



Infrastructure · Water · Environment · Buildings

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Transmittal Letter

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Mr. Peter Taylor
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Copies:
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Doreen Simmons, Hancock & Estabrook
Nels Magnuson, NYSDEC
Peter Ouderkirk, NYSDEC
Deanna Ripstein, NYSDOH
Moh Mohiuddin, ARCADIS
File

From:
Lisa Collins

Date:
January 2, 2013

Subject:
Interim Remedial Measure
Construction Completion Report

ARCADIS Project No.:
AY000415.0003

We are sending you:

Attached

Under Separate Cover Via _____ the Following Items:

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Plans

Specifications

Change Order

Prints

Samples

Copy of Letter

Reports

Other: CD

Copies	Date	Description	Action*
1	1/2013	Phase II Interim Remedial Measure Construction Completion Report (New Furnace Area), Brownfield Cleanup Program, SMC Brownfield Site (C633016), Oneida County, New Hartford, New York.	AS

Action*

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CR Correct and Resubmit

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**Phase II Interim Remedial
Measure Construction
Completion Report (New
Furnace Area)**

Brownfield Cleanup Program
SMC Brownfield Site (C633016)
Oneida County
New Hartford, New York

January 2013



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**Phase II Interim Remedial
Measure Construction
Completion Report (New
Furnace Area)**

Brownfield Cleanup Program
SMC Brownfield Site (C633016)
Oneida County
New Hartford, New York

Prepared for:
Special Metals Corporation

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Our Ref.:
AY000415.0003

Date:
January 2, 2013

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1. Introduction	1
2. New Furnace Area Subsurface Conditions	1
3. Summary of New Furnace Area Construction	2
4. IRM Activities	3
4.1 Soil and Concrete Removal	3
4.2 Post-Excavation Sampling	3
4.2 Solid Waste Characterization and Disposal	4
4.3 Groundwater Management	4
4.3 Air Monitoring	5
5. Certification	6
6. References	7

Tables

Table 1	Post-Excavation Sample Analytical Results
Table 2	Waste Characterization Sample Analytical Results
Table 3	Waste Disposal Summary

Figures

Figure 1	Site Location
Figure 2	New Furnace Area
Figure 3	Post-Excavation Sample Locations and Results

Appendices

A	Laboratory Analytical Data
B	Waste Profiles, Waste Manifests & Weight Tickets
C	Temporary Groundwater Discharge Approval



Phase II Interim Remedial Measure Construction Completion Report (New Furnace Area)

Brownfield Cleanup Program
SMC Brownfield Site (C633016)
Oneida County, New Hartford, New York

1. Introduction

ARCADIS of New York, Inc. (ARCADIS), on behalf of Special Metals Corporation (SMC), has prepared this Phase II Interim Remedial Measure Construction Completion Report for the soil removal activities conducted in the area where new furnaces were installed at the Special Metals Brownfield Cleanup Program (BCP, C633016) site (herein the "Site") located in New Hartford, New York (Figure 1). The new furnace area is located adjacent to the former Furnace 8 foundation, which was abandoned as part of the Phase I Interim Remedial Measure (IRM) (Figure 2). Previous investigations conducted in support of the Phase I IRM indicated the presence of polychlorinated biphenyls (PCBs) in soils in the new furnace area.

The objective of the Phase II IRM was to facilitate the proper management of PCB-impacted soil and concrete that would be removed from within the footprint of the new furnace foundations and associated equipment. Additionally, the Phase II IRM included the handling of groundwater generated as a result of dewatering activities performed. The Phase II IRM was conducted under the *Phase II Interim Remedial Measure Work Plan (New Furnace Area)* (ARCADIS 2011) submitted to and approved by the New York State Department of Environmental Conservation (NYSDEC).

The Phase II IRM was conducted from December 2011 through May 2012 and is documented in this report.

2. New Furnace Area Subsurface Conditions

The subsurface conditions in the SMC facility furnace area were reported in the October 1, 2008 *Pre-Remediation Soil Boring Program Report - Furnace 7 & 8 Investigation Area, Special Metals Corporation, New Hartford, NY* completed by O'Brien & Gere. PCBs were detected in samples of subsurface soil and groundwater in the vicinity of the new furnace area at low concentrations (generally less than 5 parts per billion) as summarized in the report. Evidence of free product in the new furnace area was not observed during these investigations.

In July/August 2011 ARCADIS conducted a focused investigation of the former Furnace 6, 7 & 8 areas which included additional data collection to support the excavation and dewatering techniques prior to implementation of the IRM in this area of the Site. As part of this investigation, two wells (MW-7 and MW-8) were installed just north of the former Furnace 8 foundation and within the area of the new furnace construction (Figure 2). Soils encountered at both well locations consisted of dense silt

deposits with varying amounts of clay, sand and gravel. Oil or staining was not observed in the soils at either of the borings drilled for the MW-7 and MW-8 wells. PCBs were detected in soil samples collected from a depth of 1-3 feet at each boring at concentrations of 20,000 micrograms per kilogram ($\mu\text{g}/\text{kg}$) at MW-7 and 19,000 $\mu\text{g}/\text{kg}$ at MW-8. PCBs were non-detect in a soil sample from 7-9 feet at the MW-7 location, and an estimated concentration of 50 $\mu\text{g}/\text{kg}$ in a sample from 7-9 feet at the MW-8 location.

3. Summary of New Furnace Area Construction

The new furnace footprint is located north-northwest of the former Furnace 8 (Figure 2). The excavation and stabilization activities conducted as part of the new furnace installation in this area are summarized below:

- Removed the existing concrete slab from an approximate 61.5-foot by 27-foot area. Additionally, a portion of existing slab was removed to allow for the rerouting of a sub-slab roof drain conveyance pipe. In all, the in-place volume of concrete removed was approximately 50 cubic yards (yd^3).
- Installed twenty-eight (28) 10-inch by 10-inch H-piles around the outer perimeter of the furnace pit footprint. For each H-pile, a 24-inch diameter hole was drilled to a depth of 20-25 feet below finished floor (bff). Steel caissons were utilized to prevent borehole collapse. Concrete was poured in the bottom 3-4 feet of the holes, followed by placement of the H-piles to depths ranging from 19-23 feet bff. Following establishment of the desired position of H-piles, flowable fill was poured around the piles to grade.
- Installed 3-inch by 8-inch wood lagging between each H-pile as shoring.
- Excavated to a depth of approximately 17-18 feet bff. Due to the presence of groundwater in the excavation, a 1-foot thick layer of pea-stone was placed across the bottom of the excavation to serve as a drainage layer for dewatering. Wood lagging was progressively lowered between H-piles as the depth of the excavation increased. The excavation area was approximately 60 feet by 25 feet, corresponding to a total in-place soil and concrete volume removed of approximately 975 yd^3 .

The extents of the new furnace area as well as excavation and stabilization features are depicted on Figure 2. Following completion of excavation and stabilization

activities, forming for the concrete furnace pit commenced. Dewatering of the new furnace area was maintained until concrete was poured and sufficiently cured to a depth above the water table.

4. IRM Activities

4.1 Soil and Concrete Removal

A staging area was constructed to temporarily store excavated soil outside the facility until completion of waste characterization and offsite disposal. The staging area was located in the same area used for stockpiling material during the Phase I IRM located outside the northern end of the facility. The soil staging area was composed of a liner system to prevent excavated material from coming into contact with the underlying native soil. The liner system consisted of a 40-mil thick high-density polyethylene (HDPE) liner with geo-textile fabric on both sides to provide a protective barrier. A crusher-run roadway was constructed in the staging area to allow for ingress and egress without driving over excavated material. The outside edges of the HDPE liner were wrapped up and over a hay bale berm to prevent potential groundwater or leachate from migrating beyond the limits of the staging area. The staging area was covered at the end of each shift or anytime precipitation was occurring to minimize the potential for rainwater to come in contact with excavated material.

Concrete removed from within the new furnace area was placed into 20 yd³ roll-offs located onsite until characterization was complete.

4.2 Post-Excavation Sampling

Post-excavation soil sampling was conducted in the new furnace area consistent with guidelines outlined in the New York State Department of Environmental Conservation (NYSDEC) guidance document *DER-10 / Technical Guidance for Site Investigation and Remediation* dated May 3, 2010. A total of eight post-excavation soil samples were collected. Six samples were collected from the excavation side walls while the other two were collected from the base of the excavation.

Post-excavation sample locations, depths, and results are shown on Figure 3. Samples were submitted to Upstate Laboratories, Inc. located in Syracuse, New York and analyzed for PCBs using United States Environmental Protection Agency (USEPA) Method 8082. The post-excavation sample results are summarized in Table



**Phase II Interim Remedial
Measure Construction Completion
Report (New Furnace Area)**

Brownfield Cleanup Program
SMC Brownfield Site (C633016)
Oneida County, New Hartford, New York

1. PCBs were not detected in any of the post-excavation samples collected in the new furnace area. Laboratory analytical data are provided in Appendix A.

4.2 Solid Waste Characterization and Disposal

Waste characterization sampling conducted for excavated soil included the collection of three composite samples and sampling for PCBs (USEPA Method 8082) and for a full toxicity characteristic leaching procedure (TCLP) analysis including volatile organic compounds (USEPA Method 1311/8260B), semi-volatile organic compounds (USEPA Method 1311/8270C), metals (USEPA Method 1311/Metals), pesticides (USEPA Method 1311/8081A), herbicides (USEPA Method 1311/8151A) and mercury (USEPA Method 1311/Mercury). PCB concentrations in soil characterization samples ranged from non-detect to 4.78 milligrams per kilogram (mg/kg).

Characterization sampling completed for concrete included the collection of four grab samples from within the new furnace area. Concrete samples were analyzed for PCBs using USEPA Method 8082. PCB concentrations in the concrete samples were all less than 1 mg/kg.

All waste characterization samples were submitted to Upstate Laboratories, Inc. located in Syracuse, New York. A summary of waste characterization sample results has been provided in Table 2. Laboratory analytical results are provided in Appendix A.

Based on the waste characterization results, the soil and concrete were disposed of as non-hazardous waste. All soil and concrete were disposed of at the Oneida Herkimer Regional Landfill located in Ava, New York. A cumulative total of 2,172 tons of non-hazardous soil was transported offsite between March 30 and April 5, 2012. A total of 106 tons of non-hazardous concrete were transported offsite between January 26 and April 4, 2012. A summary of all waste transported offsite during the Phase II IRM is provided in Table 3. Waste profiles, waste manifests, and weight tickets have been provided as Appendix B.

4.3 Groundwater Management

Dewatering was required throughout the duration of the Phase II IRM. Groundwater was pumped from a temporary sump installed in the excavation via a submersible pump into a 10,000 gallon frac tank located onsite. A groundwater sample was collected from the new furnace area and resulted in a PCB concentration of 0.028



**Phase II Interim Remedial
Measure Construction Completion
Report (New Furnace Area)**

Brownfield Cleanup Program
SMC Brownfield Site (C633016)
Oneida County, New Hartford, New York

milligrams per liter (mg/L). Approval for the temporary discharge to an onsite manhole (i.e., sanitary sewer manhole) tributary to the Oneida County Water Pollution Control Plant was given by the Oneida County Department of Water Quality and Water Pollution Control in a letter dated March 9, 2012 (Appendix C). As a precautionary measure, a temporary treatment system was installed to provide pre-treatment of the groundwater with solids filtration media and carbon media prior to being discharged to the sanitary sewer. Approximately 66,700 gallons of groundwater were pumped from the onsite frac tank, through pre-treatment media, and to the sanitary sewer.

Waste that was generated in conjunction with the temporary treatment system including spent carbon media, bag filters, and frac tank cleaning residue, were profiled and transported offsite to the CWM Chemical Services, LLC facility located in Model City, New York for disposal. Copies of the waste manifests have been provided in Appendix B.

4.3 Air Monitoring

Air monitoring was conducted in the work zone during the entire Phase II IRM. Additionally, air monitoring was conducted at two adjacent locations nearest to active SMC operations. Air monitoring stations consisted of a particulate monitoring instrument to measure dust levels and a multi-gas meter to measure VOCs, carbon monoxide (CO), oxygen (O₂), lower explosive limit (LEL), and hydrogen sulfide (H₂S).

Engineering controls utilized to mitigate dust and exhaust fume generation during construction activities included the following:

- Saw-cutting was conducted exclusively using wet methods to minimize airborne concrete dust.
- Gas or diesel-powered, heavy equipment (e.g., excavators) were fitted with exhaust scrubbers designed to filter exhaust fumes (e.g., CO and VOCs).
- Walk-behind, propane-powered saw-cutting machines were temporarily fit with exhaust hoses to allow for venting outside.



**Phase II Interim Remedial
Measure Construction Completion
Report (New Furnace Area)**

Brownfield Cleanup Program
SMC Brownfield Site (C633016)
Oneida County, New Hartford, New York

5. Certification

This is to certify that this Phase II Interim Remedial Measure (IRM) has been successfully implemented per the remedial action objectives noted above in Section 1 and that this Construction Completion Report has been prepared in accordance with DER-10 and 6 NYCRR Part 375 to document all of the activities associated with the new furnace area IRM at the Special Metals Corporation Brownfield Cleanup Program (BCP) site (No. C633016) in New Hartford, New York, pursuant to the Brownfield Cleanup Agreement entered into between Special Metals Corporation and the New State Department of Environmental Conservation (NYSDEC) in December 2009, and the *Phase II IRM Work Plan (New Furnace Area)* by ARCADIS (2011).

ARCADIS of New York, Inc.

A handwritten signature in black ink, appearing to read "mte", written over a horizontal line.

Moh Mohiuddin, Ph.D., P.E., BCEE
Principal Engineer
NY PE License #074527



**Phase II Interim Remedial
Measure Construction Completion
Report (New Furnace Area)**

Brownfield Cleanup Program
SMC Brownfield Site (C633016)
Oneida County, New Hartford, New York

6. References

ARCADIS-BBL. 2007 Phase II Environmental Site Assessment, May 2007.

ARCADIS 2011. Phase II Interim Remedial Measure Work Plan (New Furnace Area),
Special Metals Corporation BCP Site, New Hartford, NY. December 2011.

NYSDEC 2011. Letter from Peter Ouderkirk NYSDEC regarding IRM for former
Furnace 6, 7, & 8 areas, Special Metals Corporation BCP Site, New Hartford, NY.
August 26, 2011.

O'Brien & Gere. 2008. Pre-Remediation Soil Boring Program Report - Furnace 7 & 8
Investigation Area, Special Metals Corporation, New Hartford, NY, October 1,
2008.



Tables

Table 1: Post-Excavation Sample Analytical Results, Phase II Interim Remedial Measure Construction Completion Report, New Furnace Area, Special Metals Corporation, New Hartford, New York

Location ⁽¹⁾	Date Sampled	PCBs ⁽²⁾	
Post-Ex Side 1	3/22/2011	< 370	µg/kg
Post-Ex Side 2	3/23/2012	< 87	µg/kg
Post-Ex Side 3	3/26/2012	< 89	µg/kg
Post-Ex Side 4	3/26/2012	< 92	µg/kg
Post-Ex Side 5	3/27/2012	< 87	µg/kg
Post-Ex Side 6	3/30/2012	< 200	µg/kg
Post-Ex Bottom 1	3/29/2012	< 220	µg/kg
Post-Ex Bottom 2	3/29/2012	< 210	µg/kg

Notes:

- 1) Post-excavation sample locations are shown on Figure 3.
- 2) Samples analyzed for PCBs using USEPA Method 8082. A copy of laboratory analytical results has been provided within Appendix A.

Abbreviations:

- NQ - Not quantified
- PCB - polychlorinated biphenyls
- µg/kg - micrograms per kilogram



Table 2: Waste Characterization Sample Analytical Results, Phase II Interim Remedial Measure Construction Completion Report, New Furnace Area, Special Metals Corporation, New Hartford, New York

Sample Description	Type	Date Sampled	PCBs (mg/kg) ⁽¹⁾	TCLP Analyses ⁽²⁾					
				VOCs	SVOCs	Metals ⁽³⁾	Pesticides	Herbicides	Mercury
Soil Characterization - 1	Soil	3/22/2012	4.78	ND	ND	Barium - 0.55 mg/L Silver - 0.0172 mg/L	ND	ND	ND
Soil Characterization - 2	Soil	3/29/2012	< 0.096	ND	ND	Barium - 1.21 mg/L	ND	ND	ND
Soil Characterization - 3	Soil	3/29/2012	< 0.091	ND	ND	Barium 1.4 mg/L	ND	ND	ND
Concrete Characterization - 1	Concrete	12/27/2011	0.037 J	NA	NA	NA	NA	NA	NA
Concrete Characterization - 2	Concrete	12/27/2011	0.160	NA	NA	NA	NA	NA	NA
Concrete Characterization - 3	Concrete	12/27/2011	0.230	NA	NA	NA	NA	NA	NA
Concrete Characterization - 4	Concrete	12/27/2011	0.017 J	NA	NA	NA	NA	NA	NA
New Furnace Area Groundwater	Water	2/29/2012	0.028	NA	NA	NA	NA	NA	NA

Notes:

- 1) Samples analyzed for PCBs using USEPA Method 8082.
- 2) TCLP analyses using the following methods: VOCs (US EPA 1311/8260B), SVOCs (US EPA 1311/8270C), Metals (US EPA 1311/Metals), Pesticides (US EPA 1311/8081A), Herbicides (US EPA 1311/8151A), and Mercury (US EPA 1311/Mercury).
- 3) Only those analytes detected above the method detection limit are shown in this table for TCLP metals.
- 4) Copies of laboratory analytical results are provided in Appendix A.

Abbreviations:

- J - Indicates analyte was detected below the quantitation limits
- mg/kg - milligrams per kilogram
- NA - not analyzed for
- ND - non-detect
- PCBs - polychlorinated biphenyls
- SVOCs - semi-volatile organic compounds
- TCLP - toxicity characteristic leaching procedure
- VOCs - volatile organic compounds

Table 3: Waste Disposal Summary, Phase II Interim Remedial Measure Construction Completion Report, New Furnace Area, Special Metals Corporation, New Hartford, New York

Loadout Event ⁽¹⁾	Disposal Date	Disposal Facility Name	Disposal Facility Location	Manifest/Bill of Lading Number	Transporter Name	Container Type	Waste Type	Waste Profile	Quantity	
									tons	gallons
1	1/26/2012	Oneida Herkimer Regional Landfill	Ava, New York	008343914 JJK	Hazmat Environmental Group, Inc.	rolloff dumpster	Non-Hazardous Concrete	OHSWA CS 0112-01	16.80	-
2	3/30/2012	Oneida Herkimer Regional Landfill	Ava, New York	008343915 JJK	Hazmat Environmental Group, Inc.	rolloff dumpster	Non-Hazardous Concrete	OHSWA CS 0112-01	14.63	-
3	3/31/2012	Oneida Herkimer Regional Landfill	Ava, New York	008343916 JJK	Hazmat Environmental Group, Inc.	rolloff dumpster	Non-Hazardous Concrete	OHSWA CS 0112-01	17.05	-
4	4/1/2012	Oneida Herkimer Regional Landfill	Ava, New York	008343918 JJK	Hazmat Environmental Group, Inc.	rolloff dumpster	Non-Hazardous Concrete	OHSWA CS 0112-01	15.56	-
5	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	008343917 JJK	Hazmat Environmental Group, Inc.	rolloff dumpster	Non-Hazardous Concrete	OHSWA CS 0112-01	10.08	-
6	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	008343596 JJK	Hazmat Environmental Group, Inc.	rolloff dumpster	Non-Hazardous Concrete	OHSWA CS 0112-01	13.89	-
7	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	008343597 JJK	Hazmat Environmental Group, Inc.	rolloff dumpster	Non-Hazardous Concrete	OHSWA CS 0112-01	17.68	-
8	4/5/2012	Oneida Herkimer Regional Landfill	Ava, New York	1621	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	19.63	-
9	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1572	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	33.13	-
10	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1574	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	33.93	-
11	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1573	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	43.55	-
12	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1577	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	36.04	-
13	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1579	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	35.23	-
14	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1580	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	31.41	-
15	3/30/2012	Oneida Herkimer Regional Landfill	Ava, New York	1564	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	34.94	-
16	3/30/2012	Oneida Herkimer Regional Landfill	Ava, New York	1563	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	32.13	-
17	3/30/2012	Oneida Herkimer Regional Landfill	Ava, New York	1562	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	35.49	-
18	3/30/2012	Oneida Herkimer Regional Landfill	Ava, New York	1561	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	38.00	-
19	3/30/2012	Oneida Herkimer Regional Landfill	Ava, New York	1559	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	30.99	-
20	3/30/2012	Oneida Herkimer Regional Landfill	Ava, New York	1558	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	31.31	-
21	3/30/2012	Oneida Herkimer Regional Landfill	Ava, New York	1560	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	29.37	-
22	3/30/2012	Oneida Herkimer Regional Landfill	Ava, New York	1557	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	36.73	-
23	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1565	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	33.36	-
24	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1566	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	27.61	-
25	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1567	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	35.72	-
26	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1568	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	24.96	-
27	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1589	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	40.97	-
28	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1570	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	39.66	-
29	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1571	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	32.21	-
30	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1575	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	42.02	-
31	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1576	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	33.86	-
32	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1578	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	30.93	-
33	4/2/2012	Oneida Herkimer Regional Landfill	Ava, New York	1581	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	25.15	-
34	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1582	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	36.36	-
35	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1583	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	37.10	-
36	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1584	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	40.65	-
37	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1585	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	31.06	-
38	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1586	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	32.28	-
39	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1587	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	32.72	-
40	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1589	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	34.86	-
41	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1588	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	38.13	-
42	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1590	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	38.76	-
43	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1592	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	28.48	-
44	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1593	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	36.21	-
45	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1594	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	35.12	-
46	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1595	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	37.17	-
47	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1596	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	33.18	-
48	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1597	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	34.45	-
49	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1599	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	34.98	-
50	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1598	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	26.70	-
51	4/3/2012	Oneida Herkimer Regional Landfill	Ava, New York	1600	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	38.54	-
52	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1606	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	33.27	-
53	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1605	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	34.96	-
54	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1604	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	38.66	-
55	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1603	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	34.17	-
56	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1602	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	35.66	-
57	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1601	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	38.04	-
58	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1607	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	36.32	-
59	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1608	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	36.97	-
60	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1609	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	39.97	-
61	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1610	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	34.13	-
62	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1611	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	32.83	-
63	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1612	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	32.83	-
64	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1613	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	34.57	-
65	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1614	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	32.78	-
66	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1615	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	29.23	-
67	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1616	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	26.54	-
68	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1617	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	39.60	-
69	4/4/2012	Oneida Herkimer Regional Landfill	Ava, New York	1618	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	37.55	-
70	4/5/2012	Oneida Herkimer Regional Landfill	Ava, New York	1620	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	28.00	-
71	4/5/2012	Oneida Herkimer Regional Landfill	Ava, New York	1622	Riccelli Enterprises, Inc.	dump trailer	Non-Hazardous Soil	OHSWA CS 0312-05	20.90	-
Note (2)	3/20/12 - 5/14/12	Oneida County Water Pollution Control Plant	Oneida County, New York	-	-	-	Pre-Treated Groundwater	-	-	66,678

Notes:

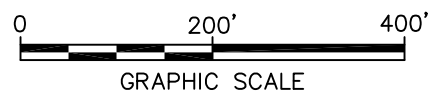
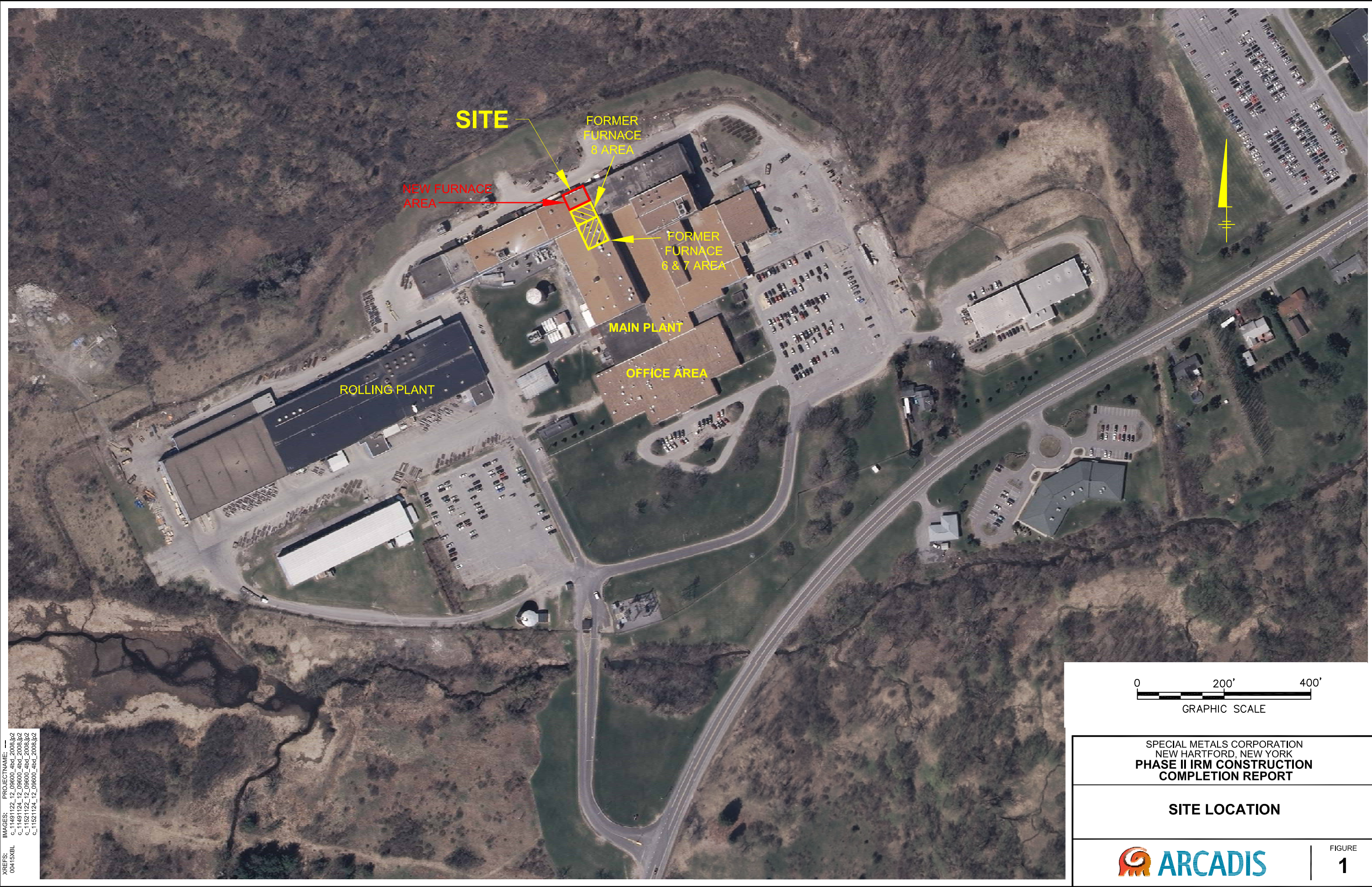
- 1) Copies of weight tickets and waste manifests have been provided in Appendix B.
- 2) Groundwater generated from dewatering for the Phase II Interim Remedial Measure activities was stored onsite in frac tanks, pre-treated with solids filtration media and carbon media, and discharged to an onsite manhole tributary to the Oneida County Water Pollution Control Plant. Approval for temporary discharge to the sanitary sewer was given by the Oneida County Department of Water Quality and Water Pollution Control in a letter dated March 9, 2012. Waste profile information for these wastes is located in Appendix B.



Figures

CITY: SYRACUSE, NY; DIV: GROUP; ENV: CADD; DB: R. BASSETT, P. LISTER, K. SARTORI; PM: T. MTR; C: DAVERN; L: YR; ON: OFF-REF; (FRZ)
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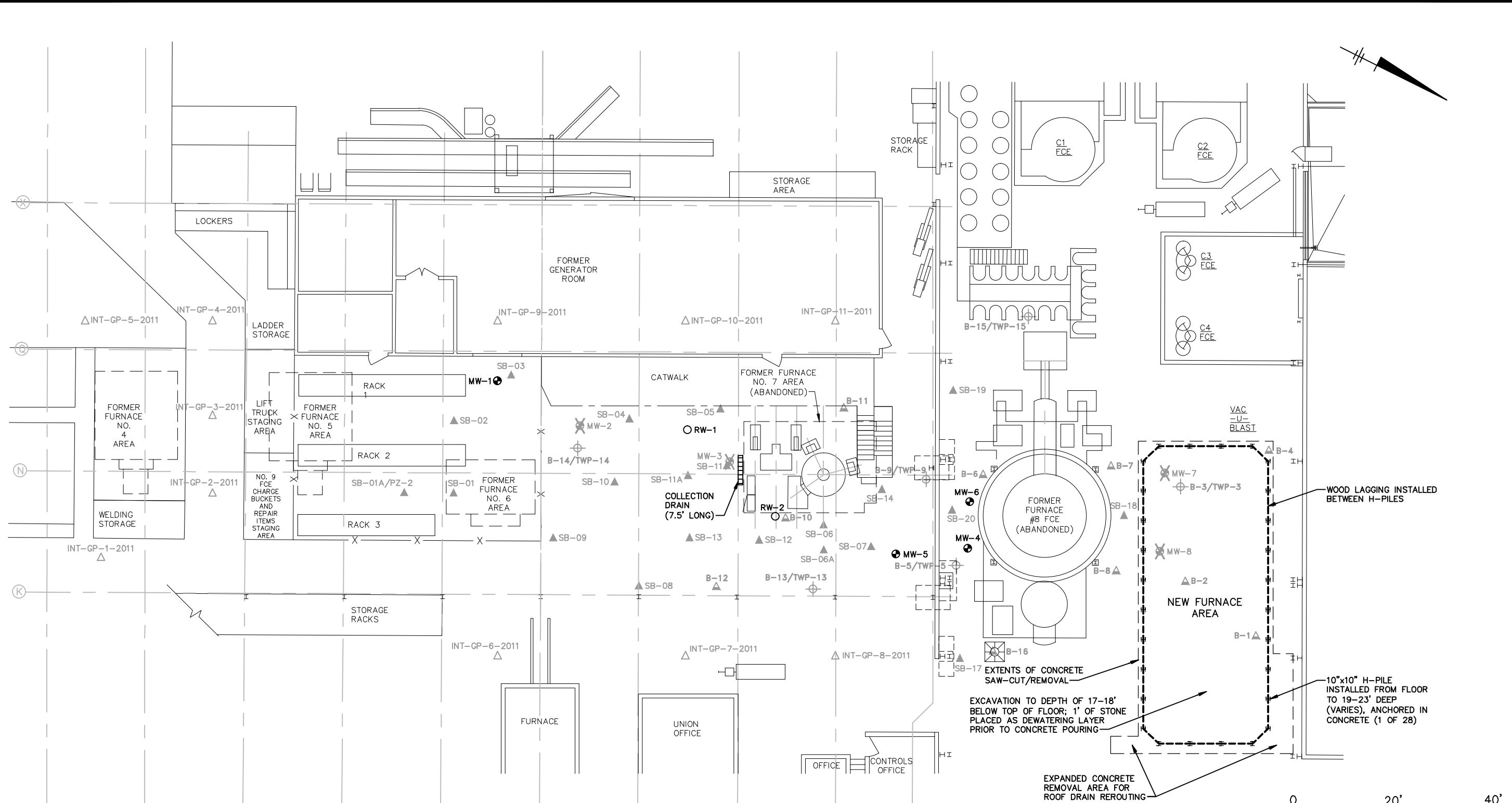
SPECIAL METALS CORPORATION
NEW HARTFORD, NEW YORK
**PHASE II IRM CONSTRUCTION
COMPLETION REPORT**

SITE LOCATION

 **ARCADIS**

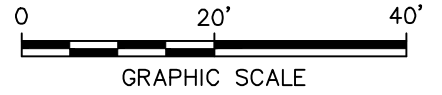
FIGURE
1

CITY: SYRACUSE, NY; DIV: GROUP: ENVCADD; DB: R. BASSETT, W. JONES, P. LISTER; PLOT/MTR: C. DAVERN; LVR: ONH+OFF=REF (FRZ); G:\ENVCADD\SYRACUSE\ACT\AY00415004\300002\DWG\PHASE-2\CCR\00415B04.DWG; LAYOUT: 2; SAVED: 8/15/2012 3:49 PM; ACADVER: 18.15 (LMS TECH); PAGES: 2; PLOTSTYLE: PLT; FULLCTB; PLOTTED: 8/15/2012 3:49 PM; BY: ALLEN, ROYCE; XREFS: 00415XBL; PROJECT NAME: ---



- LEGEND:**
- ⊕ SOIL BORING/TEMPORARY WELL POINT
 - ▲ 2008 SOIL BORING
 - ▲ 2007 SOIL BORING
 - MW-1 ● MONITORING WELL
 - RW-1 ○ RECOVERY WELL
 - MW-2 ✕ ABANDONED MONITORING WELL
 - △ INTERIOR GEOPROBE LOCATION
 - WOOD LAGGING
 - - - EXTENTS OF CONCRETE REMOVAL

- NOTES:**
1. MONITORING WELL LOCATIONS BASED ON AUGUST 12, 2011 SURVEY BY C.T. MALE ASSOCIATES. SOIL BORING AND SUBSURFACE STRUCTURE LOCATIONS ARE APPROXIMATE AND ARE BASED ON FIGURE 2 (FILE NO. 45326-002.DWG) AND FIGURE 3A (FILE NO. 45657-003.DWG) DATED JANUARY 2010 AND PROVIDED BY O'BRIEN AND GERE.
 2. FORMER FURNACE #7 & #8 FOUNDATIONS ABANDONED IN-PLACE WITH FLOWABLE FILL DURING PHASE I IRM.
 3. MONITORING WELLS MW-7 AND MW-8 WERE ABANDONED DURING THE PHASE II IRM. MONITORING WELLS MW-2 AND MW-3 WERE ABANDONED DURING THE PHASE I IRM.
 4. NEW FURNACE AREA LOCATION AND DIMENSIONS ARE APPROXIMATE.



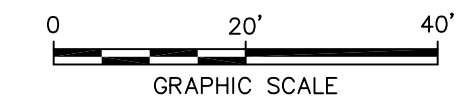
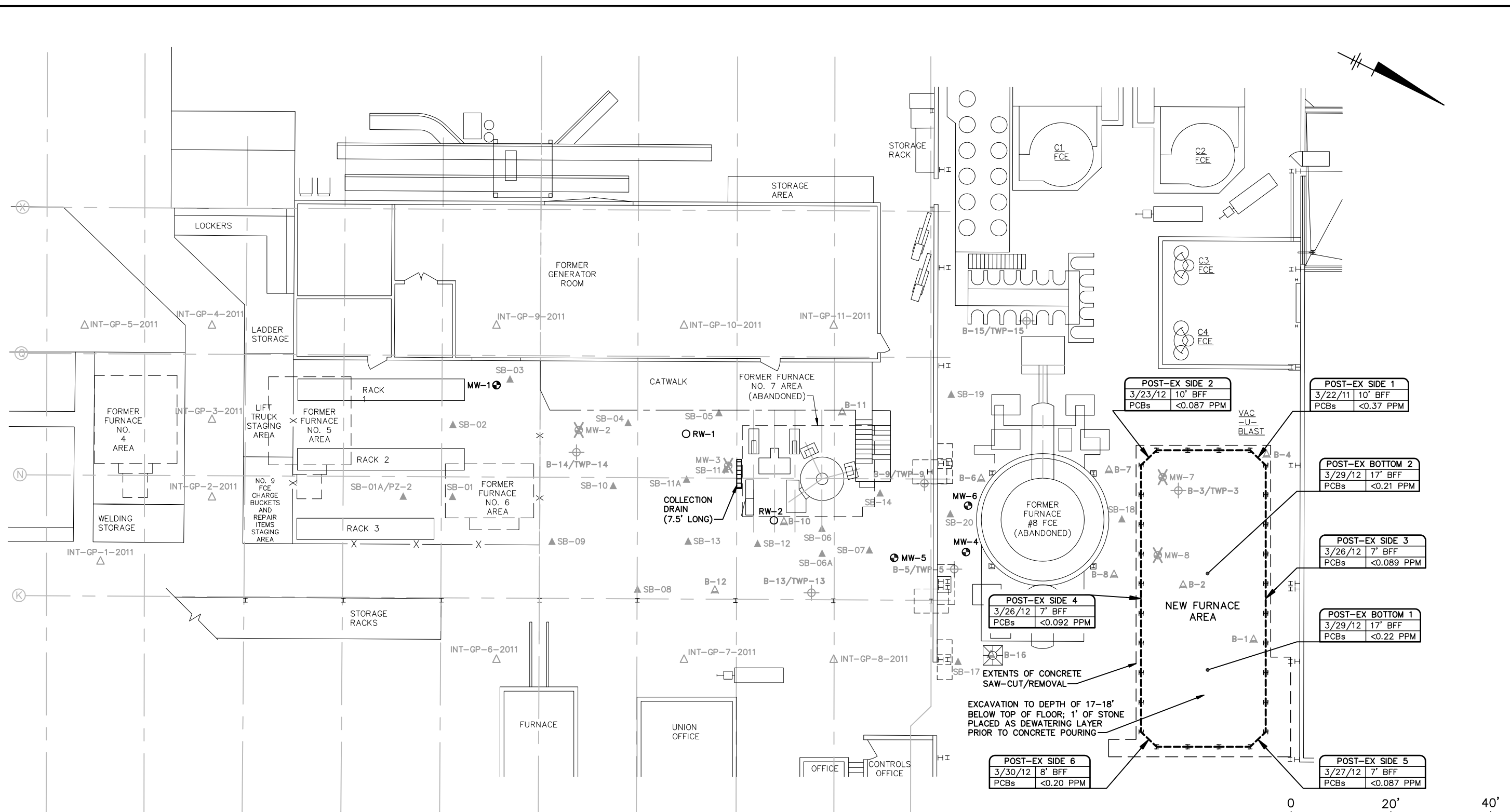
SPECIAL METALS CORPORATION
NEW HARTFORD, NEW YORK
**PHASE II IRM CONSTRUCTION
COMPLETION REPORT**

NEW FURNACE AREA

ARCADIS

FIGURE
2

CITY: SYRACUSE, N. Y. DIV/GROUP: ENV/IMD/DB: R. BASSETT, W. JONES, P. LUSTER, PM/TMTR: C. DAVERN, LYR: ONE/OFF/REF, (FRZ)
 G:\ENVCAD\SYRACUSE\ACT\10004151000300002\DWG\PHASE-2\CCR0041501.DWG LAYOUT: 3. SAVED: 9/7/2012 4:14 PM. ACADVER: 18.15 (LMS TECH). PAGES: 18. PLOTSTYLETABLE: PLT\FULL.CTB PLOTTED: 9/7/2012 4:14 PM. BY: ALLEN, ROYCE
 XREFS: 00415XBL
 IMAGES: PROJECTNAME:



KEY:

SAMPLE LOCATION	POST-EX SIDE 1	SAMPLE DEPTH
SAMPLE DATE	3/22/11	10' BFF
SAMPLE ANALYTE	PCBs	<0.37 PPM

PCBs - POLYCHLORINATED BIPHENYLS
 BFF - BELOW FINISHED FLOOR
 PPM - PARTS PER MILLION

- LEGEND:**
- ⊕ SOIL BORING/TEMPORARY WELL POINT
 - ▲ 2008 SOIL BORING
 - △ 2007 SOIL BORING
 - MW-1 ⊕ MONITORING WELL
 - RW-1 ○ RECOVERY WELL
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 - NEW FURNACE AREA LOCATION AND DIMENSIONS ARE APPROXIMATE.

SPECIAL METALS CORPORATION
 NEW HARTFORD, NEW YORK
**PHASE II IRM CONSTRUCTION
 COMPLETION REPORT**

**POST-EXCAVATION SAMPLE LOCATIONS
 AND RESULTS**

FIGURE
3