

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Chemetco Superfund Site Removal Action - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #2
Chemetco Superfund Site Removal Action
B5HB
Hartford, IL
Latitude: 38.7969510 Longitude: -90.0998470

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From: Kevin Turner, OSC

Date: 2/20/2014

Reporting Period:

1. Introduction

1.1 Background

Site Number:	B5HB	Contract Number:	
D.O. Number:		Action Memo Date:	6/14/2013
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	
Mobilization Date:	10/4/2013	Start Date:	10/4/2013
Demob Date:		Completion Date:	
CERCLIS ID:	ILD 048843809	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Time Critical Removal Action – Copper smelting slag and residual products remain from the former operations at the Chemetco Superfund Site. This facility was a secondary copper smelting and recycling operation that left remnant metal bearing materials in the environment.

1.1.2 Site Description

Please refer to Initial POLREP for details.

1.1.2.1 Location

Please refer to Initial POLREP for details.

1.1.2.2 Description of Threat

Please refer to Initial POLREP for details.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Please refer to Initial POLREP for details.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The time-critical removal response actions will be conducted by the bankruptcy Trustee and Paradigm Minerals, in accordance with Section 104(a)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9604(a)(1) and Section 300.415 of the National Oil and Hazardous Substance Pollution Contingency Plan (NCP, 40CFR 300.415, to abate or eliminate the immediate threat posed to public health and/or the environment by the presence of the

hazardous substances on the Site.

2.1.2 Response Actions to Date

Following all final approvals of the CD, the Estate of Chemetco and Paradigm Minerals mobilized a contractor (Precision Crushing) to the site at the end of September 2013. In working with the OSC, the contractor began some minor site clean-up (house keeping); scrap metal recycling, skull removals and sales and mobilizing heavy equipment.

On November 14, 2013, U.S. EPA mobilized START contractors to perform oversight of approved site activities previously initiated by the Estate of Chemetco that include renting and leasing of dozers, tracked excavators, cranes, articulated dump trucks and magnetized metal handling equipment used for:

- On-going demolition work of facility plant production equipment and buildings previously used for copper smelting and product processing. Please note that the current demolition work with resultant scrap metal recycling is a necessary step to help finance the needs of the Estate for future site work that will enhance the removal and recovery of metals commodities contained in the slag.
- The location, excavation, loading and recovery of "skulls" containing higher copper or other metal content. This recovery is another important step to aid in the financing for future work performed by the Estate. Please note that a hand-held X-ray fluorescence (XRF) instrument is used to determine the skulls copper or other metal concentrations.
- Loading the skulls into containers for shipment to over-seas businesses that will recover and refine the copper.
- Relocating slag materials to create a work area to be used for future work.
- Relocating slag materials to construct a haul road from the slag pile to the work area.

On December 6, 2013, the Estate contractors initiated the construction of a loading dock adjacent to the Tank House that will be used as part of a UMBM container loading operation. It was completed on December 13, 2013.

On December 9, 2013, the Estate contractors started the assembly of the series of material conveyor circuits in the Tank House to be used as a part of forthcoming material bagging (Super-sack) operations.

On December 14, 2013, the Estate submitted to the agency the following documents:

1. CHEMETCO Health and Safety Form;
2. Site Safety Briefing Form;
3. Estate Safety Briefing – Winter;
4. CHEMETCO Site Emergency Evacuation Plan;
5. IEPA Seal Order Handout;
6. MSDS – Copper Slag.

On December 16, 2013, the Estate took delivery of five particulate monitoring instruments that will be used for the perimeter air monitoring approach. A metrological station was also delivered. The estate will electronically store the air monitoring data results. An additional hand-held particulate meter was obtained on December 31, 2013.

On January 3, 2014, the loading-dock next to the "Tank" building construction was completed.

On January 10, 2014, the Estate of Chemetco contractor, Precision Crushing, Inc., initiated a "bump" test of the crushing circuit as a preliminary step to access the crushing output goal to meet the 1-inch minus product requirement set forth by the buyer.

On January 14, 2014, Precision Crushing initiated full scale crushing and bagging operations. To date, approximately 3000 tons have been processed and 1272 one-ton bags have been set aside for future loading into ocean containers.

On January 16, 2014, the Estate if Chemetco purchased two additional cameras to supplement the eight existing plant security cameras.

On January 23, 2014, the estate submitted a QAAP for the air monitoring program.

On January 29, 2014, the first 25 ocean-tight containers of crushed and separated "Mixed Copper Tin Material" was loaded and trans-shipped for metals recovery at the Northeast Yejin Co., Ltd. Facility in Chenzhou City, Hunan Province, China.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

U.S DOJ, U.S. EPA, State of Illinois, the Estate of CHEMETCO and Paradigm Minerals negotiated a Consent Decree to govern the removal activities.

2.1.4 Progress Metrics

Waste or Product Stream	Medium	Quantity	Manifest #	Treatment	Disposal/Recycle/Intermodal Loading	Final Reclamation Destination
Copper Spills	Recyclable Copper	88.81 tons	NA	Recycle	Interco Trading Co. Madison, Illinois	Aurubis Lunen, Germany

Cupro	Recyclable Copper/Tin	43.66 tons	NA	Recycle	Interco Trading Co. Madison, Illinois	Aurubis Lunen, Germany
Copper Pot Slag (MBM)	Recyclable Copper	43.37 tons	NA	Recycle	Interco Trading Co. Madison, Illinois	Aurubis Lunen, Germany
Copper Reverts	Recyclable Copper	502.95 tons	NA	Recycle	Interco Trading Co. Madison, Illinois	Aurubis Lunen, Germany
High-grade Copper (processed)	Recyclable Copper	21.27 tons	NA	Recycle	Interco Trading Co. Madison, Illinois	Aurubis Lunen, Germany
Carbon Steel (magnetic Fe)	Recyclable Steel		NA	Recycle	Not yet determined	NA
Non-crushable Steel (Shredder)	Recyclable Steel	6.15 tons	NA	Recycle	Not yet determined	
Scrap Steel	Recyclable Steel	852.61 tons	NA	Recycle	Grossman Iron & Steel, St. Louis, MO	
Mixed Copper Tin Materials	Recyclable Metals	1151.49 tons	NA	Recycle	CMAC	Northeast Yejin Co. Ltd., Liyu Jiang Town, Chenzhou City, China
White-goods, computers, office equipment, etc.	Recyclable Steel	3.32 tons	NA	Recycle	Component Level Recycling, Sauget, IL	
Hydraulic oil spill materials	Sorbent pads, PPE	2 drums		Land Disposal	Heritage Enviro. Services	
Refractory brick	Broken refractory				Pending at this time	
North Polishing Pond Zinc Dry Sludge	Recyclable Zinc	217.19 tons	NA	Recycle	CMAC	Northeast Yejin Co. Ltd. Liyu Jiang Town, Chenzhou City, China
Construction/Demolition Debris (non-hazardous)	General Refuse	8.43 tons	NA	Land Disposal	Republic Waste Services Roxana, IL	

2.2 Planning Section

U.S. EPA Emergency Response and Removals Branch will perform oversight to the recovery of metals bearing materials and the forthcoming UMBM metals processing reclamation & removal actions to take place in early 2014.

2.2.1 Anticipated Activities

1. Oversee the site maintenance and enhancements to site security and access controls to the entire facility. Security cameras and recorders will be utilized. Additional security lights will be added and a guard service will be contracted for off-hours and weekend security needs.
2. Participate in weekly meetings with the Estate, Estate employees, Estate contractors and Estate Trustee.
3. Review the Health and Safety Plan (HASP) assembled by the Estate related to all employees and its contractors.
4. Plant Demolition – Conduct oversight of the ongoing demolition and resultant scrap metal recovery work.
5. Perimeter Air Monitoring Program – Review the air monitoring plan to be used by the Estate to monitor fugitive dusts from materials handling and crushing operations.
6. Oversee the implementation and approach to process crush, screen, bag, load, containerize, and trans-ship unprocessed metal bearing materials (UMBM, cupro, copper bearing, Zinc sludges) at the Site, which should include, at a minimum:
 1. Installing and grading slag product materials (hill) for access roads that will be used for UMBM materials recovery;
 2. Excavating/loading and delivery of cuprous bearing materials delivered to the crushing circuit;
 3. Product crushing circuit will include a jaw crusher, magnetic conveyor separator, screening tables along with several material conveyors. Generous water-spray and misting for dust suppression will be included in critical areas of jaw crushing and UMBM size screening;
 4. Operation and Maintenance of the UMBM bagging systems;
 5. Freight forwarding transporting the loaded ocean-tight cargo containers to an Agency approved intermodal loading facility with ultimate destination to reclamation facility(s) in accordance with EPA's Off-Site Rule (40 CFR § 300.440) and the

- project Consent Decree (CD), up to and including overseas port destinations in Germany and China;
6. Control access to the contaminated areas to prevent further migration of contamination, by fencing, traffic restrictions or other applicable means;
 7. The Estate will subcontract a street sweeping service to maintain clean roadway surfaces inside and near the facility main gate;
 8. Load one or two-ton super-sacks into ocean-tight containers for freight forwarding trans-shipment to nearby rail loading terminals with destinations to domestic port loading facilities with outbound overseas destinations to China and Germany.

2.2.1.1 Planned Response Activities

- Take all necessary steps to implement source control of the slag and scrubber sludge. Source control may include surface water and storm water control measures to control off-site migration of zinc oxides and other metals.
- Prepare for the forthcoming Paradigm process work by which metals will be separated and concentrated to enhance the metals commodity value.
- Backfill any subgrade excavated areas with clean fill to effectuate storm water control and grade the Site as necessary.

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2.2.1.2 Next Steps

- Await court approval of the amended Asset Purchasing and Processing Agreement (APPA).
- Prepare and execute forthcoming loading and shipping containers of all product streams for metals recycling either domestic or abroad.

2.2.2 Issues

While full production to separate, size, bag and load the "mixed copper and tin materials" into ocean-tight containers is possible, logistical delays in transportation of the materials has been experienced due to the extreme cold weather experienced throughout the East and Midwest.

However, inclement weather may create weather delays to the project schedule. Also, the Estate financing challenges could create possible delays in the future related to the forthcoming Paradigm materials processing approach.

Financing of the Paradigm "process" could delay future schedules.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety Meetings and briefings are held before the beginning of a new work assignment.

2.5.2 Liaison Officer

2.5.3 Information Officer

3. Participating Entities

3.1 Unified Command

US EPA is directing all work in the removal effort.

3.2 Cooperating Agencies

U.S. Department of Justice and Illinois Environmental Protection Agency.

4. Personnel On Site

US EPA -- 1

START -- 1

Estate Employees - 5

Estate Contractors:

Precision Crushing, Inc. - 23

Aero-Tech. - 4

5. Definition of Terms

APPA -- Asset Purchase and Processing Agreement

ATSDR -- Agency for Toxic Substances and Disease Registry

CERCLA -- Comprehensive Environmental Response, Compensation, and Liability Act

CD -- Consent Decree

CFR -- Code of Federal Regulations

Chemtco -- Chemtco Superfund Site, ("the Estate," "Trustee for the Estate of bankruptcy Trustee" or, "Trustee"), previously

d.b.a. Chemtco Metals Corporation

Cupro -- Copper containing (aka cupriferous, cupronickel)

CWA -- Clean Water Act, 33 U.S.C. §§ 1251-1387

HASP -- Health & Safety Plan

IDPH - Illinois Department of Public Health

IEPA – Illinois Environmental Protection Agency
ILCS – Illinois Compiled Statutes
NCP – National Oil and Hazardous Substance Pollution Contingency Plan
NPL – National Priorities List
PA/SI – Preliminary Assessment / Site Inspection
Paradigm – Paradigm Minerals & Environmental Services
PMES – Paradigm Minerals & Environmental Services
PRP – Private Responsible Parties
RCRA – Resource Conservation and Recovery Act
Skulls – Slag with copper bearing commodity value
START – Superfund Technical Assessment & Response Team
Super-sack – 1 to 2-ton polypropylene woven bags used to store and handle bulk processed materials
TCLP – Toxicity Characteristic Leaching Procedure
UMBM – Unprocessed Metal Bearing Materials
XRF – X-ray fluorescence

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.