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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: **POLREP #3**
Baycote Metal Finishing Site
C5B2
Mishawaka, IN
Latitude: 41.6497046 Longitude: -86.1648540

To: Sam Borries, U.S. EPA
Jason El-Zein, U.S. EPA
Valencia Darby, Department of Interior
Lindy Nelson, Department of Interior
Mark Durno, U.S. EPA
Mark Johnson, ATSDR
Sherry Fielding, U.S. EPA
Charlie Gebien, U.S. EPA
John Glover, U.S. EPA
Beverly Kush, U.S. EPA
Mindy Clements, U.S. EPA
Thomas Marks, U.S. EPA
Mike Ribordy, U.S. EPA
Harry Atkinson, IDEM
Gabriele Hauer, IDEM
Max Michael, IDEM
Rex Osborn, IDEM
John Lankowicz, St. Joseph County Health Department
Dan Chesterson, IDEM
Dale Freeman, City of Mishawaka
Virginia Narsete, U.S. EPA
Thomas Turner, U.S. EPA
Carol Ropski, U.S. EPA
Rich Hackel, IDEM

From: Paul Atkociunas, OSC
Date: 6/15/2012
Reporting Period:

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, the Superfund Technical Assessment and Response Team (START) and U.S. EPA OSCs Holz, Hassan, and Atkociunas, performed a Site Assessment including sample collection. Activities performed during the Site Assessment included:

- Documenting Site conditions;
- Conducting air monitoring;
- Inventorying drums and other small containers; and
- Collecting samples from vats, pits, tanks, drums and containers and spilled material.

U.S. EPA collected fifteen samples from drums, plating vats, small containers and spilled material and submitted them for analysis.

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 from liquid sample BMF-WL02-121211 documented reactive cyanide and total cyanide at concentrations of 8,000 and 15,000 milligrams per liter (mg/L), respectively. The analytical results from liquid sample BMF-WL05-121211 documented reactive cyanide and total cyanide at concentrations of 140 and 30,000 mg/L, respectively. According to 40 CFR § 261.23 (a)(5), these samples represent a cyanide- or sulfide-bearing waste that, when exposed to pH conditions between 2 and 12.5 SUs, could generate toxic gases, vapors, or fumes "in a quantity sufficient to present a danger to human health or the environment." These two samples document cyanide bearing waste, which verifies the characteristic of a hazardous waste for reactivity (D003).

Analytical results from liquid samples BMF-WL04-121211, BMF-WL07-121211, BMF-WL10-121211, and solid sample BMF-WS02-121211 documented pH values of less than 2. According to 40 CFR § 261.22(a), these waste samples represent material 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 sample BMF-WS01-121211 documented a cadmium concentration of 83 mg/L. This TCLP cadmium concentration exceeds the TCLP cadmium regulatory limit of 1.0 mg/L. Therefore, according to 40 CFR § 261.24(b), this sample represent materials that meet the definition of characteristically hazardous waste for toxicity (D006).

Analytical results from solid samples BMF-WS-02-121211, BMF-WS-03-121211, and BMF-WS-04-121211 documented chromium concentrations of 20,000, 420, and 300 mg/L, respectively. These TCLP chromium concentrations exceed the TCLP chromium regulatory limit of 5.0 mg/L. Therefore, according to 40 CFR § 261.24(b), these samples represent materials that meet the definition of characteristically hazardous waste for toxicity (D007).

Analytical results from liquid sample BMF-WL08-121211 showed a flashpoint of less than 32 degrees Fahrenheit (°F). According to 40 CFR § 261.21 (a), this waste sample represents material that meets the definition of characteristically hazardous waste for ignitability (D001) because the flashpoint is below 140 °F.

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.

Removal activities on Site will include: Develop and implement a Site Health and Safety Plan and Site Security Plan; Develop and implement a Site Work Plan, a Sampling Plan, Air Monitoring Plan and a Site Emergency Contingency Plan; Inventory and perform hazard categorization on substances contained in vats, pits, drums, and other containers; Perform sampling and analysis to determine disposal options; Consolidate and package hazardous substances, pollutants, and contaminants for transportation and off-site disposal; Dismantle and decontaminate process equipment and building components associated with the plating areas, as necessary; 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); and Take any other response actions to address any release or threatened release of a hazardous substance, pollutant and contaminant that the U.S. EPA OSC determines may pose an imminent and substantial endangerment to the public health or the environment.

2.1.2 Response Actions to Date
During the reporting period, EPA conducted the following activities:

- Mobilized Hazard Categorization Trailer from Grosse Ille, Michigan.
- Continued to inventory vats, tanks containers and collect samples for hazard categorization.
- Mobilized ERRS Field Chemist to conduct hazard categorization of samples.
- Received approval for disposal of hazardous waste debris at the Envirosafe facility located in Oregon, OH.
- Collected particulate air samples from Area U for hexavalent chromium and metals analysis.
- Mobilized drums, totes, and flex bins to containerize waste into D.O.T. shippable containers.
- Began to color code vats / containers with a hazard classification.
- Demolished RCRA empty vats and containers.
- Continued to conduct air monitoring of work zones and the Site perimeter.
- Coordinated with IDEM to review and approve a metals recycler.
- Updated Site maps and emergency procedures.
- Received analytical results from particulate air sampling (hexavalent chromium and metals) in the Contamination Reduction Zone (CRZ), which indicate that action levels were not exceeded.
- Extrapolated air sampling results in the CRZ with particulate readings at the time of sampling to generate a CRZ specific Action Level for particulate readings.

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

Waste Stream	*Date*	*Quantity*	*Manifest #*	*Treatment*	*Disposal facility*
Solid Waste Debris	6/6/12	30 yards	001		WM Landfill
Solid Waste Debris	6/8/12	30 yards	002		WM Landfill

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities
Removal activities on Site will include:

1. Develop and implement an improved Site Health and Safety Plan and Site Security Plan;
2. Develop and implement a Site Work Plan with overall schedule;
3. Continue inventory, sampling, and perform hazard categorization on substances contained in vats, pits, drums, and other containers;
4. Perform sampling and analysis to determine disposal options;
5. Consolidate and package hazardous substances, pollutants, and contaminants for transportation and off-site disposal;
6. Investigate soils in the stressed vegetation in eastern area of the Site.
7. Dismantle and decontaminate process equipment and building components associated with the plating areas, as necessary;
8. 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); and
9. Take any other response actions to address any release or threatened release of a hazardous substance, pollutant and contaminant that the U.S. EPA OSC determines may pose an imminent and substantial endangerment to the public health or the environment.

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 June 18, two additional laborers will be mobilized to Site. Aniticipated work includes the following:

- Continue to inventory and sample containers, vats and tanks.
- Continue Hazard Categorization of samples.
- Consolidate / repackage drums.
- Repack / transfer containers into D.O.T. shippable containers.
- Demolish RCRA empty totes.
- Overpack several drums.
- Continue air monitoring in the work zone and the perimeter of the Site.
- Evaluate disposal options based upon waste volumes, containers, hazard categorization results and Site logistics.

2.2.2 Issues

On June 13, 2012, a heater suspended from I-beams located in Area U partially fell. Three C-clamps which connected the unit to I-beams slipped / broke, due to corrosion and stress. ERRS dislodged the heater from the fourth connection point utilizing a pole from a safe distance. The heater fell safely onto empty vats. The OSC and RM reviewed other overhead hazards present in the building and stressed safe work procedures to members of the crew. Additional piping that may have presented an overhead threat was cut and removed safely.

2.3 Logistics Section

NA

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	$500,000.00	$98,150.00	$401,850.00	80.37%
START	$50,000.00	$29,000.00	$21,000.00	42.00%
Intramural Costs				
Total Site Costs	$550,000.00	$127,150.00	$422,850.00	76.88%

* 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 was approved and signed by all site personnel. Safety meetings are held daily.

2.5.2 Liaison Officer

NA

2.5.3 Information Officer

NA

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:

OrganizationPosition	# Personnel

EPA	OSC	1
ERRS	Response Manager	1
	Foreman	1
	Field Chemist	1
	Laborer	4
	Field Cost Accountant	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
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.