Groundwater	Coolants and Oils	• Collected sample from B-2 and B-3 (Soil), MW-11 (Groundwater) • Soils were analyzed for TCL PCBs, TCL Pesticides, Metals, TPH, Phenols, pH • Groundwater was analyzed for TCL VOCs, TCL SVOCs, TCL PCBs, Metals, TPH, Phenols	• NYSDEC TAGM 3028 11/30/1992. • NYCRR title 6, Chapter X, Parts 700-705 1992. • NYSDEC AWQ October 1991.	• Nickel and antimony detected exceeding criteria at. • Not identified as a source.

MACTEC Assessment:

Sufficient sample and analysis has previously been conducted at this Unit to document that no further action is warranted.

Media	Impacted	Recommendation
Soil	No	NFA
Groundwater	No	NFA
Other		

MACTEC 2014 MPA Investigation Activities:

No sampling was conducted specific to the Continuous Casting Process Cooling Tower based on MACTEC's recommendation of No Further Action.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

CAMU 1: Extrusion/Slippery Water CAMU 1 (SWMU 2, SWMU 18, AOC 2A, AOC 2B, AOC 13)

RFA Description

SWMU 2 - Extrusion Pit
SWMU 18 - Extrusion Slippery Water System
AOC 2a - Hot and Cold Extrusion Cooling Tower
AOC 2b - Slippery Water Tank
AOC 13 - Extrusion Cooling Tower

- **Unit Description:** Potential spillage of cooling water in the Slippery Water Room, Slippery Water Pit, Slippery Water Tank and Slippery Water Cooling Tower.
- **Date of Operation:** 1951->1992
- **Materials Handled/Contaminants Suspected:** Oils, Coolants, Metals, PCBs
- **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
Environmental Strategies Corporation - Phase I RFI	8/11/1995	See Individual units	See Individual units	See Individual units	See Individual units	See Individual units	See Individual units
Environmental Strategies Corporation - Phase II RFI	12/30/1998	No Further Evaluation	Soil and Groundwater	Oils, coolants, PCBs, and Metals	• Closed the slippery water tank in place after removal of residual material and cleaning with a citric acid based cleaning compound. • Conducted 4 borings; E-1, E-2, E-3, and MW-13 (well was dry). 17 soil samples were collected from these locations and analyzed for TCL PCBs, TPH, and Metals.	• Site-specific risk-based action levels were generated for metals in soils. • NYSDEC TAGM 3028 (Revised 1997). • NYSDEC AWQ June 1998 • US EPA MCLs for drinking water 7/27/1990.	No contaminants detected in soil above criteria. The absence of apparent impact to soil suggests that no further evaluation of groundwater in this area is necessary.

MACTEC Assessment:

No further investigation needed for soil and groundwater. Groundwater at MW-3/MW-3B (downgradient) doesn't show impact from COPCs (less than GA standards). Soil samples were collected in appropriate locations to identify COPCs.

Media	Impacted	Recommendation
Soil	No	NFA
Groundwater	No	NFA
Other	Unk	Concrete sampling to assess residual PCBs in the Extrusion Pit

MACTEC 2014 MPA Investigation Activities:

Concrete samples were collected to asses PCB contamination originating from the Extrusion Pit. Hollow stem auger borings were completed at two locations in the Extrusion pit area; soil and groundwater samples were collected. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Concrete	FC D6-01	0 - 0.1
	FC F6-02	0 - 0.1
	FC E6-03	0 - 0.1
	FC E7-03	0 - 0.1
Soil	SB F6-04	1 , 8, 22
	SB E6-05	1 , 8, 13
Groundwater	MW F6-04	7.8 - 17.8

See also:
SWMU 2 - Extrusion Pit
SWMU 18 - Extrusion Slippery Water System
AOC 2a - Hot and Cold Extrusion Cooling Tower
AOC 2b - Slippery Water Tank
AOC 13 - Extrusion Cooling Tower

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Analysis	Findings
Concrete	PCB	PCBs were detected at two locations at concentrations exceeding the Commercial SCO. Matrix interferences at the other two locations resulted in elevated reporting limits above the SCOs.
Soil	Metals	Metals were detected at concentrations exceeding the commercial SCO at two intervals at one location.
Groundwater	PCB	PCBs were detected at a concentration exceeding the GA standard.

MACTEC 2014 MPA Conclusions/Recommendations:

PCBs were reported in floor, soil, and water samples from the general area of extrusion/slippery water processes. Additional investigation is warranted to evaluate the extent of contamination related to this AOC.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

CAMU 2: Facility-Wide Groundwater - Pickle House Area, Fuel Oil (SWMU 1, SWMU 6, SWMU 12, SWMU 19, SWMU 20, AOC4, AOC 7, ACO 8, AOC 9, AOC 10)

RFA Description

- **Process:** See the following:
  - SWMU 1 - Waste Acid Pits
  - SWMU 6 - Northeast Quadrant Fill Area
  - SWMU 12 - Transportation Building Waste Oil
  - SWMU 19 - Maintenance Steam Cleaning Pad
  - SWMU 20 - Process Discharge Piping
  - AOC 4 - Pickling Room
  - AOC 7 Closed Anneal Underground Storage Tank
  - AOC 8 - Closed Fuel Oil Underground Storage Tanks
  - AOC 9 - Fuel Oil Storage Tank and Distribution System
  - AOC 10 - Former Coal Storage Area
  - API Oil/Water Separator
- **Unit Description:** Potential spillage from any of the above.
- **Date of Operation:** 1951->1992
- **Materials Handled/Contaminants Suspected:** Oils, Coolants, Metals, PCBs
- **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
Environmental Strategies Corporation - Phase I RFI	8/11/1995	• Phase II RFI • Pickle House ICM • Fuel Oil ICM	Groundwater	chromium, lead, copper, cadmium, cyanide, beryllium, acid, TPH	Samples were collected from the bedrock and overburden wells on site and analyzed for; • TCL VOCs • TCL SVOCs • TCL Pesticides and PCBs • total and dissolved TAL Inorganics plus molybdenum	• NYDEC TAGM 3028 November 30, 1992 • NYSDEC AWQ October 1991. • US EPA MCLs for drinking water 7/27/1990	Investigated location for potential contaminant releases to groundwater. The following are those areas that fall under the Groundwater CAMU due to exceedances of the criteria. • SWMU 1, Waste Acid Pits • SWMU 6, Northeast Quadrant Fill Area • SWMU 12, Transportation Building Waste Oil • SWMU 19, Maintenance Steam Cleaning Pad • SWMU 20, Process Discharge Piping • AOC 4, Pickling Room • AOC 7, Closed Anneal UST • AOC 8, Closed Fuel Oil USTs • AOC 9, Fuel Oil Distribution System • AOC 10, Former Coal Storage Area There is a need for a Fuel Oil Interception trench and collection system.
Environmental Strategies Corporation - Groundwater ICM Technical Memorandum	9/11/1995	Phase II RFI - ICM Concept and Design	Groundwater	chromium, lead, copper, cadmium, cyanide, beryllium, acid, TPH	• Evaluated existing wells in the area of the Pickle House to provide data necessary to design a recovery system • Installed recovery RW-1B and RW-2B. • No analytical data was collected during this investigation. • ICM investigation and installation of groundwater recovery well RW-4 for LNAPL. • Overburden and bedrock well pump tests. • Step-draw down test and constant drawdown test.	N/A	• Recovery wells are sufficient in capturing plume migration. • Additional investigation is necessary to evaluate the effectiveness of the recovery barrier and treatment. • Although the findings of this investigation indicate that the conditions are significantly different than those used to develop the initial ICM concept, the conditions are appropriate for management of the LNAPL and Pickle House areas.
Environmental Strategies Corporation - Phase II RFI	12/30/1998	• Fuel Oil ICM • Groundwater ICM	Groundwater	chromium, lead, copper, cadmium, cyanide, beryllium, acid, TPH	• 10 boring were completed for TCLP Metals (SP-1 through SP-10) in the area proposed for construction of the interceptor trench. • A groundwater sample was collected form MW-5. • 6 boreholes were advanced in the northern portion of the Rolling Mill Region. • MW-15, MW-16, MW-17 and PZ-16 were installed.	• NYSDEC. TAGM 3028. Revised 1997 • NYSDEC AWQ October 1998. • US EPA MCLs for drinking water 7/27/1990	• Analytical results for groundwater samples collected during the Phase II RFI were similar to the Phase I RFI exceedances. • Most significant groundwater exceedances were collected in the vicinity of the Pickle House. • Data suggests groundwater quality in the vicinity of the Pickle House has improved due to the operation of the ICM (Recovery System). • Total impact will be evaluated during a CMS. • Exceedances for TCLP Lead were detected in several soil samples. • Groundwater results do not show an impact from the lead. • Soils in the area must be handled appropriately during the construction of the interceptor trench for the Fuel Oil ICM, including testing and off site disposal. • After completion of the Fuel Oil ICM surface soil conditions will be evaluated to determine if any subsequent action is necessary. • Soil sample data indicates petroleum impact consistent with that observed in other areas of known fuel oil impact. • Separate phase product will be addressed through the fuel oil ICM. • There is little apparent potential for petroleum constituents to be discharged to the Kromma Kill by groundwater following implementation of the Fuel Oil ICM.
Malcolm Pirnie Inc - LNAPL Cutoff/Collection Trench - Construction Report	4/25/2001	CMS			construction of the Fuel Oil cut-off/collection trench 835 ft long and 15 ft deep on the eastern side of the site.		
MACTEC - Interim Site Management Plan - DRAFT	Jul-12	Continued Monitoring	Groundwater	Metals, SVOCs, VOCs, TPH, PCBs	Wells are sampled every 15 months in accordance with the Site Management Plan.	• NYCRR title 6, Chapter X, Parts 700-705 1999. • NYSDEC TOGS 1998.	

MACTEC Assessment:

LNAPL recovery has been ongoing since 1989. Currently LNAPL recovery is conducted by bailing wells which replaced the fuel oil cutoff/collection trench. Long term monitoring to evaluate groundwater contamination trends is ongoing. An evaluation of potential ongoing sources of product should be conducted to better target recovery efforts.

Ongoing GW Impact	GW Recommendation
Yes	Investigation- evaluate of potential ongoing sources of product to better target recovery efforts.

MACTEC 2014 MPA Investigation Activities:

Sampling necessary to address this AOC was not included in the scope of the 2014 MPA Site Characterization investigation; further investigation is warranted.

Back to master sheet

API Oil/Water Separator

RFA Description

• **Process:** An API-type gravity oil/water separator accepts process and stormwater discharge flow. The separator, constructed in 1990, consists of a holding/settling chamber, an oil skimming and collection unit, transfer connecting piping and ancillary equipment. The unit is located northwest of Lincoln Avenue parallel to the pickle house and was designed to provide a 24-hour hydraulic retention time for a flow of 700,000 gallons/day. Free oil present in the wastewater rises to the water surface and is skimmed from the top of the process tanks for collection. The oil is disposed in the central waste oil storage tank. After separation the water is discharged into the Kromma Kill.

The API separator was constructed in response to frequently observed oil discharges into the Kromma Kill that were attributed in part to contaminated process water. Since the construction, there have been no reported releases from the oil/water separator. No evidence of releases to the environment were noted during the site inspection.

• **Unit Description:** Gravity oil/water separator for process and storm water.
• **Date of Operation:** 1990>1992
• **Materials Handled:** Oil
• **Additional Info:** This unit is not carried through Phase I and Phase II.

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
NYSDEC Post Closure Permit # 4-0126-11/27-0	12/10/1992	RFA/RFI	N/A	N/A	None	N/A	N/A
McLaren/Hart - RCRA Facility Assessment Report	11/6/1991	No Further Action	Soil and Groundwater	Oil	None	N/A	N/A

MACTEC Assessment:

The API oil water separator was reportedly cleaned out at the time operations ceased at the site, however, documentation was not available for review. If sediment has accumulated in the separator then it may contain PCBs from oils used at the site.

Media	Impacted	Recommendation
Soil	Not sampled	NFA- nearby soils characterized by SWMU-1
Groundwater	No	NFA- unlikely to be an ongoing source of contamination
Other	Unk	Investigation- sample sediment if present for PCBs

MACTEC 2014 MPA Investigation Activities:

Sediment and product samples were collected to asses contamination from the API oil/water separator. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth
Sediment	SD H7-02	NA
	SD H7-03	NA
Product	PS H6-01	NA
	PS H6-03	NA

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Results	
Sediment	Hydrocarbon	Hydrocarbons were detected in sediment from the API OWS.
	PCB	PCBs were detected exceeding the Class C Sediment SGV.
	VOC	No VOCs detected exceeding the Class A Sediment SGV.
	SVOC	No SVOCs detected exceeding the Class A Sediment SGV.
	Metals	Metals were detected exceeding the Class C Sediment SGVs.
	Cr+6	Cr+6 was not detected exceeding the Class A Sediment SGVs.
Product	PCB	PCBs were detected at 11 PPM in the oil collection tank (PS-H6-03).

MACTEC 2014 MPA Conclusions/Recommendations:

Fuel product was indicated in the oil collection unit at the upstream end of the holding/settling chamber. Sediment that has collected downstream from the settling chamber contained PCBs and hydrocarbons. Additional investigation is warranted to evaluate the extent of contamination related to this AOC.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

Boring B-10 (Includes SWMU 3B, SWMU 6, SWMU 13)

RFA Description
- **Process:** See the following Units:
  - SWMU 3b - Container Storage Area - Rolling Mills Region
  - SWMU 6 - Northeast Quadrant Fill Area
  - SWMU 13 - Drum Crushing/Waste Oil Accumulation Area
- **Unit Description:**
- **Date of Operation:**
- **Materials Handled:**
- **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
Environmental Strategies Corporation - Phase I RFI	8/11/1995	Combined into the B-10 Area for further investigation under RFI Phase II	Surface, Subsurface Soil and Groundwater	Oils, Acids, Chrome or Nickel Sludges, PCBs, Expired Chemicals, and Spent Cleaning Solvents	• Samples collected from B-10 (Soil) were analyzed for select list of organic compounds (VOC), SVOCs, PCBs, TCLP, TPH, Total Phenols, and pH. MW--5/MW-5B, MW-A1, and MW-A2 (Groundwater) samples were analyzed for TCL VOC, TCL SVOC, TCL PCBs, Total and dissolved TAL Inorganics plus molybdenum, TPH, Phenols, and miscellaneous parameters. • AL Tech covered the general area of concern (proximate to Boring B-10) with polyethylene sheeting and gravel cover as an ICM.	• NYSDEC TAGM 3028 11/30/1992. • NYCRR title 6, Chapter X, Parts 700-705 1992 • NYSDEC AWQ October 1991.	PCBs were detected in surface soils at B-10. The source and extent of the PCB impact have not been defined. AL Tech proposed to eliminate potential migration and exposure of the PCB contaminated surface soil through an ICM. Specifically the ICM was to cover the areas with polyethylene and gravel.
Environmental Strategies Corporation - Phase II RFI	12/30/1998	No Further Action	Surface and subsurface soil samples	nickel, PAH, PCBs	• An ICM was previously conducted in the B-10 area to remove contaminated soil with PCBs greater than 10 ppm. (Documentation unavailable at the time of this review) • 10 surface soil samples were collected for VOC, SVOC, PCB and TPH • 5 subsurface samples were collected. • Shallow monitoring well MW-12 was installed. • Sub surface soil samples collected for PCBs.	• Site-specific risk-based action levels were generated for metals in soils. • NYSDEC TAGM 3028 (Revised 1997). • NYSDEC AWQ October 1998. • US EPA MCLs for drinking water 7/27/1990	• PCBs were only detected in one of 17 soil samples (13mg/kg at 8 feet bgs). • No TCL VOCs, TCL SVOCs (Except bis(2-ethylhexyl)phthalate), TPH, phenols, or PCBs in the groundwater sample collected from MW-12 which is located hydraulically down gradient from this area.

MACTEC Assessment:

The Drum Crushing Area and the Container Storage Area are located within the building. The Northeast Quadrant Fill Area is located outside the building.

Media	Impacted	Recommendation
Soil	Yes	Investigation- confirm IRM results and characterize area soil from outside the building.
Groundwater	Yes	NFA - evaluated as part of CAMU 2. Ongoing LTM.
Other	Unk	Investigation - concrete sampling to assess potential PCBs.

MACTEC 2014 MPA Investigation Activities:

A concrete sample was collected to asses PCB contamination from the Rolling Mill Region Container Storage Area and Drum Crushing area. Soil samples were collected from seven locations throughout the Northeast Fill Quadrant to assess contamination present in this area of the site. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Soil	SS K7-02 SB-K7-02	0-0.2 1 , 7 , 8
	SS M7-01 SB- M7-01	0-0.2 1 , 12
	SS M6-01 SB M6-01	0-0.2 1 , 4 , 8
	SS J6-01 SB J6-01	0-0.2 1 , 4 , 12
	SS K6-01 SB K6-01	0-0.2 1 , 8 , 16
	SS M5-01 SB M5-01	0-0.2 1 , 4 , 8
	SS L5-01 SB L5-01	0-0.2 1 , 6 , 8
Concrete	FC L6-01	0 - 0.1

MACTEC 2014 MPA Investigation Activities / Conclusions:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Results	Findings
Soil	Pests	No pesticides were detected exceeding SCOs.
	PCB	PCBs were detected exceeding commercial SCOs at 4 locations
	VOC	No VOCs detected exceeding SCOs.
	SVOC	No SVOCs detected exceeding SCOs.
	Metals	Metals were detected at concentrations exceeding the industrial SCO at 6 locations.
	Cr+6	No Cr+6 was detected exceeding SCOs.
Concrete	PCB	PCBs were detected exceeding the Industrial SCO.

See also:
- SWMU 3b - Container Storage Area - Rolling Mills Region
- SWMU 6 - Northeast Quadrant Fill Area
- SWMU 13 - Drum Crushing/Waste Oil Accumulation Area

MACTEC 2014 MPA Conclusions/Recommendations:

Additional investigation is warranted to evaluate the extent of contamination related to this AOC.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Uranium

RFI Description of Current Conditions Description

• **Process:** During the late 1950s the Watervliet facility melted Uranium (depleted U238) on an experimental/production basis. Uranium 238 was provided, in electrode form, via Westinghouse, Inc., a federal government subcontractor. After the VAR melting process, U238 was forged on the "air driven" forging press. This forging press is no longer on-site. Due to the low strength of U238, heating of the material was not required as part of the forging process. The VAR U238 ingot formed on the forging press, resulted in a rectangular billet, suitable for rolling operations planned by Westinghouse, Inc. The forging operation was the final process conducted on-site for U238 prior to offsite shipment.

It is reported that Westinghouse, Inc. conducted a final site assessment during the late 1950's to assure that no residual uranium materials remained on-site after the completion of contracted experimental/production processing of U238.

The process occurred in the building used for maintenance of mobile equipment. (Assumed to be the transportation building)

• **Unit Description:** Former maintenance facility where Uranium 238 was processed.
• **Date of Operation:** Late 1950's

32

• **Additional Info:** This was not included as a Unit in the original RFA/RFI.

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
McLaren/Hart - RCRA Facility Investigation Description of Current Conditions Report	11/6/1991	No Further Action	Soil Groundwater	Uranium 238	None	N/A	Westinghouse Inc. conducted a site assessment to confirm that there was no residual uranium material left after the completion of contracted experiments.
Certification Docket - Department of Energy*	1980	No Further Action	Soil	Uranium 238	Utilized an open - and closed - window Geiger-Mueller survey	N/A	No present or potential radiation-related health hazard exists due to post- Atomic Energy Commission operations and that no further Department of Energy survey is required.

MACTEC Assessment:

The Westinghouse assessment was conducted in the late 1950s and documentation regarding the assessment was not available for review. The processes described in the RFI Description of Current Conditions Report and the DOE Certification Docket are different. DOE description includes processing billets into rods through the Annealing Furnace the 14 inch rolling mill. RFI description includes processing electrodes at the VAR and pressing them into billets at the forge press. The location of the Uranium processing is unclear based on available documentation. However, discussions with the NYSDEC project manager and the former site manager indicate that "the building used for maintenance of mobile equipment" is the transportation building.

Media	Impacted	Recommendation
Soil	Not sampled	NFA
Groundwater	Not sampled	NFA
Other		NFA- pending review of documentation and visual observations during the site visit.

MACTEC 2014 MPA Investigation Activities:

MACTEC's review of DOE documentation differed from McLaren/Hart descriptions; therefore, radiation screening using NaI detector was performed in areas of the site where uranium was potentially processed.

Media	Sample number	Sample Depth
Soil Concrete	NA	Surface

MACTEC 2014 MPA Investigation Conclusions:

Radiation screening identified areas with measurements above background. Screening results are provided in Attachment 6.

Media	Analysis	Results
Soil	Radiological Screening	Radiation above background was measured.

MACTEC 2014 MPA Recommendations:

Further investigation was conducted by the NYSDEC to evaluate the type of radiation present in these areas. NYSDEC determined No Further Action is necessary.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Pilger Mill - Waste Paraffin Oil Storage Tank

RFA Description

• **Process:** The Pilger Mill was a cold working process which elongated stainless steel piping while maintaining a specified industry standard outside dimension (O.D.). Finished product was up to 120 ft. long and had a smaller diameter and wall thickness than the initial material. A chlorinated paraffin oil (aliphatic hydrocarbon) was used to lubricate the product as it was elongated. The Pilger Mill was located within the Extrusion Building. Waste paraffin oil was accumulated within a 4,000 gallon aboveground, diked, steel storage tank. The oil is pumped to the "dirty" oil tank, filtered, and then pumped to a "clean" 4,000 gallon oil storage tank. This filtered oil is then returned to the pilger mill for reuse in the milling operation. The "dirty" oil tank is pumped out approximately every six months for off-site reclamation.

• **Unit Description:** Two above ground oil tanks located in the Extrusion Building
• **Date of Operation:** unknown to>1992
• **Materials Handled:** Paraffin Oil
• **Additional Info:**

Document	Date	Decision Point	Pathway	COPCs	Activities Conducted	Standards / Criteria / Date	Findings
McLaren/Hart - RCRA Facility Assessment Report	11/6/1991	No Further Action	Soil and Groundwater	Oil	N/A	None	N/A

MACTEC Assessment:

Spills of oil could have occurred in this area.

Media	Impacted	Recommendation
Soil	Not sampled	Investigation- visually inspect the area for evidence of release
Groundwater	Unk	NFA- pending visual inspection
Other	N/A	

MACTEC 2014 MPA Investigation Activities:

Concrete and soil sampling were conducted to asses the source and extent of PCB contamination from the Rolling Mill Region Container Storage Area. See Attachment 1 for sample locations.

Media	Sample number	Sample Depth (feet bgs.)
Concrete	FC E7-03	0 - 0.2

MACTEC 2014 MPA Investigation Findings:

Results from the Main Plant Area Site Characterization Report (MACTEC, 2014) are included in Attachment 2.

Media	Results	Findings
Concrete	PCB	Due to matrix interferences the PCB result for this sample is not usable for evaluating the presence of PCBs compared to the SCOs.

MACTEC 2014 MPA Conclusions/Recommendations:

Sample results for this Unit were inconclusive due to sample matrix interferences. The area should be resampled and analyzed by an alternative method.

Back to master sheet

Note: This Table is an update to the Unit Summary Table from the Previous Activities Summary Report - April 2014

Prepared by: JMF/BPW
Reviewed by: JPC/ES
Updated by: DF/JF
Update Reviewed by: JPC/ES

ATTACHMENT 1

2014 MPA INVESTIGATION SAMPLE LOCATION FIGURE

Building #	Building Name
1	EAF Baghouse
2	Melt Shop
3	Caster
4	Laboratory
5	
6	
7	Hydromation Plant
8	
9	Rolling Mills
10	Billet Grinding
11	
12	Bar Finishing
13	Caster Water Treatment
14	Bar Turning
15	
16	
17	Annealing
18	
19	Gas House
20	
21	
22	Vacuum Arc Remelting
23	Consutrode
24	
25	
26	Acid Storage
27	Grinding
28	Forge Press
29	Office
30	Storage
31	Tech Services
32	Transportation/Laboratories
33	Guard House
34	WWTP
35	
36	Pickle House
37	Extrusion
38	
39	
40	
41	
42	
43	
44	

Tank #	Location	A	U	Type	# of tanks
TK1	22" mill			Aboveground	2
TK2	Garage			Aboveground	1
TK3	Garage			Aboveground	1
TK4	Forgepress			Aboveground	6
TK5	Extrusion			Aboveground	2
TK6	Transportation			Aboveground	1
TK7	Transportation			Aboveground	1
TK8	Annealing			Aboveground	1
TK9	Extrusion			Aboveground	2
TK10	Hill			Aboveground	1
TK11	South of Bar Finish			Aboveground	1
TK12	Extrusion			Underground	1
TK13	South of Anneal			Aboveground	2
TK14	South of Melt Shop			Underground	1
TK15	Extrusion			Underground	2
TK16	South of Anneal			Aboveground	2
TK17	North of pickle house			Aboveground	5
TK18	South of Extrusion Building			Aboveground	1
TK19	Northwest of Melt Shop			Aboveground	1
TK20	West of Melt Shop			Aboveground	1
TK21	Southwest of Melt Shop			Aboveground	1
TK22	North of WWTP			Aboveground	1
TK24	Southeast Main Office			Underground	1
TK25	Southwest of North Gate			Underground	7
TK26	Northwest of Melt Shop			Aboveground	3
TK27	South of Bar Finish			Underground	1
TK28	Extrusion			Underground	1
TK29	South of Anneal			Underground	1
TK30	South of API			Aboveground	1
TK31	Southeast of Forge Press Building			Aboveground	1

SWMU #	Solid Waste Management Unit
1	Waste Acid Pits
2	Extrusion Pit
3	Container Storage Areas
4	Lime Neutralized Waste Pickle Liquor Sludge Containers
5	Waste Management Area (Not Shown)
6	Northeast Quadrant Fill Area
7	South Lagoon
8	EAF Baghouse
9	Scrap Metal Storage Areas
10	Wastewater Treatment Plant
11	Hydromation Plant
12,13,14	Waste Oil Accumulation Area
15	Calow Unit
16,17	Lime Storage Vessels
18	Extrusion Slippery Water
19	Steam Cleaning Pad
20	Process Discharge Piping*
	*Actual locations unknown, estimated potential locations are shown

AOC #	Area of Concern
2	Process Pits**
3	Septic Tank
4	Pickling Room
5	Thompson Etch Room
6,7,8	Underground Storage Tanks
9	Fuel Oil Storage Tanks and Distribution System
10	Former Coal Storage Area
11	Kromma Kill
12	Oiled Roads*
13,14	Cooling Towers
	*Actual locations unknown, estimated potential locations are shown

#	Additional Concerns
1	API Oil/Water Separator
2	Boring B-10
3	Assumed Uranium Process Location (disposal locations unknown)
4	Pilger Mill

AOC #	Area of Concern - Process Pits**
2a	Hot and Cold Well Tanks for the Extrusion Cooling Tower
2b	Slippery Water Tank (Extrusion/Slippery Water CAMU)
2c	Leachate Pit
2d	Surge Pit
2e	Forge Press Pit
2f	Rolling Mill Pit
2g	Extrusion Pit - Same as SWMU 2
2h	Caster Pit

MELT SHOP REGION

ROLLING MILL REGION

SCRAP METAL STORAGE REGION

EXTRUSION REGION

Utility Right of Way

Drainage Ditch

API Oil/Water Separator

Spring Street Road

Lincoln Ave

Kromma Kill

Note:
AOC and SWMU locations from Environmental Strategies Corporation (ESC). "Draft Phase I RCRA Facility Investigation Report, AL Tech Specialty Steel Corporation, Watervliet, New York." August 11, 1995.

Legend

Sample Location: Sediment; Surface Water; Soil Boring; Soil Boring/Well; Direct Push to Refusal; Hollow Stem Auger; Hollow Stem Auger/Well; Test Pit; Surface Soil; Concrete Floor; Soil Floor; Product; Transformer/Capacitor # (AOC 1); 200 Foot Grid; Equipment Tank; Drums; Existing Monitoring Well; Existing Microwell; Former Microwell; Railroad Tracks; Former Railroad Tracks; Region Boundary; Utility Right of Way; Former Fuel Oil Distribution System; Fuel Oil ICM Interceptor Trench; Surface Waterbody; Scrap Metal Storage Area (SMSA); Paved Area; Current Building; Former Building; Approximate Utility: Catch Basin; Manhole; Outfall

0 40 80 Feet

Prepared/Date: BRP 12/09/14
Checked/Date: JMF 12/09/14

NYSDEC Site # 401003
Al Tech Specialty Steel
Colonie, New York

MACTEC

MPA Investigation Sample Locations
Project 3612122256 Figure 2.2

Document: P:\Projects\3612122256\Projects AI Tech - R1 FS\4.0 Deliverables\4.4 Database\GIS\MapDocuments\R1 Report\R1 Locations_SDs2ALE.mxd PDF: P:\Projects\3612122256\Projects AI Tech - R1 FS\4.0 Deliverables\4.4.1 Report\MPA Investigation\SDs\Figures\Figure 2.2 - MPA Locations.pdf 12/09/2014 3:37 PM kristin.peters

ATTACHMENT 2

2014 MPA INVESTIGATION REPORT TABLES

TABLE 5A: Table Notes- For Use with Section 5 Analytical Results Tables

General Notes:
ND- non detect
ft bgs - feet below ground surface
Bold result - analyte detected
FS - field sample
FD - field duplicate
blank cell sample not analyzed for that parameter
TB - trip blank
mg/kg - milligram per kilogram (ppm)
ug/kg- micograms per kilogram (ppb)
ug/l - micrograms per liter (ppb)
mg/l - milligrams per liter (ppm)

Qualifiers:
U - analyzed but not detected
J - estimated value
UJ - estimated concentration below the method reporting limit
R- rejected
NS- No Standard

Soil Notes:
SCO- NYSDEC Part 375 Remedial Program Soil Cleanup Objective
RES- Residential SCO
COMM-Commercial SCO
IND- Industrial SCO
Yellow highlighted cells indicate an exceedance of the Residential SCO
Orange highlighted cells indicate an exceedance of the Commercial SCO
Red highlighted cells indicate an exceedance of the Industrial SCO
Soil Type

Fill Waste = Soil conatined some or all of the following: ash, scrap metal, fire brick, slag
Native = undisturbed natural soils

*- Site specific criteria for RCRA RFI (1998)
Investigation Objectives

FO - Field observations were made during the site walk and field activities that were identified as needing additional sampling. Samples were collected at these locations that included piles of waste and locations of notable staining.
Fill - Sample collected in fill/waste material to evaluate concentrations of COCs
Native - Sample collected in native soils located in undisturbed natural soils.
GW - Sample collected below the water table.
AS - Sample collected to address a specific AOC.
CP-51 - Sample collected in surficial soils (0 to 1 feet) to evaluate the presence of PCBs compared to the NYSDEC Clean-up Policy CP-51. (NYSDEC, 2010).

Sediment Notes:
SGV- NYS Freshwater Sediment Guidance Value - Table 5 (6/24/2014)
Class B SGV Range - "sediments are slightly to moderatly contaminated and additional testing is required to evlauate potemtial
Class C SGV - values exceeding the Class B range, "sediments are considered highly contaminted and are likely to pose a risk t
Orange highlighted cell indicates the value is within the Class B SGV range
Red highlighted cell exceeds the Class C SGV

Surface Water Notes:
Class D SW - surface water standard for waters suitable for fish, shellfish, and wildlife survival.
Red highlighted cell indicates an exceedance of the Class D surface water quality standard.

Groundwater Notes:
GA Groundwater Criteria - NYS Part 703 Groundwaeter Quality Standards
Red highlighted cells indicate an exceedance of the Class GA Standard

Table 5.1: Shallow Surface Extrusion Region
Inorganic Analytical Results

					Location	SS-D7-01		SS-E5-01		SS-E6-01		SS-E7-01		SS-F5-01		SS-F6-01		SS-F7-01	
					Sample Id	401003SSD70100		401003SSE50100		401003SSE60100		401003SSE70100		401003SSF50100		401003SSF60100		401003SSF70100	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2	
					Soil Type	Fill		Fill		Fill		Fill		Fill		Fill Waste		Fill Waste	
					Sample Date	6/5/2014		6/2/2014		6/2/2014		6/5/2014		6/3/2014		6/3/2014		6/5/2014	
		SCO			Qc Code	FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**														
Metals																			
6010	Aluminum	NS	NS	NS	mg/kg	**13,800**	J	**6,130**	J	**12,100**	J	**5,590**		**10,700**	J	**8,020**	J	**9,660**	
6010	Antimony	NS	NS	NS	mg/kg	**0.92**	J	**88.6**	J	**8.9**	J	**0.76**	J	**103**	J	**7.1**	J	**3.6**	J
6010	**Arsenic**	**16**	**16**	**16**	mg/kg	**10.1**		**100**		**6.9**		**4.6**		**2.8**		**7.1**		**9.4**	
6010	**Barium**	**350**	**400**	**10,000**	mg/kg	**129**		**111**	J	**485**	J	**39**		**119**	J	**92**	J	**116**	
6010	Beryllium	14	590	2,700	mg/kg	**0.72**		1.5	U	**1.3**		**0.3**		**0.36**		**0.44**		**0.43**	
6010	**Cadmium**	**2.5**	**9.3**	**60**	mg/kg	0.22	U	**2**		**1.1**		**0.18**	J	**2.5**		**0.82**		**0.53**	
6010	Calcium	NS	NS	NS	mg/kg	**2,840**		**8,010**	J	**21,100**	J	**37,900**	J	**11,300**	J	**6,540**	J	**19,200**	
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**191**		**76700**	J	**870**	J	**577**	J	**9530**		**655**	J	**2820**	
6010	Cobalt	NS	NS	NS	mg/kg	**22.9**		**427**		**67.6**		**27.9**		**311**	J	**39.3**		**231**	
6010	**Copper**	**270**	**270**	**10,000**	mg/kg	**52.4**		**3150**	J	**152**	J	**52.5**		**707**		**96.1**	J	**221**	
6010	Iron	NS	NS	NS	mg/kg	**32,700**	J	**359,000**	J	**30,800**	J	**17,800**	J	**81,900**	J	**24,900**	J	**42,000**	J
6010	Lead	400	1,000	3,900	mg/kg	**21.1**		**23.5**		**240**		**8.1**		**69.5**	J	**52.1**		**114**	
6010	Magnesium	NS	NS	NS	mg/kg	**6,770**		**2,260**	J	**6,080**	J	**4,850**	J	**3,880**	J	**4,200**	J	**5,450**	
6010	**Manganese**	**2,000**	**10,000**	**10,000**	mg/kg	**666**		**4560**	J	**983**	J	**352**		**1640**		**563**	J	**1190**	
7471	Mercury	0.81	2.8	5.7	mg/kg	**0.034**		**0.048**		**0.079**		0.019	U	**0.06**		**0.047**	J	**0.1**	
6010	Molybdenum*	NS	NS	4088	mg/kg	**14.9**		**1810**	J	**127**	J	**68.2**		**2040**	J	**71.8**	J	**214**	
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**174**		**39300**		**1080**		**580**	J	**8490**		**908**		**3470**	
6010	Potassium	NS	NS	NS	mg/kg	**1,190**		**605**	J	**1,040**	J	**865**		**654**		**873**	J	**904**	
6010	Selenium	36	1,500	6,800	mg/kg	4.1	U	**2.2**	J	**1.4**	J	**1.1**	J	**15**		**0.48**	J	**2.3**	J
6010	Silver	36	1,500	6,800	mg/kg	0.61	U	4.5	U	**0.54**	J	0.6	U	**1.7**	J	**0.36**	J	0.62	U
6010	Sodium	NS	NS	NS	mg/kg	**57.6**	J	**116**	J	**584**		**58.7**	J	**280**		**90.3**	J	**79.2**	J
6010	Thallium	NS	NS	NS	mg/kg	6.1	U	**18.9**		6.5	U	6	U	**1.2**	J	6.1	U	6.2	U
6010	Titanium	NS	NS	NS	mg/kg	**77.3**		**786**	J	**427**	J	**303**	J	**423**	J	**149**	J	**164**	
6010	Vanadium	NS	NS	NS	mg/kg	**25.7**		**484**	J	**50.6**	J	**26.6**		**354**	J	**28**	J	**58.7**	
6010	Zinc	2,200	10,000	10,000	mg/kg	**89.6**	J	**62.3**	J	**131**	J	**34.5**		**127**	J	**153**	J	**87**	
7199	**Chromium, Hexavalent**	**22**	**400**	**800**	mg/kg	**1.1**		**41.4**		**2.7**		**1.5**		**8.8**	J	**6.7**		**10.4**	
4500	pH	NS	NS	NS	PH UNITS	**6.59**		**8.02**		**8.23**		**7.63**		**7.69**		**8.18**		**7.89**	

Notes: See Table 5A

Table 5.2: Shallow Surface Rolling Mill Region
Inorganic Analytical Results

					Location	**SS-G3-01**		**SS-G4-01**		**SS-G4-03**		**SS-H3-01**		**SS-H4-01**		**SS-H5-01**		**SS-I3-01**		**SS-I5-01**	
					Sample Id	401003SSG30100		401003SSG40100		401003SSG40300		401003SSH30100		401003SSH40100		401003SSH50100		401003SSI30100		401003SSI50100	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2	
					Soil Type	Fill		Fill Waste		AS - Calow Pit		Fill Waste		Fill Waste		Fill Waste		Fill Waste		Fill Waste	
					Sample Date	6/5/2014 8:45		6/10/2014 15:50		6/9/2014 12:05		6/9/2014 15:55		6/10/2014 17:15		6/4/2014 10:25		6/4/2014 15:20		6/10/2014 11:20	
		SCO			**Qc Code**	FS		FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																
Metals																					
6010	Aluminum	NS	NS	NS	mg/kg	**9,930**		**5,370**	J	**9,500**		**18,700**		**6,160**	J	**6,100**	J	**7,460**		**13,600**	
6010	Antimony	NS	NS	NS	mg/kg	**2.7**	J	**47.3**	J	**1.8**	J	**20.3**		**37**	J	**33.3**	J	**4.5**	J	**1.4**	J
6010	**Arsenic**	**16**	**16**	**16**	mg/kg	**7.4**		**26.8**		**7.3**		**4.4**	J	**10.8**		**19.2**		**8.7**		**29**	
6010	Barium	350	400	10,000	mg/kg	**141**		**111**	J	**204**		**82.1**		**72.3**	J	**174**	J	**73.5**		**225**	J
6010	Beryllium	14	590	2,700	mg/kg	**0.6**		0.24	U	**0.53**		**0.32**		**0.29**		**0.49**		**0.26**		**0.95**	
6010	**Cadmium**	**2.5**	**9.3**	**60**	mg/kg	**0.31**		0.24	U	**2.5**		**2.6**		**0.3**		**0.5**		**0.74**		**1.3**	
6010	Calcium	NS	NS	NS	mg/kg	**22,700**	J	**22,200**	J	**32,100**		**22,800**		**16,900**	J	**5,710**	J	**86,900**	J	**15,500**	
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**2290**	J	**5030**		**792**		**11700**		**3070**	J	**2880**		**3830**	J	**257**	J
6010	Cobalt	NS	NS	NS	mg/kg	**41.9**		**384**		**87.9**		**164**		**481**		**653**	J	**78.5**		**54.2**	
6010	**Copper**	**270**	**270**	**10,000**	mg/kg	**63.5**		**1350**		**456**		**3800**		**438**	J	**652**		**206**		**170**	J
6010	Iron	NS	NS	NS	mg/kg	**31,800**	J	**122,000**	J	**44,000**	J	**91,200**	J	**42,100**	J	**35,600**	J	**38,000**	J	**28,400**	J
6010	**Lead**	**400**	**1,000**	**3,900**	mg/kg	**14.4**		**25.8**	J	**117**		**142**		**45.5**		**168**	J	**51.6**		**277**	J
6010	Magnesium	NS	NS	NS	mg/kg	**9,630**	J	**5,590**	J	**4,660**		**8,120**		**4,790**	J	**2,370**	J	**10,500**	J	**3,570**	J
6010	**Manganese**	**2,000**	**10,000**	**10,000**	mg/kg	**695**		**1600**		**805**		**2350**		**1210**	J	**847**		**1210**		**925**	
7471	Mercury	0.81	2.8	5.7	mg/kg	**0.023**	J	**0.017**	J	**0.3**		**0.087**		**0.018**	J	**0.19**		**0.034**	J	**0.11**	
6010	Molybdenum*	NS	NS	4088	mg/kg	**104**		**1690**		**462**		**522**		**466**	J	**191**	J	**271**		**41**	J
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**1450**	J	**27400**		**4130**		**8090**		**4740**		**3100**		**3330**	J	**389**	J
6010	Potassium	NS	NS	NS	mg/kg	**930**		**485**	J	**1,040**		**640**		**584**	J	**685**		**882**		**1,170**	J
6010	Selenium	36	1,500	6,800	mg/kg	**1.1**	J	**2.6**	J	**1.6**	J	**2.2**	J	**2.6**	J	**4.1**	J	**2.4**	J	**1.1**	J
6010	Silver	36	1,500	6,800	mg/kg	0.7	U	**1.6**		0.68	U	**1.2**		0.54	U	**0.9**	J	0.7	U	**0.83**	
6010	Sodium	NS	NS	NS	mg/kg	**264**		**118**	J	**240**		**133**	J	**122**	J	**109**	J	**167**		**306**	
6010	Thallium	NS	NS	NS	mg/kg	7	U	7.3	U	6.8	U	**1**	J	5.4	U	**0.84**	J	7	U	6.9	U
6010	Titanium	NS	NS	NS	mg/kg	**193**	J	**234**	J	**179**		**336**		**194**	J	**285**	J	**225**	J	**313**	
6010	Vanadium	NS	NS	NS	mg/kg	**31.4**		**65.7**	J	**44.1**		**139**		**87.1**	J	**62**	J	**81.4**		**42.1**	J
6010	**Zinc**	**2,200**	**10,000**	**10,000**	mg/kg	**52.7**		**281**	J	**930**		**454**		**82.7**	J	**136**	J	**93.4**		**512**	
7199	**Chromium, Hexavalent**	**22**	**400**	**800**	mg/kg	**2**		**5.3**		**10.8**		**3.1**		**10.5**	J	**16.2**	J	**4.4**		**1.7**	J
4500	pH	NS	NS	NS	PH UNITS	**7.69**		**8.27**		**8.15**		**8.05**		**8.51**		**7.49**		**7.88**		**7.29**	

Notes: See Table 5A

Table 5.2: Shallow Surface Rolling Mill Region
Inorganic Analytical Results

					Location	SS-I6-01		SS-I7-01		SS-J3-01		SS-J4-01		SS-J5-01		SS-J5-03		SS-J6-01		SS-J7-01	
					Sample Id	401003SSI60100		401003SSI70100		401003SSJ30100		401003SSJ40100		401003SSJ50100		401003SSJ50300		401003SSJ60100		401003SSJ70100	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2	
					Soil Type	Fill		Fill Waste		Fill Waste		Fill		Fill Waste		AS - Coal Storage		Fill Waste		Fill Waste	
					Sample Date	6/4/2014 9:00		6/4/2014 12:10		6/4/2014 14:05		6/4/2014 10:00		6/10/2014 8:55		6/9/2014 11:35		6/6/2014 11:25		6/6/2014 10:10	
		SCO			Qc Code	FS		FS		FS		FS		FS		FS		FS		FS	
Method	Parameter	RES	COMM	IND	Units																
Metals																					
6010	Aluminum	NS	NS	NS	mg/kg	**6,070**	J	**6,210**	J	**9,010**	J	**7,460**	J	**6,530**		**4,210**		**6,210**	J	**7,540**	J
6010	Antimony	NS	NS	NS	mg/kg	**8**	J	**2.5**	J	**4**	J	**13**	J	**11.6**	J	**77.2**		**13.7**	J	**3.3**	J
6010	**Arsenic**	**16**	**16**	**16**	mg/kg	**2.3**		**16.6**		**4.9**		**5.8**		**5.8**		**28.2**	J	11.8	U	**6.3**	
6010	Barium	350	400	10,000	mg/kg	**63**	J	**120**		**82.7**		**64.6**		**89.2**	J	**72.8**		**78.1**		**74.2**	
6010	Beryllium	14	590	2,700	mg/kg	**0.25**		**0.39**		**0.3**		**0.33**		**0.17**	J	0.22	U	0.24	U	**0.34**	
6010	**Cadmium**	**2.5**	**9.3**	**60**	mg/kg	**0.39**		**0.3**		**2.2**		**0.43**		**0.68**		**1.3**		**0.93**		**1.3**	
6010	Calcium	NS	NS	NS	mg/kg	**57,300**	J	**3,970**	J	**63,300**	J	**12,100**		**16,700**		**7,100**		**9,630**		**19,100**	
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**5720**	J	**857**	J	**2420**	J	**1290**		**8460**	J	**37900**		**10500**		**2480**	
6010	Cobalt	NS	NS	NS	mg/kg	**105**	J	**372**		**76.5**		**64.3**		**295**		**815**		**1890**		**84.9**	
6010	**Copper**	**270**	**270**	**10,000**	mg/kg	**524**	J	**92.9**		**275**		**935**		**1030**	J	**2340**		**1650**		**375**	
6010	Iron	NS	NS	NS	mg/kg	**47,800**	J	**28,400**	J	**32,000**	J	**31,500**	J	**90,500**	J	**230,000**	J	**132,000**	J	**39,100**	J
6010	**Lead**	**400**	**1,000**	**3,900**	mg/kg	**21.1**	J	**48.1**		**66.5**		**39.6**		**48.7**	J	**38.5**		**35.6**		**48.7**	
6010	Magnesium	NS	NS	NS	mg/kg	**10,300**		**2,160**	J	**9,150**	J	**4,980**		**3,480**	J	**1,900**		**3,250**		**5,150**	
6010	**Manganese**	**2,000**	**10,000**	**10,000**	mg/kg	**1020**	J	**532**		**1100**		**1120**		**1810**		**4110**		**1860**		**811**	
7471	Mercury	0.81	2.8	5.7	mg/kg	**0.023**		**0.19**	J	**0.031**	J	**0.028**		**0.06**		**0.031**		**0.044**		**0.08**	
6010	Molybdenum*	NS	NS	4088	mg/kg	**347**	J	**168**		**172**		**324**		**1080**	J	**3190**		**1700**		**230**	
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**4250**	J	**4230**	J	**1990**	J	**2340**		**9630**	J	**22700**		**9030**		**2040**	
6010	Potassium	NS	NS	NS	mg/kg	**759**		**684**		**993**		**658**		**797**	J	**622**		**501**		**870**	
6010	Selenium	36	1,500	6,800	mg/kg	**1.5**	J	**6.6**		**2.7**	J	**1.5**	J	**2.7**	J	**3.5**	J	**2.8**	J	**2.1**	J
6010	Silver	36	1,500	6,800	mg/kg	0.61	U	0.78	U	0.71	U	**0.6**		0.66	U	0.65	U	0.71	U	0.61	U
6010	Sodium	NS	NS	NS	mg/kg	**148**		**98.3**	J	**140**	J	**128**	J	**154**		**124**	J	**152**	J	**129**	J
6010	Thallium	NS	NS	NS	mg/kg	6.1	U	7.8	U	7.1	U	5.7	U	6.6	U	**6.2**	J	**1.1**	J	6.1	U
6010	Titanium	NS	NS	NS	mg/kg	**254**	J	**172**	J	**230**	J	**321**	J	**410**		**286**		**311**		**263**	
6010	Vanadium	NS	NS	NS	mg/kg	**100**		**56.7**		**55.2**		**69.7**		**218**	J	**642**		**489**		**67.3**	
6010	**Zinc**	**2,200**	**10,000**	**10,000**	mg/kg	**65.5**		**79**		**302**		**131**	J	**84.5**		**44.4**		**93.1**		**165**	
7199	**Chromium, Hexavalent**	**22**	**400**	**800**	mg/kg	**4.2**		**10.4**		**12.8**		**0.97**		**15.4**	J	**37.4**		**7.5**		**6.1**	
4500	pH	NS	NS	NS	PH UNITS	**7.72**		**7.53**		**8.22**		**7.93**		**8.23**		**8.5**		**6.97**		**7.54**	

Notes: See Table 5A

Table 5.2: Shallow Surface Rolling Mill Region
Inorganic Analytical Results

					Location	**SS-K4-01**		**SS-K5-01**		**SS-K6-01**		**SS-K7-02**		**SS-L4-01**		**SS-L5-01**		**SS-L7-02**		**SS-M3-01**	
					Sample Id	401003SSK40100		401003SSK50100		401003SSK60100		401003SSK70200		401003SSL40100		401003SSL50100		401003SSL70200		401003SSM30100	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2	
					Soil Type	Fill Waste		Fill Waste		Fill		Fill		Fill		Fill		Fill Waste		Fill Waste	
					Sample Date	6/9/2014 13:05		6/9/2014 12:45		6/3/2014 14:25		6/5/2014 17:15		6/3/2014 16:10		6/3/2014 13:15		6/5/2014 15:45		6/5/2014 8:25	
		SCO			**Qc Code**	FS		FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																
Metals																					
6010	Aluminum	NS	NS	NS	mg/kg	**11,800**		**8,080**		**7,020**	J	**7,680**	J	**5,160**	J	**8,400**	J	**6,460**	J	**9,090**	J
6010	Antimony	NS	NS	NS	mg/kg	**5.9**	J	**0.99**	J	**25.6**	J	**8**	J	**42**	J	**6.5**	J	**23.7**	J	**5.1**	J
6010	**Arsenic**	**16**	**16**	**16**	mg/kg	**15.1**		**5.2**		**5**	J	**2**	J	**14.2**		**7.1**		20.6	U	**5.9**	
6010	Barium	350	400	10,000	mg/kg	**247**	J	**56.6**		**89.2**		**111**	J	**44.7**	J	**125**	J	**78.7**	J	**81.3**	
6010	Beryllium	14	590	2,700	mg/kg	**0.5**		**0.4**		1	U	**0.26**		**0.3**		**0.44**		0.21	U	**0.36**	
6010	**Cadmium**	**2.5**	**9.3**	**60**	mg/kg	**3.5**		**0.3**		**2.6**		**1.3**		**0.41**		**1.2**		**13.4**		**11.7**	
6010	Calcium	NS	NS	NS	mg/kg	**4,360**		**2,130**		**4,400**		**12,600**	J	**9,250**	J	**11,500**	J	**8,620**	J	**4,940**	
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**2740**	J	**318**		**5780**		**5460**		**4040**		**638**		**16500**		**1940**	
6010	Cobalt	NS	NS	NS	mg/kg	**974**		**20.3**		**453**		**125**	J	**312**	J	**25.8**	J	**403**	J	**96.3**	
6010	**Copper**	**270**	**270**	**10,000**	mg/kg	**765**	J	**60.7**		**4140**		**947**		**884**		**678**		**1880**		**375**	
6010	Iron	NS	NS	NS	mg/kg	**60,100**	J	**20,800**	J	**150,000**	J	**67,500**	J	**53,400**	J	**27,900**	J	**168,000**	J	**41,000**	J
6010	**Lead**	**400**	**1,000**	**3,900**	mg/kg	**573**	J	**46.5**		**200**		**5730**	J	**55.6**	J	**176**	J	**100**	J	**115**	
6010	Magnesium	NS	NS	NS	mg/kg	**5,600**	J	**3,900**		**3,160**		**4,650**		**3,710**	J	**5,920**	J	**3,580**		**3,040**	
6010	**Manganese**	**2,000**	**10,000**	**10,000**	mg/kg	**876**		**1010**		**14900**		**1380**		**1130**		**1990**		**2570**		**1360**	
7471	Mercury	0.81	2.8	5.7	mg/kg	**0.094**		**0.036**		**0.65**		**0.03**		**0.018**	J	**0.29**		**0.027**		**0.069**	J
6010	Molybdenum*	NS	NS	4088	mg/kg	**226**	J	**26.5**		**1110**		**709**		**681**	J	**39.8**	J	**2550**		**285**	
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**3190**	J	**401**		**4840**		**4620**		**12500**		**456**		**15400**		**2160**	
6010	Potassium	NS	NS	NS	mg/kg	**773**	J	**952**		**541**		**924**		**465**		**720**		**701**		**695**	
6010	Selenium	36	1,500	6,800	mg/kg	**8.2**		**1.2**	J	**10.5**	J	**1.2**	J	**3**	J	**1.6**	J	**3.1**	J	**2.8**	J
6010	Silver	36	1,500	6,800	mg/kg	**0.3**	J	0.63	U	**23**		0.69	U	**0.7**	J	**2.1**	J	0.62	U	0.86	U
6010	Sodium	NS	NS	NS	mg/kg	**92.1**	J	**44.8**	J	**76.9**	J	**175**		**266**		**47**	J	**150**		**99.9**	J
6010	Thallium	NS	NS	NS	mg/kg	**0.74**	J	6.3	U	**8.4**	J	**0.4**	J	**0.91**	J	6.4	U	**1.8**	J	8.6	U
6010	Titanium	NS	NS	NS	mg/kg	**255**		**135**		**410**	J	**444**	J	**173**	J	**94**	J	**419**	J	**230**	
6010	Vanadium	NS	NS	NS	mg/kg	**83.3**	J	**31.8**		**276**		**146**		**115**	J	**26.8**	J	**447**		**83.2**	
6010	**Zinc**	**2,200**	**10,000**	**10,000**	mg/kg	**1120**		**54.1**		**593**	J	**126**	J	**58.3**	J	**181**	J	**152**	J	**5210**	J
7199	**Chromium, Hexavalent**	**22**	**400**	**800**	mg/kg	**8.7**	J	**3.2**		**34**		**8.5**	J	**12.8**	J	**8.6**	J	**30.2**	J	**4.1**	
4500	pH	NS	NS	NS	PH UNITS	**7.97**		**8.04**		**7.45**		**7.76**		**8.3**		**8.01**		**7.86**		**6.46**	

Notes: See Table 5A

Table 5.2: Shallow Surface Rolling Mill Region
Inorganic Analytical Results

					Location	**SS-M5-01**		**SS-M5-01**		**SS-M6-01**		**SS-M7-01**	
					Sample Id	401003SSM50100		401003SSM50100XD		401003SSM60100		401003SSM70100	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2	
					Soil Type	Fill Waste		Fill Waste		Fill Waste		Fill Waste	
					Sample Date	6/3/2014 11:00		6/3/2014 11:00		6/5/2014 13:10		6/6/2014 8:50	
		SCO			**Qc Code**	FS		FD		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**								
Metals													
6010	Aluminum	NS	NS	NS	mg/kg	**7,610**	J	**7,440**	J	**10,200**	J	**9,200**	J
6010	Antimony	NS	NS	NS	mg/kg	**8.5**	J	**8.6**	J	**15.9**	J	**43.4**	J
6010	**Arsenic**	**16**	**16**	**16**	mg/kg	**8.4**		**9.3**		**6.1**		**11.8**	
6010	Barium	350	400	10,000	mg/kg	**93.6**	J	**98.5**	J	**167**		**144**	J
6010	Beryllium	14	590	2,700	mg/kg	**0.41**		**0.44**		**0.28**		**0.55**	
6010	**Cadmium**	**2.5**	**9.3**	**60**	mg/kg	**0.57**		**0.72**		**2.3**		**0.46**	
6010	Calcium	NS	NS	NS	mg/kg	**60,700**	J	**58,700**	J	**17,500**		**11,100**	J
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**830**		**869**		**9890**		**2030**	
6010	Cobalt	NS	NS	NS	mg/kg	**72.4**	J	**106**	J	**227**		**238**	J
6010	**Copper**	**270**	**270**	**10,000**	mg/kg	**3310**	J	**612**	J	**1630**		**290**	
6010	Iron	NS	NS	NS	mg/kg	**28,800**	J	**30,000**	J	**119,000**	J	**36,300**	J
6010	**Lead**	**400**	**1,000**	**3,900**	mg/kg	**389**	J	**48.9**	J	**254**		**1050**	J
6010	Magnesium	NS	NS	NS	mg/kg	**5,590**	J	**6,260**	J	**5,230**		**3,710**	
6010	**Manganese**	**2,000**	**10,000**	**10,000**	mg/kg	**2770**		**2960**		**2230**		**1380**	
7471	Mercury	0.81	2.8	5.7	mg/kg	**0.033**		**0.041**		**0.15**	J	**0.19**	
6010	Molybdenum*	NS	NS	4088	mg/kg	**118**	J	**186**	J	**1630**		**119**	
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**1240**	J	**2510**	J	**8320**		**1430**	
6010	Potassium	NS	NS	NS	mg/kg	**768**		**691**		**990**		**812**	
6010	Selenium	36	1,500	6,800	mg/kg	**1.2**	J	**1.5**	J	**9.5**		**4.9**	
6010	Silver	36	1,500	6,800	mg/kg	**4.2**	J	**2.5**	J	0.78	U	0.67	U
6010	Sodium	NS	NS	NS	mg/kg	**274**		**257**		**161**	J	**223**	
6010	Thallium	NS	NS	NS	mg/kg	6.3	U	5.7	U	7.8	U	6.7	U
6010	Titanium	NS	NS	NS	mg/kg	**131**	J	**171**	J	**310**		**322**	J
6010	Vanadium	NS	NS	NS	mg/kg	**42.1**	J	**47.3**	J	**566**		**66.4**	
6010	**Zinc**	**2,200**	**10,000**	**10,000**	mg/kg	**124**	J	**132**	J	**362**	J	**108**	J
7199	**Chromium, Hexavalent**	**22**	**400**	**800**	mg/kg	**3.5**	J	**16.6**	J	**8.2**		**11.4**	J
4500	pH	NS	NS	NS	PH UNITS	**8.36**		**8.42**		**7.54**		**7.67**	

Notes: See Table 5A

Table 5.3: Shallow Surface SMSA Region
Inorganic Analytical Results

					Location	**SS-D4-01**		**SS-D4-02**		**SS-D5-01**		**SS-E4-01**		**SS-F3-01**		**SS-F4-01**		**SS-G5-01**	
					Sample Id	401003SSD40100		401003SSD40202		401003SSD50100		401003SSE40100		401003SSF30100		401003SSF40100		401003SSG50100	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2	
					Soil Type	Fill		Fill		Fill Waste		Fill Waste		Fill		Fill Waste		Fill Waste	
					Sample Date	6/3/2014 8:35		6/6/2014 8:45		6/2/2014 12:35		6/11/2014 10:15		6/2/2014 15:00		6/9/2014 17:00		6/10/2014 14:20	
		SCO			**Qc Code**	FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**														
Metals																			
6010	Aluminum	NS	NS	NS	mg/kg	**11,300**	J	**9,460**		**5,480**	J	**10,600**	J	**9,420**	J	**7,880**		**8,300**	J
6010	Antimony	NS	NS	NS	mg/kg	**3.6**	J	**15.2**	**J**	**290**	**J**	**25.5**	**J**	16.8	UJ	**15.8**	J	**10.1**	J
6010	Arsenic	**16**	**16**	**16**	mg/kg	**8**		21.1	U	**17.8**		**18.9**		**6.4**		**1**	J	**14.6**	
6010	Barium	350	400	10,000	mg/kg	**83.9**	J	**214**		**143**	J	**131**	J	**80.5**	J	**112**		**119**	J
6010	Beryllium	14	590	2,700	mg/kg	**0.56**		**0.78**		**0.047**	J	**0.38**		**0.45**		**0.32**		**0.5**	
6010	Cadmium	2.5	9.3	60	mg/kg	**0.27**		**1.3**		0.24	U	**0.76**		**0.16**	J	**0.65**		**0.32**	J
6010	Calcium	NS	NS	NS	mg/kg	**4,730**	J	**7,180**		**17,000**	J	**3,860**	J	**11,800**	J	**4,850**		**6,310**	J
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**414**	J	**13300**		**16600**	J	**2260**		**14.2**	J	**14400**		**1100**	
6010	Cobalt	NS	NS	NS	mg/kg	**30.2**		**7430**		**506**		**279**		**11**		**147**		**130**	
6010	**Copper**	**270**	**270**	**10,000**	mg/kg	**58.6**	J	**455**		**1710**	J	**307**		**30.3**	J	**455**		**596**	
6010	Iron	NS	NS	NS	mg/kg	**29,800**	J	**98,600**	J	**146,000**	J	**51,700**	J	**26,400**	J	**66,300**	J	**49,600**	J
6010	Lead	400	1,000	3,900	mg/kg	**21.2**		**41.4**		**74.3**		**143**	J	**16.6**		**30.3**		**51.2**	J
6010	Magnesium	NS	NS	NS	mg/kg	**5,640**	J	**4,640**		**4,710**	J	**5,370**	J	**6,000**	J	**4,510**		**4,180**	J
6010	**Manganese**	**2,000**	**10,000**	**10,000**	mg/kg	**657**	J	**1670**		**3330**	J	**1100**		**543**	J	**1580**		**1090**	
7471	Mercury	0.81	2.8	5.7	mg/kg	**0.061**	J	**0.19**		**0.4**		**0.078**		**0.021**	J	**0.081**		**0.05**	
6010	Molybdenum	NS	NS	4088*	mg/kg	**40.1**	J	**651**		**2870**	J	**205**		**0.43**	J	**355**		**543**	
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**635**		**11500**		**25700**		**3040**		**27.9**		**9630**		**7730**	
6010	Potassium	NS	NS	NS	mg/kg	**1,030**	J	**867**		**536**	J	**1,050**	J	**1,090**	J	**1,050**		**736**	J
6010	Selenium	36	1,500	6,800	mg/kg	4.6	U	**5.6**		**6.3**		**1.6**	J	4.5	U	**1.7**	J	**3.3**	J
6010	Silver	36	1,500	6,800	mg/kg	**0.36**	J	0.63	U	**2.6**		**0.92**		**0.23**	J	0.61	U	**0.76**	J
6010	Sodium	NS	NS	NS	mg/kg	**75.9**	J	**153**		**105**	J	**62.2**	J	**33.1**	J	**61.3**	J	**175**	J
6010	Thallium	NS	NS	NS	mg/kg	6.9	U	**26**		**4.9**	J	6.9	U	6.7	U	**3.1**	J	8.1	U
6010	Titanium	NS	NS	NS	mg/kg	**53.6**	J	**278**		**331**	J	**158**	J	**38.3**	J	**348**		**192**	J
6010	Vanadium	NS	NS	NS	mg/kg	**23.6**	J	**95.8**		**349**	J	**47.6**	J	**15.4**	J	**118**		**53.1**	J
6010	Zinc	2,200	10,000	10,000	mg/kg	**83.2**	J	**77.7**		**106**	J	**135**	J	**72.5**	J	**95.9**		**117**	J
7199	**Chromium, Hexavalent**	**22**	**400**	**800**	**mg/kg**	**2.1**		**44.6**		**19.4**		**10.9**		**0.78**		**12.9**		**4.2**	
4500	pH	NS	NS	NS	PH UNITS	**8.17**		**8.53**		**8.25**		**7.92**		**8.49**		**8.42**		**7.78**	

Notes: See Table 5A

Table 5.4: Shallow Surface Melt Shop Region
Inorganic Analytical Results

					Location	SS-G2-01		SS-H2-01		SS-H3-02		SS-I2-02		SS-J1-01		SS-K1-01		SS-K2-01		SS-K2-01	
					Sample Id	401003SSG20100		401003SSH20100		401003SSH30200		401003SSI20200		401003SSJ10100		401003SSK10100		401003SSK20100		401003SSK20100XD	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2	
					Soil Type	Fill Waste		Fill Waste		Fill Waste		FO - Pile		Fill Waste		Fill Waste		Fill Waste		Fill Waste	
					Sample Date	6/4/2014 11:45		6/9/2014 14:40		6/3/2014 10:10		6/6/2014 11:20		6/4/2014 14:25		6/4/2014 13:50		6/9/2014 10:40		6/9/2014 10:40	
		SCO			Qc Code	FS		FS		FS		FS		FS		FS		FS		FD	
Method	Parameter	RES	COMM	IND	Units																
6010	Aluminum	NS	NS	NS	mg/kg	**10,000**	J	**10,800**		**20,000**	J	**10,800**	J	**13,600**		**10,900**		**10,900**		**11,700**	
6010	Antimony	NS	NS	NS	mg/kg	**12.7**	J	**39.4**	J	**0.89**	J	**8.5**	J	**6.3**	J	**40**		**2.2**	J	**3.2**	J
6010	**Arsenic**	**16**	**16**	**16**	mg/kg	11.6	U	**3**		**2.3**		**5.9**		**15.9**		**33.6**		**8.8**		**7.3**	
6010	Barium	350	400	10,000	mg/kg	**206**		**136**		**95.9**	J	**186**	J	**183**		**110**		**156**	J	**92.4**	J
6010	Beryllium	14	590	2,700	mg/kg	**0.51**		**0.068**	J	**0.35**		**0.24**		**0.57**		**0.34**		**0.5**		**0.47**	
6010	**Cadmium**	**2.5**	**9.3**	**60**	mg/kg	**2**		**5.5**		**0.47**		**20.2**		**13.3**		**1.2**		**2.3**	J	**1.5**	J
6010	Calcium	NS	NS	NS	mg/kg	**10,300**		**42,700**		**6,810**	J	**27,800**	J	**14,800**		**13,000**		**28,800**		**24,200**	
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**6940**		**15700**		**684**	J	**4540**		**3640**		**25100**		**1490**	J	**3050**	J
6010	Cobalt	NS	NS	NS	mg/kg	**119**		**215**		**35.5**		**107**	J	**109**		**339**		**44.1**		**46.2**	
6010	**Copper**	**270**	**270**	**10,000**	mg/kg	**398**		**1310**		**135**	J	**1050**		**425**		**1680**		**230**	J	**180**	J
6010	Iron	NS	NS	NS	mg/kg	**59,500**	J	**141,000**	J	**28,000**	J	**107,000**	J	**54,600**	J	**171,000**		**34,900**	J	**52,300**	J
6010	**Lead**	**400**	**1,000**	**3,900**	mg/kg	**49.6**		**595**		**37**		**697**	J	**534**		**23.6**		**391**	J	**107**	J
6010	Magnesium	NS	NS	NS	mg/kg	**6,090**		**17,500**		**6,780**	J	**5,950**		**7,450**		**6,860**		**7,950**	J	**10,500**	J
6010	**Manganese**	**2,000**	**10,000**	**10,000**	mg/kg	**1620**		**2630**		**600**	J	**4300**		**2880**		**3210**		**1300**	J	**2910**	J
7471	**Mercury**	**0.81**	**2.8**	**5.7**	mg/kg	**0.11**		**0.3**		**0.028**		**0.97**		**0.9**	J	**0.02**	J	**0.043**		**0.053**	
6010	Molybdenum	NS	NS	4088	mg/kg	**225**		**1900**		**181**	J	**672**		**540**		**1270**		**157**	J	**348**	J
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**3820**		**12900**		**927**		**3650**		**3740**		**15000**		**1300**	J	**1500**	J
6010	Potassium	NS	NS	NS	mg/kg	**976**		**889**		**982**	J	**916**		**2140**		**907**		**1040**	J	**982**	J
6010	Selenium	36	1,500	6,800	mg/kg	**3.6**	J	**4**		**1.7**	J	**5.4**		**7.2**		**1.4**	J	**1.8**	J	**2.7**	J
6010	Silver	36	1,500	6,800	mg/kg	**0.36**	J	**1.7**		0.55	U	**2.8**		**4.7**		2.9	U	0.68	U	0.67	U
6010	Sodium	NS	NS	NS	mg/kg	**85.5**	J	**191**		**64.2**	J	**121**	J	**338**		**73.8**	J	**83.2**	J	**121**	J
6010	Thallium	NS	NS	NS	mg/kg	**1.5**	J	6	U	5.5	U	64.9	U	5.5	U	**5.9**		6.8	U	6.7	U
6010	Titanium	NS	NS	NS	mg/kg	**160**	J	**625**		**722**	J	**216**	J	**551**		**233**		**186**	J	**296**	J
6010	Uranium	NS	NS	NS	mg/kg							**1.1**									
6010	Vanadium	NS	NS	NS	mg/kg	**93.4**		**433**		**56.2**	J	**168**		**113**		**320**		**59**	J	**152**	J
6010	**Zinc**	**2,200**	**10,000**	**10,000**	mg/kg	**129**	J	**372**		**91.1**	J	**1640**	J	**10100**		**153**		**1570**	J	**684**	J
6020	Zirconium	NS	NS	NS	mg/kg							**42.8**									
7199	**Chromium, Hexavalent**	**22**	**400**	**800**	mg/kg	**23.4**		**10.9**		**2.5**				**13.7**		**11.1**		**3.7**	J	**1.5**	J
4500	pH	NS	NS	NS	PH UNITS	**8.1**		**8.35**		**8.55**		**7.81**		**7.6**		**7.9**		**8.22**		**8.27**	

Notes: See Table 5A

Table 5.4: Shallow Surface Melt Shop Region
Inorganic Analytical Results

					Location	**SS-K3-01**		**SS-L2-01**		**SS-L3-01**		**SS-M2-01**	
					Sample Id	401003SSK30100		401003SSL20100		401003SSL30100		401003SSM20100	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2	
					Soil Type	Fill		Fill		Fill		Fill Waste	
					Sample Date	6/3/2014 13:45		6/9/2014 15:35		6/3/2014 12:35		6/5/2014 11:00	
		SCO			**Qc Code**	FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**								
6010	Aluminum	NS	NS	NS	mg/kg	**15,400**	J	**16,600**		**11,200**	J	**5,130**	J
6010	Antimony	NS	NS	NS	mg/kg	**1.5**	J	**0.81**	J	**10.4**	J	**16**	J
6010	**Arsenic**	**16**	**16**	**16**	mg/kg	**13.9**		**7.1**		2.2	U	**21.1**	
6010	Barium	350	400	10,000	mg/kg	**126**	J	**127**		**80**	J	**72.5**	
6010	Beryllium	14	590	2,700	mg/kg	**0.74**		**0.8**		**0.14**	J	0.2	U
6010	**Cadmium**	**2.5**	**9.3**	**60**	mg/kg	**0.59**		**0.44**		**0.92**		**0.84**	
6010	Calcium	NS	NS	NS	mg/kg	**7,770**	J	**2,450**		**12,900**	J	**52,100**	
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**639**	J	**90.7**		**7330**	J	**11100**	
6010	Cobalt	NS	NS	NS	mg/kg	**79.8**	J	**26.2**		**261**	J	**179**	
6010	**Copper**	**270**	**270**	**10,000**	mg/kg	**121**	J	**42.1**		**1110**	J	**2490**	
6010	Iron	NS	NS	NS	mg/kg	**36,300**	J	**32,000**	J	**97,300**	J	**106,000**	J
6010	**Lead**	**400**	**1,000**	**3,900**	mg/kg	**89.7**	J	**44**		**89.3**	J	**820**	
6010	Magnesium	NS	NS	NS	mg/kg	**6,810**		**5,350**		**4,040**		**11,900**	
6010	**Manganese**	**2,000**	**10,000**	**10,000**	mg/kg	**1260**	J	**948**		**2340**	J	**2670**	
7471	**Mercury**	**0.81**	**2.8**	**5.7**	mg/kg	**0.087**		**0.11**		**0.058**		**0.025**	
6010	Molybdenum	NS	NS	4088	mg/kg	**91.2**	J	**15.1**		**1330**	J	**876**	
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**2610**	J	**125**		**6420**	J	**6250**	
6010	Potassium	NS	NS	NS	mg/kg	**1700**		**2030**		**699**		**498**	
6010	Selenium	36	1,500	6,800	mg/kg	7.4	U	**2.3**	J	**4.6**		**4**	
6010	Silver	36	1,500	6,800	mg/kg	1.1	U	0.67	U	0.67	U	**0.66**	
6010	Sodium	NS	NS	NS	mg/kg	**123**	J	**51.2**	J	**302**		**156**	
6010	Thallium	NS	NS	NS	mg/kg	11.1	U	6.7	U	6.7	U	**1.5**	J
6010	Titanium	NS	NS	NS	mg/kg	**274**	J	**206**		**421**	J	**265**	
6010	Uranium	NS	NS	NS	mg/kg								
6010	Vanadium	NS	NS	NS	mg/kg	**51.3**		**33.5**		**331**		**195**	
6010	**Zinc**	**2,200**	**10,000**	**10,000**	mg/kg	**155**		**104**		**168**		**89**	J
6020	Zirconium	NS	NS	NS	mg/kg								
7199	**Chromium, Hexavalent**	**22**	**400**	**800**	mg/kg	**2.1**		**3.6**		**2.8**		**19.2**	
4500	pH	NS	NS	NS	PH UNITS	**7.53**		**7.02**		**7.75**		**7.66**	

Notes: See Table 5A

Table 5.5: Shallow Surface Soil Extrusion Region
Organic Analytical Results

					Location	SS-D7-01		SS-E5-01		SS-E6-01		SS-E7-01		SS-F5-01		SS-F6-01		SS-F7-01	
					Sample Id	401003SSD70100		401003SSE50100		401003SSE60100		401003SSE70100		401003SSF50100		401003SSF60100		401003SSF70100	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2	
					Soil Type	Fill		Fill		Fill		Fill		Fill		Fill Waste		Fill Waste	
					Sample Date	6/5/2014		6/2/2014		6/2/2014		6/5/2014		6/3/2014		6/3/2014		6/5/2014	
		SCO			Qc Code	FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**														
Volatile Organic Compounds																			
8260	1,2,3-Trichlorobenzene	NS	NS	NS	ug/kg	70	U	**34**	J	51	UJ	47	U	39	U	130	U	49	U
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg	70	U	**94**		51	UJ	**81**		**42**		130	U	**85**	
8260	1,3-Dichlorobenzene	17,000	280,000	560,000	ug/kg	70	U	**16**	J	51	U	47	U	39	U	130	U	49	U
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg	**150**		530	U	470	U	**140**		**98**		650	U	**270**	
8260	Tetrachloroethene	5,500	150,000	300,000	ug/kg	70	U	61	U	**9.4**	J	**18**	J	39	U	130	U	49	U
Semi- Volatile Organic Compounds																			
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg	200	U	**28**	J	1800	U	1800	U	950	UJ	1700	U	**24**	J
8270	Acenaphthene	100,000	500,000	1,000,000	ug/kg	200	U	230	U	1800	U	1800	U	950	UJ	**26**	J	**16**	J
8270	Acenaphthylene	100,000	500,000	1,000,000	ug/kg	200	U	230	U	1800	U	1800	U	950	UJ	1700	U	**9.1**	J
8270	Anthracene	100,000	500,000	1,000,000	ug/kg	200	U	230	U	**67**	J	1800	U	950	UJ	**75**	J	**39**	J
8270	Benzo(a)anthracene	1,000	5,600	11,000	ug/kg	200	U	230	U	1800	UJ	**85**	J	950	UJ	**420**	J	**210**	
8270	Benzo(a)pyrene	1,000	1,000	1,100	ug/kg	200	U	230	U	**110**	J	1800	U	950	UJ	**450**	J	**200**	
8270	Benzo(b)fluoranthene	1,000	5,600	11,000	ug/kg	**7.3**	J	**140**	J	1800	UJ	**77**	J	**28**	J	**470**	J	**360**	
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg	200	U	**54**	J	1800	UJ	1800	U	950	UJ	1700	UJ	**110**	J
8270	Benzo(k)fluoranthene	1,000	56,000	110,000	ug/kg	**3.7**	J	230	U	1800	UJ	**53**	J	950	UJ	**530**	J	**160**	J
8270	Carbazole	NS	NS	NS	ug/kg	200	U	230	U	1800	U	1800	U	950	UJ	**50**	J	**31**	J
8270	Chrysene	1,000	56,000	110,000	ug/kg	200	U	230	U	1800	UJ	**59**	J	950	UJ	**550**	J	**220**	
8270	Di-n-octylphthalate	NS	NS	NS	ug/kg	200	U	230	U	1800	UJ	1800	U	950	UJ	1700	UJ	190	U
8270	Dibenz(a,h)anthracene	330	560	1,100	ug/kg	200	U	230	U	1800	UJ	1800	U	950	UJ	1700	UJ	**110**	J
8270	Dibenzofuran	14,000	350,000	1,000,000	ug/kg	200	U	230	U	1800	U	1800	U	950	UJ	1700	U	**14**	J
8270	Fluoranthene	100,000	500,000	1,000,000	ug/kg	**9.5**	J	**93**	J	1800	U	**76**	J	950	UJ	**690**	J	**440**	
8270	Fluorene	100,000	500,000	1,000,000	ug/kg	200	U	230	U	1800	U	1800	U	950	UJ	1700	U	**13**	J
8270	**Indeno(1,2,3-cd)pyrene**	**500**	**5,600**	**11,000**	ug/kg	200	U	**49**	J	**220**	J	1800	U	950	UJ	**620**	J	**160**	J
8270	Naphthalene	100,000	500,000	1,000,000	ug/kg	200	U	230	U	1800	U	1800	U	950	UJ	1700	U	**19**	J
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg	**5.9**	J	**49**	J	1800	U	1800	U	950	UJ	**390**	J	**220**	
8270	Pyrene	100,000	500,000	1,000,000	ug/kg	**9.1**	J	**73**	J	**200**	J	**99**	J	950	UJ	**1200**	J	**390**	
Pesticides																			
8081	4,4'-DDD	2,600	92,000	180,000	ug/kg	9.7	U	9400	U	350	U	**14**	J	18	U	**8**	J	38	U
8081	4,4'-DDE	1,800	62,000	120,000	ug/kg	9.7	U	1200	U	350	U	8.7	U	18	U	**7**	J	**8.4**	J
8081	4,4'-DDT	1,700	47,000	94,000	ug/kg	9.7	U	9200	U	350	U	**23**		**20**		**54**		**47**	
8081	Alpha-BHC	97	3,400	6,800	ug/kg	9.7	U	1100	U	350	U	8.7	U	18	U	**6.2**	J	38	U
8081	Delta-BHC	100,000	500,000	1,000,000	ug/kg	9.7	U	1100	U	**910**		8.7	U	18	U	17	U	38	U
8081	Dieldrin	39	1,400	2,800	ug/kg	9.7	U	4400	U	350	U	8.7	U	**15**	J	**17**		**30**	J
8081	Endosulfan sulfate	4,800	200,000	920,000	ug/kg	9.7	U	1100	U	350	U	8.7	U	18	U	17	U	38	UJ
8081	Endrin	2,200	89,000	410,000	ug/kg	9.7	U	1100	U	**77**	J	8.7	U	18	U	17	U	38	U
8081	Endrin ketone	NS	NS	NS	ug/kg	9.7	U	1100	U	350	U	8.7	U	**12**	J	17	U	38	U
8081	Heptachlor	420	15,000	29,000	ug/kg	9.7	U	1100	U	**410**	J	8.7	U	18	U	17	U	38	U
8081	Gamma-Chlordane	NS	NS	NS	ug/kg	9.7	U	1600	U	**140**	J	**2.7**	J	18	U	17	U	38	U
8081	Methoxychlor	NS	NS	NS	ug/kg	9.7	U	1100	U	350	U	8.7	U	18	U	**5.1**	J	38	U
Polychlorinated Biphenyls																			
8082	**Aroclor-1242**	**1,000**	**1,000**	**25,000**	ug/kg	210	U	30000	UJ	**110000**	J	220	U	210	U	210	UJ	230	U
8082	Aroclor-1248	1,000	1,000	25,000	ug/kg	210	U	30000	UJ	11000	U	220	U	210	U	**490**	J	230	U
8082	Aroclor-1254	1,000	1,000	25,000	ug/kg	210	U	30000	UJ	11000	U	220	U	**250**	J	210	UJ	**500**	J
8082	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	210	U	**120000**	J	**15000**	J	**740**		210	U	**2000**	J	**720**	J
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	ND		**120000**		**125000**		**740**		**250**		**2490**		**1220**	

Notes: See Table 5A
*- CP-51 / Soil Cleanup Guidance = 1 mg/kg in soils less than 1 foot bgs.

Table 5.6: Shallow Surface Soil Rolling Mill Region
Organic Analytical Results

					Location	SS-G3-01		SS-G4-01		SS-G4-03		SS-H3-01		SS-H4-01		SS-H5-01		SS-I3-01	
					Sample Id	401003SSG30100		401003SSG40100		401003SSG40300		401003SSH30100		401003SSH40100		401003SSH50100		401003SSI30100	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2	
					Soil Type	Fill		Fill Waste		AS - Calow Pit		Fill Waste		Fill Waste		Fill Waste		Fill Waste	
					Sample Date	6/5/2014 8:45		6/10/2014 15:50		6/9/2014 12:05		6/9/2014 15:55		6/10/2014 17:15		6/4/2014 10:25		6/4/2014 15:20	
		SCO			Qc Code	FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**														
Volatile Organic Compounds																			
8260	1,1,1-Trichloroethane	100,000	500,000	1,000,000	ug/kg	49	U	66	U	63	U	62	U	61	U	62	U	46	U
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg	**58**		66	U	63	U	**2300**		61	U	**72**		**75**	
8260	1,2,4-Trimethylbenzene	47,000	190,000	380,000	ug/kg	**19**	J	66	U	63	U	62	U	**26**	J	**190**		46	U
8260	1,3,5-Trimethylbenzene	47,000	190,000	380,000	ug/kg	49	U	66	U	63	U	62	U	61	U	**150**		46	U
8260	1,3-Dichlorobenzene	17,000	280,000	560,000	ug/kg	49	U	66	U	63	U	62	U	61	U	62	U	46	U
8260	4-iso-Propyltoluene	NS	NS	NS	ug/kg	49	U	66	U	63	U	62	U	61	U	**65**		46	U
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg	**120**		**350**		**540**		**700**		**680**		**480**		**230**	
8260	Benzene	2,900	44,000	89,000	ug/kg	49	U	66	U	63	U	62	U	61	U	**25**	J	46	U
8260	Cyclohexane	NS	NS	NS	ug/kg	49	U	66	U	63	U	62	U	61	U	**190**	J	46	U
8260	Ethyl benzene	30,000	390,000	780,000	ug/kg	49	U	66	U	63	U	62	U	61	U	**190**		46	U
8260	Isopropylbenzene	NS	NS	NS	ug/kg	49	U	66	U	63	U	62	U	61	U	**34**	J	46	U
8260	Methyl cyclohexane	NS	NS	NS	ug/kg	49	U	66	U	63	U	62	U	**170**		**610**		46	U
8260	n-Butylbenzene	100,000	500,000	1,000,000	ug/kg	49	U	66	U	63	U	62	U	61	U	**150**		46	U
8260	Propylbenzene	100,000	500,000	1,000,000	ug/kg	49	U	66	U	63	U	62	U	61	U	**92**		46	U
8260	sec-Butylbenzene	100,000	500,000	1,000,000	ug/kg	49	U	66	U	63	U	62	U	61	U	**43**	J	46	U
8260	Styrene	NS	NS	NS	ug/kg	49	U	66	U	63	U	62	U	61	U	62	U	46	U
8260	Tetrachloroethene	5,500	150,000	300,000	ug/kg	49	U	66	U	63	U	62	U	61	U	62	U	46	U
8260	Toluene	100,000	500,000	1,000,000	ug/kg	49	U	66	U	63	U	62	U	61	U	140	U	46	U
8260	Xylenes, Total	100,000	500,000	1,000,000	ug/kg	99	U	130	U	130	U	120	U	**23**	J	**430**		91	U
Semi-Volatile Organic Compounds																			
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg	**290**	J	920	U	25000	U	3700	U	**30**	J	**1900**		3600	U
8270	2-Methylphenol	100,000	500,000	1,000,000	ug/kg	3900	U	920	U	25000	U	3700	U	**5.9**	J	200	U	3600	U
8270	4-Nitroaniline	NS	NS	NS	ug/kg	7500	U	1800	U	48000	U	7200	U	340	U	400	U	6900	U
8270	Acenaphthene	100,000	500,000	1,000,000	ug/kg	**330**	J	920	U	25000	U	3700	U	170	U	200	U	3600	U
8270	Acenaphthylene	100,000	500,000	1,000,000	ug/kg	**470**	J	920	U	25000	U	3700	U	170	U	200	U	3600	U
8270	Acetophenone	NS	NS	NS	ug/kg	3900	U	920	U	25000	U	3700	U	170	U	200	U	3600	U
8270	Anthracene	100,000	500,000	1,000,000	ug/kg	**250**	J	920	U	25000	U	3700	U	170	U	**560**		3600	U
8270	**Benzo(a)anthracene**	**1,000**	**5,600**	**11,000**	ug/kg	**930**	J	920	U	25000	U	3700	U	**25**	J	200	U	3600	U
8270	**Benzo(a)pyrene**	**1,000**	**1,000**	**1,100**	ug/kg	**1200**	J	920	U	25000	U	3700	U	**38**	J	200	U	3600	U
8270	**Benzo(b)fluoranthene**	**1,000**	**5,600**	**11,000**	ug/kg	**1400**	J	920	U	25000	U	3700	U	**68**	J	200	U	3600	U
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg	3900	U	920	U	25000	U	3700	U	**34**	J	200	U	3600	U
8270	**Benzo(k)fluoranthene**	**1,000**	**56,000**	**110,000**	ug/kg	**1300**	J	920	U	25000	U	3700	U	**31**	J	200	U	3600	U
8270	Biphenyl	NS	NS	NS	ug/kg	3900	U	920	U	25000	U	3700	U	170	U	**250**		3600	U
8270	Bis(2-Ethylhexyl)phthalate	NS	NS	NS	ug/kg	3900	U	920	U	25000	U	3700	U	**400**		200	U	3600	U
8270	Carbazole	NS	NS	NS	ug/kg	**110**	J	920	U	25000	U	3700	U	170	U	200	U	3600	U
8270	**Dibenz(a,h)anthracene**	**330**	**560**	**1,100**	ug/kg	**450**	J	920	U	25000	U	3700	U	**3.6**	J	200	U	3600	U
8270	Dibenzofuran	14,000	350,000	1,000,000	ug/kg	**300**	J	920	U	25000	U	3700	U	170	U	**340**		3600	U
8270	Diethylphthalate	NS	NS	NS	ug/kg	3900	U	920	U	25000	U	3700	U	170	U	200	U	3600	U
8270	Dimethylphthalate	NS	NS	NS	ug/kg	3900	U	920	U	25000	U	3700	U	170	U	200	U	3600	U
8270	Fluoranthene	100,000	500,000	1,000,000	ug/kg	**1200**	J	**16**	J	25000	U	**160**	J	170	U	**130**	J	3600	U
8270	Fluorene	100,000	500,000	1,000,000	ug/kg	**300**	J	920	U	25000	U	3700	U	170	U	200	U	3600	U
8270	Indeno(1,2,3-cd)pyrene	500,000	5,600,000	11,000,000	ug/kg	**1000**	J	920	U	25000	U	3700	U	**27**	J	200	U	3600	U
8270	Naphthalene	100,000	500,000	1,000,000	ug/kg	**860**	J	920	U	25000	U	3700	U	**17**	J	**540**		3600	U
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg	**560**	J	920	U	25000	U	3700	U	**42**	J	**560**		3600	U
8270	Pyrene	100,000	500,000	1,000,000	ug/kg	**1700**	J	920	U	25000	U	**180**	J	**39**	J	**85**	J	3600	U

Table 5.6: Shallow Surface Soil Rolling Mill Region
Organic Analytical Results

					Location	SS-G3-01		SS-G4-01		SS-G4-03		SS-H3-01		SS-H4-01		SS-H5-01		SS-I3-01	
					Sample Id	401003SSG30100		401003SSG40100		401003SSG40300		401003SSH30100		401003SSH40100		401003SSH50100		401003SSI30100	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2	
					Soil Type	Fill		Fill Waste		AS - Calow Pit		Fill Waste		Fill Waste		Fill Waste		Fill Waste	
					Sample Date	6/5/2014 8:45		6/10/2014 15:50		6/9/2014 12:05		6/9/2014 15:55		6/10/2014 17:15		6/4/2014 10:25		6/4/2014 15:20	
		SCO			Qc Code	FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**														
Pesticides																			
8081	4,4'-DDD	2,600	92,000	180,000	ug/kg	96	U	**33**	J	**12**	J	**9.1**	J	**26**	J	**12**	J	**19**	J
8081	4,4'-DDE	1,800	62,000	120,000	ug/kg	96	U	9.1	U	**40**	J	37	U	86	U	**5.1**	J	36	U
8081	4,4'-DDT	1,700	47,000	94,000	ug/kg	96	U	100	U	**64**		**42**		**100**		**27**	J	37	U
8081	Aldrin	19	680	1,400	ug/kg	96	U	90	U	58	U	37	U	86	U	**3.9**	J	36	U
8081	Beta-BHC	72	3,000	14,000	ug/kg	96	U	90	U	58	U	37	U	86	U	**2.5**	J	36	U
8081	Delta-BHC	100,000	500,000	1,000,000	ug/kg	96	U	25	J	58	U	37	U	86	U	**3.1**	J	36	U
8081	Dieldrin	39,000	1,400,000	2,800,000	ug/kg	96	U	50	U	**19**	J	37	U	86	U	**18**	J	36	U
8081	Endosulfan I	4,800	200,000	920,000	ug/kg	96	U	90	U	58	U	37	U	86	U	**3.8**	J	36	U
8081	Endosulfan II	4,800	200,000	920,000	ug/kg	96	U	90	U	58	U	37	U	**26**	J	9.9	U	36	U
8081	Endosulfan sulfate	4,800	200,000	920,000	ug/kg	96	U	9.1	U	**11**	J	**8.1**	J	86	U	**3.7**	J	36	U
8081	Endrin	2,200	89,000	410,000	ug/kg	96	U	11	U	58	U	37	U	86	U	**6**	J	36	U
8081	Endrin aldehyde	NS	NS	NS	ug/kg	96	U	96	U	58	U	37	U	86	U	9.9	U	36	U
8081	Endrin ketone	NS	NS	NS	ug/kg	96	U	48	U	58	U	37	U	86	U	**15**	J	36	U
8081	Gamma-BHC/Lindane	280	9,200	23,000	ug/kg	96	U	**24**	J	58	U	37	U	86	U	**9.9**	J	36	U
8081	Gamma-Chlordane	NS	NS	NS	ug/kg	96	U	90	U	**36**	J	37	U	86	U	9.9	U	36	U
8081	Heptachlor epoxide	NS	NS	NS	ug/kg	96	U	90	U	58	U	37	U	86	U	9.9	U	36	U
8081	Methoxychlor	NS	NS	NS	ug/kg	96	U	9.1	U	58	U	37	U	86	U	9.9	U	36	U
Polychlorinated Biphenyls																			
8082	**Aroclor-1248**	**1,000**	**1,000**	**25,000**	ug/kg	280	U	260	U	**3800**	J	260	U	220	U	230	U	190	U
8082	**Aroclor-1254**	**1,000**	**1,000**	**25,000**	ug/kg	280	U	260	U	**2900**	J	**350**	J	220	U	**180**	J	190	U
8082	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	**220**	J	**960**	J	**1900**	J	**460**	J	**1600**		230	U	**620**	
8082	**Aroclor-1268**	**1,000**	**1,000**	**25,000**	ug/kg	**720**	J	260	U	530	U	260	U	220	U	230	U	190	U
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	**940**		**960**		**8600**		**810**		**1600**		**180**		**620**	
310.13	Hydrocarbon	NS	NS	NS	mg/kg														

Notes: See Table 5A
*- CP-51 / Soil Cleanup Guidance = 1 mg/kg in soils less than 1 foot bgs.

Table 5.6: Shallow Surface Soil Rolling Mill Region
Organic Analytical Results

					Location	SS-I5-01		SS-I6-01		SS-I7-01		SS-J3-01		SS-J4-01		SS-J5-01		SS-J5-03		SS-J6-01	
					Sample Id	401003SSI50100		401003SSI60100		401003SSI70100		401003SSJ30100		401003SSJ40100		401003SSJ50100		401003SSJ50300		401003SSJ60100	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2	
					Soil Type	Fill Waste		Fill		Fill Waste		Fill Waste		Fill		Fill Waste		AS		Fill Waste	
					Sample Date	6/10/2014 11:20		6/4/2014 9:00		6/4/2014 12:10		6/4/2014 14:05		6/4/2014 10:00		6/10/2014 8:55		6/9/2014 11:35		6/6/2014 11:25	
		SCO			Qc Code	FS		FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																
Volatile Organic Compounds																					
8260	1,1,1-Trichloroethane	100,000	500,000	1,000,000	ug/kg	74	U	45	U	54	U	45	U	65	U	46	U	48	U	54	U
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg	**67**	J	45	U	**110**		**32**	J	**52**	J	46	U	48	U	54	U
8260	1,2,4-Trimethylbenzene	47,000	190,000	380,000	ug/kg	74	U	45	U	**50**	J	45	U	65	U	46	U	48	U	54	U
8260	1,3,5-Trimethylbenzene	47,000	190,000	380,000	ug/kg	74	U	45	U	**17**	J	45	U	65	U	46	U	48	U	54	U
8260	1,3-Dichlorobenzene	17,000	280,000	560,000	ug/kg	74	U	45	U	54	U	45	U	65	U	46	U	48	U	54	U
8260	4-iso-Propyltoluene	NS	NS	NS	ug/kg	74	U	45	U	54	U	45	U	65	U	46	U	48	U	54	U
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg	**410**		**160**		**190**		**250**		290	U	**81**		130	U	**74**	
8260	Benzene	2,900	44,000	89,000	ug/kg	74	U	45	U	**44**	J	45	U	65	U	46	U	48	U	54	U
8260	Cyclohexane	NS	NS	NS	ug/kg	74	UJ	**11**	J	**66**		45	U	65	U	46	UJ	48	U	54	U
8260	Ethyl benzene	30,000	390,000	780,000	ug/kg	74	U	45	U	**41**	J	**15**	J	65	U	46	U	48	U	54	U
8260	Isopropylbenzene	NS	NS	NS	ug/kg	74	U	45	U	**18**	J	**8.6**	J	65	U	46	U	48	U	54	U
8260	Methyl cyclohexane	NS	NS	NS	ug/kg	**88**	J	**36**	J	**240**		45	U	65	U	46	UJ	48	U	54	U
8260	n-Butylbenzene	100,000	500,000	1,000,000	ug/kg	74	U	45	U	54	U	45	U	65	U	46	U	48	U	54	U
8260	Propylbenzene	100,000	500,000	1,000,000	ug/kg	74	U	45	U	**28**	J	45	U	65	U	46	U	48	U	54	U
8260	sec-Butylbenzene	100,000	500,000	1,000,000	ug/kg	74	U	45	U	54	U	45	U	65	U	46	U	48	U	54	U
8260	Styrene	NS	NS	NS	ug/kg	74	U	45	U	54	U	45	U	**53**	J	46	U	48	U	54	U
8260	Tetrachloroethene	5,500	150,000	300,000	ug/kg	74	U	45	U	**11**	J	45	U	65	U	46	U	48	U	54	U
8260	Toluene	100,000	500,000	1,000,000	ug/kg	74	U	45	U	**190**		45	U	65	U	46	U	48	U	54	U
8260	Xylenes, Total	100,000	500,000	1,000,000	ug/kg	**14**	J	90	U	**210**		**7.5**	J	130	U	91	U	97	U	**24**	J
Semi-Volatile Organic Compounds																					
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg	8100	U	**14**	J	**230**		3800	U	190	U	180	U	**7.9**	J	**24**	J
8270	2-Methylphenol	100,000	500,000	1,000,000	ug/kg	8100	U	190	U	200	U	3800	U	190	U	180	U	180	U	920	U
8270	4-Nitroaniline	NS	NS	NS	ug/kg	16000	U	360	UJ	380	U	7400	U	370	U	350	U	360	U	1800	U
8270	Acenaphthene	100,000	500,000	1,000,000	ug/kg	8100	U	**3.6**	J	200	U	3800	U	190	U	180	U	180	U	920	U
8270	Acenaphthylene	100,000	500,000	1,000,000	ug/kg	8100	U	190	UJ	**13**	J	3800	U	**12**	J	180	U	180	U	920	U
8270	Acetophenone	NS	NS	NS	ug/kg	8100	U	190	UJ	**28**	J	3800	U	190	U	180	U	180	U	920	U
8270	Anthracene	100,000	500,000	1,000,000	ug/kg	8100	U	**52**	J	**14**	J	3800	U	190	U	180	U	180	U	920	U
8270	**Benzo(a)anthracene**	**1,000**	**5,600**	**11,000**	ug/kg	8100	U	**46**	J	**92**	J	3800	U	**42**	J	180	U	180	U	920	U
8270	**Benzo(a)pyrene**	**1,000**	**1,000**	**1,100**	ug/kg	8100	U	**49**	J	**97**	J	3800	U	**86**	J	180	U	180	U	**100**	J
8270	**Benzo(b)fluoranthene**	**1,000**	**5,600**	**11,000**	ug/kg	8100	U	**52**	J	**100**	J	**120**	J	**79**	J	**70**	J	180	U	**160**	J
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg	**540**	J	190	UJ	**48**	J	3800	U	**61**	J	**33**	J	180	U	**73**	J
8270	**Benzo(k)fluoranthene**	**1,000**	**56,000**	**110,000**	ug/kg	8100	U	**57**	J	**87**	J	**110**	J	**92**	J	180	U	180	U	**85**	J
8270	Biphenyl	NS	NS	NS	ug/kg	8100	U	190	UJ	**41**	J	3800	U	190	U	180	U	180	U	920	U
8270	Bis(2-Ethylhexyl)phthalate	NS	NS	NS	ug/kg	8100	U	190	UJ	200	U	3800	U	**63**	J	180	U	180	U	920	U
8270	Carbazole	NS	NS	NS	ug/kg	8100	U	**8**	J	**10**	J	3800	U	**5.2**	J	180	U	180	U	920	U
8270	**Dibenz(a,h)anthracene**	**330**	**560**	**1,100**	ug/kg	8100	U	**5.9**	J	**30**	J	3800	U	190	U	180	U	180	U	920	U
8270	Dibenzofuran	14,000	350,000	1,000,000	ug/kg	8100	U	**4.7**	J	**72**	J	3800	U	190	U	180	U	180	U	920	U
8270	Diethylphthalate	NS	NS	NS	ug/kg	8100	U	190	UJ	200	U	3800	U	190	U	180	U	180	U	920	U
8270	Dimethylphthalate	NS	NS	NS	ug/kg	8100	U	190	UJ	200	U	**220**	J	190	U	180	U	180	U	920	U
8270	Fluoranthene	100,000	500,000	1,000,000	ug/kg	8100	U	**91**	J	**120**	J	3800	U	**3.3**	J	180	U	**16**	J	**180**	J
8270	Fluorene	100,000	500,000	1,000,000	ug/kg	8100	U	190	UJ	200	U	3800	U	190	U	180	U	180	U	920	U
8270	Indeno(1,2,3-cd)pyrene	500,000	5,600,000	11,000,000	ug/kg	8100	U	**64**	J	**110**	J	3800	U	**98**	J	180	U	180	U	**64**	J
8270	Naphthalene	100,000	500,000	1,000,000	ug/kg	8100	U	**9.7**	J	**110**	J	3800	U	190	U	180	U	**6**	J	920	U
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg	**680**	J	**9.4**	J	**260**		3800	U	**9.4**	J	180	U	**17**	J	**120**	J
8270	Pyrene	100,000	500,000	1,000,000	ug/kg	8100	U	**120**	J	**180**	J	**88**	J	190	U	180	U	**20**	J	**150**	J

Table 5.6: Shallow Surface Soil Rolling Mill Region
Organic Analytical Results

					Location	SS-I5-01		SS-I6-01		SS-I7-01		SS-J3-01		SS-J4-01		SS-J5-01		SS-J5-03		SS-J6-01	
					Sample Id	401003SSI50100		401003SSI60100		401003SSI70100		401003SSJ30100		401003SSJ40100		401003SSJ50100		401003SSJ50300		401003SSJ60100	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2	
					Soil Type	Fill Waste		Fill		Fill Waste		Fill Waste		Fill		Fill Waste		AS		Fill Waste	
					Sample Date	6/10/2014 11:20		6/4/2014 9:00		6/4/2014 12:10		6/4/2014 14:05		6/4/2014 10:00		6/10/2014 8:55		6/9/2014 11:35		6/6/2014 11:25	
		SCO			Qc Code	FS		FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																
Pesticides																					
8081	4,4'-DDD	2,600	92,000	180,000	ug/kg	99	U	9	U	39	U	93	U	19	U	**8.7**	J	**1.7**	J	**39**	J
8081	4,4'-DDE	1,800	62,000	120,000	ug/kg	**24**	J	9	U	**14**	J	93	U	19	U	**3.7**	J	1.8	U	18	U
8081	4,4'-DDT	1,700	47,000	94,000	ug/kg	99	U	9	U	39	U	93	U	19	U	18	U	**12**		**53**	
8081	Aldrin	19	680	1,400	ug/kg	99	U	9	U	39	U	93	U	19	U	18	U	1.8	U	18	U
8081	Beta-BHC	72	3,000	14,000	ug/kg	99	U	**3.1**	J	39	U	93	U	19	U	18	U	1.8	U	18	U
8081	Delta-BHC	100,000	500,000	1,000,000	ug/kg	99	U	9	U	39	U	93	U	19	U	18	U	1.8	U	18	U
8081	Dieldrin	39,000	1,400,000	2,800,000	ug/kg	99	U	**6.7**	J	39	U	93	U	19	U	18	U	**5.9**	J	**24**	J
8081	Endosulfan I	4,800	200,000	920,000	ug/kg	99	U	9	U	39	U	93	U	19	U	18	U	1.8	U	18	U
8081	Endosulfan II	4,800	200,000	920,000	ug/kg	99	U	9	U	39	U	93	U	19	U	18	U	1.8	U	18	U
8081	Endosulfan sulfate	4,800	200,000	920,000	ug/kg	99	U	9	UJ	39	U	93	U	19	U	18	U	**0.9**	J	18	U
8081	Endrin	2,200	89,000	410,000	ug/kg	99	U	9	U	39	U	93	U	19	U	18	U	1.8	U	18	U
8081	Endrin aldehyde	NS	NS	NS	ug/kg	99	U	9	UJ	39	U	93	U	19	U	18	U	1.8	U	18	U
8081	Endrin ketone	NS	NS	NS	ug/kg	99	U	9	U	39	U	93	U	19	U	18	U	1.8	U	**18**	J
8081	Gamma-BHC/Lindane	280	9,200	23,000	ug/kg	99	U	9	U	39	U	93	U	19	U	18	U	1.8	U	18	U
8081	Gamma-Chlordane	NS	NS	NS	ug/kg	99	U	9	U	39	U	93	U	19	U	18	U	**1.5**	J	18	U
8081	Heptachlor epoxide	NS	NS	NS	ug/kg	99	U	9	U	39	U	93	U	19	U	18	U	1.8	U	18	U
8081	Methoxychlor	NS	NS	NS	ug/kg	99	U	9	U	39	U	93	U	19	U	18	U	1.8	U	18	U
Polychlorinated Biphenyls																					
8082	**Aroclor-1248**	**1,000**	**1,000**	**25,000**	ug/kg	250	U	200	U	240	U	270	U	200	U	220	U	190	U	190	U
8082	**Aroclor-1254**	**1,000**	**1,000**	**25,000**	ug/kg	250	U	200	U	**280**		270	U	200	U	220	U	190	U	190	U
8082	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	**530**	J	**470**	J	240	U	**250**	J	**340**	J	**220**	J	**310**	J	**1000**	
8082	**Aroclor-1268**	**1,000**	**1,000**	**25,000**	ug/kg	**380**	J	200	U	240	U	270	U	**160**	J	220	U	190	U	190	U
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	**910**		**470**		**280**		**250**		**500**		**220**		**310**		**1000**	
310.13	Hydrocarbon	NS	NS	NS	mg/kg													ND			

Notes: See Table 5A
*- CP-51 / Soil Cleanup Guidance = 1 mg/kg in soils less than 1 foot bgs.

Table 5.6: Shallow Surface Soil Rolling Mill Region
Organic Analytical Results

					Location	SS-J7-01		SS-K4-01		SS-K5-01		SS-K6-01		SS-K7-02		SS-L4-01		SS-L5-01		SS-L7-02	
					Sample Id	401003SSJ70100		401003SSK40100		401003SSK50100		401003SSK60100		401003SSK70200		401003SSL40100		401003SSL50100		401003SSL70200	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2	
					Soil Type	Fill Waste		AS - Transformer 14		Fill Waste		Fill		Fill		Fill		Fill		Fill Waste	
					Sample Date	6/6/2014 10:10		6/9/2014 13:05		6/9/2014 12:45		6/3/2014 14:25		6/5/2014 17:15		6/3/2014 16:10		6/3/2014 13:15		6/5/2014 15:45	
		SCO			Qc Code	FS		FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																
Volatile Organic Compounds																					
8260	1,1,1-Trichloroethane	100,000	500,000	1,000,000	ug/kg	50	U	68	U	**28**	J	140	U	61	U	59	U	66	U	39	U
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg	50	U	**480**		50	U	140	U	61	U	59	U	66	U	39	U
8260	1,2,4-Trimethylbenzene	47,000	190,000	380,000	ug/kg	50	U	**45**	J	50	U	140	U	61	U	59	U	66	U	**110**	
8260	1,3,5-Trimethylbenzene	47,000	190,000	380,000	ug/kg	50	U	**24**	J	50	U	140	U	61	U	59	U	66	U	**61**	
8260	1,3-Dichlorobenzene	17,000	280,000	560,000	ug/kg	50	U	68	U	50	U	140	U	61	U	59	U	66	U	**52**	
8260	4-iso-Propyltoluene	NS	NS	NS	ug/kg	50	U	68	U	50	U	140	U	61	U	59	U	66	U	39	U
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg	**160**		**560**		200	U	450	U	130	U	**300**		**310**		39	U
8260	Benzene	2,900	44,000	89,000	ug/kg	50	U	68	U	50	U	140	U	61	U	59	U	66	U	39	U
8260	Cyclohexane	NS	NS	NS	ug/kg	50	U	68	U	50	U	140	U	61	U	59	UJ	66	UJ	39	U
8260	Ethyl benzene	30,000	390,000	780,000	ug/kg	50	U	68	U	50	U	140	U	61	U	59	U	66	U	**13**	J
8260	Isopropylbenzene	NS	NS	NS	ug/kg	50	U	68	U	50	U	140	U	61	U	59	U	66	U	39	U
8260	Methyl cyclohexane	NS	NS	NS	ug/kg	**23**	J	68	U	50	U	140	U	61	U	59	U	**35**	J	39	U
8260	n-Butylbenzene	100,000	500,000	1,000,000	ug/kg	50	U	68	U	50	U	140	U	61	U	59	U	66	U	39	U
8260	Propylbenzene	100,000	500,000	1,000,000	ug/kg	50	U	68	U	50	U	140	U	61	U	59	U	66	U	39	U
8260	sec-Butylbenzene	100,000	500,000	1,000,000	ug/kg	50	U	68	U	50	U	140	U	61	U	59	U	66	U	39	U
8260	Styrene	NS	NS	NS	ug/kg	50	U	68	U	50	U	140	U	61	U	59	U	66	U	39	U
8260	Tetrachloroethene	5,500	150,000	300,000	ug/kg	**16**	J	68	U	**150**		140	U	61	U	59	U	**71**		39	U
8260	Toluene	100,000	500,000	1,000,000	ug/kg	50	U	68	U	50	U	140	U	61	U	59	U	66	U	39	U
8260	Xylenes, Total	100,000	500,000	1,000,000	ug/kg	99	U	**15**	J	99	U	280	U	120	U	120	U	**18**	J	**140**	
Semi-Volatile Organic Compounds																					
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg	**43**	J	8300	U	**35**	J	8800	U	**14**	J	850	U	3400	U	**25**	J
8270	2-Methylphenol	100,000	500,000	1,000,000	ug/kg	1700	U	8300	U	180	U	8800	U	170	U	850	U	3400	U	920	U
8270	4-Nitroaniline	NS	NS	NS	ug/kg	3300	U	16000	U	350	U	17000	U	340	U	1600	U	6600	U	1800	U
8270	Acenaphthene	100,000	500,000	1,000,000	ug/kg	**48**	J	8300	U	180	U	8800	U	170	U	850	U	3400	U	920	U
8270	Acenaphthylene	100,000	500,000	1,000,000	ug/kg	1700	U	8300	U	180	U	8800	U	**10**	J	850	U	3400	U	920	U
8270	Acetophenone	NS	NS	NS	ug/kg	1700	U	8300	U	180	U	8800	U	170	U	850	U	3400	U	920	U
8270	Anthracene	100,000	500,000	1,000,000	ug/kg	**180**	J	8300	U	180	U	8800	U	**10**	J	850	U	3400	U	920	U
8270	**Benzo(a)anthracene**	**1,000**	**5,600**	**11,000**	ug/kg	**630**	J	8300	U	180	U	8800	U	**100**	J	850	U	3400	U	920	U
8270	**Benzo(a)pyrene**	**1,000**	**1,000**	**1,100**	ug/kg	**730**	J	8300	U	180	U	8800	U	**120**	J	850	U	3400	U	920	U
8270	**Benzo(b)fluoranthene**	**1,000**	**5,600**	**11,000**	ug/kg	**1500**	J	8300	U	180	U	8800	U	**260**		850	U	3400	U	**76**	J
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg	**1300**	J	8300	U	**10**	J	8800	U	**54**	J	850	U	3400	U	920	U
8270	**Benzo(k)fluoranthene**	**1,000**	**56,000**	**110,000**	ug/kg	**670**	J	8300	U	180	U	8800	U	**98**	J	850	U	3400	U	920	U
8270	Biphenyl	NS	NS	NS	ug/kg	1700	U	8300	U	180	U	8800	U	170	U	850	U	3400	U	920	U
8270	Bis(2-Ethylhexyl)phthalate	NS	NS	NS	ug/kg	1700	U	8300	U	180	U	8800	U	170	U	850	U	3400	U	920	U
8270	Carbazole	NS	NS	NS	ug/kg	**160**	J	8300	U	180	U	8800	U	**13**	J	850	U	3400	U	920	U
8270	**Dibenz(a,h)anthracene**	**330**	**560**	**1,100**	ug/kg	1700	U	8300	U	180	U	8800	U	**15**	J	850	U	3400	U	920	U
8270	Dibenzofuran	14,000	350,000	1,000,000	ug/kg	**52**	J	8300	U	**16**	J	8800	U	**14**	J	850	U	3400	U	920	U
8270	Diethylphthalate	NS	NS	NS	ug/kg	**68**	J	8300	U	180	U	8800	U	170	U	850	U	3400	U	920	U
8270	Dimethylphthalate	NS	NS	NS	ug/kg	1700	U	8300	U	180	U	8800	U	170	U	850	U	3400	U	920	U
8270	Fluoranthene	100,000	500,000	1,000,000	ug/kg	**1300**	J	8300	U	180	U	8800	U	**310**		**140**	J	**180**	J	**96**	J
8270	Fluorene	100,000	500,000	1,000,000	ug/kg	**46**	J	8300	U	180	U	8800	U	**6.5**	J	850	U	3400	U	920	U
8270	Indeno(1,2,3-cd)pyrene	500,000	5,600,000	11,000,000	ug/kg	**930**	J	8300	U	**6.5**	J	8800	U	**50**	J	850	U	3400	U	920	U
8270	Naphthalene	100,000	500,000	1,000,000	ug/kg	1700	U	8300	U	180	U	8800	U	**11**	J	850	U	3400	U	920	U
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg	**770**	J	8300	U	180	U	8800	U	**200**		850	U	3400	U	**120**	J
8270	Pyrene	100,000	500,000	1,000,000	ug/kg	**1100**	J	8300	U	**12**	J	8800	U	**220**		**160**	J	**91**	J	**59**	J

Table 5.6: Shallow Surface Soil Rolling Mill Region
Organic Analytical Results

					Location	SS-J7-01		SS-K4-01		SS-K5-01		SS-K6-01		SS-K7-02		SS-L4-01		SS-L5-01		SS-L7-02	
					Sample Id	401003SSJ70100		401003SSK40100		401003SSK50100		401003SSK60100		401003SSK70200		401003SSL40100		401003SSL50100		401003SSL70200	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2	
					Soil Type	Fill Waste		AS - Transformer 14		Fill Waste		Fill		Fill		Fill		Fill		Fill Waste	
					Sample Date	6/6/2014 10:10		6/9/2014 13:05		6/9/2014 12:45		6/3/2014 14:25		6/5/2014 17:15		6/3/2014 16:10		6/3/2014 13:15		6/5/2014 15:45	
		SCO			Qc Code	FS		FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																
Pesticides																					
8081	4,4'-DDD	2,600	92,000	180,000	ug/kg	34	U	**12**	J	8.7	U	17	U	35	U	17	U	**38**		18	U
8081	4,4'-DDE	1,800	62,000	120,000	ug/kg	**7.2**	J	41	U	8.7	U	17	U	35	U	17	U	**17**	J	**4.3**	J
8081	4,4'-DDT	1,700	47,000	94,000	ug/kg	**21**	J	41	U	**17**		17	U	**20**	J	**25**		**66**		**14**	J
8081	Aldrin	19	680	1,400	ug/kg	34	U	41	U	8.7	U	17	U	35	U	17	U	**15**	J	18	U
8081	Beta-BHC	72	3,000	14,000	ug/kg	34	U	41	U	8.7	U	**6.1**	J	35	U	17	U	33	U	**7.9**	J
8081	Delta-BHC	100,000	500,000	1,000,000	ug/kg	34	U	41	U	8.7	U	17	U	35	U	17	U	33	U	18	U
8081	Dieldrin	39,000	1,400,000	2,800,000	ug/kg	**22**	J	41	U	**4.6**	J	**15**	J	35	U	**8.4**	J	**46**	J	18	U
8081	Endosulfan I	4,800	200,000	920,000	ug/kg	34	U	41	U	8.7	U	17	U	35	U	17	U	**8**	J	18	U
8081	Endosulfan II	4,800	200,000	920,000	ug/kg	34	U	41	U	8.7	U	17	U	35	U	17	U	33	U	18	U
8081	Endosulfan sulfate	4,800	200,000	920,000	ug/kg	34	U	**9.3**	J	**1.8**	J	17	U	35	U	17	U	33	U	18	U
8081	Endrin	2,200	89,000	410,000	ug/kg	34	U	41	U	8.7	U	17	U	35	U	17	U	33	U	18	U
8081	Endrin aldehyde	NS	NS	NS	ug/kg	34	U	41	U	**5.3**	J	**5.8**	J	35	U	17	U	33	U	18	U
8081	Endrin ketone	NS	NS	NS	ug/kg	34	U	41	U	8.7	U	17	U	35	U	**24**	J	**27**	J	18	U
8081	Gamma-BHC/Lindane	280	9,200	23,000	ug/kg	34	U	41	U	8.7	U	17	U	35	U	17	U	33	U	18	U
8081	Gamma-Chlordane	NS	NS	NS	ug/kg	34	U	41	U	8.7	U	**5.6**	J	35	U	17	U	25	J	18	U
8081	Heptachlor epoxide	NS	NS	NS	ug/kg	34	U	41	U	8.7	U	17	U	35	U	17	U	33	U	18	U
8081	Methoxychlor	NS	NS	NS	ug/kg	34	U	**8.9**	J	**2.2**	J	**5.1**	J	35	U	17	U	33	U	18	U
Polychlorinated Biphenyls																					
8082	**Aroclor-1248**	**1,000**	**1,000**	**25,000**	ug/kg	190	U	460	U	220	U	210	U	180	U	230	U	250	U	210	U
8082	**Aroclor-1254**	**1,000**	**1,000**	**25,000**	ug/kg	**480**		460	U	**380**	J	210	U	**130**	J	230	U	**1600**	J	210	U
8082	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	**480**		**6200**	J	**440**	J	**1400**	J	**210**		**440**	J	**580**	J	**140**	J
8082	**Aroclor-1268**	**1,000**	**1,000**	**25,000**	ug/kg	190	U	**1800**	J	220	U	210	U	180	U	230	U	**190**	J	210	U
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	**960**		**8000**		**820**		**1400**		**340**		**440**		**2370**		**140**	
310.13	Hydrocarbon	NS	NS	NS	mg/kg																

Notes: See Table 5A
*- CP-51 / Soil Cleanup Guidance = 1 mg/kg in soils less than 1 foot bgs.

Table 5.6: Shallow Surface Soil Rolling Mill Region
Organic Analytical Results

					Location	**SS-M3-01**		**SS-M5-01**		**SS-M5-01**		**SS-M5-06**		**SS-M6-01**		**SS-M7-01**	
					Sample Id	401003SSM30100		401003SSM50100		401003SSM50100XD		401003SSM5060A		401003SSM60100		401003SSM70100	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.1		0 - 0.2		0 - 0.2	
					Soil Type	Fill Waste		Fill Waste		Fill Waste		FO - Stain		Fill Waste		Fill Waste	
					Sample Date	6/5/2014 8:25		6/3/2014 11:00		6/3/2014 11:00		6/9/2014 10:55		6/5/2014 13:10		6/6/2014 8:50	
		SCO			**Qc Code**	FS		FS		FD		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**												
Volatile Organic Compounds																	
8260	1,1,1-Trichloroethane	100,000	500,000	1,000,000	ug/kg	120	U	120	U	57	U			55	U	65	U
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg	120	U	120	U	**38**	J			55	U	65	U
8260	1,2,4-Trimethylbenzene	47,000	190,000	380,000	ug/kg	120	U	120	U	57	U			55	U	**28**	J
8260	1,3,5-Trimethylbenzene	47,000	190,000	380,000	ug/kg	120	U	120	U	57	U			55	U	65	U
8260	1,3-Dichlorobenzene	17,000	280,000	560,000	ug/kg	120	U	120	U	57	U			55	U	65	U
8260	4-iso-Propyltoluene	NS	NS	NS	ug/kg	**49**	J	120	U	57	U			55	U	65	U
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg	**600**		**530**		**320**				**410**		370	U
8260	Benzene	2,900	44,000	89,000	ug/kg	120	U	120	U	57	U			55	U	65	U
8260	Cyclohexane	NS	NS	NS	ug/kg	120	U	120	UJ	57	UJ			55	U	65	U
8260	Ethyl benzene	30,000	390,000	780,000	ug/kg	120	U	120	U	57	U			55	U	65	U
8260	Isopropylbenzene	NS	NS	NS	ug/kg	120	U	120	U	57	U			55	U	65	U
8260	Methyl cyclohexane	NS	NS	NS	ug/kg	120	U	120	U	57	U			55	U	**71**	
8260	n-Butylbenzene	100,000	500,000	1,000,000	ug/kg	120	U	120	U	57	U			55	U	65	U
8260	Propylbenzene	100,000	500,000	1,000,000	ug/kg	120	U	120	U	57	U			55	U	65	U
8260	sec-Butylbenzene	100,000	500,000	1,000,000	ug/kg	120	U	120	U	57	U			55	U	65	U
8260	Styrene	NS	NS	NS	ug/kg	120	U	120	U	57	U			55	U	65	U
8260	Tetrachloroethene	5,500	150,000	300,000	ug/kg	120	U	120	U	57	U			55	U	65	U
8260	Toluene	100,000	500,000	1,000,000	ug/kg	120	U	120	U	57	U			55	U	65	U
8260	Xylenes, Total	100,000	500,000	1,000,000	ug/kg	230	U	240	U	110	U			110	U	**19**	J
Semi-Volatile Organic Compounds																	
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg	4500	U	3600	U	1800	U			10000	U	**54**	J
8270	2-Methylphenol	100,000	500,000	1,000,000	ug/kg	4500	U	3600	U	1800	U			10000	U	1900	U
8270	4-Nitroaniline	NS	NS	NS	ug/kg	8700	U	6900	U	3500	U			20000	U	3700	U
8270	Acenaphthene	100,000	500,000	1,000,000	ug/kg	4500	U	**6000**		**2300**				10000	U	1900	U
8270	Acenaphthylene	100,000	500,000	1,000,000	ug/kg	4500	U	3600	U	1800	U			10000	U	1900	U
8270	Acetophenone	NS	NS	NS	ug/kg	4500	U	3600	U	1800	U			10000	U	1900	U
8270	Anthracene	100,000	500,000	1,000,000	ug/kg	4500	U	**12000**	J	**3400**	J			10000	U	**87**	J
8270	**Benzo(a)anthracene**	**1,000**	**5,600**	**11,000**	ug/kg	4500	U	**21000**	J	**6300**	J			**1200**	J	**500**	J
8270	**Benzo(a)pyrene**	**1,000**	**1,000**	**1,100**	ug/kg	4500	U	**20000**	J	**5900**	J			**1700**	J	**350**	J
8270	**Benzo(b)fluoranthene**	**1,000**	**5,600**	**11,000**	ug/kg	**320**	J	**24000**		**12000**				**2300**	J	**690**	J
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg	4500	U	**13000**	J	**3000**	J			10000	U	**270**	J
8270	**Benzo(k)fluoranthene**	**1,000**	**56,000**	**110,000**	ug/kg	**330**	J	**3000**	J	**900**	J			**2100**	J	**96**	J
8270	Biphenyl	NS	NS	NS	ug/kg	4500	U	3600	U	1800	U			10000	U	1900	U
8270	Bis(2-Ethylhexyl)phthalate	NS	NS	NS	ug/kg	4500	U	3600	U	1800	U			10000	U	1900	U
8270	Carbazole	NS	NS	NS	ug/kg	4500	U	**6000**	J	**1800**	J			**280**	J	1900	U
8270	**Dibenz(a,h)anthracene**	**330**	**560**	**1,100**	ug/kg	4500	U	3600	U	1800	U			10000	U	**87**	J
8270	Dibenzofuran	14,000	350,000	1,000,000	ug/kg	4500	U	**3200**	J	**1300**	J			10000	U	1900	U
8270	Diethylphthalate	NS	NS	NS	ug/kg	4500	U	3600	U	1800	U			10000	U	1900	U
8270	Dimethylphthalate	NS	NS	NS	ug/kg	4500	U	3600	U	1800	U			10000	U	1900	U
8270	Fluoranthene	100,000	500,000	1,000,000	ug/kg	4500	U	**97000**	J	**20000**	J			10000	U	**810**	J
8270	Fluorene	100,000	500,000	1,000,000	ug/kg	4500	U	**5700**	J	**2000**	J			10000	U	1900	U
8270	Indeno(1,2,3-cd)pyrene	500,000	5,600,000	11,000,000	ug/kg	4500	U	**12000**	J	**2700**	J			10000	U	**240**	J
8270	Naphthalene	100,000	500,000	1,000,000	ug/kg	4500	U	3600	U	1800	U			10000	U	1900	U
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg	**170**	J	**58000**	J	**19000**	J			10000	U	**420**	J
8270	Pyrene	100,000	500,000	1,000,000	ug/kg	4500	U	**43000**	J	**13000**	J			10000	U	**690**	J

Table 5.6: Shallow Surface Soil Rolling Mill Region
Organic Analytical Results

					Location	SS-M3-01		SS-M5-01		SS-M5-01		SS-M5-06		SS-M6-01		SS-M7-01	
					Sample Id	401003SSM30100		401003SSM50100		401003SSM50100XD		401003SSM5060A		401003SSM60100		401003SSM70100	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.1		0 - 0.2		0 - 0.2	
					Soil Type	Fill Waste		Fill Waste		Fill Waste		FO - Stain		Fill Waste		Fill Waste	
					Sample Date	6/5/2014 8:25		6/3/2014 11:00		6/3/2014 11:00		6/9/2014 10:55		6/5/2014 13:10		6/6/2014 8:50	
		SCO			Qc Code	FS		FS		FD		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**												
Pesticides																	
8081	4,4'-DDD	2,600	92,000	180,000	ug/kg	45	U	17	U	**5.9**	J			41	U	**4.6**	J
8081	4,4'-DDE	1,800	62,000	120,000	ug/kg	45	U	**6.7**	J	**8.2**	J			50	U	**4.2**	J
8081	4,4'-DDT	1,700	47,000	94,000	ug/kg	45	U	**35**		**32**				41	U	**30**	
8081	Aldrin	19	680	1,400	ug/kg	45	U	17	U	18	U			41	U	19	U
8081	Beta-BHC	72	3,000	14,000	ug/kg	45	U	17	U	18	U			**59**	J	19	U
8081	Delta-BHC	100,000	500,000	1,000,000	ug/kg	45	U	17	U	18	U			41	U	19	U
8081	Dieldrin	39,000	1,400,000	2,800,000	ug/kg	45	U	17	U	**6.8**	J			**68**	J	19	U
8081	Endosulfan I	4,800	200,000	920,000	ug/kg	45	U	**3.6**	J	**4.3**	J			**19**	J	19	U
8081	Endosulfan II	4,800	200,000	920,000	ug/kg	45	U	17	U	18	U			41	U	19	U
8081	Endosulfan sulfate	4,800	200,000	920,000	ug/kg	45	U	**6.7**	J	**6.2**	J			41	U	19	U
8081	Endrin	2,200	89,000	410,000	ug/kg	45	U	17	U	18	U			41	U	**22**	
8081	Endrin aldehyde	NS	NS	NS	ug/kg	45	U	17	U	18	U			**80**		**5.8**	J
8081	Endrin ketone	NS	NS	NS	ug/kg	45	U	**19**	J	**16**	J			41	U	19	U
8081	Gamma-BHC/Lindane	280	9,200	23,000	ug/kg	45	U	17	U	18	U			**14**	J	19	U
8081	Gamma-Chlordane	NS	NS	NS	ug/kg	45	U	17	U	18	U			**28**	J	19	U
8081	Heptachlor epoxide	NS	NS	NS	ug/kg	45	U	**7.9**	J	18	U			**14**	J	19	U
8081	Methoxychlor	NS	NS	NS	ug/kg	45	U	17	U	18	U			41	U	19	U
Polychlorinated Biphenyls																	
8082	**Aroclor-1248**	**1,000**	**1,000**	**25,000**	ug/kg	330	U	200	UJ	210	UJ	210	U	230	U	200	U
8082	**Aroclor-1254**	**1,000**	**1,000**	**25,000**	ug/kg	330	U	**450**	J	**410**	J	**270**	J	**4300**	J	**220**	J
8082	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	**600**	J	**380**	J	**330**	J	**280**	J	**1400**	J	**420**	
8082	**Aroclor-1268**	**1,000**	**1,000**	**25,000**	ug/kg	330	U	200	UJ	210	UJ	210	U	230	U	200	U
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	**600**		**830**		**740**		**550**		**5700**		**640**	
310.13	Hydrocarbon	NS	NS	NS	mg/kg												

Notes: See Table 5A
*- CP-51 / Soil Cleanup Guidance = 1 mg/kg in soils less than 1 foot bgs.

Table 5.7: Shallow Surface Soil SMSA Region
Organic Analytical Results

					Location	**SS-D4-01**		**SS-D4-02**		**SS-D5-01**		**SS-E4-01**		**SS-F3-01**		**SS-F4-01**		**SS-G5-01**	
					Sample Id	401003SSD40100		401003SSD40202		401003SSD50100		401003SSE40100		401003SSF30100		401003SSF40100		401003SSG50100	
					Sample Depth (ft bgs)	0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2		0 - 0.2	
					Soil Type	Fill		Fill		Fill		Fill Waste		Fill		Fill Waste		Fill Waste	
					Sample Date	6/3/2014 8:35		6/6/2014 8:45		6/2/2014 12:35		6/11/2014 10:15		6/2/2014 15:00		6/9/2014 17:00		6/10/2014 14:20	
		SCO			**Qc Code**	FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**														
Volatile Organic Compounds																			
8260	1,2,3-Trichlorobenzene	NS	NS	NS	ug/kg	51	UJ	**19**	J	58	UJ	57	U	67	UJ	47	U	62	U
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg	51	UJ	**260**		58	UJ	60		67	UJ	**35**	J	62	U
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg	250	U	**190**		280	U	310		200	U	**240**		**700**	
8260	Methyl cyclohexane	NS	NS	NS	ug/kg	51	U	40	U	58	U	57	U	67	U	**43**	J	62	U
8260	Methylene chloride	51,000	500,000	1,000,000	ug/kg	51	U	**14**	J	58	U	57	U	67	U	47	U	62	U
8260	Styrene	NS	NS	NS	ug/kg	51	U	40	U	58	U	57	U	**17**	J	47	U	62	U
8260	Xylenes, Total	100,000	500,000	1,000,000	ug/kg	100	U	**7.7**	J	120	U	110	U	130	U	**14**	J	120	U
Semi-Volatile Organic Compounds																			
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg	3,700	U	**47**	J	3,800	U	**7**	J	3,500	U	**26**	J	**6**	J
8270	Acenaphthene	100,000	500,000	1,000,000	ug/kg	3700	U	**3.6**	J	3800	U	180	U	3500	U	180	U	210	U
8270	Acenaphthylene	100,000	500,000	1,000,000	ug/kg	3700	U	190	U	3800	U	180	U	3500	U	**22**	J	210	U
8270	Anthracene	100,000	500,000	1,000,000	ug/kg	3700	U	190	U	3800	U	**8.4**	J	3500	U	**14**	J	210	U
8270	Benzo(a)anthracene	1,000	5,600	11,000	ug/kg	3700	U	190	U	3800	UJ	**66**	J	3500	U	**94**	J	**31**	J
8270	Benzo(a)pyrene	1,000	1,000	1,100	ug/kg	3700	U	**33**	J	3800	UJ	**72**	J	3500	U	**72**	J	**39**	J
8270	Benzo(b)fluoranthene	1,000	5,600	11,000	ug/kg	3700	UJ	**68**	J	3800	UJ	**140**	J	3500	UJ	**180**		**74**	J
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg	3700	U	190	U	3800	UJ	**29**	J	3500	U	**45**	J	**15**	J
8270	Benzo(k)fluoranthene	1,000	56,000	110,000	ug/kg	3700	U	190	U	3800	UJ	**49**	J	3500	U	**87**	J	**45**	J
8270	Carbazole	NS	NS	NS	ug/kg	3,700	U	**4**	J	3,800	U	**5**	J	3,500	U	**10**	J	210	U
8270	Chrysene	1,000	56,000	110,000	ug/kg	3700	U	190	U	**500**	J	**76**	J	3500	U	180	U	**55**	J
8270	Di-n-octylphthalate	NS	NS	NS	ug/kg	3,700	U	190	U	3,800	UJ	180	U	3,500	U	180	U	210	U
8270	Dibenz(a,h)anthracene	330	560	1,100	ug/kg	3700	U	190	U	3800	UJ	180	U	3500	U	**90**	J	210	U
8270	Dibenzofuran	14,000	350,000	1,000,000	ug/kg	3700	U	**19**	J	3800	U	180	U	3500	U	**8.6**	J	210	U
8270	Fluoranthene	100,000	500,000	1,000,000	ug/kg	3700	U	**190**	U	**260**	J	**110**	J	3500	U	**120**	J	**63**	J
8270	Fluorene	100,000	500,000	1,000,000	ug/kg	3700	U	**6.1**	J	3800	U	180	U	3500	U	180	U	210	U
8270	Indeno(1,2,3-cd)pyrene	500	5,600	11,000	ug/kg	3700	U	190	U	3800	UJ	**28**	J	3500	U	**110**	J	**14**	J
8270	Naphthalene	100,000	500,000	1,000,000	ug/kg	3700	U	190	U	3800	U	180	U	3500	U	**19**	J	210	U
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg	3700	U	**84**	J	**150**	J	**47**	J	3500	U	**45**	J	**27**	J
8270	Pyrene	100,000	500,000	1,000,000	ug/kg	3700	U	**110**	J	**460**	J	**87**	J	3500	U	**120**	J	**56**	J
Pesticides																			
8081	4,4'-DDD	2,600	92,000	180,000	ug/kg	8.9	U	**1.2**	J	190	U	9.1	U	8.5	U	8.7	U	10	U
8081	4,4'-DDE	1,800	62,000	120,000	ug/kg	12	U	1.8	U	190	U	9.1	U	8.5	U	8.7	U	**2.9**	J
8081	4,4'-DDT	1,700	47,000	94,000	ug/kg	**11**		**12**		190	U	100	U	**2.5**	J	**14**		**11**	
8081	Alpha-Chlordane	910	24,000	47,000	ug/kg	**11**	J	1.8	U	190	U	9.1	U	8.5	U	8.7	U	10	U
8081	Delta-BHC	100,000	500,000	1,000,000	ug/kg	8.9	U	**0.59**	J	190	U	**2.9**	J	**1.8**	J	8.7	U	**2.9**	J
8081	Dieldrin	39	1,400	2,800	ug/kg	**9.6**	J	**5.9**	J	250	U	50	U	8.5	U	**7.9**	J	**8.5**	J
8081	Endosulfan I	4,800	200,000	920,000	ug/kg	**12**	J	**0.56**	J	190	U	9.1	U	8.5	U	8.7	U	10	U
8081	Endrin	2,200	89,000	410,000	ug/kg	8.9	U	**0.72**	J	190	U	11	U	8.5	U	8.7	U	10	U
8081	Endrin aldehyde	NS	NS	NS	ug/kg	8.9	U	**2.5**	J	190	U	96	U	8.5	U	8.7	UJ	10	U
8081	Endrin ketone	NS	NS	NS	ug/kg	8.9	U	**3.8**	J	190	U	48	U	8.5	U	**4.9**	J	**2.9**	J
8081	Gamma-Chlordane	NS	NS	NS	ug/kg	**30**	J	**1.1**	J	190	U	9.1	U	8.5	U	8.7	U	10	U
8081	Methoxychlor	NS	NS	NS	ug/kg	8.9	U	**0.85**	J	190	U	9.1	U	8.5	U	8.7	U	10	U
Polychlorinated Biphenyl																			
8082	Aroclor-1254	1,000	1,000	25,000	ug/kg	260	U	**390**	J	240	UJ	250	U	190	UJ	**360**	J	250	U
8082	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	260	U	**330**	J	**7400**	J	**6300**	J	190	UJ	**650**	J	**520**	J
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	ND		**720.85**		**7470**		**6308**		ND		**1010**		**520**	
310.13	Hydrocarbon	NS	NS	NS	mg/kg													ND	

Notes: See Table 5A
*- CP-51 / Soil Cleanup Guidance = 1 mg/kg in soils less than 1 foot bgs.

Table 5.8: Shallow Surface Soil Melt Shop Region
Organic Analytical Results

| | | |

Table 5.10: Surface Soil Extrusion Region
Inorganic Analytical Results

					Location	SS-E5-02		TP-E7-01		TP-F5-01		TP-F5-01	
					Sample Id	401003SSE50200		401003TPE70102		401003TPF50102		01003TPF50102X	
					Sample Depth (ft bgs)	0 - 1		1 - 2		1 - 2		1 - 2	
					Soil Type	Fill		Fill		Fill		Fill	
					Investigation Objective	Fill		Fill		Fill		Fill	
					Sample Date	6/9/2014 12:25		6/5/2014 12:45		6/3/2014 15:25		6/3/2014 15:25	
		SCO			Qc Code	FS		FS		FS		FD	
Method	Parameter	RES	COMM	IND	Units								
6010	Aluminum	NS	NS	NS	mg/kg	**17800**		**12200**		**10000**	J	**12800**	J
6010	Antimony	NS	NS	NS	mg/kg	**0.96**	J	**0.56**	J	**10.3**	J	**10.5**	J
6010	Arsenic	16	16	16	mg/kg	**8.9**		**9.8**		**8.7**		**8**	
6010	**Barium**	**350**	**400**	**10,000**	mg/kg	**1280**		**135**		**172**	J	**183**	J
6010	Beryllium	14	590	2,700	mg/kg	**0.95**		**0.69**		**0.55**		**0.63**	
6010	**Cadmium**	**2.5**	**9.3**	**60**	mg/kg	**2.9**		**0.24**		**0.86**	J	**0.48**	J
6010	Calcium	NS	NS	NS	mg/kg	**5340**		**6090**	J	**8840**	J	**6090**	J
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**397**		**286**	J	**1160**		**1040**	
6010	Cobalt	NS	NS	NS	mg/kg	**90.2**		**27.5**		**745**	J	**95**	J
6010	**Copper**	**270**	**270**	**10,000**	mg/kg	**356**		**44.9**		**225**		**159**	
6010	Iron	NS	NS	NS	mg/kg	**37700**	J	**28800**	J	**34900**	J	**35700**	J
6010	**Lead**	**400**	**1,000**	**3,900**	mg/kg	**686**		**21.9**		**31.6**	J	**30.2**	J
6010	Magnesium	NS	NS	NS	mg/kg	**5680**		**5640**	J	**5270**	J	**6740**	J
6010	Manganese	2,000	10,000	10,000	mg/kg	**1170**		**946**		**884**		**1060**	
6010	Mercury	0.81	2.8	5.7	mg/kg	**0.15**		**0.062**	J	**0.033**		**0.043**	
6010	Molybdenum*	NS	NS	4800	mg/kg	**146**		**14.6**		**995**	J	**180**	J
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**1230**		**195**	J	**4830**	J	**1630**	J
6010	Potassium	NS	NS	NS	mg/kg	**1780**		**1210**		**828**		**1030**	
6010	Selenium	36	1,500	6,800	mg/kg	**1.5**	J	**1.2**	J	**2.9**	J	**1.1**	J
6010	Silver	36	1,500	6,800	mg/kg	**0.27**	J	0.71	U	**0.68**	J	**0.43**	J
6010	Sodium	NS	NS	NS	mg/kg	**578**		**72.2**	J	**144**		**138**	J
6010	Thallium	NS	NS	NS	mg/kg	6.2	U	7.1	U	**0.77**	J	6.7	U
6010	Titanium	NS	NS	NS	mg/kg	**510**		**137**	J	**286**	J	**161**	J
6020	Uranium	NS	NS	NS	mg/kg					**1.2**		**1.1**	
6010	Vanadium	NS	NS	NS	mg/kg	**65**		**20.9**		**81**	J	**55.6**	J
6010	Zinc	2,200	10,000	10,000	mg/kg	**820**		**80.2**		**74.8**	J	**78**	J
6020	Zirconium	NS	NS	NS	mg/kg					**9.8**		**8.6**	
7199	**Chromium, Hexavalent**	**22**	**400**	**800**	mg/kg	**53**		1.1		**3**	J	**4**	J
4500	pH	NS	NS	NS	PH UNITS	**6.81**		**7.48**		**7.83**		**7.73**	

Notes: See Table 5A

Table 5.11: Surface Soil Rolling Mill Region
Inorganic Analytical Results

					Location	**SS-J7-02**		**SS-J7-03**		**SS-J7-04**		**SS-J7-05**	
					Sample Id	401003SSJ70201		401003SSJ70301		401003SSJ70401		401003SSJ70501	
					Sample Depth (ft bgs)	0 - 1		0 - 1		0 - 1		0 - 1	
					Soil Type	Fill		Fill		Fill		Fill	
					Investigation Objective	CP-51		CP-51		CP-51		CP-51	
					Sample Date	6/6/2014 10:30		6/6/2014 10:20		6/6/2014 10:10		6/6/2014 9:45	
		SCO			**Qc Code**	FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**								
6010	Aluminum	NS	NS	NS	mg/kg	**9560**	J	**7450**	J	**7470**		**9260**	
6010	Antimony	NS	NS	NS	mg/kg	**19.8**	J	**13.7**	J	**3.7**	J	**2**	J
6010	Arsenic	16	16	16	mg/kg	**5.2**	J	**3.1**	U	**10.6**		**10.1**	
6010	Barium	350	400	10,000	mg/kg	**109**	J	**98.4**	J	**270**		**100**	
6010	Beryllium	14	590	2,700	mg/kg	**0.86**		0.31	U	**0.34**		**0.44**	
6010	**Cadmium**	**2.5**	**9.3**	**60**	mg/kg	**1.2**		**1.8**		**4.6**		**1.5**	
6010	Calcium	NS	NS	NS	mg/kg	**16600**	J	**6860**	J	**4010**		**4130**	
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**14200**		**10300**		**1880**		**1110**	
6010	Cobalt	NS	NS	NS	mg/kg	**5070**	J	**316**	J	**145**		**85.9**	
6010	**Copper**	**270**	**270**	**10,000**	mg/kg	**513**		**1830**		**139**		**116**	
6010	Iron	NS	NS	NS	mg/kg	**94100**	J	**79900**	J	**34300**	J	**33000**	J
6010	Lead	400	1,000	3,900	mg/kg	**126**	J	**62.1**	J	**91.2**		**92.5**	
6010	Magnesium	NS	NS	NS	mg/kg	**4360**		**3990**		**3190**		**3990**	
6010	**Manganese**	**2,000**	**10,000**	**10,000**	mg/kg	**2720**		**1660**		**677**		**751**	
7471	**Mercury**	**0.81**	**2.8**	**5.7**	mg/kg	**2**		**0.19**		**1.6**		**0.96**	
6010	Molybdenum*	NS	NS	4,088	mg/kg	**1160**		**875**		**144**		**91.6**	
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**7490**		**7270**		**1630**		**795**	
6010	Potassium	NS	NS	NS	mg/kg	**736**		**797**		**676**		**880**	
6010	Selenium	36	1,500	6,800	mg/kg	**6.2**		**3.2**	J	**4.6**	J	**2.2**	J
6010	Sodium	NS	NS	NS	mg/kg	**598**		**125**	J	**71.9**	J	**74.3**	J
6010	Thallium	NS	NS	NS	mg/kg	**0.99**	J	**1.3**	J	7.1	U	6.8	U
6010	Titanium	NS	NS	NS	mg/kg	**234**	J	**285**	J	**168**		**178**	
6010	Vanadium	NS	NS	NS	mg/kg	**285**		**226**		**99.5**		**60.8**	
6010	Zinc	2,200	10,000	10,000	mg/kg	**214**	J	**338**	J	**133**		**279**	
7199	Chromium, Hexavalent	22	400	800	mg/kg	**0.78**	J	**1.6**	J	1.8	U	2	U
4500	pH	NS	NS	NS	PH UNITS	**6.78**		**7.09**		**7.54**		**7.49**	

Notes: See Table 5A

Table 5.12: Surface Soil SMSA Region
Inorganic Analytical Results

					Location	**TP-D5-01**	
					Sample Id	401003TPD50102	
					Sample Depth (ft bgs)	1 - 2	
					Soil Type	Fill	
					Investigation Objective	Fill	
					Sample Date	6/2/2014 13:00	
		SCO			**Qc Code**	FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**		
Metals							
6010	Aluminum				mg/kg	**6430**	J
6010	Antimony				mg/kg	**708**	J
6010	Barium	350	400	10,000	mg/kg	**147**	J
6010	Cadmium	2.5	9.3	60	mg/kg	**0.2**	J
6010	Calcium				mg/kg	**12300**	J
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**35400**	J
6010	Cobalt				mg/kg	**656**	
6010	**Copper**	**270**	**270**	**10,000**	mg/kg	**3140**	J
6010	Iron				mg/kg	**208000**	J
6010	Lead	400	1,000	3,900	mg/kg	**144**	
6010	Magnesium				mg/kg	**3860**	J
6010	**Manganese**	**2,000**	**10,000**	**10,000**	mg/kg	**4180**	J
7471	Mercury	0.81	2.8	5.7	mg/kg	**0.38**	J
6010	Molybdenum			4,088	mg/kg	**3270**	J
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**23900**	
6010	Potassium				mg/kg	**645**	J
6010	Selenium	36	1,500	6,800	mg/kg	**10.3**	
6010	Silver	36	1,500	6,800	mg/kg	**3.3**	
6010	Sodium				mg/kg	**117**	J
6010	Thallium				mg/kg	**10.3**	
6010	Titanium				mg/kg	**258**	J
6010	Vanadium				mg/kg	**288**	J
6010	Zinc	2,200	10,000	10,000	mg/kg	**153**	J
7199	Chromium, Hexavalent	22	400	800	mg/kg	**8.8**	
4500	pH				PH UNITS	**8.52**	

Notes: See Table 5A

Table 5.13: Surface Soil Melt Shop Region
Inrganic Analytical Results

					Location	**SB-M2-02**		**SS-H2-02**		**SS-I1-01**	
					Sample Id	401003SBM20201		401003SSH20201		401003SSI10100	
					Sample Depth (ft bgs)	0.2 - 1		0 - 1		0 - 1	
					Soil Type	Fill Waste		Fill Waste		Fill	
					Investigation Objective	CP-51		FO - Pile		AS - Melt Shop	
					Sample Date	6/11/2014 11:10		6/6/2014 10:55		6/6/2014 11:05	
		SCO			**Qc Code**	FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**						
Metals											
6010	Aluminum	NS	NS	NS	mg/kg	**13100**	J	**8760**	J	**9340**	J
6010	Antimony	NS	NS	NS	mg/kg	18.6	UJ	**0.82**	J	15.5	UJ
6010	Arsenic	16	16	16	mg/kg	**14.5**		**12.9**		**6.2**	
6010	**Barium**	**350**	**400**	**10,000**	mg/kg	**119**	J	**549**	J	**54.2**	J
6010	Beryllium	14	590	2,700	mg/kg	**0.75**		**0.34**		**0.43**	
6010	**Cadmium**	**2.5**	**9.3**	**60**	mg/kg	**0.29**		**2.5**		**0.36**	
6010	Calcium	NS	NS	NS	mg/kg	**4680**	J	**216000**	J	**6330**	J
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**69.8**	J	**383**		**32.9**	
6010	Cobalt	NS	NS	NS	mg/kg	**20.1**		**21.4**	J	**13.1**	J
6010	Copper	270	270	10,000	mg/kg	**38.6**	J	**117**		**42.6**	
6010	Iron	NS	NS	NS	mg/kg	**23800**	J	**20500**	J	**22200**	J
6010	Lead	400	1,000	3,900	mg/kg	**114**		**85.4**	J	**12.8**	J
6010	Magnesium	NS	NS	NS	mg/kg	**5150**	J	**20900**		**4870**	
6010	Manganese	2,000	10,000	10,000	mg/kg	**390**	J	**1080**		**653**	
7471	Mercury	0.81	2.8	5.7	mg/kg	**0.04**		**0.15**		**0.026**	
6010	Molybdenum*	NS	NS	4,088	mg/kg	**12.3**	J	**55.1**		**24.9**	
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**83.8**		**880**		**113**	
6010	Potassium	NS	NS	NS	mg/kg	**1600**	J	**1430**		**874**	
6010	Selenium	36	1,500	6,800	mg/kg	**1.3**	J	**2.3**	J	**0.61**	J
6010	Silver	36	1,500	6,800	mg/kg	0.74	U	**0.31**	J	0.62	U
6010	Sodium	NS	NS	NS	mg/kg	**1110**		**220**		**42**	J
6010	Titanium	NS	NS	NS	mg/kg	**264**	J	**185**	J	**105**	J
6020	Uranium	NS	NS	NS	mg/kg	**4.7**				**0.78**	
6010	Vanadium	NS	NS	NS	mg/kg	**31.7**	J	**142**		**20.8**	
6010	Zinc	2,200	10,000	10,000	mg/kg	**112**	J	**250**	J	**80.3**	J
6020	Zirconium	NS	NS	NS	mg/kg	**7**				**8.3**	
7199	Chromium, Hexavalent	22	400	800	mg/kg	0.5	UJ	**1.3**	J		
4500	pH	NS	NS	NS	PH UNITS	**7.93**		**8.79**		7.66	

Notes: See Table 5A

Table 5.14:Surface Soil Extrusion Region
Organic Analytical Results

					Location	**SB-E6-01**	**SB-E6-05**	**SB-E6-06**	**SB-F6-01**	**SB-F6-04**	**SS-E5-02**	**TP-D7-01**	**TP-E7-01**
					Sample Id	401003SBE60101	401003SBE60501	401003SBE60601	401003SBF60101	401003SBF60401	401003SSE50200	401003TPD70101	401003TPE70101
					Sample Depth (ft bgs)	0.2 - 1	0.2 - 1	0.2 - 1	0.2 - 1	0.2 - 1	0 - 1	0.2 - 1	0.2 - 1
					Soil Type	Fill	Fill	Fill	Fill Waste	Fill	Fill	Fill	Fill
					Investigation Objective	CP-51	CP-51	CP-51	CP-51	CP-51	Transformer T6	CP-51	CP-51
					Sample Date	6/2/2014 12:25	6/10/2014 16:10	6/10/2014 11:25	6/3/2014 8:45	6/11/2014 11:35	6/9/2014 12:25	6/5/2014 10:40	6/5/2014 12:35
		SCO			**Qc Code**	FS	FS	FS	FS	FS	FS	FS	FS
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**								
Volatile Organic Compounds													
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg						**30** J		
8260	1,2,4-Trimethylbenzene	47000	190000	380000	ug/kg						70 U		
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg						**1600**		
Semi-volatile Organic Compounds													
8270	**2-Methylnaphthalene**	NS	NS	NS	ug/kg						43000 U		
8270	**Anthracene**	NS	NS	NS							43000 U		
8270	**Benzo(a)anthracene**	1000	5600	11000	ug/kg						43000 U		
8270	**Benzo(a)pyrene**	1000	1000	1100	ug/kg						43000 U		
8270	**Benzo(b)fluoranthene**	1000	5600	11000	ug/kg						43000 U		
8270	**Benzo(ghi)perylene**	NS	NS	NS							43000 U		
8270	**Benzo(k)fluoranthene**	1000	56000	110000	ug/kg						43000 U		
8270	**Carbazole**	NS	NS	NS	ug/kg						43000 U		
8270	**Chrysene**	1000	56000	110000	ug/kg						43000 U		
8270	**Dibenzofuran**	14000	350000	1,000,000	ug/kg						43000 U		
8270	**Fluoranthene**	100000	500000	1,000,000	ug/kg						**1900** J		
8270	**Indeno(1,2,3-cd)pyrene**	NS	NS	NS							43000 U		
8270	**Phenanthrene**	100000	500000	1,000,000	ug/kg						43000 U		
8270	**Pyrene**	100000	500000	1,000,000	ug/kg						**1200** J		
Pesticides													
8081	4,4'-DDD	2600	92000	180000	ug/kg						**150** J		
8081	4,4'-DDE	1800	62000	120000	ug/kg						210 U		
8081	4,4'-DDT	1700	47000	94000	ug/kg						**800**		
8081	Dieldrin	39	1400	2800	ug/kg						210 U		
8081	Endosulfan sulfate	4800	200000	920000	ug/kg						**120** J		
8081	Endrin	2200	89000	410000	ug/kg						210 U		
8081	Endrin ketone	NS	NS	NS	ug/kg						**240** J		
8081	Gamma chlordane	NS	NS	NS	ug/kg						210 U		
8081	Methoxychlor	NS	NS	NS	ug/kg						210 U		
Polychlorinated Biphenyls													
8082	**Aroclor-1242**	1000	1000	25000	ug/kg	**1700** J	210 U	240 U	200 UJ	230 U	6200 U	240 U	250 U
8082	**Aroclor-1254**	1000	1000	25000	ug/kg	210 UJ	210 U	240 U	200 UJ	230 U	6200 U	240 U	250 U
8082	**Aroclor-1260**	1000	1000	25000	ug/kg	**110** J	210 U	240 U	**220** J	230 U	**30000** J	240 U	**1300**
Calculated	**Total PCBs***	1000	1000	25000	ug/kg	**1810**	ND	ND	**220**	ND	**30000**	ND	**1300**

Notes: See Table 5A

*- CP-51 / Soil Cleanup Guidance = for soils less than 1 foot bgs 1 mg/kg; for soils greater than 2 feet bgs 10 mg/kg (commercial use) and 25 mg/kg (industrial use).

Table 5.14:Surface Soil Extrusion Region
Organic Analytical Results

					Location	TP-E7-01	TP-F5-01	TP-F5-01	TP-F5-01	TP-F7-01
					Sample Id	401003TPE70102	401003TPF50101	401003TPF50102	401003TPF50102XD	401003TPF70101
					Sample Depth (ft bgs)	1 - 2	0.2 - 1	1 - 2	1 - 2	0.2 - 1
					Soil Type	Fill Waste	Fill	Fill	Fill	Fill Waste
					Investigation Objective	Fill	CP-51	Fill	Fill	CP-51
					Sample Date	6/5/2014 12:45	6/3/2014 15:10	6/3/2014 15:25	6/3/2014 15:25	6/5/2014 13:55
		SCO			Qc Code	FS	FS	FS	FD	FS
Method	Parameter	RES	COMM	IND	Units					
Volatile Organic Compounds										
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg	46 U		**28** J	**46**	
8260	1,2,4-Trimethylbenzene	47000	190000	380000	ug/kg	46 U		**18** J	46 U	
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg	**110**		**110** J	**54** J	
Semi-volatile Organic Compounds										
8270	**2-Methylnaphthalene**	NS	NS	NS	ug/kg	**8.1** J		370 UJ	1900 U	
8270	**Anthracene**	NS	NS	NS		180 U		**14** J	1900 U	
8270	**Benzo(a)anthracene**	1000	5600	11000	ug/kg	**22** J		**66** J	1900 U	
8270	**Benzo(a)pyrene**	1000	1000	1100	ug/kg	**22** J		370 UJ	1900 U	
8270	**Benzo(b)fluoranthene**	1000	5600	11000	ug/kg	**25** J		**22** J	1900 UJ	
8270	**Benzo(ghi)perylene**	NS	NS	NS		180 U		**14** J	1900 UJ	
8270	**Benzo(k)fluoranthene**	1000	56000	110000	ug/kg	**21** J		370 UJ	1900 U	
8270	**Carbazole**	NS	NS	NS	ug/kg	**3.1** J		370 UJ	1900 U	
8270	**Chrysene**	1000	56000	110000	ug/kg	**27** J		**48** J	1900 U	
8270	**Dibenzofuran**	14000	350000	1,000,000	ug/kg	**2.7** J		370 UJ	1900 U	
8270	**Fluoranthene**	100000	500000	1,000,000	ug/kg	**35** J		**18** J	1900 U	
8270	**Indeno(1,2,3-cd)pyrene**	NS	NS	NS		180 U		**200** J	1900 UJ	
8270	**Phenanthrene**	100000	500000	1,000,000	ug/kg	**25** J		370 UJ	1900 U	
8270	**Pyrene**	100000	500000	1,000,000	ug/kg	**47** J		370 UJ	1900 U	
Pesticides										
8081	4,4'-DDD	2600	92000	180000	ug/kg	**2.6** J		18 U	18 U	
8081	4,4'-DDE	1800	62000	120000	ug/kg	9.1 U		**7.8** J	**8.4** J	
8081	4,4'-DDT	1700	47000	94000	ug/kg	**5.1** J		**36**	**70**	
8081	Dieldrin	39	1400	2800	ug/kg	**4.1** J		**11** J	**19** J	
8081	Endosulfan sulfate	4800	200000	920000	ug/kg	9.1 U		18 U	18 U	
8081	Endrin	2200	89000	410000	ug/kg	9.1 U		18 U	**13** J	
8081	Endrin ketone	NS	NS	NS	ug/kg	**2.8** J		**24** J	**57** J	
8081	Gamma chlordane	NS	NS	NS	ug/kg	9.1 U		18 U	18 U	
8081	Methoxychlor	NS	NS	NS	ug/kg	9.1 U		18 U	**6.4** J	
Polychlorinated Biphenyls										
8082	**Aroclor-1242**	1000	1000	25000	ug/kg	220 U	210 U	220 UJ	190 UJ	240 U
8082	**Aroclor-1254**	1000	1000	25000	ug/kg	220 U	**430** J	**570** J	**590** J	**140** J
8082	**Aroclor-1260**	1000	1000	25000	ug/kg	220 U	**160** J	**230** J	**490** J	240 U
Calculated	**Total PCBs***	1000	1000	25000	ug/kg	ND	**590**	**800**	**1080**	**140**

Notes: See Table 5A

*- CP-51 / Soil Cleanup Guidance = for soils less than 1 foot bgs 1 mg/kg; for soils great

Table 5.15: Surface Soil Rolling Mill Region
Organic Analytical Results

					Location	SB-G4-01		SB-H3-01		SB-H4-01		SB-I5-01		SB-J4-01		SB-J5-01		SB-J6-01		SB-J7-01		SB-K4-01	
					Sample Id	401003SBG40101		401003SBH30101		401003SBH40101		401003SBI50101		401003SBJ40101		401003SBJ50101		401003SBJ60101		401003SBJ70101		401003SBK40101	
					Sample Depth (ft bgs)	0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1	
					Soil Type	Fill		Fill		Fill Waste		Fill Waste		Fill		Fill Waste		Fill Waste		Fill Waste		Fill Waste	
					Investigation Objective	CP-51		CP-51		CP-51		CP-51		CP-51		CP-51		CP-51		CP-51		CP-51	
					Sample Date	6/10/2014 15:10		6/9/2014 15:17		6/10/2014 16:50		6/10/2014 10:30		6/4/2014 9:29		6/10/2014 8:15		6/6/2014 10:50		6/6/2014 9:30		6/9/2014 13:05	
		SCO			Qc Code	FS		FS		FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																		
Volatile Organic Compounds																							
VOCs	Acetic acid, methyl ester	NS	NS	NS	ug/kg																		
Semi-Volatile Organic Compounds																							
SVOCs	2-Methylnaphthalene	NS	NS	NS	ug/kg					**450**	J												
SVOCs	Acenaphthene	100,000	500,000	1,000,000	ug/kg					**540**	J												
SVOCs	Acenaphthylene	100,000	500,000	1,000,000	ug/kg					**140**	J												
SVOCs	Anthracene	100,000	500,000	1,000,000	ug/kg					**490**	J												
SVOCs	**Benzo(a)anthracene**	**1,000**	**5,600**	**11,000**	ug/kg					13000	U												
SVOCs	**Benzo(a)pyrene**	**1,000**	**1,000**	**1,100**	ug/kg					13000	U												
SVOCs	**Benzo(b)fluoranthene**	**1,000**	**5,600**	**11,000**	ug/kg					13000	U												
SVOCs	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg					13000	U												
SVOCs	Benzo(k)fluoranthene	1,000	56,000	110,000	ug/kg					13000	U												
SVOCs	Biphenyl	NS	NS	NS	ug/kg					13,000	U												
SVOCs	Carbazole	NS	NS	NS	ug/kg					**240**	J												
SVOCs	**Chrysene**	**1,000**	**56,000**	**110,000**	ug/kg					13000	U												
SVOCs	Di-n-octylphthalate	NS	NS	NS	ug/kg					13,000	U												
SVOCs	**Dibenz(a,h)anthracene**	**330**	**560**	**1,100**	ug/kg					13000	U												
SVOCs	Dibenzofuran	14,000	350,000	1,000,000	ug/kg					13000	U												
SVOCs	Fluoranthene	100,000	500,000	1,000,000	ug/kg					13000	U												
SVOCs	Fluorene	100,000	500,000	1,000,000	ug/kg					**320**	J												
SVOCs	**Indeno(1,2,3-cd)pyrene**	**500**	**5,600**	**11,000**	ug/kg					13000	U												
SVOCs	N-Nitrosodiphenylamine	NS	NS	NS	ug/kg					13,000	U												
SVOCs	Naphthalene	100,000	500,000	1,000,000	ug/kg					13000	U												
SVOCs	Phenanthrene	100,000	500,000	1,000,000	ug/kg					**500**	J												
SVOCs	Pyrene	100,000	500,000	1,000,000	ug/kg					13000	U												
Pesticides																							
Pest	4,4'-DDD	2,600	92,000	180,000	ug/kg					410	U												
Pest	4,4'-DDE	1,800	62,000	120,000	ug/kg					410	U												
Pest	4,4'-DDT	1,700	47,000	94,000	ug/kg					410	U												
Pest	Aldrin	19	680	1,400	ug/kg					410	U												
Pest	Delta-BHC	100,000	500,000	1,000,000	ug/kg					410	U												
Pest	Dieldrin	39	1,400	2,800	ug/kg					410	U												
Pest	Endosulfan I	4,800	200,000	920,000	ug/kg					410	U												
Pest	Endosulfan II	4,800	200,000	920,000	ug/kg					410	U												
Pest	Endosulfan sulfate	4,800	200,000	920,000	ug/kg					410	U												
Pest	Endrin	2,200	89,000	410,000	ug/kg					410	U												
Pest	Endrin aldehyde	NS	NS	NS	ug/kg					410	U												
Pest	Endrin ketone	NS	NS	NS	ug/kg					410	U												
Pest	Gamma-Chlordane	NS	NS	NS	ug/kg					410	U												
Pest	Methoxychlor	NS	NS	NS	ug/kg					410	U												
Polychlorinated Biphenyls																							
PCBs	**Aroclor-1254**	**1,000**	**1,000**	**25,000**	ug/kg	220	U	240	U	200	U	260	U	220	U	210	U	240	U	**100**	J	1400	U
PCBs	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	220	U	**580**	J	200	U	**1900**	J	**340**	J	210	U	**450**		210	U	**12000**	J
PCBs	**Aroclor-1268**	**1,000**	**1,000**	**25,000**	ug/kg	220	U	**160**	J	200	U	**2200**	J	220	U	210	U	240	U	210	U	1400	U
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	ND		ND		ND		**4100**		**340**		ND		**450**		**100**		**12000**	

Notes: See Table 5A
*- CP-51 / Soil Cleanup Guidance = for soils less than 1 foot bgs 1 mg/kg; for soils greater than 2 feet bgs 10 mg/kg (commercial use) and 25 mg/kg (industrial use).

Table 5.15: Surface Soil Rolling Mill Region
Organic Analytical Results

					Location	SB-K5-01		SB-K6-01		SB-K7-02		SB-L4-01		SB-L5-01		SB-L7-02		SB-M3-01		SB-M5-01		SB-M6-01	
					Sample Id	401003SBK50101		401003SBK60101		401003SBK70201		401003SBL40101		401003SBL50101		401003SBL70201		401003SBM30101		401003SBM50101		401003SBM60101	
					Sample Depth (ft bgs)	0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1	
					Soil Type	Fill Waste		Fill		Fill		Fill		Fill		Fill Waste		Fill Waste		Fill Waste		Fill Waste	
					Investigation Objective	CP-51		CP-51		CP-51		CP-51		CP-51		CP-51		CP-51		CP-51		CP-51	
					Sample Date	6/9/2014 12:00		6/3/2014 13:50		6/5/2014 16:45		6/3/2014 15:40		6/3/2014 20:40		6/5/2014 14:35		6/5/2014 8:40		6/3/2014 10:10		6/5/2014 13:20	
		SCO			Qc Code	FS		FS		FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																		
Volatile Organic Compounds																							
VOCs	Acetic acid, methyl ester	NS	NS	NS	ug/kg																		
Semi-Volatile Organic Compounds																							
SVOCs	2-Methylnaphthalene	NS	NS	NS	ug/kg																		
SVOCs	Acenaphthene	100,000	500,000	1,000,000	ug/kg																		
SVOCs	Acenaphthylene	100,000	500,000	1,000,000	ug/kg																		
SVOCs	Anthracene	100,000	500,000	1,000,000	ug/kg																		
SVOCs	**Benzo(a)anthracene**	**1,000**	**5,600**	**11,000**	ug/kg																		
SVOCs	**Benzo(a)pyrene**	**1,000**	**1,000**	**1,100**	ug/kg																		
SVOCs	**Benzo(b)fluoranthene**	**1,000**	**5,600**	**11,000**	ug/kg																		
SVOCs	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg																		
SVOCs	Benzo(k)fluoranthene	1,000	56,000	110,000	ug/kg																		
SVOCs	Biphenyl	NS	NS	NS	ug/kg																		
SVOCs	Carbazole	NS	NS	NS	ug/kg																		
SVOCs	**Chrysene**	**1,000**	**56,000**	**110,000**	ug/kg																		
SVOCs	Di-n-octylphthalate	NS	NS	NS	ug/kg																		
SVOCs	**Dibenz(a,h)anthracene**	**330**	**560**	**1,100**	ug/kg																		
SVOCs	Dibenzofuran	14,000	350,000	1,000,000	ug/kg																		
SVOCs	Fluoranthene	100,000	500,000	1,000,000	ug/kg																		
SVOCs	Fluorene	100,000	500,000	1,000,000	ug/kg																		
SVOCs	**Indeno(1,2,3-cd)pyrene**	**500**	**5,600**	**11,000**	ug/kg																		
SVOCs	N-Nitrosodiphenylamine	NS	NS	NS	ug/kg																		
SVOCs	Naphthalene	100,000	500,000	1,000,000	ug/kg																		
SVOCs	Phenanthrene	100,000	500,000	1,000,000	ug/kg																		
SVOCs	Pyrene	100,000	500,000	1,000,000	ug/kg																		
Pesticides																							
Pest	4,4'-DDD	2,600	92,000	180,000	ug/kg																		
Pest	4,4'-DDE	1,800	62,000	120,000	ug/kg																		
Pest	4,4'-DDT	1,700	47,000	94,000	ug/kg																		
Pest	Aldrin	19	680	1,400	ug/kg																		
Pest	Delta-BHC	100,000	500,000	1,000,000	ug/kg																		
Pest	Dieldrin	39	1,400	2,800	ug/kg																		
Pest	Endosulfan I	4,800	200,000	920,000	ug/kg																		
Pest	Endosulfan II	4,800	200,000	920,000	ug/kg																		
Pest	Endosulfan sulfate	4,800	200,000	920,000	ug/kg																		
Pest	Endrin	2,200	89,000	410,000	ug/kg																		
Pest	Endrin aldehyde	NS	NS	NS	ug/kg																		
Pest	Endrin ketone	NS	NS	NS	ug/kg																		
Pest	Gamma-Chlordane	NS	NS	NS	ug/kg																		
Pest	Methoxychlor	NS	NS	NS	ug/kg																		
Polychlorinated Biphenyls																							
PCBs	**Aroclor-1254**	**1,000**	**1,000**	**25,000**	ug/kg	**380**	J	250	U	**190**	J	**2200**	J	270	U	**200**	J	210	U	250	U	290	UJ
PCBs	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	**200**	J	250	U	**260**	J	**530**	J	270	U	**200**		210	U	250	U	290	UJ
PCBs	**Aroclor-1268**	**1,000**	**1,000**	**25,000**	ug/kg	210	U	250	U	**110**	J	**460**	J	270	U	190	U	210	U	250	U	290	UJ
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	**580**		ND		**560**		**3190**		ND		**400**		ND		ND		ND	

Notes: See Table 5A
*- CP-51 / Soil Cleanup Guidance = for soils less than 1 foot bgs 1 mg/kg; for soils greater tha

Table 5.15: Surface Soil Rolling Mill Region
Organic Analytical Results

					Location	SB-M6-01		SB-M7-01		SS-J7-02		SS-J7-03		SS-J7-04		SS-J7-05		TP-G3-01		TP-H5-01		TP-I3-01	
					Sample Id	401003SBM60101XD		401003SBM70101		401003SSJ70201		401003SSJ70301		401003SSJ70401		401003SSJ70501		401003TPG30101		401003TPH50101		401003TPI30101	
					Sample Depth (ft bgs)	0.2 - 1		0.2 - 1		0 - 1		0 - 1		0 - 1		0 - 1		0.2 - 1		0.2 - 1		0.2 - 1	
					Soil Type	Fill Waste		Fill Waste		Fill		Fill		Fill		Fill		Fill		Fill Waste		Fill Waste	
					Investigation Objective	CP-51		CP-51		Steam Clean Pad		Steam Clean Pad		Steam Clean Pad		Steam Clean Pad		CP-51		CP-51		CP-51	
					Sample Date	6/5/2014 13:20		6/6/2014 8:20		6/6/2014 10:30		6/6/2014 10:20		6/6/2014 10:10		6/6/2014 9:45		6/5/2014 8:55		6/4/2014 10:30		6/4/2014 15:25	
		SCO			Qc Code	FD		FS		FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																		
Volatile Organic Compounds																							
VOCs	Acetic acid, methyl ester	NS	NS	NS	ug/kg																		
Semi-Volatile Organic Compounds																							
SVOCs	2-Methylnaphthalene	NS	NS	NS	ug/kg			**140**	J	**430**	J	**220**	J	**160**	J	**61**	J						
SVOCs	Acenaphthene	100,000	500,000	1,000,000	ug/kg			1900	U	3900	U	**130**	J	**21**	J	**34**	J						
SVOCs	Acenaphthylene	100,000	500,000	1,000,000	ug/kg			1900	U	3900	U	4800	U	**21**	J	200	U						
SVOCs	Anthracene	100,000	500,000	1,000,000	ug/kg			1900	U	3900	U	**360**	J	**5**	J	200	U						
SVOCs	**Benzo(a)anthracene**	**1,000**	**5,600**	**11,000**	ug/kg			**510**	J	**500**	J	**1600**	J	**260**		**330**							
SVOCs	**Benzo(a)pyrene**	**1,000**	**1,000**	**1,100**	ug/kg			**530**	J	**450**	J	**1500**	J	**270**		**290**							
SVOCs	**Benzo(b)fluoranthene**	**1,000**	**5,600**	**11,000**	ug/kg			**890**	J	**940**	J	**2400**	J	**510**		**220**							
SVOCs	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg			**350**	J	**180**	J	**600**	J	**130**	J	**140**	J						
SVOCs	Benzo(k)fluoranthene	1,000	56,000	110,000	ug/kg			**400**	J	**370**	J	**970**	J	**210**		**350**							
SVOCs	Biphenyl	NS	NS	NS	ug/kg			1,900	U	3,900	U	4,800	U	**28**	J	200	U						
SVOCs	Carbazole	NS	NS	NS	ug/kg			1,900	U	3,900	U	**280**	J	**38**	J	**59**	J						
SVOCs	**Chrysene**	**1,000**	**56,000**	**110,000**	ug/kg			**820**	J	**590**	J	**1600**	J	**290**		**340**							
SVOCs	Di-n-octylphthalate	NS	NS	NS	ug/kg			1,900	U	3,900	U	4,800	U	190	U	200	U						
SVOCs	**Dibenz(a,h)anthracene**	**330**	**560**	**1,100**	ug/kg			**110**	J	3900	U	4800	U	**100**	J	**75**	J						
SVOCs	Dibenzofuran	14,000	350,000	1,000,000	ug/kg			1900	U	3900	U	4800	U	**56**	J	**31**	J						
SVOCs	Fluoranthene	100,000	500,000	1,000,000	ug/kg			**790**	J	**920**	J	**3000**	J	**490**		**450**							
SVOCs	Fluorene	100,000	500,000	1,000,000	ug/kg			1900	U	3900	U	4800	U	**25**	J	**31**	J						
SVOCs	**Indeno(1,2,3-cd)pyrene**	**500**	**5,600**	**11,000**	ug/kg			**310**	J	3900	U	**530**	J	**180**	J	**210**							
SVOCs	N-Nitrosodiphenylamine	NS	NS	NS	ug/kg			1,900	U	3,900	U	4,800	U	**18**	J	200	U						
SVOCs	Naphthalene	100,000	500,000	1,000,000	ug/kg			1900	U	**210**	J	4800	U	**68**	J	200	U						
SVOCs	Phenanthrene	100,000	500,000	1,000,000	ug/kg			**540**	J	**770**	J	**2000**	J	**57**	J	**520**							
SVOCs	Pyrene	100,000	500,000	1,000,000	ug/kg			**650**	J	**720**	J	**2200**	J	**400**		**1000**							
Pesticides																							
Pest	4,4'-DDD	2,600	92,000	180,000	ug/kg			**5**	J	38	U	47	U	**47**	J	19	U						
Pest	4,4'-DDE	1,800	62,000	120,000	ug/kg			**9**	J	38	U	47	U	**11**	J	**25**							
Pest	4,4'-DDT	1,700	47,000	94,000	ug/kg			**17**	J	87	U	**22**	J	**65**		**98**							
Pest	Aldrin	19	680	1,400	ug/kg			18	U	38	U	47	U	19	U	**4.9**	J						
Pest	Delta-BHC	100,000	500,000	1,000,000	ug/kg			18	U	38	U	47	U	**5.5**	J	19	U						
Pest	Dieldrin	39	1,400	2,800	ug/kg			**7.8**	J	41	U	**23**	J	**25**	J	19	U						
Pest	Endosulfan I	4,800	200,000	920,000	ug/kg			18	U	38	U	47	U	**5.7**	J	**15**	J						
Pest	Endosulfan II	4,800	200,000	920,000	ug/kg			18	U	38	U	47	U	19	U	**4.8**	J						
Pest	Endosulfan sulfate	4,800	200,000	920,000	ug/kg			**5.7**	J	38	U	47	U	19	UJ	19	UJ						
Pest	Endrin	2,200	89,000	410,000	ug/kg			**12**	J	38	U	47	U	**5**	J	19	U						
Pest	Endrin aldehyde	NS	NS	NS	ug/kg			18	U	38	U	47	U	**15**	J	**27**	J						
Pest	Endrin ketone	NS	NS	NS	ug/kg			18	U	38	U	47	U	**8.1**	J	**6.4**	J						
Pest	Gamma-Chlordane	NS	NS	NS	ug/kg			18	U	38	U	47	U	**7.9**	J	**17**	J						
Pest	Methoxychlor	NS	NS	NS	ug/kg			18	U	38	U	47	U	19	U	**12**	J						
Polychlorinated Biphenyls																							
PCBs	**Aroclor-1254**	**1,000**	**1,000**	**25,000**	ug/kg	240	UJ	230	U	**850**		310	U	**800**	J	**1600**	J	220	U	**460**	J	220	U
PCBs	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	240	UJ	230	U	**900**		**350**		**510**	J	**530**	J	220	U	290	U	**200**	J
PCBs	**Aroclor-1268**	**1,000**	**1,000**	**25,000**	ug/kg	240	UJ	230	U	270	U	310	U	210	U	240	U	220	U	290	U	**360**	
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	ND		ND		**1750**		**350**		**1310**		**2130**		ND		**460**		**560**	

Notes: See Table 5A

*- CP-51 / Soil Cleanup Guidance = for soils less than 1 foot bgs 1 mg/kg; for soils greater tha

Table 5.16: Surface Soil SMSA Region
Organic Analytical Results

					Location	SB-E4-01		SB-F3-01		SB-F4-01		SB-G5-01		TP-D4-01		TP-D5-01		TP-D5-01		TP-E5-01	
					Sample Id	401003SBE40101		401003SBF30101		401003SBF40101		401003SBG50101		401003TPD40101		401003TPD50101		401003TPD50102		401003TPE50101	
					Sample Depth (ft bgs)	0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		1 - 2		0.2 - 1	
					Soil Type	Fill Waste		Fill		Fill Waste		Fill Waste		Fill		Fill Waste		Fill		Fill	
					Investigation Objective	CP-51		CP-51		CP-51		CP-51		CP-51		CP-51		Fill		CP-51	
					Sample Date	6/11/2014 8:30		6/2/2014 14:00		6/9/2014 16:30		6/10/2014 13:20		6/3/2014 8:45		6/2/2014 12:40		6/2/2014 13:00		6/2/2014 15:05	
		SCO			Qc Code	FS		FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																
Volatile Organic Compounds																					
8260	1,2,3-Trichlorobenzene	NS	NS	NS	ug/kg													**32**	J		
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg													**250**			
8260	1,2,4-Trimethylbenzene	47,000	190,000	380,000	ug/kg													**25**	J		
8260	Methyl cyclohexane	NS	NS	NS	ug/kg													**37**	J		
8260	Tetrachloroethene	5,500	150,000	300,000	ug/kg													**8.9**	J		
8260	Xylenes, Total	100,000	500,000	1,000,000	ug/kg													**15**	J		
Semi-Volatile Organic Compounds																					
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg													**22**	J		
8270	Acenaphthene	100,000	500,000	1,000,000	ug/kg													**47**	J		
8270	Anthracene	100,000	500,000	1,000,000	ug/kg													**160**	J		
8270	Benzo(a)anthracene	1,000	5,600	11,000	ug/kg													**550**	J		
8270	Benzo(a)pyrene	1,000	1,000	1,100	ug/kg													**480**	J		
8270	Benzo(b)fluoranthene	1,000	5,600	11,000	ug/kg													**520**	J		
8270	Benzo(k)fluoranthene	1,000	56,000	110,000	ug/kg													**490**	J		
8270	Carbazole	NS	NS	NS	ug/kg													**73**	J		
8270	Chrysene	1,000	56,000	110,000	ug/kg													**660**	J		
8270	Fluoranthene	100,000	500,000	1,000,000	ug/kg													**1200**	J		
8270	Indeno(1,2,3-cd)pyrene	500	5,600	11,000	ug/kg													**420**	J		
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg													**780**	J		
8270	Pyrene	100,000	500,000	1,000,000	ug/kg													**1400**	J		
Pesticides																					
8081	Dieldrin	39	1,400	2,800	ug/kg													270	U		
8081	Endrin	2,200	89,000	410,000	ug/kg													180	U		
8081	Gamma chlordane	NS	NS	NS	ug/kg													180	U		
Polychlorinated Biphenyls																					
8082	Aroclor-1242	1,000	1,000	25,000	ug/kg	250	U	230	UJ	210	U	260	U	210	U	**110**	J	**96**	J	11000	UJ
8082	Aroclor-1248	1,000	1,000	25,000	ug/kg	**900**	J	230	UJ	210	U	260	U	210	U	270	UJ	430	UJ	11000	UJ
8082	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	**1000**	J	230	UJ	**120**	J	**190**	J	**640**	J	**9000**	J	**8400**	J	**41000**	J
8082	Aroclor-1268	1,000	1,000	25,000	ug/kg	250	U	230	UJ	210	U	260	U	**250**	J	270	UJ	430	UJ	11000	UJ
CalculatedT	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	**1900**		ND		**120**		**190**		**890**		**9110**		**8400**		**41000**	

Notes:See Table 5A

*- CP-51 / Soil Cleanup Guidance = for soils less than 1 foot bgs 1 mg/kg; for soils greater than 2 feet bgs 10 mg/kg (commercial use) and 25 mg/kg (industrial use).

Table 5.17: Surface Soil Melt Shop Region
Organic Analytical Results

					Location	SB-G2-01		SB-H2-01		SB-J1-01		SB-K1-01		SB-K2-01		SB-L2-01		SB-M2-01		SB-M2-01		SB-M2-02	
					Sample Id	401003SBG20101		401003SBH20101		401003SBJ10101		401003SBK10101		401003SBK20101		401003SBL20101		401003SBM20101		401003SBM20101XD		401003SBM20201	
					Sample Depth (ft bgs)	0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1		0.2 - 1	
					Soil Type	Fill Waste		Fill Waste		Fill		Fill		Fill		Fill		Fill		Fill		Fill	
					Investigation Objective	CP-51		CP-51		CP-51		CP-51		CP-51		CP-51		CP-51		CP-51		CP-51	
					Sample Date	6/4/2014 11:25		6/9/2014 13:55		6/4/2014 14:05		6/4/2014 13:03		6/9/2014 11:05		6/9/2014 13:30		6/5/2014 10:25		6/5/2014 10:25		6/11/2014 11:10	
		SCO			Qc Code	FS		FS		FS		FS		FS		FS		FS		FD		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																		
Volatile Organic Compounds																							
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg																	**150**	
Semi-Volatile Organic Compounds																							
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg																	190	U
8270	Acenaphthene	100,000	500,000	1,000,000	ug/kg																	190	U
8270	Anthracene	100,000	500,000	1,000,000	ug/kg																	**8.8**	J
8270	**Benzo(a)anthracene**	**1,000**	**5,600**	**11,000**	ug/kg																	**50**	J
8270	**Benzo(a)pyrene**	**1,000**	**1,000**	**1,100**	ug/kg																	**57**	J
8270	**Benzo(b)fluoranthene**	**1,000**	**5,600**	**11,000**	ug/kg																	**82**	J
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg																	**19**	J
8270	**Benzo(k)fluoranthene**	**1,000**	**56,000**	**110,000**	ug/kg																	**40**	J
8270	Carbazole	NS	NS	NS	ug/kg																	190	U
8270	**Chrysene**	**1,000**	**56,000**	**110,000**	ug/kg																	**62**	J
8270	**Fluoranthene**	**100,000**	**500,000**	**1,000,000**	ug/kg																	**100**	J
8270	**Indeno(1,2,3-cd)pyrene**	**500**	**5,600**	**11,000**	ug/kg																	**17**	J
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg																	**55**	J
8270	Pyrene	100,000	500,000	1,000,000	ug/kg																	**80**	J
Pesticides																							
8081	4,4'-DDD	2,600	92,000	180,000	ug/kg																	**0.41**	J
8081	4,4'-DDT	1,700	47,000	94,000	ug/kg																	1.8	U
8081	Delta-BHC	100,000	500,000	1,000,000	ug/kg																	**0.61**	J
8081	Dieldrin	39	1,400	2,800	ug/kg																	**1**	J
8081	Gamma chlordane	**NS**	**NS**	**NS**	ug/kg																	1.8	U
Polychlorinated Biphenyls																							
8082	**Aroclor-1254**	**1,000**	**1,000**	**25,000**	ug/kg	250	U	210	U	260	U	220	U	250	U	270	U	200	UJ	220	UJ	240	U
8082	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	**530**	J	210	U	260	U	220	U	250	U	270	U	200	UJ	220	UJ	240	U
8082	**Aroclor-1268**	**1,000**	**1,000**	**25,000**	ug/kg	**280**	J	**150**	J	260	U	220	U	250	U	270	U	200	UJ	220	UJ	240	U
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	**810**		**150**		ND		ND		ND		ND		ND		ND		ND	

Notes: See Table 5A

*- CP-51 / Soil Cleanup Guidance = for soils less than 1 foot bgs 1 mg/kg; for soils greater than 2 feet bgs 10 mg/kg (commercial use) and 25 mg/kg (industrial use).

Table 5.17: Surface Soil Melt Shop Region
Organic Analytical Results

					Location	**SS-H2-02**		**TP-H3-02**		**TP-K3-01**		**TP-L3-01**	
					Sample Id	401003SSH20201		401003TPH30201		401003TPK30101		401003TPL30101	
					Sample Depth (ft bgs)	0 - 1		0.2 - 1		0.2 - 1		0.2 - 1	
					Soil Type	Fill Waste		Fill Waste		Fill		Fill	
					Investigation Objective	Pile		CP-51		CP-51		CP-51	
					Sample Date	6/6/2014 10:55		6/3/2014 10:20		6/3/2014 16:35		6/3/2014 12:40	
		SCO			**Qc Code**	FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**								
Volatile Organic Compounds													
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg	560	U						
Semi-Volatile Organic Compounds													
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg	**7.4**	J						
8270	Acenaphthene	100,000	500,000	1,000,000	ug/kg	**2.6**	J						
8270	Anthracene	100,000	500,000	1,000,000	ug/kg	**7.8**	J						
8270	**Benzo(a)anthracene**	**1,000**	**5,600**	**11,000**	ug/kg	**38**	J						
8270	**Benzo(a)pyrene**	**1,000**	**1,000**	**1,100**	ug/kg	**43**	J						
8270	**Benzo(b)fluoranthene**	**1,000**	**5,600**	**11,000**	ug/kg	**79**	J						
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg	**20**	J						
8270	**Benzo(k)fluoranthene**	**1,000**	**56,000**	**110,000**	ug/kg	**27**	J						
8270	Carbazole	NS	NS	NS	ug/kg	**10**	J						
8270	**Chrysene**	**1,000**	**56,000**	**110,000**	ug/kg	**52**	J						
8270	**Fluoranthene**	**100,000**	**500,000**	**1,000,000**	ug/kg	**70**	J						
8270	**Indeno(1,2,3-cd)pyrene**	**500**	**5,600**	**11,000**	ug/kg	**17**	J						
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg	**39**	J						
8270	Pyrene	100,000	500,000	1,000,000	ug/kg	**60**	J						
Pesticides													
8081	4,4'-DDD	2,600	92,000	180,000	ug/kg	**9.4**	J						
8081	4,4'-DDT	1,700	47,000	94,000	ug/kg	**11**	J						
8081	Delta-BHC	100,000	500,000	1,000,000	ug/kg	21	U						
8081	Dieldrin	39	1,400	2,800	ug/kg	**13**	J						
8081	Gamma chlordane	**NS**	**NS**	**NS**	ug/kg	21	U						
Polychlorinated Biphenyls													
8082	**Aroclor-1254**	**1,000**	**1,000**	**25,000**	ug/kg	**220**	J	220	UJ	270	U	260	U
8082	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	**230**	J	220	UJ	270	U	**760**	J
8082	**Aroclor-1268**	**1,000**	**1,000**	**25,000**	ug/kg	280	U	220	UJ	270	U	260	U
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	**450**		ND		ND		**760**	

Notes: See Table 5A
*- CP-51 / Soil Cleanup Guidance = for soils less than 1 foot bgs 1 mg/kg; for soils greate

Table 5.19: Sub Surface Soil Extrusion Region
Inorganic Analytical Results

					Location	**SB-E6-01**		**SB-E6-01**		**SB-E6-05**		**SB-E6-05**		**SB-E6-06**		**SB-E6-06**		**SB-F6-01**		**SB-F6-01**	
					Sample Id	401003SBE60103		401003SBE60106		401003SBE60506		401003SBE60511		401003SBE60609		401003SBE60619		401003SBF60105		401003SBF60107	
					Sample Depth (ft bgs)	3 - 4		6 - 8		6 - 8		11 - 13		9 - 10		19 - 20		3 - 4		7 - 12	
					Soil Type	Fill		Fill		Fill		Native		Fill		Native		Fill		Native	
					Investigation Objective	Fill		GW		Fill		Native		Fill		GW/Native		Fill		GW/Native	
					Approximate GW Level (ft bgs)	5.5		5.5		13		13		13.5		13.5		7		7	
					Sample Date	6/2/2014 12:35		6/2/2014 12:50		6/11/2014 14:40		6/11/2014 8:45		6/10/2014 12:00		6/10/2014 12:35		6/3/2014 8:40		6/3/2014 9:00	
		SCO			**Qc Code**	FS		FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																
6010	Aluminum	NS	NS	NS	mg/kg	**8,800**	J	**7,100**	J	**10,900**	J	**9,640**	J	**8,370**	J	**11,400**	J	**11,200**	J	**7,930**	J
6010	Antimony	NS	NS	NS	mg/kg	15.8	UJ	16.3	UJ	**7.7**	J	19.2	UJ	17.9	UJ	20.8	UJ	**12.2**	J	19.7	UJ
6010	Arsenic	16	16	16	mg/kg	**4.1**		**3.9**		**8.1**		**3.7**		**3**		**6**		**8.6**		**3.5**	
6010	**Barium**	**350**	**400**	**10,000**	mg/kg	**51.5**	J	**48.5**	J	**133**	J	**2080**	J	**52.8**	J	**182**	J	**77.3**	J	**53.2**	J
6010	Beryllium	14	590	2,700	mg/kg	**0.46**		**0.37**		**0.6**		**0.42**		**0.39**		**0.69**		**0.65**		**0.37**	
6010	Cadmium	2.5	9.3	60	mg/kg	**0.074**	J	**0.098**	J	**0.92**		0.26	U	0.24	U	0.28	U	**0.12**	J	**0.072**	J
6010	Calcium	NS	NS	NS	mg/kg	**1,450**	J	**1,400**	J	**3,160**	J	**2,910**	J	**1,280**	J	**39,600**	J	**6,940**	J	**1,120**	J
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**34**	J	**12.6**	J	**726**	J	**96.6**		**9.5**		**14.7**		**1090**	J	**9.5**	J
6010	Cobalt	NS	NS	NS	mg/kg	**11.1**		**8.3**		**49.3**		**8.2**		**6.3**		**13.8**		**62.3**		**6.6**	
6010	Copper	270	270	10,000	mg/kg	**13.6**	J	**13.8**	J	**110**	J	**17.8**		**14.2**		**23.9**		**136**	J	**14.4**	J
6010	Iron	NS	NS	NS	mg/kg	**16,700**	J	**14,700**	J	**34,700**	J	**18,900**	J	**14,800**	J	**24,600**	J	**29,700**	J	**14,400**	J
6010	Lead	400	1,000	3,900	mg/kg	**10**		**7.4**		**59.1**		**7.2**	J	**6.9**	J	**13.7**	J	**20.3**		**5.8**	
6010	Magnesium	NS	NS	NS	mg/kg	**2,430**	J	**2,150**	J	**5,200**	J	**3,070**	J	**2,470**	J	**10,100**	J	**4,380**	J	**2,350**	J
6010	Manganese	2,000	10,000	10,000	mg/kg	**377**	J	**481**	J	**669**	J	**378**		**152**		**507**		**600**	J	**314**	J
7471	Mercury	0.81	2.8	5.7	mg/kg	**0.029**		**0.02**	J	**0.056**		**0.025**		**0.02**	J	**0.025**		**0.052**	J	**0.015**	J
6010	Molybdenum*	NS	NS	4,088	mg/kg	**1.1**	J	**0.23**	J	**68.1**	J	**3.6**		1.2	U	1.4	U	**38.4**	J	1.3	U
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**43.8**		**16.9**		**916**		**92.9**		**15**		**28**		**923**		**14.9**	
6010	Potassium	NS	NS	NS	mg/kg	**856**	J	**776**	J	**756**	J	**905**	J	**788**	J	**1760**	J	**859**	J	**838**	J
6010	Selenium	36	1,500	6,800	mg/kg	4.2	U	4.4	U	**0.74**	J	5.1	U	4.8	U	5.5	U	**1.9**	J	5.2	U
6010	Silver	36	1,500	6,800	mg/kg	0.63	U	0.65	U	0.65	U	0.77	U	0.72	U	0.83	U	**0.29**	J	0.79	U
6010	Sodium	NS	NS	NS	mg/kg	**102**	J	**68.7**	J	**77.7**	J	**166**	J	**58.3**	J	**285**		**168**		**58.6**	J
6010	Titanium	NS	NS	NS	mg/kg	**132**	J	**145**	J	**103**	J	**167**	J	**148**	J	**338**	J	**104**	J	**137**	J
6020	Uranium	NS	NS	NS	mg/kg																
6010	Vanadium	NS	NS	NS	mg/kg	**17**	J	**15.4**	J	**32.5**	J	**17.5**	J	**15.4**	J	**24.8**	J	**22.8**	J	**15**	J
6010	Zinc	2,200	10,000	10,000	mg/kg	**35.6**	J	**33.3**	J	**323**	J	**41.2**	J	**39.6**	J	**61.4**	J	**58**	J	**38.5**	J
6020	Zirconium	NS	NS	NS	mg/kg																
7199	Chromium, Hexavalent	22	400	800	mg/kg	0.49	U	0.5	U	**1**	J	0.54	U	0.54	U	0.54	U	**6.8**		0.47	U
4500	pH	NS	NS	NS	PH UNITS	**7.9**		**7.8**		**6.98**		**8.99**		**7.09**		**8.34**		**8.77**		**6.71**	

Notes: See Table 5A

Table 5.19: Sub Surface Soil Extrusion Region
Inorganic Analytical Results

					Location	SB-F6-04		SB-F6-04		TP-D7-01		TP-D7-01		TP-E7-01		TP-F5-01		TP-F7-01	
					Sample Id	401003SBF60406		401003SBF60421		401003TPD70106		401003TPD70109		401003TPE70108		401003TPF50104		401003TPF70104	
					Sample Depth (ft bgs)	6 - 8		21 - 22		5 - 6		8 - 9		7 - 8		3 - 4		3 - 4	
					Soil Type	Native		Native		Fill Waste		Native		Native		Native		Fill Waste	
					Investigation Objective	Native		GW/Native		Fill		Native		Native		GW/Native		Fill	
					Approximate GW Level (ft bgs)	13.8		13.8		>9		>9		>8		2.5		>11	
					Sample Date	6/11/2014 12:00		6/11/2014 13:45		6/5/2014 10:55		6/5/2014 11:15		6/5/2014 13:10		6/3/2014 15:55		6/5/2014 14:00	
		SCO			Qc Code	FS		FS		FS		FS		FS		FS		FS	
Method	Parameter	RES	COMM	IND	Units														
6010	Aluminum	NS	NS	NS	mg/kg	**9,400**	J	**9,700**	J	**14,300**		**9,170**		**6,670**		**14,300**	J	**13,400**	
6010	Antimony	NS	NS	NS	mg/kg	16.3	UJ	20.4	UJ	**0.53**	J	15.6	UJ	18.1	UJ	17.7	UJ	**0.75**	J
6010	Arsenic	16	16	16	mg/kg	**5.3**		**5.7**		**10.1**		**6.3**		**3.6**		**6**		**8**	
6010	**Barium**	**350**	**400**	**10,000**	mg/kg	**93**	J	**79.3**	J	**136**		**84.2**		**53.6**		**102**	J	**114**	
6010	Beryllium	14	590	2,700	mg/kg	**0.63**		**0.51**		**0.73**		**0.49**		**0.35**		**0.81**		**0.66**	
6010	Cadmium	2.5	9.3	60	mg/kg	0.22	U	0.27	U	**0.25**		**0.16**	J	**0.093**	J	**0.13**	J	**0.23**	
6010	Calcium	NS	NS	NS	mg/kg	**1,960**	J	**34,500**	J	**3,060**	J	**1,230**	J	**808**	J	**1,620**	J	**3,430**	
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**16**		**13.3**		**37.9**	J	**22.7**	J	**7.1**	J	**23.7**		**258**	
6010	Cobalt	NS	NS	NS	mg/kg	**10.4**		**12.8**		**22.4**		**9.2**		**4.6**		**21.5**	J	**98.1**	
6010	Copper	270	270	10,000	mg/kg	**27.2**		**27**		**40.7**		**23.2**		**9.6**		**29.3**		**38.9**	
6010	Iron	NS	NS	NS	mg/kg	**18,100**	J	**22,400**	J	**33,900**	J	**17,200**	J	**11,900**	J	**26,900**	J	**29,300**	J
6010	Lead	400	1,000	3,900	mg/kg	**111**	J	**14.9**	J	**23.9**		**40.5**		**17.6**		**20.9**	J	**35.1**	
6010	Magnesium	NS	NS	NS	mg/kg	**2,890**	J	**10,400**	J	**6,170**	J	**2,830**	J	**2,210**	J	**4,990**	J	**5,190**	
6010	Manganese	2,000	10,000	10,000	mg/kg	**481**		**595**		**1010**		**518**		**371**		**810**		**705**	
7471	Mercury	0.81	2.8	5.7	mg/kg	**0.47**		**0.029**		**0.044**	J	**0.11**	J	**0.12**	J	**0.049**		**0.18**	
6010	Molybdenum*	NS	NS	4,088	mg/kg	**0.36**	J	1.4	U	**2.4**		**1.6**		**0.51**	J	**3.7**	J	**13.8**	
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**20.6**		**26.5**		**52**	J	**26.7**	J	**9.4**	J	**109**		**266**	
6010	Potassium	NS	NS	NS	mg/kg	**856**	J	**1240**	J	**1340**		**649**		**537**		**1240**		**1070**	
6010	Selenium	36	1,500	6,800	mg/kg	**0.53**	J	5.4	U	4	U	4.2	U	**0.61**	J	4.7	U	**0.54**	J
6010	Silver	36	1,500	6,800	mg/kg	0.65	U	0.82	U	0.6	U	0.62	U	0.72	U	0.71	UJ	0.66	U
6010	Sodium	NS	NS	NS	mg/kg	**68**	J	**163**	J	**54.8**	J	**41.3**	J	**42.3**	J	**132**	J	**77**	J
6010	Titanium	NS	NS	NS	mg/kg	**147**	J	**170**	J	**109**	J	**96.1**	J	**94.2**	J	**122**	J	**157**	
6020	Uranium	NS	NS	NS	mg/kg														
6010	Vanadium	NS	NS	NS	mg/kg	**18**	J	**16.7**	J	**23.8**		**15.5**		**10.6**		**23.4**	J	**24.2**	
6010	Zinc	2,200	10,000	10,000	mg/kg	**75.8**	J	**59.7**	J	**92.8**		**57**		**30.5**		**63.5**	J	**70.1**	
6020	Zirconium	NS	NS	NS	mg/kg														
7199	Chromium, Hexavalent	22	400	800	mg/kg	0.49	U	0.5	U	0.52	U	0.81	U	0.48	U	**1.4**	J	**7.1**	
4500	pH	NS	NS	NS	PH UNITS	**7.12**		**8.33**		**7.53**		**6.51**		**7.92**		**6.99**		**8.08**	

Notes: See Table 5A

Table 5.20: Sub Surface Soil Rolling Mill Region
Inorganic Analytical Results

| | | |

Table 5.20: Sub Surface Soil Rolling Mill Region
Inorganic Analytical Results

| | | |

Table 5.20: Sub Surface Soil Rolling Mill Region
Inorganic Analytical Results

| | | |

Table 5.20: Sub Surface Soil Rolling Mill Region
Inorganic Analytical Results

			SCO			Location	SB-M3-01		SB-M3-01		SB-M5-01		SB-M5-01		SB-M6-01		SB-M6-01		SB-M7-01		TP-G3-01		TP-G3-01		TP-G3-01		TP-H5-01		TP-H5-01	
						Sample Id	401003SBM30102		401003SBM30106		401003SBM50103		401003SBM50105		401003SBM60103		401003SBM60106		401003SBM70108		401003TPG30103		401003TPG30104		401003TPG30104XD		401003TPH50103		401003TPH50104	
						Sample Depth (ft bgs)	2 - 4		6 - 8		3 - 4		5 - 8		3 - 4		6 - 8		8 - 12		2 - 3		3 - 4		3 - 4		2 - 3		3 - 4	
						Soil Type	Fill Waste		Native		Fill Waste		Native		Fill Waste		Native		Native		Fill		Native		Native		Fill Waste		Native	
						Investigation Objective	Fill		GW/Native		Fill		GW/Native		Fill		GW/Native		GW/Native		Fill		Native		Native		Fill		GW/Native	
						Approximate GW Level (ft bgs)	5		5		4.5		4.5		7		7		8		>4		>4		>4		3		3	
						Sample Date	6/5/2014 8:40		6/5/2014 8:55		6/3/2014 10:20		6/3/2014 10:35		6/5/2014 13:30		6/5/2014 13:45		6/6/2014 8:40		6/5/2014 9:10		6/5/2014 9:30		6/5/2014 9:30		6/4/2014 10:40		6/4/2014 10:55	
						Qc Code	FS		FS		FS		FS		FS		FS		FS		FS		FS		FD		FS		FS	
Method	Parameter	RES	COMM	IND	Units																									
Metals																														
6010	Aluminum	NS	NS	NS	mg/kg		**17,000**	J	**20,700**	J	**11,700**	J	**13,900**	J	**12,200**	J	**16,800**	J	**10,100**	J	**15,100**		**13,700**		**15,000**		**6,430**	J	**12,100**	J
6010	Antimony	NS	NS	NS	mg/kg		**2.6**	J	21.6	UJ	**1.2**	J	19.7	UJ	14.7	UJ	16.2	UJ	16.9	UJ	**0.62**	J	**0.43**	J	**0.64**	J	**1.6**	J	17.6	UJ
6010	**Arsenic**	**16**	**16**	**16**	mg/kg		**8.6**		**10**		**8.2**		**6.1**		**4.3**		**5.5**		**5.4**		**8.5**		**7.6**		**6.8**		**21.4**		**5.9**	
6010	**Barium**	**350**	**400**	**10,000**	mg/kg		**259**		**141**		**115**	J	**128**	J	**102**		**146**		**76.4**	J	**228**		**196**		**220**		**131**	J	**126**	J
6010	Beryllium	14	590	2,700	mg/kg		**2**		**1.1**		**0.75**		**0.65**		**0.68**		**0.87**		**0.52**		**0.77**		**0.7**		**0.75**		**0.71**		**0.7**	
6010	**Cadmium**	**2.5**	**9.3**	**60**	mg/kg		**0.7**		0.29	U	**0.37**		**1**		**0.39**		0.23	U	0.23	U	**0.22**		**0.21**		**0.24**		**0.34**		0.28	U
6010	Calcium	NS	NS	NS	mg/kg		**35,600**		**3,160**		**4,920**	J	**2,260**	J	**10,700**		**2,340**		**1,910**	J	**5,070**	J	**3,600**	J	**2,840**	J	**1,440**	J	**1,450**	J
6010	**Chromium**	**22**	**400**	**800**	mg/kg		**2460**		**24.3**		**240**		**18.9**		**34.2**		**19.9**		**13.9**		**38.4**	J	**85.9**	J	**132**	J	**78.3**	J	**14.8**	J
6010	Cobalt	NS	NS	NS	mg/kg		**137**		**18.1**		**52.1**	J	**10.4**	J	**12.1**		**10.2**		**8**	J	**21.4**		**22.9**		**28**		**33.8**	J	**7.4**	J
6010	**Copper**	**270**	**270**	**10,000**	mg/kg		**475**		**33.7**		**140**		**29.4**		**35.5**		**25**		**20.9**		**46.2**		**41.8**		**45.1**		**46**	J	**30.3**	J
6010	Iron	NS	NS	NS	mg/kg		**35,800**	J	**37,500**	J	**26,200**	J	**23,900**	J	**18,200**	J	**27,700**	J	**22,900**	J	**34,300**	J	**30,100**	J	**32,700**	J	**14,800**	J	**20,700**	J
6010	**Lead**	**400**	**1,000**	**3,900**	mg/kg		**73.1**		**15.7**		**71.2**	J	**12.5**	J	**89.8**		**18.5**		**24.2**	J	**25**		**25.3**		**25.3**		**81.4**	J	**82.5**	J
6010	Magnesium	NS	NS	NS	mg/kg		**8,290**		**6,750**		**3,950**	J	**4,620**	J	**3,860**		**4,850**		**5,170**		**7,490**	J	**6,690**	J	**6,890**	J	**1,420**		**2,850**	
6010	**Manganese**	**2,000**	**10,000**	**10,000**	mg/kg		**2760**		**746**		**832**		**489**		**869**		**541**		**769**		**636**		**679**		**619**		**104**	J	**481**	J
7471	Mercury	0.81	2.8	5.7	mg/kg		**0.036**		**0.034**		**0.073**		**0.027**		**0.048**	J	**0.03**	J	**0.014**	J	**0.047**	J	**0.05**	J	**0.053**	J	**0.28**		**0.48**	
6010	Molybdenum*	NS	NS	4,088	mg/kg		**387**		**0.78**	J	**82.3**	J	**0.5**	J	**29.6**		**5.1**		**1.2**		**2.6**		**2.8**		**3.4**		**65.6**	J	**0.82**	J
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg		**3360**		**38.3**		**594**		**27.1**		**33.2**		**27.7**		**20.6**		**55.4**	J	**79.8**	J	**95.9**	J	**90.5**	J	**16.9**	J
6010	Potassium	NS	NS	NS	mg/kg		**1,780**		**1,710**		**1,100**		**1,320**		**879**		**1,430**		**908**		**1,560**		**1,320**		**1,520**		**679**		**1,260**	
6010	Selenium	36	1,500	6,800	mg/kg		**3.1**	J	5.8	U	**1.5**	J	**5.3**	U	**0.46**	J	4.3	U	4.5	U	4	U	4.2	U	**0.52**	J	**4.7**	J	**0.47**	J
6010	Silver	36	1,500	6,800	mg/kg		0.73	U	0.86	U	**0.87**	J	0.79	UJ	0.59	U	0.65	U	0.68	U	0.59	U	0.62	U	0.69	U	0.76	U	0.7	U
6010	Sodium	NS	NS	NS	mg/kg		**1720**		**253**		**273**		**286**		**78.1**	J	**68.5**	J	**43.3**	J	**293**		**237**		**235**		**49.3**	J	**62.1**	J
6010	Thallium	NS	NS	NS	mg/kg		7.3	U	8.6	U	7	U	7.9	U	5.9	U	6.5	U	6.8	U	5.9	U	6.2	U	6.9	U	7.6	U	7	U
6010	Titanium	NS	NS	NS	mg/kg		**328**		**361**		**172**	J	**269**	J	**150**		**275**		**120**	J	**69.3**	J	**67.1**	J	**93.8**	J	**172**	J	**165**	J
6020	Uranium	NS	NS	NS	mg/kg						**1.4**																			
6010	Vanadium	NS	NS	NS	mg/kg		**70.3**		**33.9**		**41.6**	J	**25.1**	J	**28**		**26.6**		**17.4**		**25**		**22.8**		**25.9**		**43.9**		**20.8**	
6010	Zinc	2,200	10,000	10,000	mg/kg		**130**	J	**86**	J	**107**	J	**67.8**	J	**115**	J	**74**	J	**56.1**	J	**89.7**		**75.7**		**84.4**		**98.2**		**81.6**	
6020	Zirconium	NS	NS	NS	mg/kg						**11**																			
7199	**Chromium, Hexavalent**	**22**	**400**	**800**	mg/kg		**4.7**		0.56	U	**3.4**	J	**0.62**	J	**2.2**		**0.66**		**0.51**	J	0.82	U	0.52	U	0.53	U	0.51	U	0.49	U
4500	pH	NS	NS	NS	PH UNITS		**7.19**		**6.54**		**7.91**		**7.14**		**8.64**		**6.5**		**7.16**		**7.8**		**7.55**		**7.58**		**5.69**		**5.91**	

Notes: See Table 5A

Table 5.20: Sub Surface Soil Rolling Mill Region
Inorganic Analytical Results

					Location	**TP-I3-01**		**TP-I6-01**		**TP-I7-01**		**TP-I7-01**		**TP-J3-01**		**TP-J3-01**	
					Sample Id	401003TPI30105		401003TPI60103		401003TPI70104		401003TPI70109		401003TPJ30104		401003TPJ30109	
					Sample Depth (ft bgs)	4 - 5		2 - 3		3 - 4		8 - 9		3 - 4		8 - 9	
					Soil Type	Fill Waste		Fill Waste		Fill Waste		Native		Fill Waste		Native	
					Investigation Objective	Fill		Fill		Fill		GW/Native		Fill		Native	
					Approximate GW Level (ft bgs)	>11		>5		9		9		>9		>9	
					Sample Date	6/4/2014 15:35		6/4/2014 9:30		6/4/2014 12:25		6/4/2014 12:55		6/4/2014 14:20		6/4/2014 14:35	
		SCO			**Qc Code**	FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**												
Metals																	
6010	Aluminum	NS	NS	NS	mg/kg	**9,700**		**5,620**	J	**4,420**	J	**7,800**	J	**13,600**		**9,390**	
6010	Antimony	NS	NS	NS	mg/kg	**27.2**	J	**11**	J	**6.5**	J	**0.6**	J	**8.8**	J	18.1	U
6010	**Arsenic**	**16**	**16**	**16**	mg/kg	**2.8**		**4.2**		**56**		**5**		**1.8**	J	**3**	
6010	**Barium**	**350**	**400**	**10,000**	mg/kg	**94.4**		**120**	J	**139**		**82.1**		**83.9**		**49.2**	
6010	Beryllium	14	590	2,700	mg/kg	**0.34**		**0.31**		**0.56**		**0.32**		**0.33**		**0.4**	
6010	**Cadmium**	**2.5**	**9.3**	**60**	mg/kg	**0.47**		**0.52**		**1.9**		**0.28**		**0.85**		**0.1**	J
6010	Calcium	NS	NS	NS	mg/kg	**13,100**	J	**37,200**	J	**1,980**	J	**23,300**	J	**39,200**		**1,680**	
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**19100**	J	**7860**	J	**127**	J	**80.4**	J	**7690**		**34**	
6010	Cobalt	NS	NS	NS	mg/kg	**304**		**253**	J	**43.8**		**9.8**		**380**		**6.5**	
6010	**Copper**	**270**	**270**	**10,000**	mg/kg	**234**		**824**	J	**193**		**20.7**		**705**		**13.8**	
6010	Iron	NS	NS	NS	mg/kg	**118,000**	J	**70,900**	J	**122,000**	J	**15,900**	J	**67,000**	J	**15,600**	J
6010	**Lead**	**400**	**1,000**	**3,900**	mg/kg	**20.2**		**38.7**	J	**843**		**59.8**		**34.4**		**5.1**	
6010	Magnesium	NS	NS	NS	mg/kg	**6,650**	J	**3,740**		**715**	J	**5,390**	J	**11,000**		**3,130**	
6010	**Manganese**	**2,000**	**10,000**	**10,000**	mg/kg	**2230**		**1290**	J	**659**		**3220**		**3000**		**151**	
7471	Mercury	0.81	2.8	5.7	mg/kg	**0.02**	J	**0.072**		**0.16**	J	**0.03**	J	**0.02**		**0.013**	J
6010	Molybdenum*	NS	NS	4,088	mg/kg	**927**		**735**	J	**45.9**		**6.1**		**698**		**3.8**	
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**12800**	J	**5380**	J	**599**	J	**467**	J	**7090**		**36.7**	
6010	Potassium	NS	NS	NS	mg/kg	**846**		**743**		**398**		**563**		**714**		**843**	
6010	Selenium	36	1,500	6,800	mg/kg	**4**	J	**4.5**	J	**5.6**		**3.2**	J	**4.5**		4.8	U
6010	Silver	36	1,500	6,800	mg/kg	0.72	U	**0.24**	J	**0.38**	J	0.7	U	0.58	U	0.72	U
6010	Sodium	NS	NS	NS	mg/kg	**64.1**	J	**345**		**99.6**	J	**86.4**	J	**516**		**440**	
6010	Thallium	NS	NS	NS	mg/kg	**3.6**	J	**0.63**	J	7	U	7	U	5.8	U	7.2	U
6010	Titanium	NS	NS	NS	mg/kg	**245**	J	**270**	J	**80.7**	J	**100**	J	**618**		**213**	
6020	Uranium	NS	NS	NS	mg/kg												
6010	Vanadium	NS	NS	NS	mg/kg	**155**		**196**		**81.9**		**223**		**245**		**17.3**	
6010	Zinc	2,200	10,000	10,000	mg/kg	**57.6**		**87.5**		**667**		**73.5**		**115**		**37.8**	
6020	Zirconium	NS	NS	NS	mg/kg												
7199	**Chromium, Hexavalent**	**22**	**400**	**800**	mg/kg	**6.3**		**13.7**		0.59	U	0.45	U	**0.52**		**8.8**	
4500	pH	NS	NS	NS	PH UNITS	**7.93**		**8.07**		**6.89**		**7.29**		**9.93**		**8.33**	

Notes: See Table 5A

Table 5.21: Sub Surface Soil SMSA Region
Inorganic Analytical Results

					Location	**SB-E4-01**		**SB-E4-01**		**SB-E4-01**		**SB-F3-01**		**SB-F3-01**		**SB-F4-01**		**SB-F4-01**		**SB-G5-01**	
					Sample Id	401003SBE40104		401003SBE40104XD		401003SBE40116		401003SBF30103		401003SBF30110		401003SBF40103		401003SBF40107		401003SBG50103	
					Sample Depth (ft bgs)	4 - 8		4 - 8		16 - 20		2 - 4		8 - 9.5		3 - 4		7 - 8		5 - 8	
					Soil Type	Fill Waste		Fill Waste		Native		Native		Native		Native		Native		Fill Waste	
					Investigation Objective	Fill		Fill		GW/Native		Native		Native		GW/Native		GW/Native		Fill	
					Approximate GW Level (ft bgs)	6.3		6.3		6.3		9.5		9.5		2.2		2.2		13.5	
					Sample Date	6/11/2014 9:20		6/11/2014 9:20		6/11/2014 10:00		6/2/2014 14:20		6/2/2014 14:30		6/9/2014 16:40		6/9/2014 16:45		6/10/2014 14:00	
		SCO			**Qc Code**	FS		FD		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																
Metals																					
6010	Aluminum	NS	NS	NS	mg/kg	**5,540**	J	**6,970**	J	**12,500**	J	**11,200**	J	**12,700**	J	**11,700**		**17,400**		**10,100**	J
6010	Antimony	NS	NS	NS	mg/kg	**25.4**	J	**18.1**	J	20.3	UJ	**8.1**	J	17.2	UJ	17.5	UJ	**0.45**	J	18.4	UJ
6010	**Arsenic**	**16**	**16**	**16**	mg/kg	**22**		**15.8**		**6.5**		**20.8**		**8**		**6.2**		**5.3**		**3.9**	
6010	**Barium**	**350**	**400**	**10,000**	mg/kg	**143**	J	**80.2**	J	**75.7**	J	**105**	J	**98.4**	J	**75.6**		**177**		**104**	J
6010	Beryllium	14	590	2,700	mg/kg	**0.15**	J	**0.34**		**0.7**		**0.6**		**0.7**		**0.54**		**0.91**		**0.47**	
6010	Cadmium	2.5	9.3	60	mg/kg	**1.2**	J	**0.41**	J	0.27	U	**0.57**		**0.14**	J	**0.26**		**0.25**		**0.18**	J
6010	Calcium	NS	NS	NS	mg/kg	**7,110**	J	**8,940**	J	**1,750**	J	**11,100**	J	**1,340**	J	**3,780**		**3,240**		**1,560**	J
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**2290**		**1680**		**16.8**		**683**	J	**22.1**	J	**21.3**		**107**		**140**	J
6010	Cobalt	NS	NS	NS	mg/kg	**494**	J	**254**	J	**16.1**		**36.3**		**16.7**		**11.8**		**20.1**		**21.5**	
6010	**Copper**	**270**	**270**	**10,000**	mg/kg	**366**		**293**		**20.4**		**285**	J	**49.5**	J	**27.9**		**43.6**		**65.5**	J
6010	Iron	NS	NS	NS	mg/kg	**48,500**	J	**39,800**	J	**26,200**	J	**40,000**	J	**29,500**	J	**26,400**	J	**29,900**	J	**20,100**	J
6010	Lead	400	1,000	3,900	mg/kg	**125**	J	**58**	J	**16.1**	J	**114**		**17.4**		**14.5**		**16.1**		**10**	
6010	Magnesium	NS	NS	NS	mg/kg	**2,770**	J	**4,120**	J	**4,470**	J	**7,000**	J	**6,370**	J	**6,040**		**5,220**		**3,280**	J
6010	**Manganese**	**2,000**	**10,000**	**10,000**	mg/kg	**995**		**860**		**281**		**795**	J	**625**	J	**643**		**1320**		**245**	J
7471	Mercury	0.81	2.8	5.7	mg/kg	**0.2**	J	**0.076**	J	**0.029**		**0.65**	J	**0.072**	J	**0.03**		**0.062**		**0.019**	J
6010	Molybdenum*	NS	NS	4,088	mg/kg	**330**	J	**147**	J	**0.35**	J	**29.2**	J	**2.2**	J	**19.8**		**16.2**		**40.4**	J
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**7130**	J	**2870**	J	**28.2**		**2690**		**40.9**		**33.3**		**149**		**713**	
6010	Potassium	NS	NS	NS	mg/kg	**618**	J	**640**	J	**1130**	J	**1020**	J	**1410**	J	**1250**		**1630**		**1060**	J
6010	Selenium	36	1,500	6,800	mg/kg	**4.9**		**6.4**		5.4	U	**4.7**		4.6	U	4.7	U	4.5	U	4.9	U
6010	Silver	36	1,500	6,800	mg/kg	**1**		**0.6**	J	0.81	U	**0.5**	J	**0.4**	J	0.7	U	0.68	U	0.74	U
6010	Sodium	NS	NS	NS	mg/kg	**110**	J	**96.5**	J	**59.7**	J	**46.6**	J	**30.3**	J	**44.5**	J	**87.6**	J	**64.4**	J
6010	Titanium	NS	NS	NS	mg/kg	**162**	J	**119**	J	**183**	J	**84.8**	J	**52.1**	J	**93.6**		**185**		**174**	J
6020	Uranium	NS	NS	NS	mg/kg																
6010	Vanadium	NS	NS	NS	mg/kg	**71.1**	J	**45.7**	J	**23.3**	J	**48.7**	J	**23.6**	J	**19.2**		**28.8**		**21.3**	J
6010	Zinc	2,200	10,000	10,000	mg/kg	**135**	J	**108**	J	**66.9**	J	**144**	J	**83.5**	J	**71.1**		**74.2**		**58.5**	J
6020	Zirconium	NS	NS	NS	mg/kg																
7199	Chromium, Hexavalent	22	400	800	mg/kg	**6.8**		**4.9**		**0.64**		**1.3**		0.43	U	**2.7**		**2**		**1**	J
4500	pH	NS	NS	NS	PH UNITS	**8.3**		**8.21**		**6.94**		**9.01**		**7.84**		**8.24**		**7.63**		**6.89**	

Notes: See Table 5A

Table 5.21: Sub Surface Soil SMSA Region
Inorganic Analytical Results

						Location	SB-G5-01		TP-D4-01		TP-D4-01		TP-D5-01		TP-D5-01		TP-E5-01		TP-E5-01	
						Sample Id	401003SBG50105		401003TPD40103		401003TPD40108		401003TPD50105		401003TPD50105XD		401003TPE50103		401003TPE50105	
						Sample Depth (ft bgs)	13 - 16		2 - 3		7 - 8		4 - 5		4 - 5		2 - 3		4 - 5	
						Soil Type	Native		Fill Waste		Native		Native		Native		Fill		Native	
						Investigation Objective	GW/Native		Fill		GW/Native		GW/Native		GW/Native		Fill		GW/Native	
						Approximate GW Level (ft bgs)	13.5		3		3		5		5		3.5		3.5	
						Sample Date	6/10/2014 13:35		6/3/2014 8:55		6/3/2014 9:25		6/2/2014 13:25		6/2/2014 13:25		6/2/2014 15:20		6/2/2014 15:30	
		SCO				Qc Code	FS		FS		FS		FS		FD		FS		FS	
Method	Parameter	RES	COMM	IND	Units															
Metals																				
6010	Aluminum	NS	NS	NS	mg/kg		**21,500**	J	**24,900**	J	**12,000**	J	**11,800**	J	**12,500**	J			**12,600**	J
6010	Antimony	NS	NS	NS	mg/kg		16.9	UJ	202	UJ	16.2	UJ	**14**	J	**11.4**	J			16.7	UJ
6010	**Arsenic**	**16**	**16**	**16**	mg/kg		**3**		**326**		**7.5**		**7.9**		**8**				**6.3**	
6010	**Barium**	**350**	**400**	**10,000**	mg/kg		**227**	J	**762**	J	**85.8**	J	**84.4**	J	**96.9**	J			**94.1**	J
6010	Beryllium	14	590	2,700	mg/kg		**1.1**		**1.1**		**0.62**		**0.68**		**0.72**				**0.71**	
6010	Cadmium	2.5	9.3	60	mg/kg		**0.15**	J	2.7	U	**0.13**	J	**0.3**		**0.26**				**0.23**	
6010	Calcium	NS	NS	NS	mg/kg		**2,570**	J	**180,000**	J	**1,630**	J	**4,690**	J	**3,140**	J			**2,030**	J
6010	**Chromium**	**22**	**400**	**800**	mg/kg		**25.8**	J	**1830**	J	**14.5**	J	**1230**	J	**1080**	J			**179**	J
6010	Cobalt	NS	NS	NS	mg/kg		**10.7**		**42.8**		**13.5**		**44.4**	J	**66.7**	J			**29.2**	
6010	**Copper**	**270**	**270**	**10,000**	mg/kg		**18.2**	J	**74.3**	J	**31**	J	**161**	J	**168**	J			**33.2**	J
6010	Iron	NS	NS	NS	mg/kg		**25,800**	J	**7,730**	J	**24,300**	J	**28,500**	J	**32,800**	J			**28,200**	J
6010	Lead	400	1,000	3,900	mg/kg		**14.2**		**66.6**		**15.3**		**19.8**	J	**27.8**	J			**15.9**	
6010	Magnesium	NS	NS	NS	mg/kg		**4,710**	J	**38,700**	J	**4,480**	J	**4,650**	J	**4,500**	J			**5,480**	J
6010	**Manganese**	**2,000**	**10,000**	**10,000**	mg/kg		**305**	J	**8640**	J	**667**	J	**784**	J	**1010**	J			**853**	J
7471	Mercury	0.81	2.8	5.7	mg/kg		**0.072**		**0.028**		**0.055**	J	**0.12**	J	**0.089**	J			**0.043**	J
6010	Molybdenum*	NS	NS	4,088	mg/kg		**1.3**	J	**227**	J	**0.17**	J	**113**	J	**98.6**	J			**9.8**	J
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg		**43**		**810**		**32.8**		**1650**		**1320**				**207**	
6010	Potassium	NS	NS	NS	mg/kg		**1380**	J	**1860**	J	**1060**	J	**1090**	J	**1190**	J			**1170**	J
6010	Selenium	36	1,500	6,800	mg/kg		4.5	U	**52.7**		4.3	U	4.4	U	**1.1**	J			4.5	U
6010	Silver	36	1,500	6,800	mg/kg		0.67	U	40.4	U	0.65	U	**0.42**	J	**0.38**	J			0.67	U
6010	Sodium	NS	NS	NS	mg/kg		**79.5**	J	**1120**		**68.7**	J	**67.5**	J	**72.7**	J			156	U
6010	Titanium	NS	NS	NS	mg/kg		**263**	J	**2090**	J	**114**	J	**1010**	J	**160**	J			**158**	J
6020	Uranium	NS	NS	NS	mg/kg												**26.6**			
6010	Vanadium	NS	NS	NS	mg/kg		**21.5**	J	**68.2**	J	**21.3**	J	**31.9**	J	**40.1**	J			**23.4**	J
6010	Zinc	2,200	10,000	10,000	mg/kg		**75.9**	J	**53.8**	J	**67.6**	J	**62.1**	J	**73.2**	J			**71.9**	J
6020	Zirconium	NS	NS	NS	mg/kg												**11.6**			
7199	Chromium, Hexavalent	22	400	800	mg/kg		0.56	UJ	**3.9**		0.46	U	**7**	J	**2.2**	J	**14.6**		**3.9**	
4500	pH	NS	NS	NS	PH UNITS		**6.81**		**10.9**		**7.57**		**7.83**		**7.81**				**7.66**	

Notes: See Table 5A

Table 5.22: Sub Surface Soil Melt Shop Region
Inorganic Analytical Results

						Location	SB-G2-01		SB-H2-01		SB-H2-01		SB-J1-01		SB-K1-01		SB-K1-01		SB-K2-01	
						Sample Id	401003SBG20102		401003SBH20102		401003SBH20105		401003SBJ10104		401003SBK10104		401003SBK10108		401003SBK20102	
						Sample Depth (ft bgs)	2 - 3		2 - 4		5 - 7		4 - 8		4 - 8		8 - 12		2 - 4	
						Soil Type	Native		Fill Waste		Native		Fill		Fill		Native		Fill	
						Investigation Objective	Native		Fill		Native		Fill		GW/Fill		GW/Native		Fill	
						Approximate GW Level (ft bgs)	>3		>7		>7		>8.5		6		6		4.25	
						Sample Date	6/4/2014 11:30		6/9/2014 14:00		6/9/2014 14:20		6/4/2014 14:20		6/4/2014 13:15		6/4/2014 13:30		6/9/2014 11:10	
		SCO				Qc Code	FS		FS		FS		FS		FS		FS		FS	
Method	Parameter	RES	COMM	IND	Units															
Metals																				
6010	Aluminum	NS	NS	NS	mg/kg		**9,460**	J	**7,630**		**11,700**		**17,500**		**13,000**	J	**12,700**	J	**9,780**	
6010	Antimony	NS	NS	NS	mg/kg		**0.7**	J	159	UJ	**1.3**	J	14.5	U	**0.68**	J	14.6	UJ	15.7	UJ
6010	Arsenic	16	16	16	mg/kg		**10.1**		21.2	U	**11.2**		**8.5**		**9.1**		**6.7**		**4.7**	
6010	Barium	350	400	10,000	mg/kg		**147**		**97.5**		**148**		**132**		**106**		**106**		**53.4**	J
6010	Beryllium	14	590	2,700	mg/kg		**0.54**		**0.12**	J	**0.56**		**0.78**		**0.8**		**0.64**		**0.52**	
6010	Cadmium	2.5	9.3	60	mg/kg		0.22	U	**0.57**		**0.27**		**0.17**	J	**0.32**		0.21	U	**0.15**	J
6010	Calcium	NS	NS	NS	mg/kg		**1,810**		**5,660**		**10,400**		**1,680**		**5,160**		**1,690**		**1,170**	
6010	**Chromium**	**22**	**400**	**800**	mg/kg		**24.8**		**1130**		**1170**		**21.9**		**81**		**19**		**12.5**	J
6010	Cobalt	NS	NS	NS	mg/kg		**21.4**		**6590**		**67.6**		**13.7**		**13.6**		**11.5**		**10.8**	
6010	**Copper**	**270**	**270**	**10,000**	mg/kg		**46.7**		**287**		**64.6**		**28.5**		**38.1**		**41.7**		**17**	J
6010	Iron	NS	NS	NS	mg/kg		**26,300**	J	**53,700**	J	**37,400**	J	**32,500**	J	**31,800**	J	**28,400**	J	**21,800**	J
6010	**Lead**	**400**	**1,000**	**3,900**	mg/kg		**21**		**25.3**		**27.9**		**14.4**		**31.7**		**13.7**		**8.7**	J
6010	Magnesium	NS	NS	NS	mg/kg		**4,880**		**2,760**		**8,050**		**5,220**		**6,130**		**5,730**		**3,080**	J
6010	Manganese	2,000	10,000	10,000	mg/kg		**745**		**614**		**763**		**569**		**701**		**867**		**471**	
7471	Mercury	0.81	2.8	5.7	mg/kg		**0.047**		**0.028**		**0.045**		**0.033**	J	**0.15**		**0.059**		**0.017**	J
6010	**Molybdenum***	NS	NS	**4,088**	mg/kg		**13.5**		**6660**		**96.9**		**1.3**		**4.5**		**6.8**		**4**	J
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg		**47**		**22400**		**1530**		**26.4**		**95.4**		**28.5**		**16.6**	J
6010	Potassium	NS	NS	NS	mg/kg		**1,090**		**758**		**1,110**		**1,590**		**1,200**		**1,160**		**1,080**	J
6010	Selenium	36	1,500	6,800	mg/kg		4.5	U	**6**		**0.75**	J	3.9	U	**0.83**	J	3.9	U	4.2	U
6010	Silver	36	1,500	6,800	mg/kg		0.67	U	**0.3**	J	0.57	U	0.58	U	0.71	U	0.59	U	0.63	U
6010	Sodium	NS	NS	NS	mg/kg		**71.1**	J	**125**	J	**83.4**	J	**78**	J	**527**		**194**		**82.7**	J
6010	Thallium	NS	NS	NS	mg/kg		6.7	U	**17.9**		5.7	U	5.8	U	7.1	U	5.9	U	6.3	U
6010	Titanium	NS	NS	NS	mg/kg		**60.5**	J	**550**		**245**		**278**		**105**		**62.8**		**159**	
6020	Uranium	NS	NS	NS	mg/kg															
6010	Vanadium	NS	NS	NS	mg/kg		**16.6**		**29.1**		**42.2**		**28.5**		**24.4**		**21**		**18.9**	J
6010	Zinc	2,200	10,000	10,000	mg/kg		**67.9**	J	**34.7**		**73.2**		**64.6**		**107**	J	**85.8**	J	**44.3**	
6020	Zirconium	NS	NS	NS	mg/kg															
7199	Chromium, Hexavalent	22	400	800	mg/kg		**1.6**		**8.8**		**1.5**		**14.5**		0.52	U	**0.51**		**0.81**	J
4500	pH	NS	NS	NS	PH UNITS		**7.84**		**8.2**		**8.24**		**6.89**		**7.83**		**7.23**		**7.86**	

Notes: See Table 5A

Table 5.22: Sub Surface Soil Melt Shop Region
Inorganic Analytical Results

			SCO			Location	SB-K2-01		SB-L2-01		SB-L2-01		SB-M2-01		SB-M2-01		SB-M2-02		TP-H3-02		TP-H3-02	
						Sample Id	401003SBK20105		401003SBL20104		401003SBL20106		401003SBM20103		401003SBM20106		401003SBM20206		401003TPH30203		401003TPH30205	
						Sample Depth (ft bgs)	5 - 8		4 - 6		6 - 8		3 - 4		6 - 8		6 - 8		2 - 3		4 - 5	
						Soil Type	Fill		Fill Waste		Native		Fill Waste		Native		Native		Fill Waste		Native	
						Investigation Objective	GW/Fill		Fill		GW/Native		Fill		GW/Native		GW/Native		Fill		Native	
						Approximate GW Level (ft bgs)	4.25		6		6		5		5		3		>5		>5	
						Sample Date	6/9/2014 11:20		6/9/2014 11:45		6/9/2014 14:00		6/5/2014 10:10		6/5/2014 10:50		6/11/2014 11:30		6/3/2014 10:35		6/3/2014 10:45	
						Qc Code	FS		FS		FS		FS		FS		FS		FS		FS	
Method	Parameter	RES	COMM	IND	Units																	
Metals																						
6010	Aluminum	NS	NS	NS	mg/kg		**17,700**		**15,700**		**8,040**		**18,800**	J	**21,100**	J	**13,000**	J	**9,650**	J	**11,300**	J
6010	Antimony	NS	NS	NS	mg/kg		**0.61**	J	**0.7**	J	**4.1**	J	**0.6**	J	21.2	UJ	18.8	UJ	**6.9**	J	15.9	UJ
6010	Arsenic	16	16	16	mg/kg		**10**		**12.7**		**10.9**		**7.6**		**11.1**		**3.1**		**4.8**		**6.8**	
6010	Barium	350	400	10,000	mg/kg		**205**	J	**150**		**80.7**		**185**		**150**		**126**	J	**75.9**	J	**161**	J
6010	Beryllium	14	590	2,700	mg/kg		**0.84**		**0.95**		**0.55**		**1**		**1**		**0.76**		**0.45**		**0.63**	
6010	Cadmium	2.5	9.3	60	mg/kg		**0.22**		**0.29**		**0.25**		**0.3**		0.28	U	**0.054**	J	**0.59**		**0.14**	J
6010	Calcium	NS	NS	NS	mg/kg		**2,000**		**2,810**		**4,540**		**3,830**		**2,730**		**1,970**	J	**4,380**	J	**2,280**	J
6010	**Chromium**	**22**	**400**	**800**	mg/kg		**27.5**	J	**20.5**		**219**		**80.8**		**26.7**		**15.3**	J	**8590**	J	**30.5**	J
6010	Cobalt	NS	NS	NS	mg/kg		**21.7**		**14.2**		**9.3**		**24.2**		**20.8**		**9.7**		**179**		**20.3**	
6010	**Copper**	**270**	**270**	**10,000**	mg/kg		**48**	J	**36**		**128**		**34.7**		**41.3**		**17.2**	J	**113**	J	**40.7**	J
6010	Iron	NS	NS	NS	mg/kg		**39,700**	J	**36,300**	J	**21,300**	J	**31,600**	J	**42,400**	J	**19,600**	J	**58,600**	J	**29,500**	J
6010	**Lead**	**400**	**1,000**	**3,900**	mg/kg		**22.4**	J	**29.3**		**49200**		**18.1**		**20.2**		**8.5**		**24.3**		**12.3**	
6010	Magnesium	NS	NS	NS	mg/kg		**8,160**	J	**4,260**		**2,200**		**5,470**		**8,350**		**3,790**	J	**4,980**	J	**6,900**	J
6010	Manganese	2,000	10,000	10,000	mg/kg		**919**		**772**		**536**		**692**		**974**		**347**	J	**986**	J	**1390**	J
7471	Mercury	0.81	2.8	5.7	mg/kg		**0.053**		**0.046**		**0.12**		**0.052**	J	**0.015**	J	**0.021**	J	**0.098**	J	**0.021**	
6010	**Molybdenum***	NS	NS	**4,088**	mg/kg		**0.84**	J	**5.9**		**25.8**		**8.2**		**2.3**		**1.3**	U	**913**	J	**28.3**	J
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg		**41.8**	J	**29.3**		**109**		**58.7**		**42.7**		**29.2**		**14500**		**52.8**	
6010	Potassium	NS	NS	NS	mg/kg		**1,580**	J	**1,390**		**676**		**1,720**		**1,720**		**1,170**	J	**1,040**	J	**1,110**	J
6010	Selenium	36	1,500	6,800	mg/kg		4.5	U	**3.1**	J	**5**		**5.4**	U	5.6	U	5	U	**2.2**	J	4.2	U
6010	Silver	36	1,500	6,800	mg/kg		0.67	U	0.76	U	**6.1**		0.8	U	0.85	U	0.75	U	0.63	U	0.63	U
6010	Sodium	NS	NS	NS	mg/kg		**140**	J	**253**		**161**	J	**468**		**959**		**1290**		148	U	148	U
6010	Thallium	NS	NS	NS	mg/kg		6.7	U	7.6	U	7.2	U	8	U	8.5	U	7.5	U	6.3	U	6.3	U
6010	Titanium	NS	NS	NS	mg/kg		**56.5**		**185**		**116**		**347**		**244**		**268**	J	**446**	J	**78.5**	J
6020	Uranium	NS	NS	NS	mg/kg												**1.5**					
6010	Vanadium	NS	NS	NS	mg/kg		**28.4**	J	**34.6**		**40.9**		**179**		**29.4**		**20.8**	J	**144**	J	**21.1**	J
6010	Zinc	2,200	10,000	10,000	mg/kg		**98.8**		**69**		**96.5**		**74.6**	J	**103**	J	**52**	J	**68.8**	J	**74**	J
6020	Zirconium	NS	NS	NS	mg/kg												**23.2**					
7199	Chromium, Hexavalent	22	400	800	mg/kg		**0.5**	J	2.6	U	2.1	U	**1.9**		**0.78**		**0.92**	J	**8.6**		0.43	U
4500	pH	NS	NS	NS	PH UNITS		**7.1**		**7.47**		**7.42**		**6.75**		**8.13**		**7.74**		**8.33**		**7.71**	

Notes: See Table 5A

Table 5.22: Sub Surface Soil Melt Shop Region
Inorganic Analytical Results

					Location	**TP-K3-01**		**TP-K3-01**		**TP-L3-01**		**TP-L3-01**	
					Sample Id	401003TPK30105		401003TPK30107		401003TPL30104		401003TPL30105	
					Sample Depth (ft bgs)	4 - 5		6 - 7		3 - 4		4 - 5	
					Soil Type	Fill		Fill		Fill		Native	
					Investigation Objective	Fill		Fill		Fill		Native	
					Approximate GW Level (ft bgs)	>7.5		>7.5		>5.5		>5.5	
					Sample Date	6/3/2014 14:05		6/3/2014 15:15		6/3/2014 12:50		6/3/2014 13:00	
		SCO			**Qc Code**	FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**								
Metals													
6010	Aluminum	NS	NS	NS	mg/kg	**12,500**	J	**11,500**	J	**13,500**	J	**15,200**	J
6010	Antimony	NS	NS	NS	mg/kg	**2.9**	J	19.3	UJ	**1.8**	J	**3.5**	J
6010	Arsenic	16	16	16	mg/kg	**10.5**		**4.9**		**10.5**		**4.9**	
6010	Barium	350	400	10,000	mg/kg	**111**	J	**74.2**	J	**90.1**	J	**152**	J
6010	Beryllium	14	590	2,700	mg/kg	**0.69**		**0.57**		**0.65**		**1**	
6010	Cadmium	2.5	9.3	60	mg/kg	**0.5**		0.26	U	0.29	U	0.25	U
6010	Calcium	NS	NS	NS	mg/kg	**5,060**	J	**1,900**	J	**3,740**	J	**2,570**	J
6010	**Chromium**	**22**	**400**	**800**	mg/kg	**1230**	J	**14.2**	J	**873**	J	**1660**	J
6010	Cobalt	NS	NS	NS	mg/kg	**40.2**	J	**7.9**	J	**262**	J	**153**	J
6010	**Copper**	**270**	**270**	**10,000**	mg/kg	**90.6**	J	**16.7**	J	**111**	J	**65.7**	J
6010	Iron	NS	NS	NS	mg/kg	**33,900**	J	**21,400**	J	**39,700**	J	**35,200**	J
6010	**Lead**	**400**	**1,000**	**3,900**	mg/kg	**43.3**	J	**7.8**	J	**44.8**	J	**24**	J
6010	Magnesium	NS	NS	NS	mg/kg	**5,370**		**3,460**		**5,950**		**4,170**	
6010	Manganese	2,000	10,000	10,000	mg/kg	**1210**	J	**329**	J	**118**	J	**814**	J
7471	Mercury	0.81	2.8	5.7	mg/kg	**0.052**		**0.018**	J	**0.22**		**0.061**	
6010	**Molybdenum***	NS	NS	**4,088**	mg/kg	**64.6**	J	**0.95**	J	**90.1**	J	**74.5**	J
6010	**Nickel**	**140**	**310**	**10,000**	mg/kg	**853**	J	**19.6**	J	**1360**	J	**996**	J
6010	Potassium	NS	NS	NS	mg/kg	**1,100**		**1,150**		**979**		**1,210**	
6010	Selenium	36	1,500	6,800	mg/kg	**0.52**	J	5.1	U	**1.1**	J	**1.1**	J
6010	Silver	36	1,500	6,800	mg/kg	0.62	U	0.77	U	0.64	U	0.74	U
6010	Sodium	NS	NS	NS	mg/kg	**91**	J	**161**	J	**107**	J	**171**	J
6010	Thallium	NS	NS	NS	mg/kg	6.2	U	7.7	U	6.4	U	7.4	U
6010	Titanium	NS	NS	NS	mg/kg	**140**	J	**250**	J	**124**	J	**202**	J
6020	Uranium	NS	NS	NS	mg/kg					**0.94**			
6010	Vanadium	NS	NS	NS	mg/kg	**38.6**		**21.7**		**34.4**		**30.7**	
6010	Zinc	2,200	10,000	10,000	mg/kg	**105**		**47.6**		**92.4**		**68.5**	
6020	Zirconium	NS	NS	NS	mg/kg					**10.4**			
7199	Chromium, Hexavalent	22	400	800	mg/kg	**3.7**		**0.57**		**3.5**		0.52	U
4500	pH	NS	NS	NS	PH UNITS	**7.73**		**7.14**		**7.77**		**6.85**	

Notes: See Table 5A

Table 5.23: Sub Surface Soil Extrusion Region
Organic Analytical Results

						Location	SB-E6-01		SB-E6-01		SB-E6-05		SB-E6-05		SB-E6-06		SB-E6-06		SB-F6-01	
						Sample Id	401003SBE60103		401003SBE60106		401003SBE60506		401003SBE60511		401003SBE60609		401003SBE60619		401003SBF60105	
						Sample Depth (ft bgs)	3 - 4		6 - 8		6 - 8		11 - 13		9 - 10		19 - 20		3 - 4	
						Soil Type	Fill		Fill		Fill		Native		Fill		Native		Fill	
						Objective	Fill		GW		Fill		Native		Fill		Native		Fill	
						Approximate GW Level (ft bgs)	5.5		5.5		13		13		13.5		13.5		7	
						Sample Date	6/2/2014 12:35		6/2/2014 12:50		6/11/2014 14:40		6/11/2014 8:45		6/10/2014 12:00		6/10/2014 12:35		6/3/2014 8:40	
		SCO				Qc Code	FS		FS		FS		FS		FS		FS		FS	
Method	Parameter	RES	COMM	IND	Units															
Volatile Organic Compounds																				
8260	1,1,1-Trichloroethane	100000	500000	1,000,000	ug/kg	42	UJ	50	UJ	73	U	**23**	J	56	U	63	U	70	U
8260	1,1-Dichloroethane	19000	240000	480000	ug/kg	42	U	50	U	73	U	**250**		56	U	63	U	70	U
8260	1,2,3-Trichlorobenzene	NS	NS	NS	ug/kg	**22**	J	50	U	73	U	54	U	56	U	63	U	70	UJ
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg	**300**		50	U	73	U	54	U	56	U	63	U	70	UJ
8260	1,2,4-Trimethylbenzene	47000	190000	380000	ug/kg	**12**	J	50	U	73	U	54	U	56	U	63	U	70	U
8260	4-iso-Propyltoluene	NS	NS	NS	ug/kg	42	U	50	U	**65**	J	54	U	56	U	63	U	70	U
8260	4-Methyl-2-pentanone	NS	NS	NS	ug/kg	210	U	250	U	360	U	**21**	J	280	U	320	U	**26**	J
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg	260	U	60	U	73	U	**110**		**87**		**120**		170	U
Semi-Volatile Organic Compounds																				
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg	200	U	210	U	**14**	J	200	U	200	U	210	U	980	U
8270	4-Methylphenol	34000	500000	1,000,000	ug/kg	380	U	400	U	**19**	J	390	U	380	U	420	U	1900	U
8270	Acenaphthene	100000	500000	1,000,000	ug/kg	200	U	210	U	230	U	200	U	200	U	210	U	**35**	J
8270	Acenaphthylene	100000	500000	1,000,000	ug/kg	200	U	210	U	**23**	J	200	U	200	U	210	U	980	U
8270	Anthracene	100000	500000	1,000,000	ug/kg	200	U	210	U	**20**	J	200	U	200	U	210	U	**71**	J
8270	Benzo(a)anthracene	1000	5600	11000	ug/kg	200	UJ	210	UJ	**54**	J	200	U	200	U	210	U	**290**	J
8270	Benzo(a)pyrene	1,000	1,000	1,100	ug/kg	200	UJ	210	UJ	**58**	J	200	U	200	U	210	U	**270**	J
8270	Benzo(b)fluoranthene	1,000	5,600	11,000	ug/kg	200	UJ	210	UJ	**130**	J	200	U	200	U	210	U	**320**	J
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg	200	UJ	210	UJ	**37**	J	200	U	200	U	210	U	980	U
8270	Benzo(k)fluoranthene	1,000	56,000	110,000	ug/kg	200	UJ	210	UJ	**130**	J	200	U	200	U	210	U	**200**	J
8270	Bis(2-Ethylhexyl)phthalate	NS	NS	NS	ug/kg	200	UJ	210	UJ	**360**		200	U	200	U	210	U	980	U
8270	Carbazole	NS	NS	NS	ug/kg	200	U	210	U	230	U	200	U	200	U	210	U	**54**	J
8270	Chrysene	1,000	56,000	110,000	ug/kg	200	UJ	210	UJ	**72**	J	200	U	200	U	210	U	**320**	J
8270	Di-n-octylphthalate	NS	NS	NS	ug/kg	200	UJ	210	UJ	230	U	200	U	200	U	210	U	980	U
8270	Dibenz(a,h)anthracene	330	560	1,100	ug/kg	200	UJ	210	UJ	**10**	J	200	U	200	U	210	U	**74**	J
8270	Dibenzofuran	14,000	350,000	1,000,000	ug/kg	200	U	210	U	230	U	200	U	200	U	210	U	**16**	J
8270	Fluoranthene	100,000	500,000	1,000,000	ug/kg	**5.3**	J	210	U	**170**	J	**42**	J	200	U	210	U	**640**	J
8270	Fluorene	100,000	500,000	1,000,000	ug/kg	200	U	210	U	230	U	200	U	200	U	210	U	**22**	J
8270	Indeno(1,2,3-cd)pyrene	500	5,600	11,000	ug/kg	200	UJ	210	UJ	**34**	J	200	U	200	U	210	U	**220**	J
8270	Naphthalene	100,000	500,000	1,000,000	ug/kg	200	U	210	U	230	U	200	U	200	U	210	U	980	U
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg	**5.8**	J	210	U	**80**	J	**11**	J	200	U	210	U	**360**	J
8270	Pyrene	100,000	500,000	1,000,000	ug/kg	**9.7**	J	210	UJ	**94**	J	**45**	J	200	U	210	U	**690**	J
Pesticides																				
8081	4,4'-DDD	2,600	92,000	180,000	ug/kg	2	U	2	U	45	U	20	U	2	U	2.1	U	19	U
8081	4,4'-DDE	1,800	62,000	120,000	ug/kg	3.3	U	2	U	45	U	20	U	2	U	2.1	U	**5.6**	J
8081	4,4'-DDT	1,700	47,000	94,000	ug/kg	2	U	2	U	180	U	**5.6**	J	2	U	2.1	U	19	U
8081	Aldrin	19	680	1,400	ug/kg	2	U	2	U	45	U	33	U	2	U	2.1	U	19	U
8081	Alpha-Chlordane	910	24,000	47,000	ug/kg	**1.6**	J	2	U	45	U	20	U	2	U	2.1	U	19	U
8081	Beta-BHC	72	3,000	14,000	ug/kg	2	U	2	U	45	U	20	U	2	U	2.1	U	19	U
8081	Delta-BHC	100,000	500,000	1,000,000	ug/kg	**17**		**1.6**	J	**18**	J	100	U	2	U	2.1	U	19	U
8081	Dieldrin	39	1,400	2,800	ug/kg	**5**	J	2	U	87	U	20	U	2	U	**1.5**	J	**5.1**	J
8081	Endosulfan I	4,800	200,000	920,000	ug/kg	**0.57**	J	2	U	45	U	20	U	2	U	2.1	U	19	U
8081	Endrin	2,200	89,000	410,000	ug/kg	**0.72**	J	2	U	45	U	20	U	2	U	2.1	U	19	U
8081	Endrin ketone	NS	NS	NS	ug/kg	2	U	2	U	45	U	20	U	2	U	2.1	U	19	U
8081	Gamma-BHC/Lindane	280	9,200	23,000	ug/kg	2	U	2	U	45	U	20	U	2	U	2.1	U	**6.2**	J
8081	Gamma-Chlordane	NS	NS	NS	ug/kg	**2.7**		2	U	45	U	20	U	2	U	**0.82**	J	19	U
8081	Heptachlor	420	15,000	29,000	ug/kg	2.3	U	2	U	45	U	30	U	2	U	2.1	U	19	U
8081	Heptachlor epoxide	NS	NS	NS	ug/kg	2	U	2	U	45	U	20	U	2	U	2.1	U	19	U
8081	Methoxychlor	NS	NS	NS	ug/kg	2	U	2	U	45	U	20	U	2	U	2.1	U	**8.1**	J
Polychlorinated Biphenyls																				
8082	**Aroclor-1242**	**1,000**	**1,000**	**25,000**	ug/kg	**240**	J	210	UJ	250	U	**6400**	J	270	U	300	U	240	U
8082	Aroclor-1248	1,000	1,000	25,000	ug/kg	260	UJ	210	UJ	250	U	230	U	270	U	300	U	**470**	J
8082	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	260	UJ	210	UJ	**2200**		230	U	270	U	300	U	**1600**	J
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	**240**		ND		**2200**		**6400**		ND		ND		**2070**	

Notes: See Table 5A
*- CP-51 / Soil Cleanup Guidance = for soils greater than 2 feet bgs 10 mg/kg (commercial use) and 25 mg/kg (industrial use).

Table 5.23: Sub Surface Soil Extrusion Region
Organic Analytical Results

						Location	SB-F6-01		SB-F6-04		SB-F6-04		TP-D7-01		TP-D7-01		TP-E7-01		TP-F5-01		TP-F7-01	
						Sample Id	401003SBF60107		401003SBF60406		401003SBF60421		401003TPD70106		401003TPD70109		401003TPE70108		401003TPF50104		401003TPF70104	
						Sample Depth (ft bgs)	7 - 12		6 - 8		21 - 22		5 - 6		8 - 9		7 - 8		3 - 4		3 - 4	
						Soil Type	Native		Native		Native		Fill Waste		Native		Native		Native		Fill Waste	
						Objective	Native		Native		Native		Fill		Native		Native		Native		Fill	
						Approximate GW Level (ft bgs)	7		13.8		13.8		>9		>9		>9		1.5		>11	
						Sample Date	6/3/2014 9:00		6/11/2014 12:00		6/11/2014 13:45		6/5/2014 10:55		6/5/2014 11:15		6/5/2014 13:10		6/3/2014 15:55		6/5/2014 14:00	
			SCO			Qc Code	FS		FS		FS		FS		FS		FS		FS		FS	
Method	Parameter	RES	COMM	IND		Units																
Volatile Organic Compounds																						
8260	1,1,1-Trichloroethane	100000	500000	1,000,000		ug/kg	64	UJ	52	U	58	U	65	U	57	U	52	U	53	U	47	U
8260	1,1-Dichloroethane	19000	240000	480000		ug/kg	64	U	52	U	58	U	65	U	57	U	52	U	53	U	47	U
8260	1,2,3-Trichlorobenzene	NS	NS	NS		ug/kg	64	U	52	U	58	U	65	U	57	U	52	U	53	U	47	U
8260	1,2,4-Trichlorobenzene	NS	NS	NS		ug/kg	64	U	52	U	58	U	65	U	57	U	52	U	53	U	47	U
8260	1,2,4-Trimethylbenzene	47000	190000	380000		ug/kg	64	U	52	U	58	U	65	U	57	U	52	U	53	U	47	U
8260	4-iso-Propyltoluene	NS	NS	NS		ug/kg	64	U	**63**		58	U	65	U	57	U	52	U	53	U	47	U
8260	4-Methyl-2-pentanone	NS	NS	NS		ug/kg	320	U	260	U	290	U	330	U	280	U	260	U	260	U	230	U
8260	Acetic acid, methyl ester	NS	NS	NS		ug/kg	85	U	**290**		**120**		**66**		**77**		**120**		**170**		**87**	
Semi-Volatile Organic Compounds																						
8270	2-Methylnaphthalene	NS	NS	NS		ug/kg	210	U	200	U	210	U	**5.5**	J	**5.6**	J	190	U	200	U	**11**	J
8270	4-Methylphenol	34000	500000	1,000,000		ug/kg	400	U	400	U	410	U	370	U	370	U	370	U	390	U	370	U
8270	Acenaphthene	100000	500000	1,000,000		ug/kg	210	U	**11**	J	210	U	190	U	**4.5**	J	**3**	J	200	U	**23**	J
8270	Acenaphthylene	100000	500000	1,000,000		ug/kg	210	U	200	U	210	U	190	U	**5.7**	J	190	U	200	U	190	U
8270	Anthracene	100000	500000	1,000,000		ug/kg	210	U	**47**	J	210	U	190	U	**17**	J	**8.2**	J	200	U	**61**	J
8270	Benzo(a)anthracene	1000	5600	11000		ug/kg	210	UJ	**150**	J	210	U	190	U	**74**	J	**31**	J	200	U	**180**	J
8270	Benzo(a)pyrene	1,000	1,000	1,100		ug/kg	210	UJ	**140**	J	210	U	190	U	**61**	J	**34**	J	200	U	**150**	J
8270	Benzo(b)fluoranthene	1,000	5,600	11,000		ug/kg	210	UJ	**210**		210	U	**5.7**	J	190	U	**30**	J	200	U	**240**	
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000		ug/kg	210	UJ	**37**	J	210	U	190	U	190	U	190	U	200	U	**66**	J
8270	Benzo(k)fluoranthene	1,000	56,000	110,000		ug/kg	210	UJ	**70**	J	210	U	**5.2**	J	190	U	**31**	J	200	U	**97**	J
8270	Bis(2-Ethylhexyl)phthalate	NS	NS	NS		ug/kg	210	UJ	200	U	210	U	190	U	190	U	190	U	200	U	190	U
8270	Carbazole	NS	NS	NS		ug/kg	210	U	200	U	210	U	190	U	**4.9**	J	190	U	200	U	**32**	J
8270	Chrysene	1,000	56,000	110,000		ug/kg	210	UJ	**150**	J	210	U	**6.8**	J	**85**	J	**42**	J	200	U	**170**	J
8270	Di-n-octylphthalate	NS	NS	NS		ug/kg	210	UJ	200	U	210	U	190	U	190	U	190	U	200	U	190	U
8270	Dibenz(a,h)anthracene	330	560	1,100		ug/kg	210	UJ	200	U	210	U	190	U	190	U	190	U	200	U	**99**	J
8270	Dibenzofuran	14,000	350,000	1,000,000		ug/kg	210	U	200	U	210	U	190	U	**5.2**	J	**2.4**	J	200	U	**12**	J
8270	Fluoranthene	100,000	500,000	1,000,000		ug/kg	210	U	**330**		210	U	**10**	J	**130**	J	**56**	J	200	U	**380**	
8270	Fluorene	100,000	500,000	1,000,000		ug/kg	210	U	**9.3**	J	210	U	190	U	190	U	190	U	200	U	**22**	J
8270	Indeno(1,2,3-cd)pyrene	500	5,600	11,000		ug/kg	210	UJ	**33**	J	210	U	190	U	**49**	J	**30**	J	200	U	**130**	J
8270	Naphthalene	100,000	500,000	1,000,000		ug/kg	210	U	200	U	210	U	190	U	190	U	**4.3**	J	200	U	**11**	J
8270	Phenanthrene	100,000	500,000	1,000,000		ug/kg	210	U	**180**	J	210	U	**12**	J	**87**	J	**40**	J	200	U	**250**	
8270	Pyrene	100,000	500,000	1,000,000		ug/kg	210	UJ	**260**		210	U	**11**	J	**160**	J	**69**	J	200	U	**330**	
Pesticides																						
8081	4,4'-DDD	2,600	92,000	180,000		ug/kg	2	U	**0.49**	J	2.1	U	1.9	U	**0.87**	J	1.9	U	**0.51**	J	1.9	U
8081	4,4'-DDE	1,800	62,000	120,000		ug/kg	2	U	2	U	2.1	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
8081	4,4'-DDT	1,700	47,000	94,000		ug/kg	2	U	2	U	2.1	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
8081	Aldrin	19	680	1,400		ug/kg	2	U	2	U	2.1	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
8081	Alpha-Chlordane	910	24,000	47,000		ug/kg	2	U	2	U	2.1	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
8081	Beta-BHC	72	3,000	14,000		ug/kg	2	U	2	U	2.1	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
8081	Delta-BHC	100,000	500,000	1,000,000		ug/kg	2	U	2	U	2.1	U	**0.41**	J	1.9	U	1.9	U	1.9	U	**0.52**	J
8081	Dieldrin	39	1,400	2,800		ug/kg	2	U	**0.89**	J	**0.91**	J	**0.55**	J	**0.57**	J	1.9	U	1.9	U	1.9	U
8081	Endosulfan I	4,800	200,000	920,000		ug/kg	2	U	2	U	2.1	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
8081	Endrin	2,200	89,000	410,000		ug/kg	2	U	**0.43**	J	2.1	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
8081	Endrin ketone	NS	NS	NS		ug/kg	2	U	2	U	2.1	U	1.9	U	**0.77**	J	1.9	U	1.9	U	1.9	U
8081	Gamma-BHC/Lindane	280	9,200	23,000		ug/kg	2	U	2	U	2.1	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
8081	Gamma-Chlordane	NS	NS	NS		ug/kg	2	U	2	U	2.1	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
8081	Heptachlor	420	15,000	29,000		ug/kg	2	U	2	U	2.1	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
8081	Heptachlor epoxide	NS	NS	NS		ug/kg	2	U	2	U	2.1	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
8081	Methoxychlor	NS	NS	NS		ug/kg	2	U	2	U	2.1	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Polychlorinated Biphenyls																						
8082	**Aroclor-1242**	**1,000**	**1,000**	**25,000**		ug/kg	220	UJ	220	U	280	U	250	U	220	U	260	U	290	U	220	U
8082	Aroclor-1248	1,000	1,000	25,000		ug/kg	220	UJ	220	U	280	U	250	U	220	U	260	U	290	U	220	U
8082	**Aroclor-1260**	**1,000**	**1,000**	**25,000**		ug/kg	220	UJ	220	U	280	U	250	U	220	U	260	U	290	U	220	U
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**		ug/kg	ND		ND		ND		ND		ND		ND		ND		ND	

Notes: See Table 5A
*- CP-51 / Soil Cleanup Guidance = for soils greater than 2 feet bgs 10 mg/kg (commercial us

Table 5.24: SubSurface Soil Rolling Mill Region
Organic Analytical Results

					Location	SB-G4-01		SB-G4-01		SB-G4-01		SB-H3-01		SB-H3-01		SB-H4-01		SB-H4-01		SB-I5-01	
					Sample Id	401003SBG40103		401003SBG40103XD		401003SBG40106		401003SBH30103		401003SBH30105		401003SBH40104		401003SBH40110		401003SBI50103	
					Sample Depth (ft bgs)	3 - 4		3 - 4		6 - 8		3 - 4		5 - 7		4 - 8		10 - 12		3 - 4	
					Soil Type	Fill		Fill		Native		Native		Native		Native		Native		Native	
					Investigation Objective	Fill		Fill		Native		Native		GW/Native		Native		GW/Native		Native	
					Approximate GW Level (ft bgs)	1.1		1.1		1.1		5		5		9.1		9.1		8	
					Sample Date	6/10/2014 15:15		6/10/2014 15:15		6/10/2014 15:40		6/9/2014 15:20		6/9/2014 15:40		6/10/2014 17:00		6/10/2014 17:05		6/10/2014 10:40	
		SCO			Qc Code	FS		FD		FS		FS		FS		FS		FS		FS	
Method	Parameter	RES	COMM	IND	Units																
Volatile Organic Compounds																					
8260	1,1,1-Trichloroethane	100000	500000	1,000,000	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	1,1,2,2-Tetrachloroethane	NS	NS	NS	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	1,1-Dichloroethane	19000	240000	480000	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	1,1-Dichloroethene	100000	500000	1,000,000	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	1,2,3-Trichlorobenzene	NS	NS	NS	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	1,2,4-Trimethylbenzene	47000	190000	380000	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	1,2-Dibromo-3-chloropropane	NS	NS	NS	ug/kg	56	U	56	U	66	U	61	UJ	51	UJ	65	U	270	U	73	UJ
8260	1,3,5-Trimethylbenzene	47000	190000	380000	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	1,3-Dichlorobenzene	17000	280000	560000	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	1,4-Dichlorobenzene	9800	130000	250000	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	1,4-Dioxane	9800	130000	250000	ug/kg	1100	U	1100	U	1200	U	1200	UJ	970	UJ		R		R	1400	UJ
8260	2-Hexanone	NS	NS	NS	ug/kg	280	U	280	U	330	U	300	U	260	U	**130**	J	**620**	J	370	U
8260	4-iso-Propyltoluene	NS	NS	NS	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg	56	UJ	**110**	J	**72**		**75**		51	U	**83**		270	U	**200**	
8260	Benzene	2900	44000	89000	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	Cis-1,2-Dichloroethene	59000	500000	1,000,000	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	Cyclohexane	NS	NS	NS	ug/kg	56	U	56	U	66	U	61	UJ	51	UJ	65	U	**140**	J	73	UJ
8260	Ethyl benzene	30000	390000	780000	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	Isopropylbenzene	NS	NS	NS	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	**300**		73	U
8260	Methyl cyclohexane	NS	NS	NS	ug/kg	56	U	56	U	66	U	61	UJ	51	UJ	65	U	**760**		**67**	J
8260	n-Butylbenzene	100000	500000	1,000,000	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	**1500**		73	U
8260	Propylbenzene	100000	500000	1,000,000	ug/kg	56	U	56	U	66	U	61	U	51	U	**67**		**790**		73	U
8260	sec-Butylbenzene	100000	500000	1,000,000	ug/kg	56	U	56	U	66	U	61	U	51	U	**430**		**650**		73	U
8260	tert-Butylbenzene	100000	500000	1,000,000	ug/kg	56	U	56	U	66	U	61	U	51	U	**140**		**80**	J	73	U
8260	**Tetrachloroethene**	**5500**	**150000**	**300000**	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	Toluene	100000	500000	1,000,000	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	Trichloroethene	10,000	200,000	400,000	ug/kg	56	U	56	U	66	U	61	U	51	U	65	U	270	U	73	U
8260	Xylenes, Total	100,000	500,000	1,000,000	ug/kg	110	U	110	U	130	U	120	U	100	U	130	U	550	U	150	U
Semi-Volatile Organic Compounds																					
8270	2,6-Dinitrotoluene	NS	NS	NS	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	190	U	200	U
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	190	U	200	U
8270	Acenaphthene	100,000	500,000	1,000,000	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	**55**	J	200	U
8270	Acenaphthylene	100,000	500,000	1,000,000	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	190	U	200	U
8270	Anthracene	100,000	500,000	1,000,000	ug/kg	200	U	180	U	180	U	3600	U	190	U	**13**	J	190	U	200	U
8270	Benzaldehyde	NS	NS	NS	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	190	U	200	U
8270	Benzo(a)anthracene	1,000	5,600	11,000	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	190	U	**270**	
8270	Benzo(a)pyrene	1,000	1,000	1,100	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	190	U	**240**	
8270	Benzo(b)fluoranthene	1,000	5,600	11,000	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	190	U	**330**	
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg	200	UJ	180	UJ	180	U	3600	U	190	U	210	U	190	U	**120**	J
8270	Benzo(k)fluoranthene	1,000	56,000	110,000	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	190	U	200	U
8270	Biphenyl	NS	NS	NS	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	190	U	200	U
8270	Carbazole	NS	NS	NS	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	190	U	200	U
8270	**Chrysene**	**1,000**	**56,000**	**110,000**	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	190	U	**340**	
8270	Dibenz(a,h)anthracene	330	560	1,100	ug/kg	200	UJ	180	UJ	180	U	3600	U	190	U	210	U	190	U	**31**	J
8270	Dibenzofuran	14,000	350,000	1,000,000	ug/kg	200	U	180	U	180	U	3600	U	190	U	**32**	J	190	U	200	U
8270	Fluoranthene	100,000	500,000	1,000,000	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	190	U	**480**	
8270	Fluorene	100,000	500,000	1,000,000	ug/kg	200	U	180	U	180	U	3600	U	190	U	**57**	J	**130**	J	200	U
8270	**Indeno(1,2,3-cd)pyrene**	**500**	**5,600**	**11,000**	ug/kg	200	UJ	180	UJ	180	U	3600	U	190	U	210	U	190	U	**130**	J
8270	Isophorone	NS	NS	NS	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	190	U	200	U
8270	N-Nitrosodiphenylamine	NS	NS	NS	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	190	U	200	U
8270	Naphthalene	100,000	500,000	1,000,000	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	190	U	200	U
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg	200	U	180	U	180	U	3600	U	190	U	**110**	J	**310**		**170**	J
8270	Pyrene	100,000	500,000	1,000,000	ug/kg	200	U	180	U	180	U	3600	U	190	U	210	U	190	U	**440**	
Pesticides																					
8081	4,4'-DDD	2,600	92,000	180,000	ug/kg	9.7	U	8.9	U	1.7	U	**21**	J	1.9	U	**1.5**	J	1.8	U	**2.8**	J
8081	4,4'-DDE	1,800	62,000	120,000	ug/kg	9.7	U	8.9	U	1.7	U	88	U	1.9	U	2.1	U	1.8	U	**3.4**	J
8081	4,4'-DDT	1,700	47,000	94,000	ug/kg	9.7	U	8.9	U	1.7	U	88	U	1.9	U	2.1	U	1.8	U	**3.1**	J
8081	Aldrin	19	680	1,400	ug/kg	9.7	U	8.9	U	1.7	U	88	U	1.9	U	2.1	U	1.8	U	9.8	U
8081	Beta-BHC	72	3,000	14,000	ug/kg	9.7	U	8.9	U	1.7	U	88	U	1.9	U	2.1	U	1.8	U	9.8	U
8081	Delta-BHC	100,000	500,000	1,000,000	ug/kg	9.7	U	**2.4**	J	1.7	U	88	U	1.9	U	**1**	J	**0.54**	J	9.8	U
8081	Dieldrin	39	1,400	2,800	ug/kg	9.7	U	**3.9**	J	1.7	U	88	U	1.9	U	**0.59**	J	**0.74**	J	9.8	U
8081	Endosulfan I	4,800	200,000	920,000	ug/kg	9.7	U	8.9	U	1.7	U	88	U	1.9	U	2.1	U	1.8	U	9.8	U
8081	Endosulfan II	4,800	200,000	920,000	ug/kg	9.7	U	8.9	U	1.7	U	88	U	1.9	U	2.1	U	1.8	U	9.8	U
8081	Endosulfan sulfate	4,800	200,000	920,000	ug/kg	9.7	U	8.9	U	1.7	U	88	U	1.9	U	2.1	U	1.8	U	9.8	U

Table 5.24: SubSurface Soil Rolling Mill Region
Organic Analytical Results

					Location	SB-G4-01		SB-G4-01		SB-G4-01		SB-H3-01		SB-H3-01		SB-H4-01		SB-H4-01		SB-I5-01	
					Sample Id	401003SBG40103		401003SBG40103XD		401003SBG40106		401003SBH30103		401003SBH30105		401003SBH40104		401003SBH40110		401003SBI50103	
					Sample Depth (ft bgs)	3 - 4		3 - 4		6 - 8		3 - 4		5 - 7		4 - 8		10 - 12		3 - 4	
					Soil Type	Fill		Fill		Native		Native		Native		Native		Native		Native	
					Investigation Objective	Fill		Fill		Native		Native		GW/Native		Native		GW/Native		Native	
					Approximate GW Level (ft bgs)	1.1		1.1		1.1		5		5		9.1		9.1		8	
					Sample Date	6/10/2014 15:15		6/10/2014 15:15		6/10/2014 15:40		6/9/2014 15:20		6/9/2014 15:40		6/10/2014 17:00		6/10/2014 17:05		6/10/2014 10:40	
		SCO			Qc Code	FS		FD		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																
8081	Endrin	2,200	89,000	410,000	ug/kg	9.7	U	8.9	U	1.7	U	88	U	1.9	U	2.1	U	1.8	U	**7.8**	J
8081	Endrin aldehyde	NS	NS	NS	ug/kg	9.7	U	8.9	U	1.7	U	88	U	1.9	U	2.1	U	1.8	U	9.8	U
8081	Endrin ketone	NS	NS	NS	ug/kg	9.7	U	8.9	U	1.7	U	88	U	1.9	U	2.1	U	1.8	U	9.8	U
8081	Gamma-BHC/Lindane	280	9,200	23,000	ug/kg	9.7	U	8.9	U	1.7	U	88	U	1.9	U	2.1	U	1.8	U	9.8	U
8081	Gamma-Chlordane	NS	NS	NS	ug/kg	9.7	U	8.9	U	1.7	U	88	U	1.9	U	**1.1**	J	1.8	U	9.8	U
8081	Heptachlor	420	15,000	29,000	ug/kg	9.7	U	8.9	U	1.7	U	88	U	1.9	U	2.1	U	1.8	U	9.8	U
8081	Heptachlor epoxide	NS	NS	NS	ug/kg	9.7	U	8.9	U	1.7	U	88	U	1.9	U	2.1	U	1.8	U	9.8	U
8081	Methoxychlor	NS	NS	NS	ug/kg	9.7	U	8.9	U	1.7	U	88	U	1.9	U	2.1	U	1.8	U	9.8	U
Polychlorinated Biphenyl																					
8082	Aroclor-1242	1,000	1,000	25,000	ug/kg	270	U	240	U	220	U	270	U	240	U	**75**	J	230	U	260	U
8082	**Aroclor-1254**	**1,000**	**1,000**	**25,000**	ug/kg	270	U	240	U	220	U	270	U	240	U	250	U	230	U	260	U
8082	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	270	U	240	U	220	U	**360**	J	240	U	250	U	230	U	260	U
8082	Aroclor-1268	1,000	1,000	25,000	ug/kg	270	U	240	U	220	U	**160**	J	240	U	250	U	230	U	260	U
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	ND		ND		ND		**520**		ND		75		ND		ND	

Notes: See Table 5A

*- CP-51 / Soil Cleanup Guidance = for soils greater than 2 feet bgs 10 mg/kg (commercial use) and 25 mg/kg (industrial use).

Table 5.24: SubSurface Soil Rolling Mill Region
Organic Analytical Results

| | | |

Table 5.24: SubSurface Soil Rolling Mill Region
Organic Analytical Results

| | | |

Table 5.24: SubSurface Soil Rolling Mill Region
Organic Analytical Results

| | | |

Table 5.24: SubSurface Soil Rolling Mill Region
Organic Analytical Results

| | | |

Table 5.24: SubSurface Soil Rolling Mill Region
Organic Analytical Results

			SCO			Location	SB-L7-02	SB-M3-01	SB-M3-01	SB-M5-01	SB-M5-01	SB-M6-01	SB-M6-01	SB-M7-01	TP-G3-01	TP-G3-01	TP-G3-01	TP-H5-01
						Sample Id	401003SBL70207	401003SBM30102	401003SBM30106	401003SBM50103	401003SBM50105	401003SBM60103	401003SBM60106	401003SBM70108	401003TPG30103	401003TPG30104	401003TPG30104XD	401003TPH50103
						Sample Depth (ft bgs)	7 - 12	2 - 4	6 - 8	3 - 4	5 - 8	3 - 4	6 - 8	8 - 12	2 - 3	3 - 4	3 - 4	2 - 3
						Soil Type	Native	Fill Waste	Native	Fill Waste	Native	Fill Waste	Native	Native	Fill	Native	Native	Fill Waste
						Investigation Objective	GW/Native	Fill	GW/Native	Fill	GW/Native	Fill	GW/Native	GW/Native	Fill	Native	Native	Fill
						Approximate GW Level (ft bgs)	7	5	5	4.5	4.5	7	7	8	>4	>4	>4	3
						Sample Date	6/5/2014 15:35	6/5/2014 8:40	6/5/2014 8:55	6/3/2014 10:20	6/3/2014 10:35	6/5/2014 13:30	6/5/2014 13:45	6/6/2014 8:40	6/5/2014 9:10	6/5/2014 9:30	6/5/2014 9:30	6/4/2014 10:40
						Qc Code	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FD	FS
Method	Parameter	RES	COMM	IND	Units													
Volatile Organic Compounds																		
8260	1,1,1-Trichloroethane	100000	500000	1,000,000	ug/kg	220 U	53 U	91 U	68 U	62 U	**41** J	57 U	52 U	91 U	180 U	49 U	630 U
8260	1,1,2,2-Tetrachloroethane	NS	NS	NS	ug/kg	220 U	53 U	91 U	68 U	62 U	50 U	57 U	52 U	91 U	180 U	49 U	630 U
8260	1,1-Dichloroethane	19000	240000	480000	ug/kg	220 U	53 U	91 U	68 U	62 U	50 U	57 U	52 U	91 U	180 U	49 U	630 U
8260	1,1-Dichloroethene	100000	500000	1,000,000	ug/kg	220 U	53 UJ	91 UJ	68 U	62 U	50 UJ	57 UJ	52 U	91 U	180 U	49 U	630 UJ
8260	1,2,3-Trichlorobenzene	NS	NS	NS	ug/kg	220 U	53 U	91 U	68 U	62 U	50 U	57 U	52 U	91 U	180 U	49 U	630 U
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg	220 U	63 U	91 U	**62** J	62 U	50 U	57 U	52 U	91 U	180 U	49 U	630 U
8260	1,2,4-Trimethylbenzene	47000	190000	380000	ug/kg	220 U	53 U	91 U	68 U	62 U	**270**	57 U	52 U	**110**	180 U	**26** J	**1400**
8260	1,2-Dibromo-3-chloropropane	NS	NS	NS	ug/kg	220 U	53 U	91 U	68 U	62 U	50 U	57 U	52 U	91 U	180 U	49 U	**1000**
8260	1,3,5-Trimethylbenzene	47000	190000	380000	ug/kg	220 U	53 U	91 U	68 U	62 U	**87**	57 U	52 U	91 U	180 U	49 U	**290** J
8260	1,3-Dichlorobenzene	17000	280000	560000	ug/kg	220 U	53 U	91 U	68 U	62 U	50 U	57 U	52 U	91 U	180 U	49 U	630 U
8260	1,4-Dichlorobenzene	9800	130000	250000	ug/kg	220 U	53 U	91 U	68 U	62 U	50 U	57 U	52 U	91 U	180 U	49 U	630 U
8260	1,4-Dioxane	9800	130000	250000	ug/kg	4100 U	1000 UJ	1700 UJ	1300 U	1200 U	940 UJ	1100 UJ	990 U	1700 UJ	3400 UJ	930 UJ	12000 U
8260	2-Hexanone	NS	NS	NS	ug/kg	1100 U	260 U	460 U	340 U	310 U	250 U	290 U	260 U	450 U	900 U	250 U	3100 U
8260	4-iso-Propyltoluene	NS	NS	NS	ug/kg	220 U	53 U	91 U	68 U	62 U	50 U	57 U	52 U	**37** J	180 U	49 U	630 U
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg	430 U	**84**	**67** J	**280**	**150**	**190**	**55** J	52 U	**63** J	**190**	**150**	630 U
8260	Benzene	2900	44000	89000	ug/kg	220 U	53 U	91 U	**17** J	62 U	50 U	57 U	52 U	91 U	180 U	49 U	**560** J
8260	Cis-1,2-Dichloroethene	59000	500000	1,000,000	ug/kg	220 U	53 U	91 U	68 U	62 U	50 U	57 U	52 U	91 U	180 U	49 U	630 U
8260	Cyclohexane	NS	NS	NS	ug/kg	220 U	53 U	91 U	68 UJ	62 UJ	50 U	57 U	52 U	91 U	180 U	**24** J	**420** J
8260	Ethyl benzene	30000	390000	780000	ug/kg	220 U	53 U	91 U	68 U	62 U	**27** J	57 U	52 U	**59** J	180 U	**16** J	**2000**
8260	Isopropylbenzene	NS	NS	NS	ug/kg	**260**	53 U	91 U	68 U	62 U	50 U	57 U	52 U	**150**	**46** J	**61** J	**1600**
8260	Methyl cyclohexane	NS	NS	NS	ug/kg	**580**	53 U	91 U	68 U	62 U	50 U	57 U	52 U	**75** J	180 U	**40** J	**1800**
8260	n-Butylbenzene	100000	500000	1,000,000	ug/kg	**970**	53 U	91 U	68 U	62 U	**21** J	57 U	52 U	**220**	**56** J	**79** J	**3200**
8260	Propylbenzene	100000	500000	1,000,000	ug/kg	**490**	53 U	91 U	68 U	62 U	**36** J	57 U	52 U	**280**	**59** J	**73** J	**2100**
8260	sec-Butylbenzene	100000	500000	1,000,000	ug/kg	220 U	53 U	91 U	68 U	62 U	50 U	57 U	52 U	**350**	**75** J	**110** J	**3000**
8260	tert-Butylbenzene	100000	500000	1,000,000	ug/kg	**140** J	53 U	91 U	68 U	62 U	50 U	57 U	52 U	91 U	180 U	49 U	630 U
8260	**Tetrachloroethene**	**5500**	**150000**	**300000**	ug/kg	220 U	53 U	91 U	**29** J	62 U	50 U	57 U	52 U	91 U	180 U	49 U	630 U
8260	Toluene	100000	500000	1,000,000	ug/kg	220 U	53 U	91 U	68 U	62 U	50 U	57 U	52 U	91 U	180 U	49 U	630 U
8260	Trichloroethene	10,000	200,000	400,000	ug/kg	220 U	53 U	91 U	68 U	62 U	50 U	57 U	52 U	91 U	180 U	49 U	630 U
8260	Xylenes, Total	100,000	500,000	1,000,000	ug/kg	430 U	110 U	180 U	140 U	120 U	**460**	110 U	100 U	**130** J	360 U	**8.4** J	**1300**
Semi-Volatile Organic Compounds																		
8270	2,6-Dinitrotoluene	NS	NS	NS	ug/kg	200 U	190 U	230 U	190 U	200 U	3500 U	200 U	200 U	1900 U	180 U	180 U	20000 U
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg	200 U	**8.6** J	230 U	190 U	200 U	3500 U	200 U	200 U	**330** J	**28** J	**17** J	**22000**
8270	Acenaphthene	100,000	500,000	1,000,000	ug/kg	200 U	190 U	230 U	190 U	200 U	3500 U	200 U	200 U	**130** J	**13** J	180 U	**1100** J
8270	Acenaphthylene	100,000	500,000	1,000,000	ug/kg	200 U	**5.8** J	230 U	190 U	200 U	3500 U	200 U	200 U	**120** J	**10** J	180 U	20000 U
8270	Anthracene	100,000	500,000	1,000,000	ug/kg	**120** J	190 U	230 U	**230**	200 U	**120** J	200 U	200 U	1900 U	180 U	180 U	20000 U
8270	Benzaldehyde	NS	NS	NS	ug/kg	200 U	190 U	230 U	190 U	200 U	3500 U	200 U	200 U	1900 UJ	180 UJ	180 UJ	20000 U
8270	Benzo(a)anthracene	1,000	5,600	11,000	ug/kg	**95** J	**36** J	230 U	**230**	200 U	**580** J	200 U	200 U	1900 U	**11** J	180 U	20000 U
8270	Benzo(a)pyrene	1,000	1,000	1,100	ug/kg	**85** J	**34** J	230 U	**270**	200 U	**250** J	**12** J	200 U	1900 U	**7.2** J	**16** J	20000 U
8270	Benzo(b)fluoranthene	1,000	5,600	11,000	ug/kg	**140** J	**41** J	230 U	**360**	200 U	**510** J	**14** J	200 U	**60** J	**6.3** J	**7.2** J	20000 U
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg	**29** J	190 U	230 U	**120** J	200 U	3500 U	200 U	200 U	1900 U	180 U	180 U	20000 U
8270	Benzo(k)fluoranthene	1,000	56,000	110,000	ug/kg	**53** J	**31** J	230 U	**370**	200 U	**540** J	**9.6** J	200 U	**49** J	**8.2** J	**6.7** J	20000 U
8270	Biphenyl	NS	NS	NS	ug/kg	200 U	190 U	230 U	190 U	200 U	3500 U	200 U	200 U	1900 U	180 U	180 U	20000 U
8270	Carbazole	NS	NS	NS	ug/kg	200 U	**2.7** J	230 U	190 U	200 U	3500 U	200 U	200 U	1900 U	**13** J	**8.1** J	20000 U
8270	**Chrysene**	**1,000**	**56,000**	**110,000**	ug/kg	**120** J	46 J	230 U	**270**	200 U	**61** J	200 U	200 U	1900 U	**11** J	180 U	20000 U
8270	Dibenz(a,h)anthracene	330	560	1,100	ug/kg	200 U	190 U	230 U	190 U	200 U	3500 U	200 U	200 U	1900 U	180 U	180 U	20000 U
8270	Dibenzofuran	14,000	350,000	1,000,000	ug/kg	200 U	190 U	230 U	190 U	200 U	3500 U	200 U	200 U	1900 U	180 U	180 U	**1400** J
8270	Fluoranthene	100,000	500,000	1,000,000	ug/kg	**210**	190 U	230 U	**460**	200 U	**790** J	**13** J	200 U	**96** J	**15** J	180 U	20000 U
8270	Fluorene	100,000	500,000	1,000,000	ug/kg	200 U	190 U	230 U	190 U	200 U	3500 U	200 U	200 U	**190** J	**24** J	180 U	**2500** J
8270	**Indeno(1,2,3-cd)pyrene**	**500**	**5,600**	**11,000**	ug/kg	**26** J	**46** J	230 U	**130** J	200 U	**540** J	**17** J	200 U	1900 U	180 U	180 U	20000 U
8270	Isophorone	NS	NS	NS	ug/kg	200 U	190 U	230 U	190 U	200 U	3500 U	200 U	200 U	1900 U	180 U	180 U	20000 U
8270	N-Nitrosodiphenylamine	NS	NS	NS	ug/kg	200 U	190 U	230 U	190 U	200 U	3500 U	200 U	200 U	**420** J	**43** J	**31** J	**1900** J
8270	Naphthalene	100,000	500,000	1,000,000	ug/kg	200 U	190 U	230 U	190 U	200 U	3500 U	200 U	200 U	**61** J	**10** J	180 U	**1600** J
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg	**660**	190 U	230 U	**230**	200 U	**480** J	200 U	200 U	**550** J	**60** J	**43** J	**4800** J
8270	Pyrene	100,000	500,000	1,000,000	ug/kg	**290**	190 U	230 U	**350**	200 U	**730** J	**23** J	200 U	**240** J	**36** J	**27** J	**560** J
Pesticides																		
8081	4,4'-DDD	2,600	92,000	180,000	ug/kg	19 U	**4.9** J	2.2 U	9.3 U	2 U	35 U	2 U	1.9 U	9.4 U	1.8 U	9 U	2 U
8081	4,4'-DDE	1,800	62,000	120,000	ug/kg	19 U	9.5 U	2.2 U	**4.4** J	2 U	35 U	2 U	1.9 U	9.4 U	1.8 U	9 U	2 U
8081	4,4'-DDT	1,700	47,000	94,000	ug/kg	19 U	9.5 U	2.2 U	**44**	2 U	35 U	2 U	1.9 U	9.4 U	1.8 U	9 U	2 U
8081	Aldrin	19	680	1,400	ug/kg	19 U	9.5 U	2.2 U	9.3 U	2 U	35 U	2 U	1.9 U	9.4 U	1.8 U	9 U	2 U
8081	Beta-BHC	72	3,000	14,000	ug/kg	19 U	9.5 U	2.2 U	**2.2** J	2 U	35 U	**0.75** J	**0.52** J	9.4 U	1.8 U	9 U	**1.2** J
8081	Delta-BHC	100,000	500,000	1,000,000	ug/kg	19 U	9.5 U	2.2 U	9.3 U	2 U	35 U	2 U	1.9 U	9.4 U	1.8 U	9 U	**0.64** J
8081	Dieldrin	39	1,400	2,800	ug/kg	19 U	**4.2** J	2.2 U	**10** J	2 U	**8.8** J	2 U	1.9 U	9.4 U	1.8 U	9 U	**1** J
8081	Endosulfan I	4,800	200,000	920,000	ug/kg	19 U	9.5 U	2.2 U	9.3 U	2 U	35 U	2 U	1.9 U	9.4 U	1.8 U	9 U	2 U
8081	Endosulfan II	4,800	200,000	920,000	ug/kg	19 U	9.5 U	2.2 U	9.3 U	2 U	35 U	2 U	1.9 U	9.4 U	1.8 U	9 U	2 U
8081	Endosulfan sulfate	4,800	200,000	920,000	ug/kg	19 U	9.5 U	2.2 U	9.3 U	2 U	35 U	2 U	1.9 U	9.4 U	1.8 U	9 U	2 U

Table 5.24: SubSurface Soil Rolling Mill Region
Organic Analytical Results

| | | |

Table 5.24: SubSurface Soil Rolling Mill Region
Organic Analytical Results

						Location	TP-H5-01		TP-I3-01		TP-I6-01		TP-I7-01		TP-I7-01		TP-J3-01		TP-J3-01	
						Sample Id	401003TPH50104		401003TPI30105		401003TPI60103		401003TPI70104		401003TPI70109		401003TPJ30104		401003TPJ30109	
						Sample Depth (ft bgs)	3 - 4		4 - 5		2 - 3		3 - 4		8 - 9		3 - 4		8 - 9	
						Soil Type	Native		Fill Waste		Fill Waste		Fill Waste		Native		Fill Waste		Native	
						Investigation Objective	GW/Native		Fill		Fill		Fill		GW/Native		Fill		Native	
						Approximate GW Level (ft bgs)	3		>11		>5		9		9		>9		>9	
						Sample Date	6/4/2014 10:55		6/4/2014 15:35		6/4/2014 9:30		6/4/2014 12:25		6/4/2014 12:55		6/4/2014 14:20		6/4/2014 14:35	
		SCO				Qc Code	FS		FS		FS		FS		FS		FS		FS	
Method	Parameter	RES	COMM	IND	Units															
Volatile Organic Compounds																				
8260	1,1,1-Trichloroethane	100000	500000	1,000,000	ug/kg	54	U	44	U	56	U	63	U	210	U	45	U	54	U
8260	1,1,2,2-Tetrachloroethane	NS	NS	NS	ug/kg	54	U	44	U	56	U	63	U	**960**		45	U	54	U
8260	1,1-Dichloroethane	19000	240000	480000	ug/kg	54	U	44	U	56	U	63	U	210	U	45	U	54	U
8260	1,1-Dichloroethene	100000	500000	1,000,000	ug/kg	54	UJ	44	U	56	UJ	63	U	210	U	45	UJ	54	UJ
8260	1,2,3-Trichlorobenzene	NS	NS	NS	ug/kg	54	U	**62**		56	U	63	U	210	U	45	U	54	U
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg	54	U	**3500**		56	U	63	U	210	U	110	U	54	U
8260	1,2,4-Trimethylbenzene	47000	190000	380000	ug/kg	**190**		**43**	J	**120**		63	U	210	U	45	U	54	U
8260	1,2-Dibromo-3-chloropropane	NS	NS	NS	ug/kg	54	U	44	U	56	U	63	U	210	U	45	U	54	U
8260	1,3,5-Trimethylbenzene	47000	190000	380000	ug/kg	**43**	J	**17**	J	**58**		63	U	210	U	45	U	54	U
8260	1,3-Dichlorobenzene	17000	280000	560000	ug/kg	54	U	44	U	56	U	63	U	210	U	45	U	54	U
8260	1,4-Dichlorobenzene	9800	130000	250000	ug/kg	54	U	44	U	56	U	63	U	210	U	45	U	54	U
8260	1,4-Dioxane	9800	130000	250000	ug/kg	1000	U	830	UJ	1100	U	1200	UJ	4100	UJ	**860**	J	1000	UJ
8260	2-Hexanone	NS	NS	NS	ug/kg	270	U	220	U	280	U	320	U	1100	U	230	U	270	U
8260	4-iso-Propyltoluene	NS	NS	NS	ug/kg	**31**	J	44	U	56	U	63	U	210	U	45	U	54	U
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg	**230**		**67**		**150**		**170**		**240**		**140**		**68**	
8260	Benzene	2900	44000	89000	ug/kg	**120**		44	U	**1700**		63	U	210	U	45	U	54	U
8260	Cis-1,2-Dichloroethene	59000	500000	1,000,000	ug/kg	54	U	44	U	56	U	63	U	210	U	45	U	54	U
8260	Cyclohexane	NS	NS	NS	ug/kg	**51**	J	44	U	56	UJ	**31**	J	210	U	45	U	54	U
8260	Ethyl benzene	30000	390000	780000	ug/kg	**140**		44	U	**160**		63	U	210	U	45	U	54	U
8260	Isopropylbenzene	NS	NS	NS	ug/kg	**130**		**15**	J	**12**	J	63	U	210	U	45	U	54	U
8260	Methyl cyclohexane	NS	NS	NS	ug/kg	**170**		44	U	**140**		**75**		210	U	45	U	54	U
8260	n-Butylbenzene	100000	500000	1,000,000	ug/kg	**200**		44	U	56	U	63	U	210	U	45	U	54	U
8260	Propylbenzene	100000	500000	1,000,000	ug/kg	**240**		44	U	**21**	J	63	U	210	U	45	U	54	U
8260	sec-Butylbenzene	100000	500000	1,000,000	ug/kg	**200**		44	U	56	U	63	U	**180**	J	45	U	54	U
8260	tert-Butylbenzene	100000	500000	1,000,000	ug/kg	54	U	44	U	56	U	63	U	210	U	45	U	54	U
8260	**Tetrachloroethene**	**5500**	**150000**	**300000**	ug/kg	54	U	44	U	**89**		**12**	J	210	U	45	U	54	U
8260	Toluene	100000	500000	1,000,000	ug/kg	54	U	44	U	**910**		63	U	210	U	45	U	54	U
8260	Trichloroethene	10,000	200,000	400,000	ug/kg	54	U	44	U	56	U	63	U	210	U	45	U	54	U
8260	Xylenes, Total	100,000	500,000	1,000,000	ug/kg	**150**		88	U	**670**		**12**	J	430	U	90	U	110	U
Semi-Volatile Organic Compounds																				
8270	2,6-Dinitrotoluene	NS	NS	NS	ug/kg	210	U	180	U	650	UJ	2000	U	**14000**		180	U	200	U
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg	**850**		**8.4**	J	**74**	J	2000	U	4000	U	**16**	J	200	U
8270	Acenaphthene	100,000	500,000	1,000,000	ug/kg	**52**	J	**3.8**	J	**9.6**	J	**43**	J	**1200**	J	180	U	200	U
8270	Acenaphthylene	100,000	500,000	1,000,000	ug/kg	**45**	J	180	U	**5.5**	J	**41**	J	**240**	J	180	U	200	U
8270	Anthracene	100,000	500,000	1,000,000	ug/kg	**310**		180	U	**150**	J	**250**	J	**1300**	J	180	U	200	U
8270	Benzaldehyde	NS	NS	NS	ug/kg	**220**		180	UJ	190	UJ	2000	UJ	4000	UJ	180	UJ	200	UJ
8270	Benzo(a)anthracene	1,000	5,600	11,000	ug/kg	**120**	J	**12**	J	**67**	J	**980**	J	4000	U	180	U	**10**	J
8270	Benzo(a)pyrene	1,000	1,000	1,100	ug/kg	**110**	J	**9.4**	J	**57**	J	**290**	J	4000	U	**18**	J	200	U
8270	Benzo(b)fluoranthene	1,000	5,600	11,000	ug/kg	**96**	J	**11**	J	**57**	J	**830**	J	4000	U	180	U	**16**	J
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg	210	U	180	U	190	UJ	2000	U	4000	U	180	U	200	U
8270	Benzo(k)fluoranthene	1,000	56,000	110,000	ug/kg	**96**	J	**9.1**	J	**63**	J	**770**	J	4000	U	180	U	200	U
8270	Biphenyl	NS	NS	NS	ug/kg	**38**	J	180	U	**23**	J	2000	U	4000	U	180	U	200	U
8270	Carbazole	NS	NS	NS	ug/kg	**21**	J	180	U	**9.2**	J	**110**	J	4000	U	180	U	200	U
8270	**Chrysene**	**1,000**	**56,000**	**110,000**	ug/kg	**140**	J	**12**	J	**91**	J	**1100**	J	4000	U	180	U	200	U
8270	Dibenz(a,h)anthracene	330	560	1,100	ug/kg	**24**	J	180	U	**11**	J	**88**	J	4000	U	180	U	200	U
8270	Dibenzofuran	14,000	350,000	1,000,000	ug/kg	**33**	J	180	U	**24**	J	**66**	J	4000	U	**10**	J	200	U
8270	Fluoranthene	100,000	500,000	1,000,000	ug/kg	**300**		**21**	J	**110**	J	**1600**	J	4000	U	180	U	200	U
8270	Fluorene	100,000	500,000	1,000,000	ug/kg	**71**	J	180	U	**13**	J	**67**	J	**330**	J	**4.4**	J	200	U
8270	**Indeno(1,2,3-cd)pyrene**	**500**	**5,600**	**11,000**	ug/kg	**86**	J	180	U	**56**	J	**600**	J	4000	U	180	U	200	U
8270	Isophorone	NS	NS	NS	ug/kg	**12**	J	180	U	190	UJ	2000	U	4000	U	180	U	200	U
8270	N-Nitrosodiphenylamine	NS	NS	NS	ug/kg	**42**	J	180	U	190	UJ	2000	U	**4200**		**10**	J	200	U
8270	Naphthalene	100,000	500,000	1,000,000	ug/kg	**320**		**5.8**	J	**71**	J	2000	U	4000	U	180	U	200	U
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg	**66**	J	**27**	J	**18**	J	**970**	J	4000	U	**47**	J	200	U
8270	Pyrene	100,000	500,000	1,000,000	ug/kg	**360**		**21**	J	**160**	J	**1500**	J	**800**	J	**78**	J	**15**	J
Pesticides																				
8081	4,4'-DDD	2,600	92,000	180,000	ug/kg	**0.73**	J	**0.68**	J	19	U	40	U	20	U	47	U	2	U
8081	4,4'-DDE	1,800	62,000	120,000	ug/kg	2	U	1.8	U	19	U	40	U	20	U	36	U	2	U
8081	4,4'-DDT	1,700	47,000	94,000	ug/kg	2	U	1.8	U	19	U	40	U	20	U	320	U	2	U
8081	Aldrin	19	680	1,400	ug/kg	2	U	1.8	U	19	U	40	U	20	U	36	U	2	U
8081	Beta-BHC	72	3,000	14,000	ug/kg	2	U	**0.79**	J	19	U	40	U	20	U	36	U	**0.8**	J
8081	Delta-BHC	100,000	500,000	1,000,000	ug/kg	2	U	1.8	U	19	U	40	U	20	U	36	U	2	U
8081	Dieldrin	39	1,400	2,800	ug/kg	**0.94**	J	1.8	U	**21**	J	40	U	20	U	150	U	2	U
8081	Endosulfan I	4,800	200,000	920,000	ug/kg	2	U	1.8	U	19	U	40	U	20	U	36	U	2	U
8081	Endosulfan II	4,800	200,000	920,000	ug/kg	2	U	1.8	U	19	U	40	U	20	U	36	U	2	U
8081	Endosulfan sulfate	4,800	200,000	920,000	ug/kg	2	U	1.8	U	19	UJ	40	U	20	U	36	U	2	U

Table 5.24: SubSurface Soil Rolling Mill Region
Organic Analytical Results

| | | |

Table 5.25: Sub Surface Soil SMSA Region
Organic Analytical Results

					Location	SB-E4-01		SB-E4-01		SB-E4-01		SB-F3-01		SB-F3-01		SB-F4-01		SB-F4-01		SB-G5-01	
					Sample Id	401003SBE40104		401003SBE40104XD		401003SBE40116		401003SBF30103		401003SBF30110		401003SBF40103		401003SBF40107		401003SBG50103	
					Sample Depth (ft bgs)	4 - 8		4 - 8		16 - 20		2 - 4		8 - 9.5		3 - 4		7 - 8		5 - 8	
					Soil Type	Fill Waste		Fill Waste		Native		Native		Native		Native		Native		Fill Waste	
					Investigation Objective	Fill		Fill		GW/Native		Native		Native		Native		GW/Native		Fill	
					Approximate GW Level (ft bgs)	6.3		6.3		6.3		9.5		9.5		2.2		2.2		13.5	
					Sample Date	6/11/2014 9:20		6/11/2014 9:20		6/11/2014 10:00		6/2/2014 14:20		6/2/2014 14:30		6/9/2014 16:40		6/9/2014 16:45		6/10/2014 14:00	
		SCO			Qc Code	FS		FD		FS		FS		FS		FS		FS		FS	
Method	Parameter	RES	COMM	IND	Units																
Volatile Organic Compounds																					
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg	81	U	57	U	65	U	340	U	180	UJ	58	U	48	U	430	U
8260	1,2,4-Trimethylbenzene	47000	190000	380000	ug/kg	81	U	57	U	65	U	**100**	J	**130**	J	58	U	48	U	430	U
8260	1,3,5-Trimethylbenzene	47000	190000	380000	ug/kg	81	U	57	U	65	U	340	U	180	U	58	U	48	U	430	U
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg	**200**		**78**		65	U	380	U	340	U	**78**		48	U	430	U
8260	Benzene	2900	44000	89000	ug/kg	81	U	57	U	65	U	340	U	**33**	J	58	U	48	U	430	U
8260	Cyclohexane	NS	NS	NS	ug/kg	81	U	57	U	65	U	340	U	180	U	58	U	**410**		430	UJ
8260	Ethyl benzene	30000	390000	780000	ug/kg	81	U	57	U	65	U	340	U	**74**	J	58	U	48	U	430	U
8260	Isopropylbenzene	NS	NS	NS	ug/kg	81	U	57	U	65	U	340	U	**50**	J	58	U	**1100**		**79**	J
8260	Methyl cyclohexane	NS	NS	NS	ug/kg	81	U	57	U	65	U	340	U	180	U	58	U	**1800**		430	U
8260	n-Butylbenzene	100000	500000	1,000,000	ug/kg	81	U	57	U	65	U	340	U	180	U	58	U	**1900**		**240**	J
8260	Propylbenzene	100000	500000	1,000,000	ug/kg	81	U	57	U	65	U	340	U	**61**	J	58	U	**1800**		**160**	J
8260	sec-Butylbenzene	100000	500000	1,000,000	ug/kg	81	U	57	U	65	U	340	U	180	U	58	U	**2100**		430	U
8260	tert-Butylbenzene	100000	500000	1,000,000	ug/kg	81	U	57	U	65	U	340	U	180	U	58	U	**73**		430	U
8260	Xylenes, Total	100000	500000	1,000,000	ug/kg	160	U	110	U	130	U	680	U	**58**	J	120	U	**12**	J	850	U
Semi-Volatile Organic Compounds																					
8270	2,4-Dinitrotoluene	NS	NS	NS	ug/kg	190	U	180	U	210	U	4000	U	3500	U	180	U	**1800**	J	200	U
8270	2,6-Dinitrotoluene	NS	NS	NS	ug/kg	190	U	180	U	210	U	4000	U	3500	U	**690**		12000	U	200	U
8270	2-Chloronaphthalene	NS	NS	NS	ug/kg	190	U	180	U	210	U	4000	U	3500	U	180	U	**2500**	J	200	U
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg	**18**	J	**5.3**	J	210	U	**540**	J	**230**	J	**9.5**	J	**11000**	J	**1100**	
8270	Acenaphthene	100,000	500,000	1,000,000	ug/kg	**15**	J	180	U	210	U	4000	U	3500	U	180	U	**2800**	J	**66**	J
8270	Acenaphthylene	100,000	500,000	1,000,000	ug/kg	**40**	J	**11**	J	210	U	4000	U	3500	U	180	U	**1700**	J	200	U
8270	Acetophenone	NS	NS	NS	ug/kg	190	U	180	U	210	U	4000	U	3500	U	180	U	**3100**	J	200	U
8270	Anthracene	100,000	500,000	1,000,000	ug/kg	**90**	J	**13**	J	210	U	4000	U	3500	U	180	U	**1400**	J	**35**	J
8270	Atrazine	NS	NS	NS	ug/kg	190	U	180	U	210	U	4000	UJ	3500	UJ	180	U	**590**	J	200	U
8270	Benzo(a)anthracene	1,000	5,600	11,000	ug/kg	**490**	J	**110**	J	210	U	4000	U	3500	U	180	U	12000	U	200	U
8270	Benzo(a)pyrene	1,000	1,000	1,100	ug/kg	**400**	J	**110**	J	210	U	4000	U	3500	U	180	U	12000	U	200	U
8270	Benzo(b)fluoranthene	1,000	5,600	11,000	ug/kg	**690**		**240**		210	U	**150**	J	3500	UJ	180	U	12000	U	200	U
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg	**140**	J	**38**	J	210	U	4000	U	3500	U	180	U	12000	U	200	U
8270	Benzo(k)fluoranthene	1,000	56,000	110,000	ug/kg	**320**	J	**90**	J	210	U	**93**	J	3500	U	180	U	12000	U	200	U
8270	Carbazole	NS	NS	NS	ug/kg	**28**	J	**7.8**	J	210	U	4000	U	3500	U	180	U	12000	U	200	U
8270	Chrysene	1,000	56,000	110,000	ug/kg	**560**	J	**130**	J	210	U	**280**	J	3500	U	180	U	12000	U	200	U
8270	Dibenzofuran	14,000	350,000	1,000,000	ug/kg	**13**	J	180	U	210	U	4000	U	3500	U	180	U	**3000**	J	200	U
8270	Fluoranthene	100,000	500,000	1,000,000	ug/kg	**770**	J	**170**	J	210	U	**110**	J	3500	U	180	U	**420**	J	200	U
8270	Fluorene	100,000	500,000	1,000,000	ug/kg	**18**	J	180	U	210	U	4000	U	3500	U	180	U	**6500**	J	**130**	J
8270	Indeno(1,2,3-cd)pyrene	500	5,600	11,000	ug/kg	**140**	J	**39**	J	210	U	4000	U	3500	U	180	U	12000	U	200	U
8270	Isophorone	NS	NS	NS	ug/kg	190	U	180	U	210	U	4000	U	3500	U	180	U	**1500**	J	200	U
8270	N-Nitrosodiphenylamine	NS	NS	NS	ug/kg	190	U	180	U	210	U	4000	U	3500	U	180	U	**12000**		200	U
8270	Naphthalene	100,000	500,000	1,000,000	ug/kg	**17**	J	180	U	210	U	4000	U	3500	U	180	U	**630**	J	**53**	J
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg	**220**	J	**50**	J	210	U	**410**	J	**190**	J	180	U	**12000**		**360**	
8270	Pyrene	100,000	500,000	1,000,000	ug/kg	**650**	J	**160**	J	210	U	**180**	J	3500	U	180	U	**590**	J	**32**	J

Table 5.25: Sub Surface Soil SMSA Region
Organic Analytical Results

					Location	**SB-E4-01**		**SB-E4-01**		**SB-E4-01**		**SB-F3-01**		**SB-F3-01**		**SB-F4-01**		**SB-F4-01**		**SB-G5-01**	
					Sample Id	401003SBE40104		401003SBE40104XD		401003SBE40116		401003SBF30103		401003SBF30110		401003SBF40103		401003SBF40107		401003SBG50103	
					Sample Depth (ft bgs)	4 - 8		4 - 8		16 - 20		2 - 4		8 - 9.5		3 - 4		7 - 8		5 - 8	
					Soil Type	Fill Waste		Fill Waste		Native		Native		Native		Native		Native		Fill Waste	
					Investigation Objective	Fill		Fill		GW/Native		Native		Native		Native		GW/Native		Fill	
					Approximate GW Level (ft bgs)	6.3		6.3		6.3		9.5		9.5		2.2		2.2		13.5	
					Sample Date	6/11/2014 9:20		6/11/2014 9:20		6/11/2014 10:00		6/2/2014 14:20		6/2/2014 14:30		6/9/2014 16:40		6/9/2014 16:45		6/10/2014 14:00	
		SCO			**Qc Code**	FS		FD		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																
Pesticides																					
80801	4,4'-DDD	2,600	92,000	180,000	ug/kg	22	U	13	U	**0.52**	J	9.6	U	1.7	U	36	U	19	U	1.9	U
80801	4,4'-DDE	1,800	62,000	120,000	ug/kg	9.3	U	9	U	2	U	9.6	U	1.7	U	36	U	**6.8**	J	1.9	U
80801	4,4'-DDT	1,700	47,000	94,000	ug/kg	120	U	9	U	2	U	**8.5**	J	1.7	U	36	U	**13**	J	1.9	U
80801	Alpha-Chlordane	910	24,000	47,000	ug/kg	9.3	U	9	U	2	U	9.6	U	1.7	U	36	U	19	U	1.9	U
80801	Beta-BHC	72	3,000	14,000	ug/kg	**2.7**	J	**3.1**	J	2	U	9.6	U	1.7	U	36	U	19	U	**4**	J
80801	Delta-BHC	100,000	500,000	1,000,000	ug/kg	**2.8**	J	**2.7**	J	2	U	9.6	U	**0.36**	J	36	U	**6.1**	J	**0.67**	J
80801	Dieldrin	39	1,400	2,800	ug/kg	64	U	33	U	**1.2**	J	9.6	U	1.7	U	36	U	**11**	J	**0.87**	J
80801	Endosulfan II	4,800	200,000	920,000	ug/kg	9.3	U	9	U	**0.55**	J	9.6	U	1.7	U	36	U	19	U	1.9	U
80801	Endosulfan sulfate	4,800	200,000	920,000	ug/kg	9.3	U	9	U	2	U	9.6	U	1.7	U	36	UJ	19	UJ	1.9	U
80801	Endrin	2,200	89,000	410,000	ug/kg	9.3	U	65	U	2	U	9.6	U	1.7	U	36	U	19	U	1.9	U
80801	Endrin aldehyde	NS	NS	NS	ug/kg	93	U	56	U	2	U	9.6	U	**1.3**	J	36	UJ	19	UJ	1.9	U
80801	Endrin ketone	NS	NS	NS	ug/kg	9.3	U	24	U	2	U	9.6	U	1.7	U	36	U	19	U	1.9	U
80801	Gamma chlordane	NS	NS	NS	ug/kg	9.3	U	9	U	2	U	9.6	U	1.7	U	36	U	19	U	1.9	U
80801	Heptachlor epoxide	NS	NS	NS	ug/kg	9.3	U	9	U	2	U	9.6	U	1.7	U	36	U	19	U	1.9	U
80801	Methoxychlor	NS	NS	NS	ug/kg	11	U	9	U	2	U	9.6	U	**0.41**	J	36	U	19	U	1.9	U
Polychlorinated Biphenyls																					
8082	Aroclor-1242	1,000	1,000	25,000	ug/kg	250	U	480	U	290	U	220	UJ	220	UJ	230	U	280	U	250	U
8082	Aroclor-1254	1,000	1,000	25,000	ug/kg	250	U	480	U	290	U	220	UJ	220	UJ	230	U	**540**	J	250	U
8082	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	**4000**	J	**7200**	J	290	U	220	UJ	220	UJ	230	U	280	U	250	U
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	**4000**		**7200**		ND		ND		ND		ND		540		ND	
310.13	Hydrocarbons	NS	NS	NS	mg/kg															**73**	

Notes: See Table 5A
*- CP-51 / Soil Cleanup Guidance = for soils greater than 2 feet bgs 10 mg/kg (commercial use) and 25 mg/kg (industrial use).

Table 5.25: Sub Surface Soil SMSA Region
Organic Analytical Results

					Location	SB-G5-01		TP-D4-01		TP-D4-01		TP-D5-01		TP-D5-01		TP-E5-01		TP-E5-01	
					Sample Id	401003SBG50105		401003TPD40103		401003TPD40108		401003TPD50105		401003TPD50105XD		401003TPE50103		401003TPE50105	
					Sample Depth (ft bgs)	13 - 16		2 - 3		7 - 8		4 - 5		4 - 5		2 - 3		4 - 5	
					Soil Type	Native		Fill Waste		Native		Native		Native		Fill		Native	
					Investigation Objective	GW/Native		Fill		GW/Native		GW/Native		GW/Native		Fill		GW/Native	
					Approximate GW Level (ft bgs)	13.5		3		3		5		5		3.5		3.5	
					Sample Date	6/10/2014 13:35		6/3/2014 8:55		6/3/2014 9:25		6/2/2014 13:25		6/2/2014 13:25		6/2/2014 15:20		6/2/2014 15:30	
		SCO			**Qc Code**	FS		FS		FS		FS		FD		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**														
Volatile Organic Compounds																			
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg	60	U	57	UJ	50	UJ	60	UJ	**58**	J	44	U	**410**	
8260	1,2,4-Trimethylbenzene	47000	190000	380000	ug/kg	**69**		57	U	50	U	60	U	62	U	44	U	50	U
8260	1,3,5-Trimethylbenzene	47000	190000	380000	ug/kg	**20**	J	57	U	50	U	60	U	62	U	44	U	50	U
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg	**110**		4100	U	50	U	160	U	160	U	120	U	90	U
8260	Benzene	2900	44000	89000	ug/kg	60	U	57	U	50	U	60	U	62	U	44	U	50	U
8260	Cyclohexane	NS	NS	NS	ug/kg	60	UJ	57	U	50	U	60	U	62	U	44	U	50	U
8260	Ethyl benzene	30000	390000	780000	ug/kg	60	U	57	U	50	U	60	U	62	U	44	U	50	U
8260	Isopropylbenzene	NS	NS	NS	ug/kg	60	U	57	U	50	U	60	U	62	U	44	U	50	U
8260	Methyl cyclohexane	NS	NS	NS	ug/kg	60	U	57	U	50	U	60	U	62	U	44	U	50	U
8260	n-Butylbenzene	100000	500000	1,000,000	ug/kg	60	U	57	U	50	U	60	U	62	U	44	U	50	U
8260	Propylbenzene	100000	500000	1,000,000	ug/kg	60	U	57	U	50	U	60	U	62	U	44	U	50	U
8260	sec-Butylbenzene	100000	500000	1,000,000	ug/kg	60	U	57	U	50	U	60	U	62	U	44	U	50	U
8260	tert-Butylbenzene	100000	500000	1,000,000	ug/kg	60	U	57	U	50	U	60	U	62	U	44	U	50	U
8260	Xylenes, Total	100000	500000	1,000,000	ug/kg	120	U	110	U	99	U	120	U	120	U	87	U	100	U
Semi-Volatile Organic Compounds																			
8270	2,4-Dinitrotoluene	NS	NS	NS	ug/kg	210	U	10000	U	200	U	210	U	210	U	200	U	200	U
8270	2,6-Dinitrotoluene	NS	NS	NS	ug/kg	210	U	10000	U	200	U	210	U	210	U	200	U	200	U
8270	2-Chloronaphthalene	NS	NS	NS	ug/kg	210	U	10000	U	200	U	210	U	210	U	200	U	200	U
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg	210	U	10000	U	200	U	**4.2**	J	**2.9**	J	200	U	200	U
8270	Acenaphthene	100,000	500,000	1,000,000	ug/kg	210	U	10000	U	200	U	**6.9**	J	210	U	200	U	200	U
8270	Acenaphthylene	100,000	500,000	1,000,000	ug/kg	210	U	10000	U	200	U	**4.3**	J	**2.1**	J	200	U	200	U
8270	Acetophenone	NS	NS	NS	ug/kg	210	U	10000	U	200	U	210	U	210	U	200	U	200	U
8270	Anthracene	100,000	500,000	1,000,000	ug/kg	210	U	10000	U	200	U	**19**	J	210	U	200	U	200	U
8270	Atrazine	NS	NS	NS	ug/kg	210	U	10000	UJ	200	UJ	210	UJ	210	UJ	200	U	200	U
8270	Benzo(a)anthracene	1,000	5,600	11,000	ug/kg	210	U	10000	UJ	200	UJ	210	UJ	**16**	J	**36**	J	200	U
8270	Benzo(a)pyrene	1,000	1,000	1,100	ug/kg	210	U	10000	U	200	UJ	**55**	J	**15**	J	**29**	J	200	U
8270	Benzo(b)fluoranthene	1,000	5,600	11,000	ug/kg	210	U	10000	UJ	200	UJ	**51**	J	**16**	J	**40**	J	200	U
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg	210	U	10000	U	200	UJ	210	UJ	210	UJ	**22**	J	200	U
8270	Benzo(k)fluoranthene	1,000	56,000	110,000	ug/kg	210	U	10000	U	200	UJ	**57**	J	**19**	J	200	U	200	U
8270	Carbazole	NS	NS	NS	ug/kg	210	U	10000	U	200	U	**11**	J	210	U	200	U	200	U
8270	Chrysene	1,000	56,000	110,000	ug/kg	210	U	10000	UJ	200	UJ	**11**	J	**20**	J	**29**	J	200	U
8270	Dibenzofuran	14,000	350,000	1,000,000	ug/kg	210	U	10000	U	200	U	210	U	210	U	200	U	200	U
8270	Fluoranthene	100,000	500,000	1,000,000	ug/kg	210	U	10000	U	200	U	210	U	**18**	J	**68**	J	200	U
8270	Fluorene	100,000	500,000	1,000,000	ug/kg	**9.7**	J	10000	U	200	U	**6.3**	J	210	U	200	U	200	U
8270	Indeno(1,2,3-cd)pyrene	500	5,600	11,000	ug/kg	210	U	10000	U	200	UJ	**72**	J	210	UJ	**18**	J	200	U
8270	Isophorone	NS	NS	NS	ug/kg	210	U	10000	U	200	U	210	U	210	U	200	U	200	U
8270	N-Nitrosodiphenylamine	NS	NS	NS	ug/kg	210	U	10000	U	200	U	210	U	210	U	200	U	200	U
8270	Naphthalene	100,000	500,000	1,000,000	ug/kg	210	U	10000	U	200	U	210	U	210	U	200	U	200	U
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg	**12**	J	10000	U	200	U	**79**	J	**13**	J	**45**	J	200	U
8270	Pyrene	100,000	500,000	1,000,000	ug/kg	210	U	10000	UJ	200	UJ	**170**	J	**36**	J	**54**	J	200	U

Table 5.25: Sub Surface Soil SMSA Region
Organic Analytical Results

					Location	SB-G5-01		TP-D4-01		TP-D4-01		TP-D5-01		TP-D5-01		TP-E5-01		TP-E5-01	
					Sample Id	401003SBG50105		401003TPD40103		401003TPD40108		401003TPD50105		401003TPD50105XD		401003TPE50103		401003TPE50105	
					Sample Depth (ft bgs)	13 - 16		2 - 3		7 - 8		4 - 5		4 - 5		2 - 3		4 - 5	
					Soil Type	Native		Fill Waste		Native		Native		Native		Fill		Native	
					Investigation Objective	GW/Native		Fill		GW/Native		GW/Native		GW/Native		Fill		GW/Native	
					Approximate GW Level (ft bgs)	13.5		3		3		5		5		3.5		3.5	
					Sample Date	6/10/2014 13:35		6/3/2014 8:55		6/3/2014 9:25		6/2/2014 13:25		6/2/2014 13:25		6/2/2014 15:20		6/2/2014 15:30	
		SCO			**Qc Code**	FS		FS		FS		FS		FD		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**														
Pesticides																			
80801	4,4'-DDD	2,600	92,000	180,000	ug/kg	2.1	U	400	U	2	U	100	U	100	U	**120**		**46**	
80801	4,4'-DDE	1,800	62,000	120,000	ug/kg	2.1	U	400	U	2	U	100	U	100	U	**7.8**	J	**3.2**	J
80801	4,4'-DDT	1,700	47,000	94,000	ug/kg	2.1	U	400	U	2	U	100	U	220	U	**160**		**62**	
80801	Alpha-Chlordane	910	24,000	47,000	ug/kg	2.1	U	**380**	J	2	U	100	U	100	U	20	U	9.6	U
80801	Beta-BHC	72	3,000	14,000	ug/kg	**0.55**	J	400	U	2	U	100	U	100	U	20	U	9.6	U
80801	Delta-BHC	100,000	500,000	1,000,000	ug/kg	**0.65**	J	400	U	2	U	**26**	J	**23**	J	**4.1**	J	**2.1**	J
80801	Dieldrin	39	1,400	2,800	ug/kg	2.1	U	400	U	2	U	100	U	100	U	**13**	J	**4.9**	J
80801	Endosulfan II	4,800	200,000	920,000	ug/kg	2.1	U	400	U	2	U	100	U	100	U	20	U	9.6	U
80801	Endosulfan sulfate	4,800	200,000	920,000	ug/kg	2.1	U	400	U	2	U	210	U	100	U	**6.9**	J	**2.9**	J
80801	Endrin	2,200	89,000	410,000	ug/kg	2.1	U	400	U	2	U	100	U	100	U	20	U	9.6	U
80801	Endrin aldehyde	NS	NS	NS	ug/kg	2.1	U	400	U	2	U	100	U	100	U	20	U	9.6	U
80801	Endrin ketone	NS	NS	NS	ug/kg	2.1	U	400	U	2	U	100	U	100	U	20	U	9.6	U
80801	Gamma chlordane	NS	NS	NS	ug/kg	2.1	U	400	U	2	U	100	U	100	U	20	U	9.6	U
80801	Heptachlor epoxide	NS	NS	NS	ug/kg	2.1	U	**140**	J	2	U	100	U	100	U	20	U	9.6	U
80801	Methoxychlor	NS	NS	NS	ug/kg	**1.4**	J	400	U	2	U	100	U	100	U	20	U	9.6	U
Polychlorinated Biphenyls																			
8082	Aroclor-1242	1,000	1,000	25,000	ug/kg	290	U	220	U	270	UJ	**110**	J	310	UJ	260	UJ	230	UJ
8082	Aroclor-1254	1,000	1,000	25,000	ug/kg	290	U	220	U	270	UJ	280	UJ	310	UJ	260	UJ	230	UJ
8082	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	290	U	220	U	270	UJ	**5600**	J	**3100**	J	**4600**	J	**1000**	J
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	ND		ND		ND		**5710**		**3100**		**4600**		**1000**	
310.13	Hydrocarbons	NS	NS	NS	mg/kg	**49**													

Notes: See Table 5A
*- CP-51 / Soil Cleanup Guidance = for soils greater than 2 feet bgs 10 mg/kg (commercial use) and 25 mg/kg (industrial use).

Table 5.26: Sub Surface Soil Melt Shop Region
Organic Analytical Results

| | | |

Table 5.26: Sub Surface Soil Melt Shop Region
Organic Analytical Results

					Location	**SB-G2-01**		**SB-H2-01**		**SB-H2-01**		**SB-J1-01**		**SB-K1-01**		**SB-K1-01**		**SB-K2-01**		**SB-K2-01**	
					Sample Id	401003SBG20102		401003SBH20102		401003SBH20105		401003SBJ10104		401003SBK10104		401003SBK10108		401003SBK20102		401003SBK20105	
					Sample Depth (ft bgs)	2 - 3		2 - 4		5 - 7		4 - 8		4 - 8		8 - 12		2 - 4		5 - 8	
					Soil Type	Native		Fill Waste		Native		Fill		Fill		Native		Fill		Fill	
					Investigation Objective	Native		Fill		Native		Fill		Fill		GW/Native		Fill		GW/Fill	
					Approximate GW Level (ft bgs)	>3		>7		>7		>8.5		6		6		4.25		4.25	
					Sample Date	6/4/2014 11:30		6/9/2014 14:00		6/9/2014 14:20		6/4/2014 14:20		6/4/2014 13:15		6/4/2014 13:30		6/9/2014 11:10		6/9/2014 11:20	
		SCO			**Qc Code**	FS		FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																
Pesticides																					
8082	4,4'-DDD	2,600	92,000	180,000	ug/kg	1.8	U	19	U	36	U	1.9	U	**3.2**	J	1.8	U	1.9	U	**0.6**	J
8082	4,4'-DDE	1,800	62,000	120,000	ug/kg	1.8	U	19	U	36	U	1.9	U	10	U	1.8	U	1.9	U	1.8	U
8082	4,4'-DDT	1,700	47,000	94,000	ug/kg	1.8	U	19	U	36	U	1.9	U	10	U	1.8	U	1.9	U	1.8	U
8082	Alpha-Chlordane	910	24,000	47,000	ug/kg	1.8	U	19	U	36	U	1.9	U	10	U	1.8	U	1.9	U	1.8	U
8082	Beta-BHC	72	3,000	14,000	ug/kg	1.8	U	19	U	36	U	1.9	U	10	U	1.8	U	1.9	U	1.8	U
8082	Delta-BHC	100,000	500,000	1,000,000	ug/kg	1.8	U	19	U	36	U	**0.66**	J	10	U	1.8	U	1.9	U	1.8	U
8082	Dieldrin	39	1,400	2,800	ug/kg	1.8	U	19	U	36	U	1.9	U	10	U	1.8	U	1.9	U	1.8	U
8082	Endosulfan I	4,800	200,000	920,000	ug/kg	1.8	U	19	U	36	U	1.9	U	10	U	1.8	U	1.9	U	1.8	U
8082	Endosulfan II	4,800	200,000	920,000	ug/kg	1.8	U	19	U	36	U	1.9	U	10	U	1.8	U	1.9	U	**0.54**	J
8082	Endrin aldehyde	NS	NS	NS	ug/kg	1.8	U	19	UJ	36	UJ	1.9	U	10	U	1.8	U	1.9	U	1.8	U
8082	Endrin ketone	NS	NS	NS	ug/kg	1.8	U	19	U	36	U	1.9	U	10	U	1.8	U	1.9	U	1.8	U
8082	Gamma-Chlordane	NS	NS	NS	ug/kg	1.8	U	19	U	36	U	1.9	U	10	U	1.8	U	1.9	U	1.8	U
8082	Heptachlor epoxide	NS	NS	NS	ug/kg	1.8	U	19	U	36	U	1.9	U	10	U	1.8	U	1.9	U	1.8	U
8082	Methoxychlor	NS	NS	NS	ug/kg	1.8	U	19	U	36	U	1.9	U	10	U	1.8	U	1.9	U	1.8	U
Polychlorinated Biphenyls																					
8081	Aroclor-1254	1,000	1,000	25,000	ug/kg	190	U	260	U	230	U	270	U	220	U	240	U	260	U	200	U
8081	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	190	U	260	U	230	U	270	U	220	U	240	U	260	U	200	U
8081	Aroclor-1268	1,000	1,000	25,000	ug/kg	190	U	260	U	**210**	J	270	U	220	U	240	U	260	U	200	U
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	ND		ND		**210**		ND		ND		ND		ND		ND	
310.13	Hydrocarbons	NS	NS	NS	mg/kg																

Notes: See Table 5A
*- CP-51 / Soil Cleanup Guidance = for soils greater than 2 feet bgs 10 mg/kg (commercial use) and 25 mg/kg (industrial use).

Table 5.26: Sub Surface Soil Melt Shop Region
Organic Analytical Results

						Location	SB-L2-01		SB-L2-01		SB-M2-01		SB-M2-01		SB-M2-02		TP-H3-02		TP-H3-02		TP-K3-01	
						Sample Id	401003SBL20104		401003SBL20106		401003SBM20103		401003SBM20106		401003SBM20206		401003TPH30203		401003TPH30205		401003TPK30105	
						Sample Depth (ft bgs)	4 - 6		6 - 8		3 - 4		6 - 8		6 - 8		2 - 3		4 - 5		4 - 5	
						Soil Type	Fill Waste		Native		Fill Waste		Native		Native		Fill Waste		Native		Fill	
						Investigation Objective	Fill		GW/Native		Fill		GW/Native		GW/Native		Fill		Native		Fill	
						Approximate GW Level (ft bgs)	6		6		5		5		3		>5		>5		>7.5	
						Sample Date	6/9/2014 11:45		6/9/2014 14:00		6/5/2014 10:10		6/5/2014 10:50		6/11/2014 11:30		6/3/2014 10:35		6/3/2014 10:45		6/3/2014 14:05	
		SCO				Qc Code	FS		FS		FS		FS		FS		FS		FS		FS	
Method	Parameter	RES	COMM	IND	Units																	
Volatile Organic Compounds																						
8260	1,1,1-Trichloroethane	100,000	500,000	1,000,000	ug/kg	57	U	53	U	480	U	85	U	80	U	49	U	49	UJ	50	U
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg	57	U	53	U	480	U	85	U	80	U	**80**		49	UJ	**970**	
8260	1,2,4-Trimethylbenzene	47,000	190,000	380,000	ug/kg	57	U	53	U	480	U	85	U	80	U	49	U	49	U	50	U
8260	1,3,5-Trimethylbenzene	47,000	190,000	380,000	ug/kg	57	U	53	U	480	U	85	U	80	U	49	U	49	U	50	U
8260	4-Methyl-2-pentanone	NS	NS	NS	ug/kg	290	U	260	U	2400	U	430	U	**35**	J	250	U	250	U	250	U
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg	92	U	180	U	480	U	**57**	J	**140**		100	U	100	U	**140**	
8260	Benzene	2,900	44,000	89,000	ug/kg	57	U	53	U	480	U	85	U	80	U	49	U	49	U	50	U
8260	Cyclohexane	NS	NS	NS	ug/kg	57	U	53	U	480	U	85	U	80	U	49	U	49	U	50	UJ
8260	Ethyl benzene	30,000	390,000	780,000	ug/kg	57	U	53	U	480	U	85	U	80	U	49	U	49	U	50	U
8260	Isopropylbenzene	NS	NS	NS	ug/kg	57	U	53	U	480	U	85	U	80	U	49	U	49	U	50	U
8260	Methyl cyclohexane	NS	NS	NS	ug/kg	57	U	53	U	480	U	85	U	80	U	49	U	49	U	50	U
8260	n-Butylbenzene	100,000	500,000	1,000,000	ug/kg	57	U	53	U	**390**	J	85	U	80	U	49	U	49	U	50	U
8260	Propylbenzene	100,000	500,000	1,000,000	ug/kg	57	U	53	U	480	U	85	U	80	U	49	U	49	U	50	U
8260	sec-Butylbenzene	100,000	500,000	1,000,000	ug/kg	57	U	53	U	**270**	J	85	U	80	U	49	U	49	U	50	U
8260	Toluene	100,000	500,000	1,000,000	ug/kg	57	U	53	U	480	U	85	U	80	U	49	U	49	U	50	U
8260	Trichloroethene	10,000	200,000	400,000	ug/kg	57	U	53	U	480	U	85	U	80	U	49	U	49	U	50	U
8260	Xylenes, Total	100,000	500,000	1,000,000	ug/kg	110	U	110	U	960	U	170	U	160	U	98	U	98	U	100	U
Semi-Volatile Organic Compounds																						
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg	210	U	**18**	J	4200	U	220	U	220	U	190	U	180	U	**3.1**	J
8270	Acenaphthene	100,000	500,000	1,000,000	ug/kg	210	U	**23**	J	**1700**	J	220	U	220	U	190	U	180	U	190	UJ
8270	Acenaphthylene	100,000	500,000	1,000,000	ug/kg	210	U	200	U	**880**	J	220	U	220	U	190	U	180	U	190	UJ
8270	Anthracene	100,000	500,000	1,000,000	ug/kg	210	U	**69**	J	**500**	J	220	U	220	U	190	U	180	U	190	UJ
8270	Benzaldehyde	NS	NS	NS	ug/kg	210	U	200	U	4200	U	220	U	220	UJ	190	UJ	180	UJ	190	UJ
8270	**Benzo(a)anthracene**	**1,000**	**5,600**	**11,000**	ug/kg	**43**	J	**520**		4200	U	220	U	220	U	190	U	180	U	190	UJ
8270	Benzo(a)pyrene	1,000	1,000	1,100	ug/kg	**52**	J	**710**		4200	U	220	U	220	U	**70**	J	180	U	**19**	J
8270	**Benzo(b)fluoranthene**	**1,000**	**5,600**	**11,000**	ug/kg	**86**	J	**1200**		4200	U	220	U	220	U	**120**	J	180	U	**18**	J
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg	**25**	J	**350**		4200	U	220	U	220	U	**48**	J	180	U	190	UJ
8270	Benzo(k)fluoranthene	1,000	56,000	110,000	ug/kg	**33**	J	**430**		4200	U	220	U	220	U	**43**	J	180	U	**20**	J
8270	Biphenyl	NS	NS	NS	ug/kg	210	U	200	U	**1800**	J	220	U	220	U	190	U	180	U	190	UJ
8270	Carbazole	NS	NS	NS	ug/kg	210	U	**33**	J	**110**	J	220	U	220	U	190	U	180	U	**2.4**	J
8270	**Chrysene**	**1,000**	**56,000**	**110,000**	ug/kg	**48**	J	**660**		4200	U	220	U	220	U	**100**	J	180	U	**23**	J
8270	**Dibenz(a,h)anthracene**	**330**	**560**	**1,100**	ug/kg	210	U	200	U	4200	U	220	U	220	U	190	U	180	U	**8.1**	J
8270	Dibenzofuran	14,000	350,000	1,000,000	ug/kg	210	U	**20**	J	4200	U	220	U	220	U	190	U	180	U	190	UJ
8270	Fluoranthene	100,000	500,000	1,000,000	ug/kg	**50**	J	**770**		4200	U	220	U	220	U	**180**	J	180	U	**27**	J
8270	Fluorene	100,000	500,000	1,000,000	ug/kg	210	U	**22**	J	**3000**	J	220	U	220	U	190	U	180	U	190	UJ
8270	**Indeno(1,2,3-cd)pyrene**	**500**	**5,600**	**11,000**	ug/kg	**23**	J	**320**		4200	U	220	U	220	U	**44**	J	180	U	**22**	J
8270	N-Nitrosodiphenylamine	NS	NS	NS	ug/kg	210	U	200	U	**4900**		220	U	220	U	190	U	180	U	190	UJ
8270	Naphthalene	100,000	500,000	1,000,000	ug/kg	210	U	**29**	J	**430**	J	220	U	220	U	190	U	180	U	190	UJ
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg	**19**	J	**250**		**5700**		220	U	220	U	**42**	J	180	U	190	UJ
8270	Pyrene	100,000	500,000	1,000,000	ug/kg	**47**	J	**660**		**570**	J	220	U	220	U	**130**	J	180	U	**38**	J

Table 5.26: Sub Surface Soil Melt Shop Region
Organic Analytical Results

						Location	SB-L2-01		SB-L2-01		SB-M2-01		SB-M2-01		SB-M2-02		TP-H3-02		TP-H3-02		TP-K3-01	
						Sample Id	401003SBL20104		401003SBL20106		401003SBM20103		401003SBM20106		401003SBM20206		401003TPH30203		401003TPH30205		401003TPK30105	
						Sample Depth (ft bgs)	4 - 6		6 - 8		3 - 4		6 - 8		6 - 8		2 - 3		4 - 5		4 - 5	
						Soil Type	Fill Waste		Native		Fill Waste		Native		Native		Fill Waste		Native		Fill	
						Investigation Objective	Fill		GW/Native		Fill		GW/Native		GW/Native		Fill		Native		Fill	
						Approximate GW Level (ft bgs)	6		6		5		5		3		>5		>5		>7.5	
						Sample Date	6/9/2014 11:45		6/9/2014 14:00		6/5/2014 10:10		6/5/2014 10:50		6/11/2014 11:30		6/3/2014 10:35		6/3/2014 10:45		6/3/2014 14:05	
		SCO				Qc Code	FS		FS		FS		FS		FS		FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**																	
Pesticides																						
8082	4,4'-DDD	2,600	92,000	180,000	ug/kg	2.1	U	19	U	10	U	2.2	U	2.1	U	1.9	U	1.7	U	19	U
8082	4,4'-DDE	1,800	62,000	120,000	ug/kg	2.1	U	19	U	10	U	2.2	U	2.1	U	**2.8**		1.7	U	19	U
8082	4,4'-DDT	1,700	47,000	94,000	ug/kg	2.1	U	19	U	10	U	2.2	U	2.1	U	**7.1**		1.7	U	19	U
8082	Alpha-Chlordane	910	24,000	47,000	ug/kg	2.1	U	19	U	10	U	2.2	U	2.1	U	**2**		1.7	U	19	U
8082	Beta-BHC	72	3,000	14,000	ug/kg	2.1	U	19	U	10	U	2.2	U	2.1	U	1.9	U	1.7	U	19	U
8082	Delta-BHC	100,000	500,000	1,000,000	ug/kg	2.1	U	19	U	10	U	2.2	U	**0.62**	J	**0.51**	J	1.7	U	19	U
8082	Dieldrin	39	1,400	2,800	ug/kg	2.1	U	19	U	10	U	2.2	U	2.1	U	**4.1**	J	1.7	U	**4.6**	J
8082	Endosulfan I	4,800	200,000	920,000	ug/kg	2.1	U	19	U	10	U	2.2	U	2.1	U	**1.1**	J	1.7	U	19	U
8082	Endosulfan II	4,800	200,000	920,000	ug/kg	2.1	U	19	U	10	U	2.2	U	2.1	U	1.9	U	1.7	U	19	U
8082	Endrin aldehyde	NS	NS	NS	ug/kg	2.1	U	19	U	10	U	2.2	U	2.1	U	**2.8**	J	1.7	U	19	UJ
8082	Endrin ketone	NS	NS	NS	ug/kg	2.1	U	19	U	10	U	2.2	U	2.1	U	1.9	U	1.7	U	19	U
8082	Gamma-Chlordane	NS	NS	NS	ug/kg	2.1	U	19	U	10	U	2.2	U	2.1	U	**6.2**	J	1.7	U	19	U
8082	Heptachlor epoxide	NS	NS	NS	ug/kg	2.1	U	19	U	10	U	2.2	U	2.1	U	**3.3**	J	1.7	U	19	U
8082	Methoxychlor	NS	NS	NS	ug/kg	2.1	U	19	U	10	U	2.2	U	2.1	U	**1.4**	J	1.7	U	19	U
Polychlorinated Biphenyls																						
8081	Aroclor-1254	1,000	1,000	25,000	ug/kg	220	U	220	U	280	U	240	U	270	U	**220**	J	250	UJ	**240**	J
8081	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	220	U	220	U	280	U	240	U	270	U	230	UJ	**1400**	J	**210**	J
8081	Aroclor-1268	1,000	1,000	25,000	ug/kg	220	U	220	U	280	U	240	U	270	U	230	UJ	250	UJ	**360**	J
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	ND		ND		ND		ND		ND		220		**1400**		**810**	
310.13	Hydrocarbons	NS	NS	NS	mg/kg					**230**		22	U								

Notes: See Table 5A
*- CP-51 / Soil Cleanup Guidance = for soils greater than 2 feet bgs 10 mg/kg (commercial use) and 25 mg/kg (industrial use).

Table 5.26: Sub Surface Soil Melt Shop Region
Organic Analytical Results

					Location	**TP-K3-01**		**TP-L3-01**		**TP-L3-01**	
					Sample Id	401003TPK30107		401003TPL30104		401003TPL30105	
					Sample Depth (ft bgs)	6 - 7		3 - 4		4 - 5	
					Soil Type	Fill		Fill		Native	
					Investigation Objective	Fill		Fill		Native	
					Approximate GW Level (ft bgs)	>7.5		>5.5		>5.5	
					Sample Date	6/3/2014 15:15		6/3/2014 12:50		6/3/2014 13:00	
		SCO			**Qc Code**	FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**						
Volatile Organic Compounds											
8260	1,1,1-Trichloroethane	100,000	500,000	1,000,000	ug/kg	53	U	51	U	720	U
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg	53	U	51	U	720	U
8260	1,2,4-Trimethylbenzene	47,000	190,000	380,000	ug/kg	53	U	51	U	720	U
8260	1,3,5-Trimethylbenzene	47,000	190,000	380,000	ug/kg	53	U	51	U	720	U
8260	4-Methyl-2-pentanone	NS	NS	NS	ug/kg	270	U	250	U	3600	U
8260	Acetic acid, methyl ester	NS	NS	NS	ug/kg	**110**		**180**		**370**	J
8260	Benzene	2,900	44,000	89,000	ug/kg	53	U	51	U	720	U
8260	Cyclohexane	NS	NS	NS	ug/kg	53	UJ	51	UJ	720	UJ
8260	Ethyl benzene	30,000	390,000	780,000	ug/kg	53	U	51	U	720	U
8260	Isopropylbenzene	NS	NS	NS	ug/kg	53	U	51	U	720	U
8260	Methyl cyclohexane	NS	NS	NS	ug/kg	53	U	51	U	720	U
8260	n-Butylbenzene	100,000	500,000	1,000,000	ug/kg	53	U	51	U	**1300**	
8260	Propylbenzene	100,000	500,000	1,000,000	ug/kg	53	U	51	U	720	U
8260	sec-Butylbenzene	100,000	500,000	1,000,000	ug/kg	53	U	51	U	**400**	J
8260	Toluene	100,000	500,000	1,000,000	ug/kg	53	U	51	U	720	U
8260	Trichloroethene	10,000	200,000	400,000	ug/kg	53	U	51	U	720	U
8260	Xylenes, Total	100,000	500,000	1,000,000	ug/kg	110	U	100	U	1400	U
Semi-Volatile Organic Compounds											
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg	200	UJ	**15**	J	**30**	J
8270	Acenaphthene	100,000	500,000	1,000,000	ug/kg	200	UJ	190	U	220	U
8270	Acenaphthylene	100,000	500,000	1,000,000	ug/kg	200	UJ	**6.6**	J	220	U
8270	Anthracene	100,000	500,000	1,000,000	ug/kg	200	UJ	**29**	J	**12**	J
8270	Benzaldehyde	NS	NS	NS	ug/kg	200	UJ	**170**	J	**200**	J
8270	**Benzo(a)anthracene**	**1,000**	**5,600**	**11,000**	ug/kg	200	UJ	**14**	J	220	U
8270	Benzo(a)pyrene	1,000	1,000	1,100	ug/kg	200	UJ	**22**	J	**8.2**	J
8270	**Benzo(b)fluoranthene**	**1,000**	**5,600**	**11,000**	ug/kg	200	UJ	**25**	J	**9.1**	J
8270	Benzo(ghi)perylene	100,000	500,000	1,000,000	ug/kg	200	UJ	190	U	220	U
8270	Benzo(k)fluoranthene	1,000	56,000	110,000	ug/kg	200	UJ	**17**	J	**8.2**	J
8270	Biphenyl	NS	NS	NS	ug/kg	200	UJ	190	U	220	U
8270	Carbazole	NS	NS	NS	ug/kg	200	UJ	**2.3**	J	220	U
8270	**Chrysene**	**1,000**	**56,000**	**110,000**	ug/kg	200	UJ	**23**	J	220	U
8270	**Dibenz(a,h)anthracene**	**330**	**560**	**1,100**	ug/kg	200	UJ	190	U	220	U
8270	Dibenzofuran	14,000	350,000	1,000,000	ug/kg	200	UJ	**4.4**	J	220	U
8270	Fluoranthene	100,000	500,000	1,000,000	ug/kg	200	UJ	**28**	J	**8.3**	J
8270	Fluorene	100,000	500,000	1,000,000	ug/kg	200	UJ	190	U	220	U
8270	**Indeno(1,2,3-cd)pyrene**	**500**	**5,600**	**11,000**	ug/kg	200	UJ	**28**	J	220	U
8270	N-Nitrosodiphenylamine	NS	NS	NS	ug/kg	200	UJ	190	U	220	U
8270	Naphthalene	100,000	500,000	1,000,000	ug/kg	**3.4**	J	**7.5**	J	**12**	J
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg	200	UJ	**6.3**	J	220	U
8270	Pyrene	100,000	500,000	1,000,000	ug/kg	200	UJ	**37**	J	**15**	J

Table 5.26: Sub Surface Soil Melt Shop Region
Organic Analytical Results

					Location	**TP-K3-01**		**TP-L3-01**		**TP-L3-01**	
					Sample Id	401003TPK30107		401003TPL30104		401003TPL30105	
					Sample Depth (ft bgs)	6 - 7		3 - 4		4 - 5	
					Soil Type	Fill		Fill		Native	
					Investigation Objective	Fill		Fill		Native	
					Approximate GW Level (ft bgs)	>7.5		>5.5		>5.5	
					Sample Date	6/3/2014 15:15		6/3/2014 12:50		6/3/2014 13:00	
		SCO			**Qc Code**	FS		FS		FS	
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**						
Pesticides											
8082	4,4'-DDD	2,600	92,000	180,000	ug/kg	2	U	**1.7**	J	**0.82**	J
8082	4,4'-DDE	1,800	62,000	120,000	ug/kg	2	U	1.9	U	2.2	U
8082	4,4'-DDT	1,700	47,000	94,000	ug/kg	2	U	2.1	U	2.2	U
8082	Alpha-Chlordane	910	24,000	47,000	ug/kg	2	U	1.9	U	2.2	U
8082	Beta-BHC	72	3,000	14,000	ug/kg	2	U	1.9	U	**0.44**	J
8082	Delta-BHC	100,000	500,000	1,000,000	ug/kg	2	U	1.9	U	2.2	U
8082	Dieldrin	39	1,400	2,800	ug/kg	2	U	**0.69**	J	**0.97**	J
8082	Endosulfan I	4,800	200,000	920,000	ug/kg	2	U	1.9	U	2.2	U
8082	Endosulfan II	4,800	200,000	920,000	ug/kg	2	U	1.9	U	2.2	U
8082	Endrin aldehyde	NS	NS	NS	ug/kg	2	U	1.9	U	2.2	U
8082	Endrin ketone	NS	NS	NS	ug/kg	2	U	**1.4**	J	2.2	U
8082	Gamma-Chlordane	NS	NS	NS	ug/kg	2	U	**0.65**	J	2.2	U
8082	Heptachlor epoxide	NS	NS	NS	ug/kg	2	U	1.9	U	2.2	U
8082	Methoxychlor	NS	NS	NS	ug/kg	2	U	1.9	U	2.2	U
Polychlorinated Biphenyls											
8081	Aroclor-1254	1,000	1,000	25,000	ug/kg	260	U	270	U	280	U
8081	**Aroclor-1260**	**1,000**	**1,000**	**25,000**	ug/kg	260	U	270	U	280	U
8081	Aroclor-1268	1,000	1,000	25,000	ug/kg	260	U	270	U	280	U
Calculated	**Total PCBs***	**1,000**	**1,000**	**25,000**	ug/kg	ND		ND		ND	
310.13	Hydrocarbons	NS	NS	NS	mg/kg						

Notes: See Table 5A
*- CP-51 / Soil Cleanup Guidance = for soils greater than 2 feet bgs 10 mg/kg (commercial use) and 25 mg/kg (industrial use).

Table 5.28: Floor Concrete Site Wide
PCB Analytical Results

					Analysis	SW8082A	SW8082A	SW8082A	SW8082A	SW8082A	SW8082A	SW8082A	Calculated
					Parameter	Aroclor-1016	Aroclor-1221	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Aroclor-1268	Total PCB
					Residential	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
					Commercial	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
					Industrial	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
					Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Region	**Building I.D.**	**Location**	**Sample Date**	**Sample ID**	**Qc Code**								
Melt Shop	1-EAF Baghouse	FC-I1-02	6/2/2014	401003FCI1020A	FS	190 U	190 U	190 U	190 U	190 U	190 U	190 U	ND
	2-Melt Shop	FC-I2-01	6/2/2014	401003FCI2010A	FS	170 U	170 U	170 U	170 U	170 U	170 U	170 U	ND
		FC-I2-01	6/2/2014	401003FCI2010AXD	FD	210 U	210 U	210 U	210 U	210 U	210 U	210 U	ND
	3-Castor	FC-I3-03	6/2/2014	401003FCI3030A	FS	240 U	240 U	240 U	240 U	240 U	240 U	240 U	ND
		FC-J3-02	6/2/2014	401003FCJ3020A	FS	210 U	210 U	210 U	210 U	210 U	210 U	210 U	ND
	4-Laboratory	FC-K2-02	6/2/2014	401003FCK2020A	FS	230 U	230 U	230 U	**74** J	230 U	230 U	230 U	**74**
	5-	FC-L3-03	6/3/2014	401003FCL3030A	FS	220 U	220 U	220 U	220 U	220 U	**160** J	220 U	**160**
Rolling Mill	6-	FC-L3-02	6/3/2014	401003FCL3020A	FS	190 U	190 U	190 U	190 U	190 U	190 U	190 U	ND
	7-8-Hydromation Plant	FC-M3-02	6/3/2014	401003FCM3020A	FS	240 U	240 U	240 U	**75** J	240 U	240 U	240 U	**75**
	9-Rolling Mills	FC-K4-08	6/3/2014	401003FCK4080A	FS	200 U	200 U	200 U	200 U	200 U	200 U	200 U	
		FC-L4-04	6/3/2014	401003FCL4040A	FS	220 U	220 U	220 U	220 U	220 U	**700** J	**660** J	**1360**
	10-Billet Grinding	**FC-K4-06**	6/3/2014	401003FCK4060A	FS	200 U	200 U	**500** J	200 U	200 U	**1100** J	**4700** J	**5800**
	11-	**FC-K4-02**	6/3/2014	401003FCK4020A	FS	190 U	190 U	**100** J	190 U	**1100** J	**1100** J	**400** J	**2200**
	12-Bar Finishing	FC-J4-03	6/2/2014	401003FCJ4030A	FS	200 U	200 U	200 U	200 U	200 U	**130** J	**300** J	**430**
		FC-J5-02	6/2/2014	401003FCJ5020A	FS	210 U	210 U	**150** J	210 U	210 U	**300** J	**150** J	**600**
		FC-J5-02	6/2/2014	401003FCJ5020AXD	FD	220 U	220 U	**160** J	220 U	220 U	**510** J	**270** J	**940**
	14-Bar Turning	FC-G4-05	6/2/2014	401003FCG4050A	FS	230 U	230 U	230 U	230 U	230 U	**190** J	230 U	**190**
		FC-H4-02	6/2/2014	401003FCH4020A	FS	**14000000** J	1100000 U	1100000 U	1100000 U	1100000 U	1100000 U	1100000 U	**14000000**
		FC-H4-02	6/2/2014	401003FCH4020B	FS	**1600000** J	1000000 U	1000000 U	1000000 U	1000000 U	1000000 U	1000000 U	**1600000**
		FC-H4-04	6/2/2014	401003FCH4040A	FS	190 U	190 U	**110** J	190 U	**170** J	**94** J	**280** J	**654**
		FC-I4-01	6/2/2014	401003FCI4010A	FS	200 U	200 U	200 U	200 U	200 U	200 U	**100** J	**100**
	15-	**FC-H5-02**	6/2/2014	401003FCH5020A	FS	200 U	200 U	200 U	**510** J	**700** J	**260** J	200 U	**1470**
	16-	FC-I5-04	6/2/2014	401003FCI5040A	FS	230 U	230 U	230 U	230 U	230 U	**240** J	**140** J	**380**
	17-Annealing	FC-I5-02	6/2/2014	401003FCI5020A	FS	200 U	200 U	200 U	200 U	200 U	**470** J	**380** J	**850**
	18-	**FC-I5-03**	6/2/2014	401003FCI5030A	FS	240 U	240 U	**310** J	240 U	240 U	**400** J	**330** J	**1040**
	21-	FC-M5-02	6/3/2014	401003FCM5020A	FS	200 U	200 U	200 U	**120** J	**470** J	**120** J	200 U	**710**
	22-Vacuum Arc Remelting	**FC-L5-03**	6/3/2014	401003FCL5030A	FS	11000 U	11000 U	11000 U	**33000** J	**140000** J	**19000** J	11000 U	**192000**
		FC-L5-04	6/5/2014	401003FCL5040A	FS	2400 U	2400 U	2400 U	2400 U	**17000**	**3700**	**1400** J	**22100**
		FC-M5-04	6/3/2014	401003FCM5040A	FS	220 U	220 U	220 U	**260** J	**1200** J	**210** J	220 U	**1670**
	23-Consutrode	FC-K5-02	6/3/2014	401003FCK5020A	FS	220 U	220 U	220 U	220 U	**280** J	**290** J	**190** J	**760**
	24-	FC-M5-05	6/3/2014	401003FCM5050A	FS	200 U	200 U	200 U	200 U	200 U	200 U	200 U	ND
	26-Acid Storage	FC-M6-02	6/3/2014	401003FCM6020A	FS	220 U	220 U	220 U	220 U	220 U	**110** J	220 U	**110**
	27-Grinding	**FC-L6-01**	6/4/2014	401003FCL6010A	FS	2300 U	2300 U	2300 U	**11000** J	**14000** J	2300 U	2300 U	**25000**
		FC-L6-02	6/3/2014	401003FCL6020A	FS	220 U	220 U	220 U	220 U	220 U	**160** J	220 U	**160**
	28-Forge Press	FC-J6-05	6/3/2014	401003FCJ6050A	FS	190 U	190 U	190 U	190 U	190 U	190 U	190 U	ND
		FC-K6-02	6/3/2014	401003FCK6020A	FS	220 U	220 U	220 U	220 U	220 U	**310** J	220 U	**310**
	30-Storage	**FC-L7-01**	6/3/2014	401003FCL7010A	FS	250 U	250 U	**1000** J	250 U	**1300** J	**710** J	250 U	**2300**
	31-Tech Services	**FC-K7-01**	6/3/2014	401003FCK7010A	FS	12000 U	12000 U	12000 U	12000 U	**63000** J	12000 U	12000 U	**63000**
	32-Transportation/Laboratories	**FC-J7-06**	6/3/2014	401003FCJ7060A	FS	180 U	180 U	180 U	180 U	**2900** J	**2000** J	180 U	**4900**
	33-Guard House	FC-I7-02	6/4/2014	401003FCI7020A	FS	230 U	230 U	230 U	230 U	230 U	230 U	230 U	ND
	34-WWTP	FC-G6-02	6/4/2014	401003FCG6020A	FS	470 U	470 U	470 U	470 U	470 U	470 U	470 U	ND
	43-	FC-H7-01	6/4/2014	401003FCH7010A	FS	210 U	210 U	210 U	210 U	210 U	210 U	210 U	ND
	44-	FC-K4-09	6/5/2014	401003FCK4090A	FS	200 U	200 U	200 U	200 U	200 U	**430**	**260**	**690**
Extrusion	35-	FC-G7-01	6/4/2014	401003FCG7010A	FS	220 U	220 U	220 U	**63** J	220 U	**160** J	220 U	**223**
	36-Pickle House	FC-G6-01	6/4/2014	401003FCG6010A	FS	240 U	240 U	240 U	240 U	240 U	240 U	240 U	ND
		FC-G7-02	6/4/2014	401003FCG7020A	FS	3900 U	3900 U	3900 U	3900 U	3900 U	3900 U	3900 U	ND
	37-Extrusion	**FC-E6-03**	6/4/2014	401003FCE6030A	FS	240 U	240 U	**5200** J	240 U	240 U	240 U	240 U	**5200**
		FC-E7-03	6/4/2014	401003FCE7030A	FS	180000 U	180000 U	180000 U	180000 U	180000 U	180000 U	180000 U	ND
		FC-F6-02	6/4/2014	401003FCF6020A	FS	110000 U	110000 U	110000 U	110000 U	110000 U	110000 U	110000 U	ND
		FC-D6-01	6/4/2014	401003FCD6010A	FS	470 U	470 U	470 U	**4200** J	470 U	**9400** J	470 U	**13600**
	38-	FC-G5-02	6/4/2014	401003FCG5020A	FS	190 U	190 U	190 U	190 U	190 U	190 U	190 U	ND
	39-	**FC-F6-03**	6/4/2014	401003FCF6030A	FS	480 U	480 U	480 U	**2500** J	480 U	480 U	480 U	**2500**
	40-	**FC-E6-04**	6/5/2014	401003FCE6040A	FS	**1400** J	250 U	250 U	250 U	250 U	250 U	250 U	**1400**
	41-	FC-E7-02	6/4/2014	401003FCE7020A	FS	230 U	**52** J	230 U	230 U	230 U	**140** J	230 U	**192**
	41-	FC-E7-02	6/4/2014	401003FCE7020AXD	FD	200 U	200 U	200 U	200 U	200 U	200 U	200 U	ND
	42-	FC-E6-02	6/4/2014	401003FCE6020A	FS	190 U	190 U	190 U	190 U	190 U	190 U	190 U	ND

Notes: See Table 5A

Table 5.29: Floor Soil Site Wide
Inorganic Analytical Results

						Area of Concern	Rolling Mill				Forge Press Pit
						Location	**FS-K4-03**	**FS-K4-03**	**FS-M4-01**	**FS-M4-01**	**SD-J6-04**
						Sample Id	401003FSK4030A	401003FSK4030B	401003FSM4010A	401003FSM4010B	401003SDJ60401
						Building I.D.	9-Rolling Mill	9-Rolling Mill	9-Rolling Mill	9-Rolling Mill	Rolling Mill
						Sample Date	6/3/2014 8:50	6/3/2014 8:50	6/3/2014 9:10	6/3/2014 9:10	6/10/2014 8:15
		SCO				Qc Code	FS	FS	FS	FS	FS
Method	**Parameter**	**RES**	**COMM**	**IND**		Units					
Metals											
6010	Aluminum	NS	NS	NS		mg/kg	**9330** J	**10000** J	**2670** J	**2190** J	**1,330**
6010	Antimony	NS	NS	NS		mg/kg	**8.6** J	**5.4** J	**106** J	**12.6** J	**0.7** J
6010	**Arsenic**	**16**	**16**	**16**		mg/kg	**9.9**	**10.2**	**21.3**	**23**	**8**
6010	Barium	350	400	10,000		mg/kg	**112** J	**132** J	**49.4** J	**64.2** J	**31.1**
6010	Beryllium	14	590	2,700		mg/kg	**0.43**	**0.49**	**0.089** J	**0.13** J	0.22 U
6010	Cadmium	3	9	60		mg/kg	**0.68**	**0.88**	**0.21** J	**0.31**	**1.4**
6010	Calcium	NS	NS	NS		mg/kg	**15,100** J	**9,990** J	**3,940** J	**5,120** J	**2,720**
6010	**Chromium**	**22**	**400**	**800**		mg/kg	**842** J	**590** J	**8230** J	**1230** J	**527**
6010	Cobalt	NS	NS	NS		mg/kg	**55.5**	**47.1**	**847**	**395**	**77**
6010	**Copper**	**270**	**270**	**10,000**		mg/kg	**316** J	**647** J	**2400** J	**2040** J	**1060**
6010	Iron	NS	NS	NS		mg/kg	**37,300** J	**35,100** J	**140,000** J	**84,000** J	**27400** J
6010	Lead	400	1,000	3,900		mg/kg	**70.7**	**66.4**	**64.6**	**127**	**39**
6010	Magnesium	NS	NS	NS		mg/kg	**5,720** J	**5,930** J	**1,570** J	**1,500** J	**261**
6010	**Manganese**	**2,000**	**10,000**	**10,000**		mg/kg	**899** J	**806** J	**2590** J	**1710** J	**1180**
7471	Mercury	1	3	6		mg/kg	**0.066**	**0.063**	**0.017** J	**0.036**	**0.027**
6010	Molybdenum*	NS	NS	4,088		mg/kg	**217** J	**219** J	**2060** J	**1010** J	**1400**
6010	**Nickel**	**140**	**310**	**10,000**		mg/kg	**1950**	**1250**	**22500**	**14100**	**2590**
6010	Potassium	NS	NS	NS		mg/kg	**1,100** J	**1,140** J	**414** J	**358** J	**98**
6010	Selenium	36	1,500	6,800		mg/kg	**2.4** J	**1.5** J	**6.7**	**5.2**	**3.6** J
6010	Silver	36	1,500	6,800		mg/kg	**0.52** J	**0.54** J	**2**	**1.2**	**0.84**
6010	Sodium	NS	NS	NS		mg/kg	**321**	**237**	**181**	**118** J	**140** J
6010	Thallium	NS	NS	NS		mg/kg	**6.6** U	6.7 U	**1.3** J	6.4 U	6.7 U
6010	Titanium	NS	NS	NS		mg/kg	**101** J	**85.4** J	**114** J	**76.2** J	**35.1**
6020	Uranium	NS	NS	NS		mg/kg	**0.77**	**0.5**	**1.4**	**2.2**	
6010	Vanadium	NS	NS	NS		mg/kg	**41.3** J	**48.8** J	**153** J	**96.6** J	**150**
6010	Zinc	2,200	10,000	10,000		mg/kg	**114** J	**120** J	**68.1** J	**85.7** J	**172**
6020	Zirconium	NS	NS	NS		mg/kg	**8.2**	**8.5**	**3.5** J	**3.2** J	
7199	Chromium, Hexavalent	22	400	800		mg/kg	**3.1**	**2.9**	**1.3**	**1.5**	**0.58**
4500	pH	NS	NS	NS		PH UNITS	**7.8**	**7.47**	**8.47**	**8.44**	**7.15**

Notes: See Table 5A

Table 5.30: Floor Soil Site Wide
Organic Analytical Results

						Area of Concern	Melt Shop	Rolling Mill						
						Location	**FS-J2-01**	**FS-K4-03**	**FS-K4-03**	**FS-L4-02**	**FS-L4-02**	**FS-L4-02**	**FS-M4-01**	**FS-M4-01**	**SD-J6-04**
						Sample Id	401003FSJ2010A	401003FSK4030A	401003FSK4030B	401003FSL4020A	401003FSL4020AXD	401003FSL4020B	401003FSM4010A	401003FSM4010B	401003SDJ60401
						Building I.D.	2-Melt Shop	9-Rolling Mill	9-Rolling Mill	9-Rolling Mill	9-Rolling Mill	9-Rolling Mill	9-Rolling Mill	9-Rolling Mill	28-Forge Press
						Sample Date	6/2/2014 12:00	6/3/2014 8:50	6/3/2014 8:50	6/3/2014 9:00	6/3/2014 9:00	6/3/2014 9:00	6/3/2014 9:10	6/3/2014 9:10	6/10/2014 8:15
		SCO			Qc Code	FS	FS	FS	FS	FD	FS	FS	FS	FS
Method	**Parameter**	**RES**	**COMM**	**IND**	**Units**									
Volatile Organic Compounds														
8260	1,2,4-Trichlorobenzene	NS	NS	NS	ug/kg		50 UJ	51 UJ				**25** J	38 UJ	30 U
8260	2-Butanone	NS	NS	NS	ug/kg		250 U	260 U				180 U	190 U	**90** J
8260	Isopropylbenzene	NS	NS	NS	ug/kg		50 U	51 U				36 U	38 U	**6.8** J
8260	Methyl cyclohexane	NS	NS	NS	ug/kg		50 U	51 U				36 U	38 U	**17** J
8260	n-Butylbenzene	NS	NS	NS	ug/kg		50 U	51 U				36 U	38 U	**30**
8260	Propylbenzene	NS	NS	NS	ug/kg		50 U	51 U				36 U	38 U	**13** J
8260	Tetrachloroethene	5,500	150,000	300,000	ug/kg		50 U	51 U				36 U	**7.7** J	30 U
8260	Trichlorofluoromethane	NS	NS	NS	ug/kg		50 UJ	51 UJ				36 UJ	38 UJ	**27** J
Semi-volatile Organic Compounds														
8270	2-Methylnaphthalene	NS	NS	NS	ug/kg		1700 U	1700 U				1800 U	1800 U	**590** J
8270	4-Methylphenol	NS	NS	NS	ug/kg		3300 U	3300 U				3500 U	3500 U	48000 U
8270	Bis(2-Ethylhexyl)phthalate	NS	NS	NS	ug/kg		1700 UJ	1700 UJ				1800 UJ	1800 UJ	**8000** J
8270	Carbazole	NS	NS	NS	ug/kg		1700 U	1700 U				1800 U	1800 U	**760** J
8270	Anthracene	100,000	500,000	1,000,000	ug/kg		**280** J	1700 U				1800 U	1800 U	25000 U
8270	Benzo(a)anthracene	1,000	5,600	11,000	ug/kg		**270** J	**180** J				**110** J	**57** J	25000 U
8270	Benzo(a)pyrene	1,000	1,000	1,100	ug/kg		**160** J	**79** J				1800 U	1800 U	25000 U
8270	Benzo(b)fluoranthene	1,000	5,600	11,000	ug/kg		**230** J	**180** J				1800 UJ	1800 UJ	25000 U
8270	Benzo(k)fluoranthene	1,000	56,000	110,000	ug/kg		**280** J	**170** J				1800 U	1800 U	25000 U
8270	Chrysene	1,000	56,000	110,000	ug/kg		**350** J	**240** J				1800 UJ	**44** J	25000 U
8270	Fluoranthene	100,000	500,000	1,000,000	ug/kg		**450** J	**310** J				1800 U	**38** J	**1200** J
8270	Indeno(1,2,3-cd)pyrene	500	5,600	11,000	ug/kg		1700 UJ	**130** J				1800 U	1800 U	25000 U
8270	Phenanthrene	100,000	500,000	1,000,000	ug/kg		1700 U	**180** J				1800 U	1800 U	**1500** J
8270	Pyrene	100,000	500,000	1,000,000	ug/kg		**600** J	**390** J				**84** J	**47** J	**1200** J
Pesticides														
8081	4,4'-DDE	1,800	62,000	120,000	ug/kg		**5.2** J	**5** J				**5.5** J	**5.5** J	28 U
8081	4,4'-DDT	1,700	47,000	94,000	ug/kg		17 U	17 U				17 U	18 U	**14** J
8081	Alpha-BHC	97	3,400	6,800	ug/kg		**6.5** J	17 U				**8.6** J	18 U	28 U
8081	Endosulfan sulfate	4,800	200,000	920,000	ug/kg		17 U	17 U				17 U	18 U	**6** J
8081	Endrin aldehyde	NS	NS	NS	ug/kg		17 U	**4.2** J				17 U	18 U	28 U
8081	Gamma-Chlordane	NS	NS	NS	ug/kg		17 U	17 U				17 U	18 U	28 U
8081	Gamma-BHC/Lindane	280	9,200	23,000	ug/kg		**5.2** J	**5.5** J				**5.5** J	**5.5** J	28 U
Polycholonated Biphenyls														
8082	Aroclor-1248	1,000	1,000	25,000	ug/kg	200 U	**51** J	**74** J	190 UJ	260 UJ	**75** J	240 UJ	200 UJ	190 U
8082	Aroclor-1254	1,000	1,000	25,000	ug/kg	200 U	230 U	**150** J	190 UJ	260 UJ	240 UJ	240 UJ	200 UJ	190 U
8082	Aroclor-1260	1,000	1,000	25,000	ug/kg	200 U	**150** J	**220** J	190 UJ	260 UJ	240 UJ	**170** J	**110** J	190 U
8082	Aroclor-1268	1,000	1,000	25,000	ug/kg	200 U	230 U	**93** J	190 UJ	260 UJ	240 UJ	240 UJ	200 UJ	190 U
Calculated	Total PCBs	1,000	1,000	25,000	ug/kg	ND	**201** J	**537** J	ND	ND	**75** J	**170** J	**110** J	ND
310.13	Motor Oil Range	NS	NS	NS	mg/kg		**290**	**2300**				**170**	**150**	

Notes: See Table 5A

Table 5.33: Kromma Kill Surface Water - Analytical Results

			Area of Concern	Kromma Kill Off-site	Kromma Kill						
			Location	SW-H8-01	SW-I7-03	SW-K7-03	SW-K7-04	SW-L7-03	SW-L7-03	SW-L7-04	SW-M6-03
			Sample Id	401003SWH801	401003SWI703XX	401003SWK703XX	401003SWK704XX	401003SWL703XX	401003SWL703XXD	401003SWL704XX	401003SWM603XX
			Sample Date	6/10/2014 13:55	6/10/2014 14:25	6/10/2014 15:20	6/10/2014 15:00	6/10/2014 15:50	6/10/2014 15:50	6/10/2014 16:45	6/10/2014 17:10
			Qc Code	FS	FS	FS	FS	FS	FD	FS	FS
Method	**Parameter**	**Class D SW**	**Unit**								
Volatile Organic Compounds											
8260	Acetone	NS	ug/l	**3.2** J	10 U	10 U	**3** J	10 U	10 U	10 U	**3.6** J
8260	Cyclohexane	NS	ug/l	1 U	**0.33** J	1 U	1 U	1 U	1 U	1 U	1 U
Semi-volatile Orgnaic Compounds											
8270	Acenaphthene	5.3	ug/l	4.7 U	**3.5** J	4.7 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U
8270	Acenaphthylene	NS	ug/l	4.7 U	**0.36** J	4.7 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U
8270	Diethylphthalate	NS	ug/l	**0.23** J	4.8 U	4.7 U	**0.22** J	4.7 U	4.7 U	4.7 U	4.8 U
8270	**Fluorene**	**0.54**	ug/l	4.7 U	**0.97** J	4.7 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U
8270	N-Nitrosodiphenylamine	NS	ug/l	4.7 U	**0.79** J	4.7 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U
8270	Phenanthrene	5	ug/l	4.7 U	**0.45** J	4.7 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U
Pesticides											
8081	**4,4'-DDD**	**0.00008**	ug/l	**0.011** J	0.47 U	0.047 UJ	0.048 U	0.047 UJ	0.048 UJ	0.049 UJ	0.047 U
8081	**4,4'-DDE**	**0.000007**	ug/l	**0.012** J	**0.12** J	0.047 UJ	0.048 U	0.047 UJ	0.048 UJ	0.049 UJ	0.047 U
8081	**4,4'-DDT**	**0.00001**	ug/l	0.048 UJ	0.47 U	**0.011** J	0.048 U	0.047 UJ	0.048 UJ	0.049 UJ	**0.011** J
8081	**Delta-BHC**	**0.008**	ug/l	**0.014** J	0.47 U	**0.013** J	0.048 U	0.047 UJ	0.048 UJ	**0.014** J	0.047 U
8081	Gamma-Chlordane	0.00002	ug/l	**0.024** J	0.47 U	0.047 UJ	0.048 U	0.047 UJ	0.048 UJ	0.049 UJ	0.047 U
8082	**Aroclor-1254**	**0.000001**	ug/l	0.057 U	**0.071**	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U
310.13	Hydrocarbon		mg/l	ND							
Metals											
6010	Aluminum	NS	mg/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.083** J	0.2 U
6010	Barium	NS	mg/l	**0.074**	**0.41**	**0.24**	**0.23**	**0.25**	**0.24**	**0.25**	**0.5**
6010	Beryllium	NS	mg/l	**0.00041** J	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
6010	Calcium	NS	mg/l	**64.3**	**93.4**	**89.8**	**83.3**	**95**	**92**	**97.3**	**105**
6010	Chromium	*	mg/l	0.004 U	0.004 U	**0.0025** J	0.004 U	0.004 U	**0.0013** J	**0.0012** J	0.004 U
6010	Cobalt	NS	mg/l	**0.0011** J	**0.012**	**0.0042**	**0.0052**	0.004 U	0.004 U	0.004 U	**0.0013** J
6010	Copper	*	mg/l	0.01 U	0.01 U	0.01 U	0.01 U	**0.0018** J	0.01 U	**0.0025** J	0.01 U
6010	Iron	NS	mg/l	**0.12**	**9.8**	**0.36**	**1.1**	0.05 U	0.05 U	**0.071** J	**0.24**
6010	Lead	*	mg/l	0.01 U	**0.0033** J	**0.0054** J	**0.0038** J	0.01 U	**0.0034** J	**0.0031** J	0.01 U
6010	Magnesium	NS	mg/l	**15.8**	**26.6**	**16.9**	**16.1**	**16.9**	**16.5**	**17.5**	**19.4**
6010	Manganese	NS	mg/l	**0.16**	**5.1**	**0.77**	**0.63**	**0.2**	**0.21**	**0.21**	**1.2**
6010	Molybdenum	NS	mg/l	**0.0082** J	**0.043**	**0.047**	**0.036**	**0.056**	**0.054**	**0.063**	**0.078**
6010	Nickel	*	mg/l	**0.004** J	**0.073**	**0.017**	**0.018**	**0.0092** J	**0.0092** J	**0.0084** J	**0.025**
6010	Potassium	NS	mg/l	**3.1**	**4.3**	**3.9**	**3.6**	**3.5**	**3.5**	**3.4**	**2**
6010	Sodium	NS	mg/l	**76.1**	**141**	**243**	**236**	**228**	**220**	**234**	**323**
6010	Titanium	NS	mg/l	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0021** J	0.005 U
6010	Zinc	*	mg/l	**0.019** J	**0.0032** J	**0.0025** J	**0.0023** J	**0.0017** J	**0.0017** J	**0.0019** J	**0.0018** J
7199	Chromium, Hexavalent	0.016	mg/l	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
4500	Hardness as CaCO3		mg/l	**226**	**343**	**294**	**274**	**307**	**298**	**315**	**343**

Notes: See Table 5A

*** Class D Surface Water Standards for Sample-Specific Compounds (6NYCRR Part 703)**

		SW-H8-01	SW-I7-03	SW-K7-03	SW-K7-04	SW-L7-03	SW-L7-03 XD	SW-L7-04	SW-M6-03	
	Hardenss (ppm)	**226**	**343**	**294**	**274**	**307**	**298**	**315**	**343**	
Parameter	**Units**									**Calculation**
Chromium	mg/L	1.111	1.564	1.378	1.301	1.428	1.393	1.458	1.564	Cr (mg/L) = (0.316)exp(0.819[ln(ppm hardness)]+3.7256)/1000
Lead	mg/L	0.233	0.360	0.307	0.285	0.321	0.311	0.330	0.360	Pb (mg/L) = {1.46203-[ln(hardness)(0145712)]}exp(1.273[ln(hardness)]-1.052/1000
Copper	mg/L	0.029	0.043	0.037	0.035	0.039	0.038	0.040	0.043	Copper (mg/L) = (0.96)exp(0.9422[ln(ppm hardness)]-1.7)/1000
Nickel	mg/L	0.933	1.328	1.166	1.099	1.209	1.179	1.236	1.328	Ni (mg/L) = (0.998)exp[(0.846)ln(ppm hardness)+2.255)]/1000
Zinc	mg/L	0.234	0.333	0.292	0.275	0.303	0.296	0.310	0.333	Zinc (,g/L) = (0.978)exp(0.8473[ln(ppm hardness)]+0.884)/1000

Table 5.34: Sediment Site Wide
Inorganic Analytical Results

				Area of Concern	Kromma Kill Off-site	Kromma Kill							
				Location	**SD-H8-01**	**SD-I7-03**	**SD-K7-03**	**SD-K7-04**	**SD-L7-03**	**SD-L7-04**	**SD-M6-03**	**SD-M6-03**
				Sample Id	401003SDH801	401003SDI70301	401003SDK70301	401003SDK70401	401003SDL70301	401003SDL70401	401003SDM60301	401003SDM60301XD
				Sample Date	6/10/2014 9:30	6/10/2014 10:00	6/10/2014 10:25	6/10/2014 10:40	6/10/2014 11:05	6/10/2014 11:20	6/10/2014 11:45	6/10/2014 11:45
				Qc Code	FS	FS	FS	FS	FS	FS	FS	FD
Method	**Parameter**	**Class B SGV Range**		**Unit**								
Metals												
6010	Aluminum	NS	NS	mg/kg	**17,700** J	**7,500** J	**8,380** J	**9,320** J	**10,500** J	**7,150** J	**10,600** J	**8,930** J
6010	Antimony	NS	NS	mg/kg	**2.6** J	**76.5** J	**19.2** J	**17.2** J	**1** J	**4.2** J	**1.7** J	**1.7** J
6010	**Arsenic**	**10**	**33**	mg/kg	**7.3**	**15.4**	**10.2**	**13**	**8.2**	**6.1**	**6.6**	**6.3**
6010	Barium	NS	NS	mg/kg	**159** J	**47** J	**142** J	**156** J	**87.2** J	**64** J	**174** J	**182** J
6010	Beryllium	NS	NS	mg/kg	**0.83**	0.24 U	**0.39**	**0.5**	**0.61**	**0.43**	**0.61**	**0.53**
6010	**Cadmium**	**1**	**5**	mg/kg	**0.59**	0.24 U	**0.71**	**0.14** J	**0.28**	**0.08** J	**0.32** J	**0.3**
6010	Calcium	NS	NS	mg/kg	**3,400** J	**4,640** J	**4,800** J	**11,400** J	**3,140** J	**3,860** J	**7,660** J	**6,340** J
6010	**Chromium**	**43**	**110**	mg/kg	**2440** J	**7130** J	**1250** J	**1310** J	**162** J	**387** J	**225** J	**219** J
6010	Cobalt	NS	NS	mg/kg	**71.6**	**106**	**753**	**104**	**34.6**	**16.3**	**29.1**	**22.2**
6010	**Copper**	**32**	**150**	mg/kg	**91.7** J	**1030** J	**84.6** J	**159** J	**40.8** J	**23** J	**49.1** J	**34.5** J
6010	Iron	NS	NS	mg/kg	**41300** J	**59200** J	**30100** J	**37000** J	**25900** J	**19800** J	**21900** J	**18500** J
6010	**Lead**	**36**	**130**	mg/kg	**17.4**	**875**	**26200**	**8410**	**437**	**86.5**	**25.1**	**30**
6010	Magnesium	NS	NS	mg/kg	**5,700** J	**3,280** J	**4,010** J	**6,990** J	**4,950** J	**3,720** J	**4,040** J	**3,420** J
6010	Manganese	NS	NS	mg/kg	**816** J	**922** J	**648** J	**602** J	**683** J	**427** J	**1050** J	**668** J
7471	**Mercury**	**0.2**	**1**	mg/kg	**0.029**	**1.2**	**1.2**	**0.012** J	**0.012** J	**0.028**	**0.058**	**0.056**
6010	Molybdenum	NS	NS	mg/kg	**303** J	**378** J	**59.7** J	**126** J	**8.5** J	**18.6** J	**26.7** J	**23.3** J
6010	**Nickel**	**23**	**49**	mg/kg	**2090**	**3400**	**1300**	**3470**	**247**	**308**	**260** J	**494** J
6010	Potassium	NS	NS	mg/kg	**1,830** J	**564** J	**620** J	**725** J	**809** J	**654** J	**908** J	**768** J
6010	Selenium	NS	NS	mg/kg	5.1 U	**2.3** J	**2.2** J	**1.9** J	**0.99** J	**0.69** J	**0.87** J	6 U
6010	Silver	1	2.2	mg/kg	0.77 U	0.71 U	0.67 U	0.62 U	0.69 U	0.76 U	1 U	0.9 U
6010	Sodium	NS	NS	mg/kg	**228**	**72.5** J	**198**	**173**	**173**	**152** J	**264**	**247**
6010	Thallium	NS	NS	mg/kg	7.7 U	**0.56** J	6.7 U	6.2 U	6.9 U	7.6 U	10 U	9 U
6010	Titanium	NS	NS	mg/kg	**307** J	**67** J	**101** J	**75.8** J	**80.9** J	**72.4** J	**197** J	**159** J
6010	Vanadium	NS	NS	mg/kg	**36.2** J	**59.8** J	**45.5** J	**33** J	**24.1** J	**15.5** J	**28.4** J	**21.9** J
6010	**Zinc**	**120**	**460**	mg/kg	**81.6** J	**53.3** J	**97.1** J	**97.1** J	**142** J	**93.3** J	**67.8** J	**57.9** J
7199	Chromium, Hexavalent	NS	NS	mg/kg	**0.98** J	**1.5** J	**6.8** J	**17.8** J	**1.6** J	0.55 UJ	0.59 UJ	0.8 UJ
4500	pH	NS	NS	PH UNITS	**7.48**	**7.39**	**7.78**	**8.07**	**7.9**	**7.26**	**7.03**	**7.06**

Notes: See Table 5A

Class B SGV Range - "sediments are slightly to moderately contaminated and additional testing is required to evaluate potential risk"
Class C SGV - values exceeding the Class B range, "sediments are considered highly contaminated and likely to pose a risk to aquatic life"
Orange highlighted cell indicates the value is within the Class B SGV range
Red highlighted cell exceeds the Class C SGV

Table 5.34: Sediment Site Wide
Inorganic Analytical Results

					Area of Concern	Rolling Mill		API OWS	
					Location	**SD-G4-04**	**SD-J3-03**	**SD-H7-02**	**SD-H7-03**
					Sample Id	401003SDG40401	401003SDJ30301	401003SDH70201	401003SDH70301
					Sample Date	6/10/2014 8:35	6/9/2014 16:00	6/9/2014 16:45	6/9/2014 17:00
					Qc Code	FS	FS	FS	FS
Method	**Parameter**	**Class B SGV Range**		**Unit**					
Metals									
6010	Aluminum	NS	NS	mg/kg	**8,990**	**2,150**	**5,240**	**5,200**
6010	Antimony	NS	NS	mg/kg	**4** J	17.2 U	**1.9** J	**2.7** J
6010	**Arsenic**	**10**	**33**	mg/kg	**4.1**	11.5 U	**7.4**	**3.4** J
6010	Barium	NS	NS	mg/kg	**966**	**146**	**180**	**79.6**
6010	Beryllium	NS	NS	mg/kg	**0.33**	0.23 U	**0.26**	**0.24** J
6010	**Cadmium**	**1**	**5**	mg/kg	**4.8**	**1.4**	**1.2**	**0.95**
6010	Calcium	NS	NS	mg/kg	**14,300**	**7,010**	**6,630**	**15,400**
6010	**Chromium**	**43**	**110**	mg/kg	**1960**	**482**	**754**	**1470**
6010	Cobalt	NS	NS	mg/kg	**90**	**8.5**	**64.3**	**130**
6010	**Copper**	**32**	**150**	mg/kg	**151**	**118**	**167**	**88.7**
6010	Iron	NS	NS	mg/kg	**69000** J	**16800** J	**29800** J	**19100** J
6010	**Lead**	**36**	**130**	mg/kg	**217**	**13.8**	**51.1**	**79.3**
6010	Magnesium	NS	NS	mg/kg	**6,250**	**630**	**3,010**	**2,490**
6010	Manganese	NS	NS	mg/kg	**995**	**345**	**2590**	**557**
7471	**Mercury**	**0.2**	**1**	mg/kg	**0.067**	**0.028**	**0.18**	**0.064**
6010	Molybdenum	NS	NS	mg/kg	**712**	**703**	**107**	**125**
6010	**Nickel**	**23**	**49**	mg/kg	**1080**	**389**	**1010**	**1550**
6010	Potassium	NS	NS	mg/kg	**659**	**332**	**672**	**828**
6010	Selenium	NS	NS	mg/kg	**5.1** J	**1.7** J	**2.6** J	**5.3** J
6010	Silver	1	2.2	mg/kg	**0.7** J	**0.39** J	0.67 U	1.1 U
6010	Sodium	NS	NS	mg/kg	**111** J	**645**	**205**	**240** J
6010	Thallium	NS	NS	mg/kg	8 U	6.9 U	**0.51** J	10.5 U
6010	Titanium	NS	NS	mg/kg	**141**	**42.3**	**121**	**164**
6010	Vanadium	NS	NS	mg/kg	**431**	**6.7**	**44.7**	**33**
6010	**Zinc**	**120**	**460**	mg/kg	**225**	**313**	**380**	**295**
7199	Chromium, Hexavalent	NS	NS	mg/kg	**9.4**	2.9 U	0.89 U	**42.9**
4500	pH	NS	NS	PH UNITS	**7.84**	**7.52**	**7.44**	**7.29**

Notes: See Table 5A

Class B SGV Range - "sediments are slightly to moderately contaminated and additional testing is required to evaluate potential risk"
Class C SGV - values exceeding the Class B range, "sediments are considered highly contaminated and likely to pose a risk to aquatic life"
Orange highlighted cell indicates the value is within the Class B SGV range
Red highlighted cell exceeds the Class C SGV

Table 5.35: Sediment Site Wide
Organic Analytical Results

					Area of Concern	Kromma Kill Off site	Kromma Kill							Rolling Mill			API OWS	
					Location	SD-H8-01	SD-I7-03	SD-K7-03	SD-K7-04	SD-L7-03	SD-L7-04	SD-M6-03	SD-M6-03	SD-G4-04	SD-J3-03	SD-J6-04	SD-H7-02	SD-H7-03
					Sample Id	401003SDH801	401003SDI70301	401003SDK70301	401003SDK70401	401003SDL70301	401003SDL70401	401003SDM60301	401003SDM60301XD	401003SDG40401	401003SDJ30301	401003SDJ60401	401003SDH70201	401003SDH70301
					Sample Date	6/10/2014 9:30	6/10/2014 10:00	6/10/2014 10:25	6/10/2014 10:40	6/10/2014 11:05	6/10/2014 11:20	6/10/2014 11:45	6/10/2014 11:45	6/10/2014 8:35	6/9/2014 16:00	6/10/2014 8:15	6/9/2014 16:45	6/9/2014 17:00
					Qc Code	FS	FS	FS	FS	FS	FS	FS	FD	FS	FS	FS	FS	FS
Method	**Parameter**	**Class B SGV Range**		**Unit**														
Volatile Organic Compounds																		
8260	1,2,3-Trichlorobenzene	230	2,800	ug/kg	**58** J	320 U	64 U	58 U	44 U	51 U	88 U	110 U	49 U	61 U	30 U	61 U	82 U
8260	1,2,4-Trichlorobenzene	35,000	55,000	ug/kg	**24** J	320 U	64 U	**30** J	44 U	51 U	88 U	110 U	49 U	61 U	30 U	**52** J	82 U
8260	1,2,4-Trimethylbenzene	3,400	30,000	ug/kg	60 U	320 U	64 U	58 U	44 U	51 U	88 U	**32** J	49 U	61 U	30 U	61 U	82 U
8260	1,3-Dichlorobenzene	1,800	7,100	ug/kg	60 U	320 U	64 U	58 U	44 U	51 U	88 U	110 U	49 U	61 U	30 U	**94**	82 U
8260	1,4-Dichlorobenzene	720	3,300	ug/kg	60 U	320 U	**19** J	58 U	44 U	51 U	88 U	110 U	49 U	61 U	30 U	**170**	82 U
8260	1,4-Dioxane	NS	NS	ug/kg	**6,200** J	R	R	R	R	R	R	R	930 UJ	1,200 UJ	580 UJ	1,200 UJ	1,600 UJ
8260	2-Butanone	NS	NS	ug/kg	300 U	1600 U	320 U	290 U	220 U	250 U	440 U	530 U	240 U	300 U	**90** J	310 U	410 U
8260	Acetic acid, methyl ester	NS	NS	ug/kg	**120**	320 U	64 U	58 U	**180**	51 U	88 U	110 U	49 U	260 U	200 U	230 U	**2200**
8260	Chlorobenzene	200	1,700	ug/kg	60 U	320 U	64 U	58 U	44 U	51 U	88 U	110 U	49 U	61 U	30 U	**38** J	82 U
8260	Cis-1,2-Dichloroethene	280	2,500	ug/kg	**120**	320 U	64 U	58 U	44 U	51 U	88 U	110 U	49 U	61 U	30 U	61 U	82 U
8260	Isopropylbenzene	210	1,800	ug/kg	60 U	320 U	64 U	58 U	44 U	51 U	88 U	110 U	49 U	61 U	**6.8** J	61 U	82 U
8260	Methyl cyclohexane	NS	NS	ug/kg	60 U	320 U	64 U	58 U	44 U	51 U	88 UJ	110 UJ	49 U	61 U	**17** J	61 U	82 U
8260	n-Butylbenzene	NS	NS	ug/kg	60 U	320 U	64 U	58 U	44 U	51 U	88 U	110 U	49 U	61 U	**30**	61 U	82 U
8260	Propylbenzene	NS	NS	ug/kg	60 U	320 U	64 U	58 U	44 U	51 U	88 U	110 U	49 U	61 U	**13** J	61 U	82 U
8260	Tetrachloroethene	16,000	57,000	ug/kg	**100**	320 U	64 U	58 U	44 U	51 U	88 U	110 U	49 U	61 U	30 U	61 U	82 U
8260	Trichlorofluoromethane			ug/kg	60 UJ	320 UJ	64 UJ	58 UJ	44 UJ	51 UJ	88 UJ	110 UJ	49 UJ	61 UJ	**27** J	61 UJ	82 UJ
Semi-Volatile Organic Compounds																		
8270	2-Methylnaphthalene	NS	NS	ug/kg	220 U	980 U	990 U	190 U	190 U	200 U	2500 U	2600 U	2000 U		**590** J	20000 U	30000 U
8270	4-Methylphenol	NS	NS	ug/kg	430 U	1900 U	1900 U	370 U	360 U	**120** J	4800 U	5100 U	3800 U		48000 U	38000 U	59000 U
8270	Bis(2-Ethylhexyl)phthalate	360,000		ug/kg	220 U	980 U	990 U	190 U	190 U	200 U	2500 U	2600 U	2000 U		**8000** J	20000 U	30000 U
8270	Carbazole	NS	NS	ug/kg	220 U	980 U	990 U	190 U	**3.7** J	200 U	2500 U	**80** J	2000 U		**760** J	**400** J	**1600** J
Polycyclic Aromatic Hydrocarbons																		
8270	Acenaphthene	4,000	35,000	ug/kg	220 U	**110** J	990 U	190 U	**2.3** J	200 U	2500 U	**62** J	2000 U		25000 U	20000 U	**1100** J
8270	Anthracene	4,000	35,000	ug/kg	220 U	**46** J	**35** J	190 U	**15** J	**6.8** J	2500 U	**160** J	2000 U		25000 U	20000 U	**2100** J
8270	Benzo(a)anthracene	4,000	35,000	ug/kg	220 U	980 U	**200** J	**20** J	**63** J	**65** J	2500 U	**420** J	2000 U		25000 U	**2800** J	**6100** J
8270	Benzo(a)pyrene	4,000	35,000	ug/kg	**7.5** J	**24** J	**210** J	**24** J	**63** J	**65** J	**140** J	**300** J	2000 U		25000 U	**2500** J	**4700** J
8270	Benzo(b)fluoranthene	4,000	35,000	ug/kg	**7.4** J	**25** J	**290** J	**40** J	**100** J	**86** J	**200** J	**490** J	**78** J		25000 U	**3800** J	**6500** J
8270	Benzo(ghi)perylene	4,000	35,000	ug/kg	**12** J	980 U	**65** J	**9** J	**20** J	**42** J	2500 U	**92** J	2000 U		25000 U	**1000** J	**1900** J
8270	Benzo(k)fluoranthene	4,000	35,000	ug/kg	**7** J	980 U	**150** J	**20** J	**36** J	**51** J	**100** J	**160** J	**51** J		25000 U	**1600** J	**4100** J
8270	Chrysene	4,000	35,000	ug/kg	220 U	**25** J	**230** J	**30** J	**70** J	**90** J	**140** J	**360** J	2000 U		25000 U	**2700** J	**4800** J
8270	Dibenz(a,h)anthracene	4,000	35,000	ug/kg	**10** J	980 U	990 U	190 U	190 U	**11** J	2500 U	2600 U	2000 U		25000 U	20000 U	30000 U
8270	Fluoranthene	4,000	35,000	ug/kg	220 U	980 U	**260** J	**50** J	**120** J	**140** J	2500 U	**930** J	2000 U		**1200** J	**5600** J	**14000** J
8270	Fluorene	4,000	35,000	ug/kg	220 U	980 U	990 U	190 U	190 U	200 U	2500 U	2600 U	2000 U		25000 U	20000 U	**1100** J
8270	Indeno(1,2,3-cd)pyrene	4,000	35,000	ug/kg	**11** J	980 U	**64** J	**7.9** J	**20** J	**34** J	2500 U	**100** J	2000 U		25000 U	**920** J	**1800** J
8270	Phenanthrene	4,000	35,000	ug/kg	220 U	**56** J	**61** J	**21** J	**73** J	**56** J	2500 U	**720** J	2000 U		**1500** J	**3200** J	**11000** J
8270	Pyrene	4,000	35,000	ug/kg	220 U	980 U	**240** J	**37** J	**91** J	**110** J	2500 U	**650** J	2000 U		**1200** J	**4800** J	**9800** J
8270	**Total PAH**	**4,000**	**35,000**	ug/kg	**54.9**	**286**	**258.9**	**258.9**	**673.3**	**756.8**	**580**	**4444**	**129**		**4490**	**28920**	**69000**
Pesticides																		
8081	4,4'-DDD	44	48,000	ug/kg	2.1 U	38 U	**19** J	**2.8** J	9.2 U	**2.1** J	49 U	52 U	19 U		28 U	470 U	150 U
8081	4,4'-DDE	44	48,000	ug/kg	2.1 U	**18** J	**11** J	9.6 U	9.2 U	10 U	**18** J	**14** J	**11** J		28 U	470 U	150 U
8081	4,4'-DDT	44	48,000	ug/kg	2.1 U	**52**	**21** J	**3.5** J	9.2 U	10 U	**30** J	52 U	**8.4** J		**14** J	1600 U	620 U
8081	Aldrin	NS	NS	ug/kg	2.1 U	38 U	39 U	9.6 U	9.2 U	10 U	49 U	52 U	19 U		28 U	470 U	150 U
8081	Alpha-BHC	NS	NS	ug/kg	2.1 U	**11** J	39 U	9.6 U	9.2 U	10 U	49 U	52 U	19 U		28 U	470 U	150 U
8081	Beta-BHC	NS	NS	ug/kg	2.1 U	38 U	39 U	9.6 U	9.2 U	10 U	49 U	52 U	19 U		28 U	**150** J	150 U
8081	Delta-BHC	NS	NS	ug/kg	**0.83** J	**14** J	**14** J	**3.8** J	**3.8** J	**4.2** J	**20** J	**25** J	**7** J		28 U	**410** J	150 U
8081	Dieldrin	180	780	ug/kg	**0.88** J	**19** J	39 U	9.6 U	9.2 U	10 U	49 U	52 U	19 U		28 U	470 U	150 U
8081	Endosulfan sulfate	1	20	ug/kg	2.1 U	38 U	39 U	9.6 U	9.2 U	10 U	49 U	52 U	19 U		**6** J	470 U	150 U
8081	Endrin aldehyde	90	220	ug/kg	2.1 U	**14** J	39 U	9.6 U	9.2 U	10 U	49 U	52 U	19 U		28 U	470 U	150 U
8081	Gamma-Chlordane	68	38,000	ug/kg	**0.88** J	**17** J	**13** J	9.6 U	9.2 U	10 U	49 U	52 U	**12** J		28 U	470 U	150 U
8081	Heptachlor epoxide	15	10,000	ug/kg	2.1 U	38 U	39 U	9.6 U	9.2 U	10 U	49 U	52 U	19 U		28 U	470 U	150 U
Polychlorinated Biphenyls																		
8082	**Aroclor-1016**	**100**	**1,000**	ug/kg	270 U	240 U	270 U	200 U	250 U	290 U	**560** J	**150** J	**79** J	230 U	190 U	5400 U	1600 U
8082	**Aroclor-1254**	**100**	**1,000**	ug/kg	270 U	**600**	**360**	200 U	250 U	290 U	320 U	290 U	230 U	230 U	190 U	5400 U	1600 U
8082	**Aroclor-1260**	**100**	**1,000**	ug/kg	270 U	**420**	**230** J	200 U	250 U	290 U	320 U	290 U	**110** J	230 U	190 U	**62000** J	**13000** J
Calculated	**Total PCBs**	**100**	**1,000**	ug/kg	ND	**1020**	**590**	ND	ND	ND	**560**	**150**	**189**	ND	ND	**62000**	**13000**
310.13	Hydrocarbons	NS	NS	mg/kg	43 U											**4400**	**2600**

Notes: See Table 5A

Class B SGV Range - "sediments are slightly to moderately contaminated and additional testing is required to evaluate potential risk"
Class C SGV - values exceeding the Class B range, "sediments are considered highly contaminated and likely to pose a risk to aquatic life"
Orange highlighted cell indicates the value is within the Class B SGV range
Red highlighted cell exceeds the Class C SGV

Table 5.36: Tank/Container Product Site Wide
Analytic Results

Method	Parameter	Units	Location / Sample Date / Sample ID / Qc Code	PS-E5-03 6/6/2014 11:05 401003PSE503 FS	PS-G4-02 6/5/2014 13:20 401003PSG402 FS	PS-G4-06 6/5/2014 13:05 401003PSG406 FS	PS-H6-01 6/6/2014 9:50 401003PSH601 FS	PS-H6-03 6/13/2014 9:10 401003PSH603 FS	PS-H7-04 7/1/2014 12:00 401003PSH704 FS	PS-I5-05 7/1/2014 11:30 401003PSI505 FS	PS-J2-02 7/1/2014 401003PSJ202 FS	PS-J2-03 7/1/2014 401003PSJ203 FS	PS-J4-02 6/5/2014 16:00 401003PSJ402 FS
SW8260C	1,2,4-Trimethylbenzene	mg/kg		3.9 UJ	0.10 U	**0.81**	9.9 UJ	0.097 U		**1,000**	0.038 U	**0.029** J	3.6 UJ
SW8260C	1,3,5-Trimethylbenzene	mg/kg		3.9 UJ	0.10 U	**0.26** J	9.9 UJ	0.097 U		**170**	0.038 U	0.078 U	3.6 UJ
SW8260C	4-iso-Propyltoluene	mg/kg		3.9 UJ	0.10 U	0.39 U	9.9 UJ	0.097 U		**110**	0.038 U	0.078 U	3.6 UJ
SW8260C	4-Methyl-2-pentanone	mg/kg		**17** J	**0.13** J	2.00 U	50 UJ	0.490 U		10 U	0.19 U	0.39 U	**2.9** J
SW8260C	Acetic acid, methyl ester	mg/kg		3.9 UJ	0.10 U	0.39 U	9.9 UJ	0.097 U		2 U	0.038 U	0.078 U	3.6 UJ
SW8260C	Acetone	mg/kg		20 UJ	0.49 U	2.00 U	50.0 UJ	0.490 U		10 U	0.19 U	**0.62**	18 UJ
SW8260C	Bromomethane	mg/kg		3.9 UJ	0.10 UJ	0.39 UJ	9.9 UJ	0.097 U		2 U	0.038 U	0.078 U	3.6 UJ
SW8260C	Chloroform	mg/kg		3.9 UJ	0.10 U	0.39 U	9.9 UJ	0.097 U		2 U	0.038 U	0.078 U	3.6 UJ
SW8260C	Chloromethane	mg/kg		3.9 UJ	0.10 U	0.39 U	9.9 UJ	0.097 U		2 U	0.038 U	0.078 U	3.6 UJ
SW8260C	Ethyl benzene	mg/kg		3.9 UJ	0.10 U	0.39 U	9.9 UJ	0.097 U		**48**	0.038 U	**0.038** J	3.6 UJ
SW8260C	Isopropylbenzene	mg/kg		3.9 UJ	0.10 U	0.39 U	9.9 UJ	0.097 U		**34**	0.038 U	0.078 U	3.6 UJ
SW8260C	Methylene chloride	mg/kg		**25** J	0.10 U	**3.20**	9.9 UJ	**0.062** J		2 U	**0.05**	**0.13**	**33** J
SW8260C	n-Butylbenzene	mg/kg		3.9 UJ	0.10 U	0.39 U	9.9 UJ	0.097 U		**320**	0.038 U	**0.053** J	3.6 UJ
SW8260C	Propylbenzene	mg/kg		3.9 UJ	0.10 U	**0.12** J	9.9 UJ	0.097 U		**97**	0.038 U	**0.043** J	3.6 UJ
SW8260C	sec-Butylbenzene	mg/kg		3.9 UJ	0.10 U	0.39 U	9.9 UJ	0.097 U		**100**	0.038 U	0.078 U	3.6 UJ
SW8260C	Styrene	mg/kg		3.9 UJ	0.10 U	**0.19** J	9.9 UJ	0.097 U		2 U	0.038 U	0.078 U	3.6 UJ
SW8260C	Toluene	mg/kg		3.9 UJ	0.10 U	0.39 U	9.9 UJ	0.097 U		**5.8**	0.038 U	**0.047** J	3.6 UJ
SW8260C	Xylenes, Total	mg/kg		7.8 UJ	0.19 U	**0.13** J	20.0 UJ	0.190 U		**270**	0.077 U	**0.034** J	7.3 UJ
SW8270D	2-Chloronaphthalene	mg/kg		57 U	45 U	45 U	**120**	52 U		230 U	0.17 U	0.21 U	52 U
SW8270D	2-Methylnaphthalene	mg/kg		57 U	45 U	45 U	**630**	52 U		230 U	0.17 U	**0.0083** J	52 U
SW8270D	4-Chloroaniline	mg/kg		57 U	45 U	45 U	43 U	52 U		230 U	0.17 U	0.21 U	52 U
SW8270D	Acenaphthene	mg/kg		57 U	45 U	45 U	43 U	52 U		230 U	0.17 U	**0.0069** J	52 U
SW8270D	Acenaphthylene	mg/kg		57 U	45 U	45 U	43 U	52 U		230 U	0.17 U	0.21 U	52 U
SW8270D	Acetophenone	mg/kg		57 U	45 U	45 U	43 U	52 U		230 U	0.17 U	**0.015** J	52 U
SW8270D	Anthracene	mg/kg		57 U	45 U	45 U	43 U	52 U		230 U	0.17 U	0.21 U	52 U
SW8270D	Biphenyl	mg/kg		57 U	45 U	45 U	43 U	52 U		230 U	0.17 U	0.21 U	52 U
SW8270D	Bis(2-Ethylhexyl)phthalate	mg/kg		57 U	45 U	45 U	**49**	52 U		230 U	0.17 U	0.21 U	52 U
SW8270D	Chrysene	mg/kg		57 U	45 U	45 U	43 U	52 U		230 U	0.17 U	**0.0074** J	52 U
SW8270D	Dibenzofuran	mg/kg		57 U	45 U	45 U	43 U	52 U		230 U	0.17 U	0.21 U	52 U
SW8270D	Fluoranthene	mg/kg		57 U	45 U	45 U	43 U	52 U		230 U	**0.0057** J	**0.017** J	52 U
SW8270D	Fluorene	mg/kg		57 U	45 U	45 U	**530**	52 U		230 U	0.17 U	0.21 U	52 U
SW8270D	N-Nitrosodiphenylamine	mg/kg		57 U	45 U	45 U	**830**	52 U		230 U	0.17 U	0.21 U	52 U
SW8270D	Naphthalene	mg/kg		57 U	45 U	45 U	43 U	52 U		230 U	0.17 U	**0.013** J	52 U
SW8270D	Phenanthrene	mg/kg		57 U	45 U	45 U	**1,800**	52 U		230 U	**0.011** J	**0.039** J	52 U
SW8270D	Pyrene	mg/kg		**44** J	45 U	45 U	**560**	52 U		230 U	0.17 U	**0.016** J	52 U
SW8082A	Aroclor-1260	mg/kg		**33** J	1.30 U	1.50 U	21 U	**11**		1.5 U	0.2 U	0.27 U	2.1 U
NY310.13	Fuel Oil #2	mg/kg		18,000 U	2,100 U	1,600 U	19,000 U	420 U		**310,000**			1,700 U
NY310.13	Fuel Oil #4	mg/kg		18,000 U	2,100 U	1,600 U	**1,400,000**	420 U		7,100 U			1,700 U
NY310.13	Motor Oil	mg/kg		**2,500,000**	**390,000**	**400,000**	38,000 U	**260,000**		14,000 U			**350,000**
SW6010C	Arsenic	mg/kg		1.8 U	2 U	2.1 U	2 U	1.9 U		2.1 U	**2.3**	**27.5** J	2 U
SW6010C	Barium	mg/kg		**0.22** J	0.51 U	**0.11** J	0.5 U	**3.6**		**0.48** J	**0.55** J	**2.8**	0.51 U
SW6010C	Cadmium	mg/kg		**0.029** J	**0.29**	**0.16** J	0.2 U	0.19 U		**0.043** J	2.2 U	0.98 U	**1.1**
SW6010C	Chromium	mg/kg		**1.3**	0.51 U	0.51 U	0.5 U	**0.78**		0.52 U	**129**	**5600**	0.51 U
SW6010C	Lead	mg/kg		**1**	**0.65** J	**2.4**	1 U	0.96 U		**4.4**	**13.6**	**290**	**10.6**
SW6010C	Selenium	mg/kg		3.6 U	4 U	4.1 U	4 U	3.8 U		4.2 U	**1.6** J	**88.6**	4.1 U
SW6010C	Silver	mg/kg		0.55 U	0.61 U	0.62 U	0.6 U	0.58 U		0.62 U	**2.4**	**143**	0.61 U
SW7471B	Mercury	mg/kg		0.02 U	**0.059**	0.019 U	0.019 U	0.02 U		0.019 U	0.02 U	**0.014** J	0.02 U
SW1010	Flash Point	DEG F		**176** >	**176** >	**176** >	**176** >	**176** >	**176** >	**176** >			**176** >
SW9045D	pH	PH UNITS		**4.85**	**4.88**	**5.4**	**4.75**	**5.64**	**4.13**	**5.99**			**6.05**

Notes: See Table 5A
Results reported greater than 1,000,000 ppm are assumed to be 100% oil.

Table 5.36: Tank/Container Product Site Wide
Analytic Results

Method	Parameter	Location / Sample Date / Sample ID / Qc Code / Units	PS-J5-04 7/1/2014 11:00 401003PSJ504 FS mg/kg	PS-J6-02 7/1/2014 10:15 401003PSJ602 FS mg/kg	PS-J6-03 6/6/2014 9:15 401003PSJ603 FS mg/kg	PS-J6-06 6/6/2014 10:30 401003PSJ606 FS mg/kg	PS-K4-04 6/5/2014 13:45 401003PSK404 FS mg/kg	PS-K4-07 6/5/2014 14:15 401003PSK407 FS mg/kg	PS-M4-02 6/5/2014 16:20 401003PSM402 FS mg/kg	QC 6/5/2014 8:00 TB003S060514XX TB mg/kg
SW8260C	1,2,4-Trimethylbenzene	mg/kg	2 U	2 U	0.1 U	0.084 UJ	0.93 UJ	0.38 UJ	0.097 UJ	0.05 U
SW8260C	1,3,5-Trimethylbenzene	mg/kg	2 U	2 U	0.1 U	0.084 UJ	0.93 UJ	0.38 UJ	0.097 UJ	0.05 U
SW8260C	4-iso-Propyltoluene	mg/kg	2 U	2 U	0.1 U	0.084 UJ	0.93 UJ	0.38 UJ	0.097 UJ	0.05 U
SW8260C	4-Methyl-2-pentanone	mg/kg	10 U	9.8 U	**0.099** J	0.420 UJ	4.7 UJ	1.9 UJ	0.49 UJ	0.25 U
SW8260C	Acetic acid, methyl ester	mg/kg	**8.3** ^	2 U	0.1 U	0.084 UJ	0.93 UJ	0.38 UJ	0.097 UJ	0.05 U
SW8260C	Acetone	mg/kg	10 U	9.8 U	0.51 U	0.420 UJ	4.7 UJ	1.9 UJ	0.49 UJ	**0.39**
SW8260C	Bromomethane	mg/kg	**2** ^	2 U	0.1 UJ	0.084 UJ	0.93 UJ	0.38 UJ	0.097 UJ	0.05 U
SW8260C	Chloroform	mg/kg	2 U	2 U	0.1 U	0.084 UJ	0.93 UJ	0.38 UJ	0.097 UJ	0.05 U
SW8260C	Chloromethane	mg/kg	**6**	2 U	0.1 U	0.084 UJ	0.93 UJ	0.38 UJ	0.097 UJ	0.05 U
SW8260C	Ethyl benzene	mg/kg	2 U	2 U	0.1 U	0.084 UJ	0.93 UJ	0.38 UJ	**0.11** J	0.05 U
SW8260C	Isopropylbenzene	mg/kg	2 U	2 U	0.1 U	0.084 UJ	0.93 UJ	0.38 UJ	0.097 UJ	0.05 U
SW8260C	Methylene chloride	mg/kg	2 U	2 U	0.1 U	**0.065** J	**11** J	**3.2** J	**0.057** J	0.05 U
SW8260C	n-Butylbenzene	mg/kg	2 U	2 U	0.1 U	0.084 UJ	0.93 UJ	0.38 UJ	0.097 UJ	0.05 U
SW8260C	Propylbenzene	mg/kg	2 U	2 U	0.1 U	0.084 UJ	0.93 UJ	0.38 UJ	0.097 UJ	0.05 U
SW8260C	sec-Butylbenzene	mg/kg	2 U	2 U	0.1 U	0.084 UJ	0.93 UJ	0.38 UJ	0.097 UJ	0.05 U
SW8260C	Styrene	mg/kg	2 U	2 U	0.1 U	0.084 UJ	0.93 UJ	0.38 UJ	0.097 UJ	0.05 U
SW8260C	Toluene	mg/kg	2 U	2 U	0.1 U	**0.290** J	0.93 UJ	0.38 UJ	0.097 UJ	0.05 U
SW8260C	Xylenes, Total	mg/kg	4 U	3.9 U	0.2 U	**0.035** J	1.90 UJ	0.77 UJ	**0.7** J	0.10 U
SW8270D	2-Chloronaphthalene	mg/kg	200 U	210 U	43 U	120 U	36 U	52 U	26 U	
SW8270D	2-Methylnaphthalene	mg/kg	**3,000**	210 U	43 U	120 U	36 U	52 U	26 U	
SW8270D	4-Chloroaniline	mg/kg	**640**	210 U	43 U	120 U	36 U	52 U	26 U	
SW8270D	Acenaphthene	mg/kg	**500**	210 U	43 U	120 U	36 U	52 U	26 U	
SW8270D	Acenaphthylene	mg/kg	**490**	210 U	43 U	120 U	36 U	52 U	26 U	
SW8270D	Acetophenone	mg/kg	**1,800**	210 U	43 U	120 U	36 U	52 U	26 U	
SW8270D	Anthracene	mg/kg	**73** J	210 U	43 U	120 U	36 U	52 U	26 U	
SW8270D	Biphenyl	mg/kg	**560**	210 U	43 U	120 U	36 U	52 U	26 U	
SW8270D	Bis(2-Ethylhexyl)phthalate	mg/kg	200 U	210 U	43 U	120 U	36 U	52 U	26 U	
SW8270D	Chrysene	mg/kg	200 U	210 U	43 U	120 U	36 U	52 U	26 U	
SW8270D	Dibenzofuran	mg/kg	**340**	210 U	43 U	120 U	36 U	52 U	26 U	
SW8270D	Fluoranthene	mg/kg	200 U	210 U	43 U	120 U	36 U	52 U	26 U	
SW8270D	Fluorene	mg/kg	**390**	210 U	43 U	120 U	36 U	52 U	26 U	
SW8270D	N-Nitrosodiphenylamine	mg/kg	**940**	210 U	43 U	120 U	36 U	52 U	26 U	
SW8270D	Naphthalene	mg/kg	**1,200**	210 U	43 U	120 U	36 U	52 U	26 U	
SW8270D	Phenanthrene	mg/kg	**580**	210 U	43 U	120 U	**180**	52 U	26 U	
SW8270D	Pyrene	mg/kg	200 U	210 U	43 U	120 U	36 U	52 U	26 U	
SW8082A	Aroclor-1260	mg/kg	2 U	2.3 U	1.6 U	1.9 U	2.1 U	2.1 U	15 U	
NY310.13	Fuel Oil #2	mg/kg	R	290 U	1,700 U	380 U	16,000 U	1,700 U	290 U	
NY310.13	Fuel Oil #4	mg/kg	R	290 U	1,700 U	380 U	16,000 U	1,700 U	290 U	
NY310.13	Motor Oil	mg/kg	R	**170,000**	**320,000**	**140,000**	**2,700,000**	**240,000**	**36,000**	
SW6010C	Arsenic	mg/kg	**6**	2 U	1.8 U	**1.1** J	1.8 U	2.1 U	2.1 U	
SW6010C	Barium	mg/kg	**0.24** J	**0.22** J	**1.4**	**8.1**	0.45 U	**0.41** J	0.53 U	
SW6010C	Cadmium	mg/kg	1 U	**0.087** J	**0.83**	**1.3**	0.18 U	**31.8**	0.21 U	
SW6010C	Chromium	mg/kg	**3570**	**0.9**	**0.71** J	**39.3**	0.45 U	**1.1**	0.53 U	
SW6010C	Lead	mg/kg	**0.58** J	**4.5**	**4.3**	**15.1**	**3.7**	**12.3**	**6.2**	
SW6010C	Selenium	mg/kg	4 U	3.9 U	3.6 U	**0.76** J	3.6 U	4.2 U	4.2 U	
SW6010C	Silver	mg/kg	**0.25** J	0.59 U	0.54 U	**0.55** J	0.54 U	0.63 U	0.64 U	
SW7471B	Mercury	mg/kg	**0.014** J	0.019 U	**0.0075** J	0.019 UJ	0.02 U	0.019 U	0.019 UJ	
SW1010	Flash Point	DEG F	**176** >	**176** >	**176** >	**176** >	**176** >	**176** >	**176** >	
SW9045D	pH	PH UNITS	**0.31**	**4.37**	**5.43**	**6.98**	**4.1**	**5.79**	**6.52**	

Notes: See Table 5A
Results reported greater than 1,000,000 ppm are assumed to be 100% oil.

Table 5.37: Tank/Container Analytical Results - Water

Method	Parameter	Location / Sample Date / Sample ID / Qc Code / Units	PS-F4-02 6/5/2014 15:15 401003PSF402 FS		PS-H7-04 7/1/2014 12:00 401003PSH704 FS		PS-K4-05 6/5/2014 15:40 401003PSK405 FS		PS-L4-03 6/6/2014 10:50 401003PSL403 FS		PS-L5-02 6/5/2014 8:55 401003PSL502 FS	
SW8260C	1,2,4-Trimethylbenzene	ug/l			1	U	1	U			1	U
SW8260C	1,3,5-Trimethylbenzene	ug/l			1	U	1	U			1	U
SW8260C	4-iso-Propyltoluene	ug/l			1	U	1	U			1	U
SW8260C	4-Methyl-2-pentanone	ug/l			5	U	5	U			5	U
SW8260C	Acetic acid, methyl ester	ug/l			3	U	3	U			3	U
SW8260C	Acetone	ug/l			10	U	10	U			**3**	J
SW8260C	Bromomethane	ug/l			1	U	1	U			1	U
SW8260C	Chloroform	ug/l			**1**	J	1	U			1	U
SW8260C	Chloromethane	ug/l			1	U	1	U			1	U
SW8260C	Ethyl benzene	ug/l			1	U	1	U			1	U
SW8260C	Isopropylbenzene	ug/l			1	U	1	U			1	U
SW8260C	Methylene chloride	ug/l			1	U	1	U			1	U
SW8260C	n-Butylbenzene	ug/l			1	U	1	U			1	U
SW8260C	Propylbenzene	ug/l			1	U	1	U			1	U
SW8260C	sec-Butylbenzene	ug/l			1	U	1	U			1	U
SW8260C	Styrene	ug/l			1	U	1	U			1	U
SW8260C	Toluene	ug/l			1	U	1	U			1	U
SW8260C	Xylenes, Total	ug/l			2	U	2	U			2	U
SW8270D	2-Chloronaphthalene	ug/l					5	U	1,900	U	5	U
SW8270D	2-Methylnaphthalene	ug/l					5	U	1,900	U	5	U
SW8270D	4-Chloroaniline	ug/l					5	U	1,900	U	5	U
SW8270D	Acenaphthene	ug/l					5	U	1,900	U	5	U
SW8270D	Acenaphthylene	ug/l					5	U	1,900	U	5	U
SW8270D	Acetophenone	ug/l					5	U	1,900	U	5	U
SW8270D	Anthracene	ug/l					5	U	1,900	U	5	U
SW8270D	Biphenyl	ug/l					5	U	1,900	U	5	U
SW8270D	Bis(2-Ethylhexyl)phthalate	ug/l					5	U	1,900	U	5	U
SW8270D	Dibenzofuran	ug/l					10	U	3,800	U	10	U
SW8270D	Fluorene	ug/l					5	U	1,900	U	5	U
SW8270D	N-Nitrosodiphenylamine	ug/l					5	U	1,900	U	5	U
SW8270D	Naphthalene	ug/l					5	U	1,900	U	5	U
SW8270D	Phenanthrene	ug/l					5	U	1,900	U	5	U
SW8270D	Pyrene	ug/l					5	U	1,900	U	5	U
SW8082A	Aroclor-1260	ug/l	0.49	U								
Notes: See Table 5A												

Table 5.38: Groundwater Site Wide-Organic Analytical Results

				Rolling Mills Region												Scrap Metal Storage Region					
			Location	MW-6		MW-6B		MW-G401		MW-I704		MW-I704		MW-J501		MW-27		MW-E401		MW-G501	
		Class GA	Sample Id	401003MW0618		401003MW06B65		401003MWG40118		401003MWI70416		401003MWI70416XD		401003MWJ50116		401003MW2716		401003MWE40121		401003MWG50119	
		Groundwater	Sample Date	8/14/2014		8/14/2014		8/12/2014		8/12/2014		8/12/2014		8/13/2014		8/14/2014		8/13/2014		8/12/2014	
			Qc Code	FS		FS		FS		FS		FD		FS		FS		FS		FS	
Method	**Parameter**	**Standard**	**Units**																		
Volatile Organic Compounds (VOCs)																					
SW8260C	1,2,3-Trichlorobenzene	5	ug/l	4	U	1	U	1	U	5	U	5	U	1	U	**1.8**		1	U	1	U
SW8260C	**1,2,4-Trichlorobenzene**	**5**	**ug/l**	4	U	1	U	1	U	5	U	5	U	1	U	**15**		1	U	1	U
SW8260C	1,2-Dichlorobenzene	3	ug/l	4	U	1	U	1	U	5	U	5	U	1	U	**1.8**		1	U	1	U
SW8260C	**1,3-Dichlorobenzene**	**3**	**ug/l**	4	U	1	U	1	U	5	U	5	U	1	U	**14**		1	U	1	U
SW8260C	**1,4-Dichlorobenzene**	**3**	**ug/l**	4	U	1	U	1	U	5	U	5	U	1	U	**17**		1	U	1	U
SW8260C	1,4-Dioxane	NS	ug/l		R		R		R		R		R		R		R		R		R
SW8260C	Benzene	1	ug/l	4	U	1	U	1	U	5	U	5	U	1	U	**0.46**	J	1	U	1	U
SW8260C	Carbon disulfide	60	ug/l	4	U	1	U	1	U	5	U	5	U	1	U	1	U	1	U	1	U
SW8260C	**Chlorobenzene**	**5**	**ug/l**	4	U	1	U	1	U	5	U	5	U	1	U	**12**		1	U	1	U
SW8260C	Chloromethane	5	ug/l	**1.8**	J	**0.96**	J	1	U	**2.7**	J	**2.8**	J	**4.3**		**1.4**		**4.3**		**0.66**	J
SW8260C	Cyclohexane	NS	ug/l	**3.8**	J	1	U	1	U	5	U	5	U	1	U	1	U	1	U	1	U
SW8260C	Methyl cyclohexane	NS	ug/l	**4.1**		1	U	1	U	5	U	5	U	**1.2**		1	U	1	U	**0.21**	J
SW8260C	n-Butylbenzene	5	ug/l	4	U	1	U	1	U	5	U	5	U	**2.4**		1	U	1	U	1	U
SW8260C	Propylbenzene	5	ug/l	4	U	1	U	1	U	5	U	5	U	**2.1**		1	U	1	U	1	U
SW8260C	sec-Butylbenzene	5	ug/l	4	U	1	U	1	U	**3.9**	J	**4.1**	J	1	U	1	U	1	U	1	U
Semivolatile Organic Compounds (SVOCs)																					
SW8270D	3,3'-Dichlorobenzidine	5	ug/l					5	U		R		R	5	U			5	U	4.5	U
SW8270D	Dibenzofuran	NS	ug/l					1	U	**2.8**	J	**2.8**	J	1	U			1	U	0.89	U
SW8270D	Diethylphthalate	50	ug/l					**7.4**		0.96	U	1	U	**2.6**				**0.3**	J	**1.9**	
Polycyclic Aromatic Hydrocarbons (PAHs)																					
SW8270D-SIM	Acenaphthene	20	ug/l					0.095	U	**5.1**		**4.9**		**1.8**				0.1	U	0.094	U
SW8270D-SIM	Acenaphthylene	NS	ug/l					0.095	U	**0.63**	J	**0.49**	J	**0.078**	J			0.1	U	0.094	U
SW8270D-SIM	Anthracene	50	ug/l					0.095	U	**0.36**	J	**0.32**	J	0.1	U			0.1	U	0.094	U
SW8270D-SIM	Fluorene	50	ug/l					0.095	U	**5.3**		**4.7**		**1.1**				0.1	U	0.094	U
SW8270D-SIM	Naphthalene	10	ug/l					0.095	U	**0.44**		**0.38**		**0.41**				0.1	U	0.094	U
SW8270D-SIM	Phenanthrene	50	ug/l					0.095	U	**0.84**	J	**0.43**	J	**0.071**	J			0.1	U	0.094	U
SW8270D-SIM	Pyrene	50	ug/l					0.095	U	**0.1**		**0.094**	J	**0.082**	J			0.1	U	0.094	U
Petroleum Hydrocarbons																					
NY310.13	Fuel Oil #2	NS	mg/l					0.48	U	**2.9**		**3.1**		0.48	U					**0.6**	
NY310.13	Unknown Hydrocarbons	NS	mg/l					0.19	U	0.2	U	0.19	U	**0.94**						0.19	U
Pesticides																					
SW8081B	4,4'-DDE	0.2	ug/l					0.047	U	**0.084**	J	0.24	U	0.05	U			0.049	U	0.045	U
SW8081B	Aldrin	NS	ug/l					**0.012**	J	0.24	U	0.24	U	0.05	U			0.049	U	0.045	U
SW8081B	Alpha-BHC	0.01	ug/l					0.047	U	**0.21**	J	0.24	U	**0.025**	J			0.049	U	**0.01**	J
SW8081B	Alpha-Chlordane	NS	ug/l					0.047	U	**0.1**	J	**0.1**	J	0.05	U			0.049	U	0.045	U
SW8081B	Beta-BHC	0.04	ug/l					0.047	U	**0.24**	J	0.24	UJ	**0.12**				0.049	U	0.045	U
SW8081B	Delta-BHC	0.04	ug/l					**0.029**	J	**0.1**	J	0.24	UJ	0.05	U			0.049	U	0.045	U
SW8081B	Gamma-BHC/Lindane	0.05	ug/l					0.047	U	**0.1**	J	**0.11**	J	**0.038**	J			0.049	U	0.045	U
SW8081B	Heptachlor	0.04	ug/l					**0.01**	J	0.24	UJ	0.24	UJ	0.05	U			0.049	U	0.045	U
Polychlorinated Biphenyls (PCBs)																					
SW8082A	**Aroclor-1248**	**0.09**	**ug/l**					0.061	U	0.057	U	0.057	U	0.062	U			0.062	U	0.058	U
SW8082A	**PCB (total)**	**0.09**	**ug/l**					ND		ND		ND		ND				ND		ND	
Notes: See Table 5A																					

Table 5.38: Groundwater Site Wide-Organic Analytical Results

				Extrusion Region		Melt Shop Region		Background	
			Location	**MW-F604**		**MW-H301**		**MW-M202**	
			Sample Id	401003MWF60417		401003MWH30110		401003MWM20219	
		Class GA Groundwater	**Sample Date**	8/13/2014		8/14/2014		8/14/2014	
			Qc Code	FS		FS		FS	
Method	**Parameter**	**Standard**	**Units**						
Volatile Organic Compounds (VOCs)									
SW8260C	1,2,3-Trichlorobenzene	5	ug/l	1	U	1	U	1	U
SW8260C	**1,2,4-Trichlorobenzene**	**5**	**ug/l**	1	U	1	U	1	U
SW8260C	1,2-Dichlorobenzene	3	ug/l	1	U	1	U	1	U
SW8260C	**1,3-Dichlorobenzene**	**3**	**ug/l**	1	U	1	U	1	U
SW8260C	**1,4-Dichlorobenzene**	**3**	**ug/l**	1	U	1	U	1	U
SW8260C	1,4-Dioxane	NS	ug/l		R		R		R
SW8260C	Benzene	1	ug/l	1	U	1	U	1	U
SW8260C	Carbon disulfide	60	ug/l	1	U	**0.23**	J	1	U
SW8260C	**Chlorobenzene**	**5**	**ug/l**	1	U	1	U	1	U
SW8260C	Chloromethane	5	ug/l	**4.1**		**0.8**	J	**2.3**	
SW8260C	Cyclohexane	NS	ug/l	1	U	1	U	1	U
SW8260C	Methyl cyclohexane	NS	ug/l	1	U	1	U	1	U
SW8260C	n-Butylbenzene	5	ug/l	1	U	1	U	1	U
SW8260C	Propylbenzene	5	ug/l	1	U	1	U	1	U
SW8260C	sec-Butylbenzene	5	ug/l	1	U	1	U	1	U
Semivolatile Organic Compounds (SVOCs)									
SW8270D	3,3'-Dichlorobenzidine	5	ug/l	4.8	U			4.8	U
SW8270D	Dibenzofuran	NS	ug/l	0.96	U			0.96	U
SW8270D	Diethylphthalate	50	ug/l	**0.32**	J			0.96	U
Polycyclic Aromatic Hydrocarbons (PAHs)									
SW8270D-SIM	Acenaphthene	20	ug/l	0.11	U			0.1	UJ
SW8270D-SIM	Acenaphthylene	NS	ug/l	0.11	U			0.1	UJ
SW8270D-SIM	Anthracene	50	ug/l	0.11	U			0.1	UJ
SW8270D-SIM	Fluorene	50	ug/l	0.11	U			0.1	UJ
SW8270D-SIM	Naphthalene	10	ug/l	0.11	U			0.1	UJ
SW8270D-SIM	Phenanthrene	50	ug/l	0.11	U			0.1	UJ
SW8270D-SIM	Pyrene	50	ug/l	0.11	U			0.1	UJ
Petroleum Hydrocarbons									
NY310.13	Fuel Oil #2	NS	mg/l					0.5	U
NY310.13	Unknown Hydrocarbons	NS	mg/l					0.2	U
Pesticides									
SW8081B	4,4'-DDE	0.2	ug/l	0.047	U			0.051	U
SW8081B	Aldrin	NS	ug/l	0.047	U			0.051	U
SW8081B	Alpha-BHC	0.01	ug/l	0.047	U			0.051	U
SW8081B	Alpha-Chlordane	NS	ug/l	0.047	U			0.051	U
SW8081B	Beta-BHC	0.04	ug/l	0.047	U			0.051	U
SW8081B	Delta-BHC	0.04	ug/l	0.047	U			0.051	U
SW8081B	Gamma-BHC/Lindane	0.05	ug/l	0.047	U			0.051	U
SW8081B	Heptachlor	0.04	ug/l	0.047	U			0.051	U
Polychlorinated Biphenyls (PCBs)									
SW8082A	**Aroclor-1248**	**0.09**	**ug/l**	**0.25**				0.061	U
SW8082A	**PCB (total)**	**0.09**	**ug/l**	**0.25**				ND	U
Notes: See Table 5A									

Table 5.39: Groundwater Site Wide
Inorganic Analytical Results

				Rolling Mill Region				Scrap Metal Storage Region		Extrusion Region	Background
			Location	MW-G401	MW-I704	MW-I704	MW-J501	MW-E401	MW-G501	MW-F604	MW-M202
			Sample Id	401003MWG40118	401003MWI70416	401003MWI70416XD	401003MWJ50116	401003MWE40121	401003MWG50119	401003MWF60417	401003MWM20219
		Class GA Groundwater	Sample Date	8/12/2014	8/12/2014	8/12/2014	8/13/2014	8/13/2014	8/12/2014	8/13/2014	8/14/2014
			Qc Code	FS	FS	FD	FS	FS	FS	FS	FS
Method	Parameter	Standard	Units								
Total Metals											
SW6010C	Aluminum		mg/l	**6.2**	**0.03** J	**0.037** J	**0.034** J	**1.3**	**0.084** J	**0.063** J	**0.29**
SW6010C	Arsenic	0.025	mg/l	0.015 U	**0.0061** J	**0.0078** J	**0.0044** J	0.015 U	0.015 U	0.015 U	0.015 U
SW6010C	**Barium**	**1**	**mg/l**	**0.23**	**0.14**	**0.14**	**0.054**	**0.087**	**2.5**	**0.28**	**0.58**
SW6010C	Calcium		mg/l	**78.4**	**108**	**111**	**51.3**	**84.4**	**103**	**62.3**	**238**
SW6010C	**Chromium**	**0.05**	**mg/l**	**0.014**	**0.0015** J	**0.0014** J	**0.0018** J	**0.0035** J	0.01 U	**0.00084** J	**0.097**
SW6010C	Cobalt		mg/l	**0.0061** J	0.01 U	0.01 U	0.01 U	**0.0019** J	0.01 U	0.01 U	**0.0046** J
SW6010C	Copper	0.2	mg/l	**0.011** J	**0.002** J	**0.0016** J	0.015 U	**0.0028** J	**0.0014** J	**0.0028** J	**0.0061** J
SW6010C	**Iron**	**0.3**	**mg/l**	**10.1**	**26.4**	**28.2**	**20**	**3.9**	**28.4**	**0.087** J	**2**
SW6010C	Lead	0.025	mg/l	**0.003** J	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U
SW6010C	**Magnesium**	**35**	**mg/l**	**16.7**	**48.4**	**49.2**	**4.9**	**36.7**	**44.2**	**11.9**	**136**
SW6010C	**Manganese**	**0.3**	**mg/l**	0.29 U	**4**	**4.2**	**1.3** J	0.37 U	**1.2** J	0.056 U	**7.6**
SW7470A	Mercury	0.0007	mg/l	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.000034** J
SW6010C	**Molybdenum***	**0.18**	**mg/l**	**0.23**	0.02 U	0.02 U	**0.029**	**0.035**	0.02 U	**0.042**	**0.024**
SW6010C	Nickel	0.1	mg/l	**0.013** J	0.04 U	0.04 U	0.04 U	**0.0042** J	**0.0033** J	**0.0026** J	**0.08**
SW6010C	Potassium		mg/l	**5.1**	**5.3**	**5.5**	**2.9** J	**3.1**	**1.9** J	**4**	**4.9**
SW6010C	**Sodium**	**20**	**mg/l**	57.4 U	11.8 U	12.2 U	1.8 U	30.5 U	22.7 U	18 U	**1900**
SW6020A	Thallium	0.0005	mg/l	**0.000094** J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
SW6010C	Titanium		mg/l	**0.35**	**0.0013** J	**0.0017** J	**0.00072** J	**0.027**	**0.0021** J	**0.0017** J	**0.0096** J
SW6010C	Vanadium		mg/l	**0.011**	0.01 U	0.01 U	0.01 U	**0.0023** J	0.01 U	0.01 U	**0.003** J
SW6010C	Zinc	2	mg/l	**0.031**	**0.005** J	**0.0053** J	0.02 U	**0.014** J	0.02 U	**0.0046** J	**0.006** J
Dissolved Metals											
SW6010C	Aluminum		mg/l	0.1 U				**0.025** J			
SW6010C	Barium	1	mg/l	**0.14**				**0.074**			
SW6010C	Cadmium	0.005	mg/l	0.005 U				**0.00045** J			
SW6010C	Calcium		mg/l	**71.4**				**85.3**			
SW6010C	Chromium	0.05	mg/l	**0.00089** J				**0.0014** J			
SW6010C	Cobalt		mg/l	0.01 U				**0.0013** J			
SW6010C	Copper	0.2	mg/l	0.015 U				**0.011** J			
SW6010C	**Iron**	**0.3**	**mg/l**	0.1 U				**2.2**			
SW6010C	**Magnesium**	**35**	**mg/l**	12.5 U				**35.3** J			
SW6010C	**Manganese**	**0.3**	**mg/l**	**0.073**				**0.35**			
SW7470A	Mercury	0.0007	mg/l	0.0002 U				0.0002 U			
SW6010C	**Molybdenum***	**0.18**	**mg/l**	**0.21**				**0.037**			
SW6010C	Nickel	0.1	mg/l	**0.0033** J				**0.0028** J			
SW6010C	Potassium		mg/l	**3.5**				**2.9** J			
SW6010C	Sodium	20	mg/l	52.4 U				29.5 U			
SW6010C	Zinc	2	mg/l	**0.0052** J				**0.0062** J			
Hexavalent Chromium											
SM3500	Chromium, Hexavalent	0.05	mg/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ
Wet Chemistry											
SM4500	pH		PH UNITS	**6.9** J	**6.73** J	**6.68** J	**7.1** J	**7** J	**6.45** J	**7.36** J	

Notes: See Table 5A

ATTACHMENT 3

TRANSFORMER FIELD OBSERVATIONS

Attachment 3: Transformer Field Observations

Transformer #	Location	Transformer Reference Code	Field Observations April 2014
T1	Grinding	T1	No transformer observed, some components still present
T2	Tech Services	T2	No transformer observed
T3	Transportation/Laboratories	T3	Unknown
T4	Annealing	T4	No transformer observed
T5	Extrusion	T5	No transformer observed, some components still present
T6	Extrusion	T6	No standing transformer observed, however carcass remains
T7	EAF Baghouse	T7	No transformer observed
T8		T8	No transformer observed, some components still present
T9	Rolling Mills	T9	No standing transformer observed, however carcass remains
T10	Billet Grinding / Rolling Mills	T10	No transformer observed, some components still present
T11	Vacuum Arc Remelting	T11	No standing transformer observed, however carcass remains
T12	Consutrode	T12	Unknown
T13	Tech Services / Storage	T13	Unknown
T14	Rolling Mills	T14	One transformer observed with product present

ATTACHMENT 4

TANK INVENTORY

Attachment 4: Tank Inventory

Tank #	Location	Aboveground / Underground	Tank Size (gallons)	Tank material	Tank contents	Tank Reference Code *	# 0f tanks	DEC Database status	Field Observations April 2014	Observations July 2014
TK1	22" mill	Aboveground	600	Bare Steel	Gear 634	T1	2	Active[1]	Still onsite, 1000 gal, secondary containment	
		Aboveground	600	Bare Steel	Gear 634	T1		Active[1]	Still onsite, 1000 gal, secondary containment	
TK2	Garage	Aboveground	1500	Bare Steel	Motor Oil	T2	1	Active[1]	No tank observed in the garage	
TK3		Aboveground	1500	Bare Steel	Hydraulic	T3	1	closed in place 12/01/1999[2]	No tank observed in the garage	
TK4	Forgepress	Aboveground	4000	Bare Steel	Waste Oil/ Water	T4	6	Active[1]	5 tanks located in the southwest corner of the forgepress building. Secondary containment approximately 1.5 feet of oil/water. A sixth tank is located outside the building (southeast). 1000-1500 gallon rivited 6-8 feet in diameter.	Tank outside bld. Six foot diameter by 18.8 feet high. Approximate capacity 4,000 gallons. Contents 4 feet of oil.
		Aboveground	1500	Bare Steel	Hydraulic	T4		Active[1]		
		Aboveground	1500	Bare Steel	Hydraulic	T4		Active[1]		
		Aboveground	1000	Bare Steel	AW-68	T4		Active[1]		
		Aboveground	1000	Bare Steel	AW-68	T4		Active[1]		
		Aboveground	1000	Bare Steel	AW-68	T4		Active[1]		
TK5	Extrusion	Aboveground	2000	Bare Steel	Mobil Alpha	T5	2	Active[1]	No tank observed in the extrusion building	
		Aboveground	2000	Bare Steel	Hydraulic AW-68	T5		Active[1]		
TK6	Transportation	Aboveground	1000	Bare Steel	Regular Gas	T6	1	closed - removed 09/01/1999[2]	Two 275 gallon tanks south of the steam cleaning pad.	
TK7		Aboveground	5000	Bare Steel	Diesel	T7	1	closed - removed 09/01/1999[2]		
TK8	Annealing	Aboveground	12000	Bare Steel	Quench Oil	T8	1	Active[1]	No tank observed in this area.	
TK9	Extrusion	Aboveground	4000	Bare Steel	Paraffin Oil	T9	2	Active[1]	No tank observed in the extrusion building.	
		Aboveground	4000	Bare Steel	Waste Paraffin Oil	T9		Active[1]		
TK10	Hill	Aboveground	300000	Bare Steel	Fuel Oil	T10	1	closed in place 01/01/1991[2]	No tank observed in this area	
TK11	South of Bar Finish	Aboveground	10000	Bare Steel	Waste Fuel Oil	T11	1	Active[1]	AST still present. A hole has been cut in the side and the tank has been cleaned.	
TK12	Extrusion	Underground	11650	Steel	Coolant	T12	1	Active[1]		
TK13	South of Anneal	Aboveground	10000	Bare Steel	Fuel Oil	T13	2	closed in place 12/01/1999[2]	No tank observed.	
		Underground	1000	Concrete	Anneal Oil			Filled in Place 4/88[1]	Tentatively identified.	
TK14	South of Melt Shop	Underground	5000	Steel	Diesel	T14	1	Active[1]	No tank identified with GPR.	
TK15	Extrusion	Underground	7600	Stainless Steel Alloy	Cooling Water	T15	2	Active[1]	Tentatively identified.	
		Underground	5200	Stainless Steel Alloy	Cooling Water	T15		Active[1]		
TK16	South of Anneal	Aboveground	6000	Bare Steel	Anneal Quench Oil	T16	2	Active[1]	No tanks observed in this area	
		Aboveground	8000	Bare Steel	Central Waste Oil	W6		Active[1]		
TK17	North of pickle house	Aboveground	13000	Steel	Ammonia	001	5	closed - removed 09/01/1992[2]	No tanks observed in this area	
		Aboveground	13300	Stainless Steel Alloy	Hydrofluoric Acid	002		closed - removed 09/01/1996[2]	No tanks observed in this area	
		Aboveground	9000	Stainless Steel Alloy	Nitric Acid	003		closed in place 12/01/1999[2]	No tanks observed in this area	
		Aboveground	7000	Bare Steel	Sulfuric Acid	004		closed in place 12/01/1999[2]	Still onsite, contents unknown.	Empty
		Aboveground	7000	Stainless Steel Alloy	Sulfuric Acid	015		closed - removed 06/01/1991[2]	Tank not observed.	
TK18	South of Extrusion Building	Aboveground	1500		Liquid Nitrogen	005	1	Active[1]	No tank observed in this area	
TK 19	Nortwest of Melt Shop	Aboveground	32000	Bare Steel	Lime Slurry	011	1	Active[1]	No tank observed in this area	
TK20	West of Melt Shop	Aboveground	17000	Bare Steel	Emission Control Dust	009	1	Active[1]	No tank observed in this area	
TK21	Southwest of Melt Shop	Aboveground	17000	Bare Steel	Lime Slurry	010	1	Active[1]	No tank observed in this area	
TK22	North of WWTP	Aboveground	25000	Bare Steel	Lime Slurry	012	1	Active[1]	Still onsite labled closed 5-04	
TK23	North of Spring Street Rd.	Aboveground	350000	Bare Steel	Landfill Leachate	013	2	Active[1]	At the WMA	
		Aboveground	350000	Bare Steel	Landfill Leachate	014		Active[1]		
TK24	Southeast Main Office	Underground	6000	Bare Steel	Gasoline		1	Removed 1981[1]	Not identified with GPR	
TK25	Southwest of North Gate	Underground	9400	Bare Steel	Fuel Oil		7	Filled in Place 6/87[1]	Identified with GPR	
		Underground	9400	Bare Steel	Fuel Oil			Filled in Place 6/87[1]		
		Underground	25588	Bare Steel	Fuel Oil			Filled in Place 6/87[1]		
		Underground	14690	Bare Steel	Fuel Oil			Filled in Place 6/87[1]		
		Underground	14690	Bare Steel	Fuel Oil			Filled in Place 6/87[1]		
		Underground	9780	Bare Steel	Fuel Oil			Filled in Place 6/87[1]		
		Underground	10152	Bare Steel	Fuel Oil			Filled in Place 6/87[1]		
TK 26	Northwest of Melt Shop	Aboveground	9000		Liquid Oxygen	006	3	Active[1]	No tank observed in this area	
		Aboveground	9000		Liquid Nitrogen	007		Active[1]		
		Aboveground	9000		Liquid Argon	008		Active[1]		
TK27	South of Bar Finish	Underground	unkown			T 27				
	unknown	Aboveground	1000	steel/carbon steel/iron	Gasoline	4	1	closed - removed 04/30/08[2]		
	unknown	Aboveground	5000	steel/carbon steel/iron	Diesel	5	1	closed - removed 04/30/08[2]		
	unknown	Aboveground	3000	steel/carbon steel/iron	lube oil	8	1	closed - removed 04/30/08[2]		
	unknown	Aboveground	3000	steel/carbon steel/iron	waste/used oil	9	1	closed - removed 04/30/08[2]		

Note:
*As per McLaren/Hart, "RCRA Facility Investigation Description of Current Conditions Report, Al Tech Specialty Steel" Nov 1991
[1]As per New York State Department of Environmental Conservation Bulk Storage Database

ATTACHMENT 5

FUEL DISTRIBUTION FIELD OBSERVATIONS

Table 5.40: Fuel Oil Distribution Line Findings

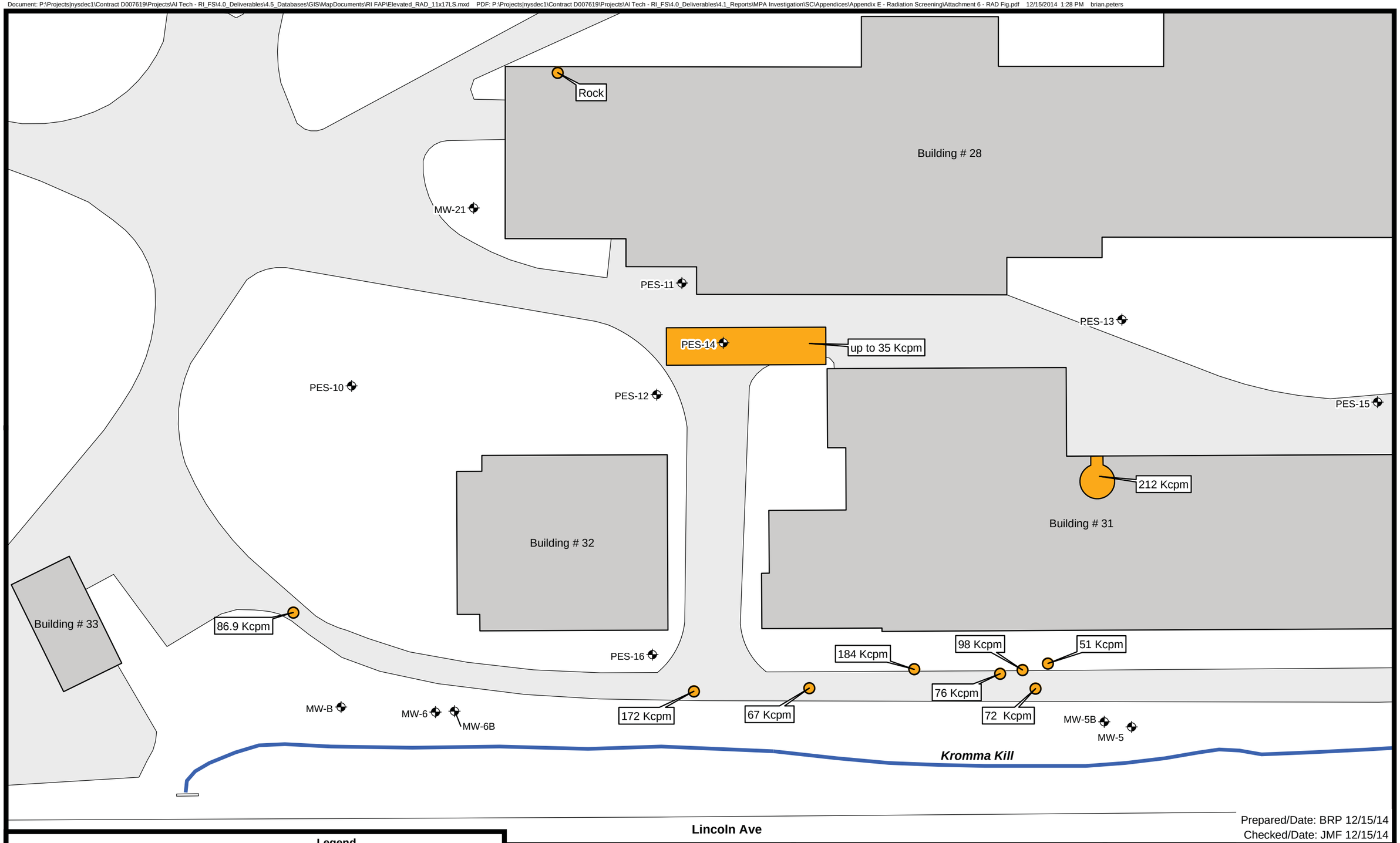
Location	Water Table (approx.)	Depth	PID Reading	Observations	Laboratory Results
SB F3-01	8'	0 - 2"	0	NA	No fuel-related contamination detected above NYSDEC SCOs
		1'	45.3	Fuel odor	
		3'	0	NA	
		10'	5.5	Fuel odor	
SB F4-01	4'	0 - 2"	2.3	NA	No fuel-related contamination detected above NYSDEC SCOs
		1'	24	Fuel odor	
		3'	382	Fuel odor	
		7'	114	Fuel odor	
		10'	69	Oil-like globules (product) on soils	NS
SB G5-01	14'	0 - 2"	5.1	NA	No contamination detected above NYSDEC SCOs
		3'	1.8	Fuel odor	NS
		6'	0	NA	Hydrocarbons detected at 73 mg/kg
		12'	64	Fuel odor	NS
		15'	6.4	NA	Hydrocarbons detected at 49 mg/kg
SB J5-01	12'	0 - 2"	0	NA	No fuel-related contamination detected above NYSDEC SCOs
		1'	0	NA	
		4'	0	NA	
		12'	132	Fuel odor	
SB J6-01	8'	0 - 2"	0	NA	No fuel-related contamination detected above NYSDEC SCOs
		1'	0	NA	
		3'	0.8	NA	
		10'	118	Fuel odor	
SB K6-01	14'	0 - 2"	0	NA	No fuel-related contamination detected above NYSDEC SCOs
		1'	0	NA	
		7'	0	NA	
		11'	6.1	NA	
		12.5'	7.1	Visible product at 12' in the Geoprobe sample sleeve	
		14'	75	Fuel-like odor	
		14.5'	34	Fuel-like odor	
SB J4-01	1'	0 - 2"	0	NA	No fuel-related contamination detected above NYSDEC SCOs
		4'	0	NA	
		8'	0	NA	

Note: Shallow surface/surface soil samples collected as part of Site-wide characterization

NS = Not sampled

ATTACHMENT 6

RADIATION MEASUREMENTS OBSERVED ABOVE BACKGROUND



Legend

N 0 20 40 Feet

Approximate Area with Radiation Above Background

Kcpm - thousand counts per minute

Monitoring Well

NYSDEC Site # 401003
Al Tech Specialty Steel
Colonie, New York

MACTEC

Attachment 6 - Radiation Measurements Observed Above Background
Project 3612122256

Prepared/Date: BRP 12/15/14
Checked/Date: JMF 12/15/14