U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Baycote Metal Finishing Site - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: **POLREP #9**
Progress
Baycote Metal Finishing Site
C5B2
Mishawaka, IN
Latitude: 41.6497046 Longitude: -86.1648540

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From: Andrew Maguire, OSC
Date: 8/3/2012
Reporting Period: 7/30/2012 - 8/3/2012

1. Introduction

1.1 Background

Site Number:	C5B2	**Contract Number:**	EP-S5-09-05
D.O. Number:		**Action Memo Date:**	2/23/2012
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	5/29/2012	**Start Date:**	5/29/2012
Demob Date:		**Completion Date:**	
CERCLIS ID:		**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

Time-Critical Removal Action: Manufacturing/Processing/Maintenance – Electroplating, Metal Finishing

1.1.2 Site Description

Baycote Metal Finishing (Baycote or the Site) began operation in 1982. The facility electroplated and anodized steel and steel casings with zinc, cadmium, and chromium for the automotive, recreational vehicle, and trailer industries. The facility ceased operations in January 2008, however, according to facility records approximately 111,000 gallons of waste remained on site at the time. In October 2009, the Indiana Department of Environmental Management (IDEM) and the owner of the site entered into an Order to remove and dispose of all hazardous waste. However, work ceased and in February 2010, approximately 50,000 gallons of waste remained on-site.

1.1.2.1 Location

The Baycote Metal Finishing Site is located at 1302 Industrial Drive in Mishawaka, St. Joseph County, Indiana 46544. The geographical coordinates for the Site are 41°39'0.03" North latitude and 86°09'57.11" West longitude. The Site is bordered by industrial properties to the north, east, and south and Industrial Drive and industrial properties to the west. Residential properties are located approximately 700 feet to the west. Seven churches and two schools are located within 1 mile of the Site. The St. Joseph River, a major surface water body that terminates in Lake Michigan, is located 0.85 mile northwest of the Site.

1.1.2.2 Description of Threat

Abandoned and unknown waste in vats, pits, tanks, drums and containers was located throughout the building. Many vats, pits, tanks and containers are open with contents exposed. Animal prints were observed in material piles on the building floor. Several drums are corroded and leaking onto the floor. Evidence of previous spills was noted in several areas. The building is in a deteriorating condition; a section of roof in the Wastewater Treatment Room had collapsed, exposing the room and its contents to weather. Due to the roof collapse and holes in the roof in other areas, rain water has accumulated in several sections of the building. Vats, totes, and containers that contain incompatible wastes (acids, caustics, cyanides) are present inside the facility. Based on these conditions, nearby populations and the environment could be exposed to potentially hazardous materials if contaminants migrate off site.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

U.S. EPA On-Scene Coordinators (OSCs) Theresa Holz and Jacob Hassan conducted a Site visit on November 21, 2011, with the St. Joseph County Health Department (SJCHD). During the visit, the OSCs documented numerous tanks, drums, containers and spilled material on the floor. The OSCs also observed containers labeled as acid, chromate, nitrate, hexavalent chrome, and cyanide. The Site was in disrepair, with a portion of the roof collapsed inside the facility. The containers were not organized, secured, or maintained in a manner necessary to prevent spillage, inter-mixture of potentially flammable or combustible materials, and/or release. The containers also were not all properly or sufficiently labeled or identified, for safety purposes.

On December 12 and 13, 2011, U.S. EPA performed a Site Assessment including sample collection. The Site Assessment documented numerous drums, plating vats, pits, tanks, small containers, and spilled material. Drums and containers were labeled as acid, chrome, and caustic. Numerous plating vats and other process equipment were documented inside the building.

Analytical results documented reactive cyanide and total cyanide at concentrations of up to 30,000 mg/l and verified the presence of a characteristic of a hazardous waste for reactivity (D003).

Analytical results from liquid samples documented pH values of less than 2, and represent waste that meets the definition of characteristically hazardous waste for corrosivity (D002) because the pH value is less than or equal to 2 standard units (SU) or greater than or equal to 12.5 SUs.

Analytical results from solid samples also found concentrations which exceeded the TLCP regulatory limits for Chromium and Cadmium, indicating that characteristically hazardous wastes representing those two metals are present at the Site. Results also found characteristic hazardous waste based on exceedence of the ignitability criteria.

In a letter dated November 11, 2011, the St. Joseph County Health Department (SJCHD) requested assistance from the U.S. EPA to secure hazardous wastes left on-site. SJCHD was concerned that the Site posed a significant threat to the health and safety of companies within the industrial park as well as the residential area located less than a 1,000 feet from the facility. On February 23, 2012, the Director of U.S. EPA's Superfund Division approved an Action Memorandum approving funding for a time-critical removal action at the Baycote Metal Finishing Site.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

In a letter dated November 11, 2011, the St. Joseph County Health Department (SJCHD) requested assistance from the U.S. EPA to secure hazardous wastes left on-site. SJCHD was concerned that the Site posed a significant threat to the health and safety of companies within the industrial park as well as the residential area located less than a 1,000 feet from the facility. On February 23, 2012, the Director of U.S. EPA's Superfund Division approved an Action Memorandum approving funding for a time-critical removal action at the Baycote Metal Finishing Site.

On April 6, 2012, U.S. EPA issued a Unilateral Administrative Order to the potentially responsible parties to conduct a removal action at the Site. The potentially responsible parties presented and inability to pay argument and indicated that they did not intend to conduct a removal action at the Site. EPA began time-critical removal actions at the Baycote Site on May 29, 2012.

This is a large Site, with 11 plating lines in 6 areas and an onsite waste water treatment plant with a collapsed roof. The OSC and its contractors have adopted a work plan to cleanup one area/plating line at a time, starting with the most contaminated while ensuring safety and efficiency.

2.1.2 Response Actions

Please refer to previous Polreps for response actions before July 30, 2012.

During the reporting period, EPA conducted the following activities:

- EPA and START continued to conduct site perimeter and work area air monitoring to ensure worker and

community protection. Mercury has been detected in the waste profile samples at below characteristic haz criteria (TCLP) so EPA/START have initiated monitoring/screening of the waste and cleanup activities for mercury vapors.

- Cleanup in Area A continues. Three vats containing cyanide solids and eight vats containing neutral and acididic liquids and solids were emptied, cleaned, and removed. Contaminated debris and catwalks were removed from around secondary containment. Sumps and trenches were cleaned of waste liquid and sludge then backfilled for safety.

- Cleanup in Areas B and H continues. Nine vats were removed, washed, and cleaned. Metal rails and supports were removed. Contaminated debris and catwalks were removed from around secondary containment. Secondary containment areas were cleaned.

- Diagrams of Areas B & H and Area A have been added the the documents area of the site website (http://epaosc.org/site/doc_list.aspx?site_id=7560) to indicate vats that have been cleaned and removed (shaded).

- A 4,500 gallon poly tank was enlisted to separately bulk Base liquid, Neutral/Haz liquid, and non-Haz liquid waste streams throughout the project. Prior to bulking, an ERRS Chemist is conducting compatibility testing on the liquids being added together. The tank is expected to save the project ~$25,000. Currently the tank is holding 4,500 gallons (16 totes) of the Base liquid waste stream awaiting profile approval and shipment off-site.

- 1 load of Cyanide waste was shipped off-site, see table below for details.

- 1 load of Acid waste was shipped off-site, see table below for details.

- Haz Debris materials were loaded into the hazardous waste roll off dumpster.

- 5,960 pounds of metal was taken off site for recycling.

- EPA's air trailer is onsite to support Level B site work.

- Profiles for waste streams were submitted to a disposal facility for approval.

- Rooms J, E, R and the Contaminant Reduction Zone were swept with a cleaning compound (as per routine) to reduce airborne dust.

- EPA and its contractors is implementing Green Practices onsite (double sided printing, dedicated water bottles, dedicated steel toed Chem boots, city electical power, etc...)

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

Information on the PRP is in the Site file. Enforcement strategies are included in a confidential enforcement memorandum.

2.1.4 Progress Metrics

The following waste has been staged and ready for disposal as of August 3, 2012

13 55-gallon drums of Haz basic vat bottom sludge

2 330-gallon totes of Haz cyanide containing liquid

26 55-gallon drums of Haz cyanide containing vat bottom sludge

0 cubic-yard boxes of Haz cyanide solids

2 95-gallon overpacks of Haz cyanide solids

17 cubic-yard boxes of Haz solids

8 330-gallon totes of Haz acid liquid

17 55-gallon drums of Haz neutral liquid

61 RCRA-empty vats (various sizes)

54 330-gallon tote metal frames (poly portion has been cut apart and placed in roll-offs)

6 330 gallon tote haz base liquid

6 330 gallon tote haz neutral liquid

1 4,900 gallon poly tank (currently full with base liquids)

Waste Stream	*Date*	*Quantity*	*Manifest #*	*Treatment*	*Disposal facility*
Solid Waste Debris	6/6/12	30 yards	001		WM Landfill Wyatt IN

Solid Waste Debris	6/8/12	30 yards	002		WM Landfill Wyatt IN
Haz Waste Debris	6/18/12	25 yards	004354475FLE		Envirosafe Services of Ohio, Oregon Ohio
Solid Waste Debris	6/21/12	30 yards	003		WM Landfill Wyatt IN
Haz Waste Debris	6/26/12	30 yards	004354473 FLE		Envirosafe Services of Ohio, Oregon Ohio
Solid Waste Debris	6/29/12	30 yards	004		WM Landfill, Wyatt IN
Haz Waste Debris	7/03/12	25 yards	004354477FLE		Envirosafe Services of Ohio, Oregon, Ohio
Solid Waste Debris	7/12/12	30 yards	005		WM landfill, Wyatt, IN
Solid Waste Debris	7/18/12	30 yards	006		WM landfill, Wyatt, IN
Cyanide Waste (UN 1935)	7/31/12	3440 gallons	010411950JJK		Dynecol Inc., Detroit, MI
Waste Toxic, Inorganic (UN 3288)	7/31/12	6400 pounds	010411950JJK		Dynecol Inc., Detroit, MI
Solid Waste Debris	8/02/12	30 yards	008		WM landfill, Wyatt, IN
Chromic Acid (UN 1755)	8/02/12	2700 gallons	010411037JJK		Dynecol Inc., Detroit, MI
Acid Liquid (UN 3264)	8/02/12	1475 gallons	010411037JJK		Dynecol Inc., Detroit, MI

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

Removal activities on Site will include:

1. Continue cleanup in plating Lines 1-2-3 in Area A. This room is heavily contaminated with acids and cyanides;
2. Continue cleanup in plating lines in Areas H and B.
3. Recycle RCRA empty containers.
4. Continue to consolidate and package hazardous substances, pollutants, and contaminants for transportation and off-site disposal;
5. Evaluate bids to determine disposal options/facility.
6. Dismantle and decontaminate process equipment and building components associated with the plating areas, as necessary;
7. Transport and dispose of all characterized or identified hazardous substances, pollutants, or contaminants to a RCRA/CERCLA-approved disposal facility in accordance with U.S. EPA Off-Site Rule (40 CFR § 300.440) .
8. Site Work plan and schedule have been submitted and will continue to be adjusted as needed. Work is planned to continue the end of Oct. 2012.

2.2.1.2 Next Steps

Cleanup of the plating shop and off-site disposal of wastes is anticipated to take approximately 6 months to complete. When time-critical removal actions are completed, EPA will refer the Site to the Indiana Department of Environmental Management (IDEM).

During the week of August 6, 2012,
- Transport and Dispose of two loads of hazardous waste: 1) Debris; 2) Acids
- Continue cleanup work in Plating Lines 1-2-3 in Area A, and Lines 8-15 in Area B.
- Consolidate / repackage waste into containers as needed into D.O.T. shippable containers.
- Demolish RCRA empty containers.
- Conduct hazcat testing to charaterize additional waste samples for disposal.
- Continue air monitoring in the work zone and the perimeter of the Site to protect workers and residents.
- Continue Evaluate the bids for the disposal of hazardous waste and chose facility as needed.
- Continue to submit waste profiles to selected disposal facilities as needed.
- Recycle RCRA empty containers.

2.2.2 Issues

The main health and safety issues during the period at the Site are potentially harmful emissions of hydrogen cyanide, acid vapor/spills, and particulates containing Cadmium and any other contaminants present. The issues is addressed through engineering controls, PPE, and good work practices. Lab results indicate small concentrations of mercury in the composite waste profile samples. EPA/START will conduct mercury screening of waste and air in the work areas to ensure worker protection and correct waste disposal practices. An ERRS Chemist is performing compatiblity testing on all materials prior to

being bulked together in the poly tank.

In addition, all workers briefed everyday to make sure everyone stays vigilant and safe. OSC and START are closely monitoring all areas, especially piles of solids and liquids to ensure no unsafe emissions or acid spills are occuring.

2.3 Logistics Section

NA

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	$1,000,000.00	$401,286.73	$598,713.27	59.87%
START	$117,500.00	$65,000.00	$52,500.00	44.68%
Intramural Costs				
Total Site Costs	$1,117,500.00	$466,286.73	$651,213.27	58.27%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

The Health and Safety Plan and was approved and signed by all site personnel. Safety meetings are held daily.

2.5.2 Liaison Officer

NA

2.5.3 Information Officer:

Community Involvement Coordinator: Ginny Narsete

3. Participating Entities

3.1 Unified Command

NA

3.2 Cooperating Agencies

IDEM
City of Mishawaka
St. Joseph County Health Department
Mishawaka Fire Department

4. Personnel On Site

The following numbers of personnel were on-Site during the reporting period:

Organization	Position	# Personnel
EPA	OSC	1
ERRS	Response Manager	1
	Chemist	1
	Foreman	1
	Laborer	5
	Field Cost Accountant	1
	Equipment Operator	1
Weston	START	1

5. Definition of Terms

Baycote	Baycote Metal Finishing Site
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CRZ	Contamination Reduction Zone

EPA	Environmental Protection Agency
ERRS	Emergency and Rapid Response Services
D.O.T.	Department of Transportation
FCA	Field Cost Accountant
HASP	Health and Safety Plan
HAZCAT	Hazardous Categorization
IDEM	Indiana Department of Environmental Management
NA	Not Applicable
OSC	On-Scene Coordinator
PolRep	Pollution Report
RCRA	Resource Conservation and Recovery Act
PRP	Potentially Responsible Party
RM	Response Manager
START	Superfund Technical Assessment and Response Team

6. Additional sources of information

6.1 Internet location of additional information/report

www.epaosc.org/BaycoteMetalFinishing

6.2 Reporting Schedule

PolReps will be submitted on a weekly or bi-weekly basis.

7. Situational Reference Materials

No information available at this time.