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

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**Region V**

**Subject:** **POLREP #11**
**Progress**
**Baycote Metal Finishing Site**
**C5B2**
**Mishawaka, IN**
**Latitude: 41.6497046 Longitude: -86.1648540**

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**From:** Paul Atkociunas, OSC
**Date:** 8/17/2012
**Reporting Period:** 8/13/12 through 8/17/12

## 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 August 13, 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.

- Cleanup in Area A continues. Cyanide sludge in Vat A16 was removed and containerized for off-site disposal. Vat A16 was removed from containment, the liner removed, the vat was scraped, and power washed for removal. Contaminated debris and structures were removed from secondary containments in Area A and placed into the appropriate roll-off. Sludge located in the containment for Vats A15 and A16 was sampled and sent to a laboratory for analysis. Approximately 4 feet of sludge exists in the containment area.

- The water accumulated in Area C was sampled and sent for laboratory analysis. Disposal options for the water will be considered pending analytical results. Based upon area / depth measurements, the floor is estimated to contain approximately 11,000 gallons of water.

- Cleanup in Areas H and B continues. The floor adjacent to / beneath the plating line in Area H was scraped, cleaned and power washed. Solids/sludge was removed from Vat H22 and containerized appropriately. The vat was scraped and power washed. Process equipment and structures from Areas H and B were removed, cleaned and deposited in the appropriate disposal roll-off. Wash waters were collected for off-site disposal. EPA, ERRS, and START conducted a walk-through of Area H; although residual debris remained in Area H, focus will be placed in other areas of the Site that contain bulk liquids and concentrated wastes. Vat H22 will be rendered unusable and left in place.

- Containers collected from Area G were sampled and HazCatted.

- Acid liquids were transferred to D.O.T. approved totes in preparation for shipment. 1 load of Acid waste was shipped off-site; see Table below for details.

- The 4,900 gallon poly tank was filled with approximately 1,800 gallons of Base Liquids; a waste shipment is scheduled for Tuesday, August 21.

- One roll-off of Nonhazardous debris was removed from Site; see Table below for details.

- Cubic yard boxes of Hazardous waste solids were sealed, labeled, and prepared for off-site shipment, scheduled for August 20.

- One load of scrap steel was sent for recycling.

- EPA, ERRS and START assessed options for accessing, removing wastes in Area W.

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

- EPA and its contractors is implementing Green Practices onsite (double sided printing, dedicated water bottles, dedicated steel toed Chem boots, city electrical power, CFL bulbs, 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 17, 2012

16 55-gallon drums of Haz basic vat bottom sludge

5 330-gallon totes of Haz cyanide containing liquid

29 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

20 cubic-yard boxes of Haz solids

3 330-gallon totes of Haz acid liquid

19 55-gallon drums of Haz neutral liquid

11 RCRA-empty vats (various sizes)

64 330-gallon tote metal frames (poly portion has been cut apart and placed in roll-offs)

10 330 gallon tote haz base liquid

10 330 gallon tote haz neutral liquid

49 55-gallon drums of Haz neutral solids

1 4,900 gallon poly tank (1,800 gallons of base liquid)

| ***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 | 007 | | 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 |
| Haz Waste Debris | 8/09/12 | 25 yards | 004354466FLE | | Envirosafe Services of Ohio, Oregon, Ohio |
| Waste Corrosive Liquid (UN 3266) | 8/10/12 | 4638 gallons | 010411219 JJK | | Dynecol Inc., Detroit, MI |
| Acid Liquid (Nitric, Chromium, Cadmium, UN 3264) | 8/10/12 | 1320 gallons | 010411079 JJK | | Dynecol Inc., Detroit, MI |
| Waste Acid Liquid (Hydrochloric, Sulfuric, Chromium, UN 3264) | 8/10/12 | 1920 gallons | 010411079 JJK | | Dynecol Inc., Detroit, |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | MI |
| Solid Waste Debris | 8/15/12 | 30 yards | 008 | | WM landfill, Wyatt, IN |
| Waste Chromic Acid (UN 1755) | 8/17/2012 | 3420 gallons | 010411337 JJK | | Dynecol Inc., Detroit, MI |
| Waste Acid Liquid (Nitric, UN3264) | 8/17/2012 | 790 gallons | 010411337 JJK | | 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 Areas A, G.
2. Access Area L for cleanup activities.
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 October 2012.

**2.2.1.2 Next Steps**

During the week of August 20, 2012, the following activities are anticipated:

- Transport and Dispose of two loads of waste: 1) Hazardous Debris; 2) Base liquids
- Continue cleanup work in Area A, specifically removal of waste in the remaining vat and material / debris in the secondary containment areas.
- Continue to clean Area B and access Area L for clean-up activities.
- Consolidate Base liquids into the 4,900 gallon poly tank in preparation for shipment.
- Consolidate / repackage waste into containers as needed into D.O.T. shippable containers.
- Demolish RCRA empty containers.
- Conduct hazcat testing to characterize 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 concerns 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 issue is addressed through engineering controls, PPE, and good work practices. An ERRS Chemist is performing compatibility testing on all materials to ensure proper management.

**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 | $501,294.00 | $498,706.00 | 49.87% |
| START | $117,500.00 | $75,200.00 | $42,300.00 | 36.00% |
| **Intramural Costs** | | | | |
| | | | | |
| **Total Site Costs** | $1,117,500.00 | $576,494.00 | $541,006.00 | 48.41% |

* 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.