U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
ALRECO Metals - Removal Polrep
Initial Removal Polrep

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

**Subject:** **POLREP #1**
**Initial**
**ALRECO Metals**
**C52N**
**Benton Harbor, MI**
**Latitude: 42.1389684 Longitude: -86.4362357**

**To:**
**From:** Elizabeth Nightingale, OSC
**Date:** 11/17/2014
**Reporting Period:** 11/10/14-11/14/14

## 1. Introduction

### 1.1 Background

| | | | |
|---|---|---|---|
| **Site Number:** | C52N | **Contract Number:** | |
| **D.O. Number:** | | **Action Memo Date:** | 8/8/2014 |
| **Response Authority:** | CERCLA | **Response Type:** | Time-Critical |
| **Response Lead:** | EPA | **Incident Category:** | Removal Action |
| **NPL Status:** | Non NPL | **Operable Unit:** | |
| **Mobilization Date:** | 11/10/2014 | **Start Date:** | 11/10/2014 |
| **Demob Date:** | | **Completion Date:** | |
| **CERCLIS ID:** | MIN000504648 | **RCRIS ID:** | |
| **ERNS No.:** | | **State Notification:** | Yes |
| **FPN#:** | | **Reimbursable Account #:** | |

#### 1.1.1 Incident Category
Time Critical Removal Action

#### 1.1.2 Site Description

The Site is a former aluminum smelting facility located in a commercial/industrial area in Benton Harbor, Michigan. The Site is approximately 28 acres in size. The majority of the onsite buildings were demolished, exposing aluminum smelting waste piles and other hazards to the elements. Much of the Site is covered in aluminum dross/smelting waste, baghouse dust, debris, insulation, drums, and containers, most with unknown contents. In April of 2014 the Michigan Department of Environmental Quality (MDEQ) referred the Site to the EPA for consideration for a time critical removal action.

#### 1.1.2.1 Location

The Site is located at 900 Alreco Drive, Benton Harbor, Berrien County, Michigan. The location coordinates are 42.1389806° north latitude and 86.4362275° west longitude. The Site is bordered by railroad tracks to the northwest with natural land beyond, natural land to the northeast, railroad tracks to the southwest with commercial/industrial properties beyond, and the Paw Paw River to the southeast with natural land beyond. Residential properties are located approximately 1,100 feet west-southwest of the Site. Lake Michigan is located approximately 1 mile west of the Site. Access to the Site is unrestricted. The property is not fully fenced.

#### 1.1.2.2 Description of Threat

Approximately 300,000 cubic yards of aluminum dross is present onsite, in outdoor piles that are exposed to the elements. Aluminum dross is sometimes considered a characteristically reactive waste per 40 CFR 261.23. The U.S. Department of Transportation (DOT) and Occupational Safety and Health Administration (OSHA), have categorized aluminum dross as a class 4.3 hazardous material, "Hazardous When Wet." Some of the reactive waste on the surface of the piles may have already reacted with exposure to precipitation, and may be less reactive now, however subsurface waste may still be in a reactive state, and may present a threat of fire.

Other known threats include releases from piles of baghouse dust that contains various hazardous substances including dioxins, releases from containers labeled as bleach and sulfuric acid, and releases from containers and waste piles with unknown contents, Roughly 63 containers were observed onsite. The

contents of the majority of the containers on the Site is unknown, as most were unlabeled and have not been characterized. These materials are not organized, secured, or maintained in a manner necessary to prevent exposure and/or release. The wastes could be easily spread throughout the community and into the Paw Paw River by wind, rain, trespassers and container failure.

The Site is located in a mixed industrial and residential neighborhood. Trespassing occurs at the Site on a regular basis. During the assessment EPA observed people walking onto the property and through the Site, and collecting scrap metal. People are and will continue to be directly exposed to the contamination at the Site if it is not addressed.

#### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

EPA conducted an assessment of the Site on April 24, 2014. EPA observed dross piles (estimated to be roughly 300,000 cubic yards) with material blowing around and running off site, labeled and unlabeled drums, demolition waste (suspected ACM), stained soils and a small furnace/smelter that contained extensive residue. EPA observed several remaining buildings in various states of demolition. A number of building foundations remained. One had filled with water and was retaining water, located along the southern end of the main demolished building.

Assessment activities included site reconnaissance, air monitoring, container and waste inventory, radiation screening, Innov-X model Alpha-4000 x-ray fluorescence (XRF) screening of surface soils and waste piles, and collection of samples.

Sixty-three containers of concern were identified during the site assessment. Containers included unopened drums of sulfuric acid and bleach, containers of waste oil, containers with unknown contents and ripped bags of baghouse dust.

The analytical results were compared to the list of CERCLA hazardous substances at 40 CFR Part 302. Listed hazardous substances (particularly semivolatile organic compounds (SVOC) and polychlorinated biphenols (PCB)) were detected in all baghouse dust and waste pile samples.

## 2. Current Activities

### 2.1 Operations Section

#### 2.1.1 Narrative

#### 2.1.2 Response Actions to Date

Over the week beginning the November 10, 2014 work focused primarily on the following activities:

- Project planning, setup, orientation and coordination
- Drafting and finalizing the site health and safety plan
- Drafting the site air monitoring plan, implementing air monitoring and setting up VIPER to report out results over the internet
- Implementing site security measures including fencing and signage
- Drafting, finalizing and distributing the site emergency contingency plan to the City, the local fire and police departments, and the hospital
- Establishing the exclusion and contamination reduction zones
- Establishing a staging area for containers
- Initiating collection of containers and staging them in staging area
- Initiating consolidation of dross/smelting waste from across the site
- Initiating sorting non-conforming debris from large dross/smelting waste piles and shape piles;
- Collecting waste characterization samples from section 1 (northern section) of the large pile

**Air Monitoring:**

Every day that cleanup activity work will be ongoing, air monitoring will be conducted to ensure public and worker safety. Chemical hazards due to fugitive emissions from removal activities are anticipated to be low since the ERRS contractor will employ administrative and engineering controls to minimize fugitive emissions and particulates that migrate off-site.

Meteorological data will be obtained daily from the NWS website that provides current weather conditions and documented in the site logbook.

**Particulate Air Monitoring:**

*Perimeter:*

Datarams (DR4) are deployed daily at four fixed locations in each direction along the site perimeter boundaries where off-site receptors are most at risk to exposure from fugitive emissions (figure forthcoming soon). Real-time PM-10 particulate data is transmitted back to the site command post where it is monitored continuously.

A website has been established to view the current and past perimeter air monitoring data for the site. To view the data go to the web address: viper.ert.org. You have to create a login on your first visit to the site. Once logged in, go to the R05 ALRECO Metals Deployment to view site data.

The perimeter action level for PM-10 particulates has been set at 150 micrograms per cubic meter (µg/m3). Should a DR4 unit detect sustained particulate concentrations greater than 150 µg/m3, the source of emissions will be investigated, and administrative and/or engineering controls will be initiated to reduce the particulate emissions.

One personal data ram (PDR) particulate air monitor will be deployed in the work zone during the removal action. The particulate monitor will data-log instantaneous and time weighted average (TWA) particulate concentrations during active operations. Data logs will be downloaded and stored.

The particulate action level within the work zone has been established as 2.0 mg/m3 for the respirable fraction of total particulates. This is a Site specific action level based on a calculation of airborne dust concentration. The crew will implement appropriate engineering control measures if an exceedance of the established action level is sustained for more than 60 seconds. Action level exceedances will be managed by setting the monitor to alarm at the established action level to notify on-site personnel.

During the week of November 10, 2014, no exceedances of the perimeter or work zone particulate action levels were recorded.

**MultiGas Air Monitoring:**

RAE Systems, Inc. AreaRAE multi-gas monitors are being deployed at the container staging area and at 3 perimeter locations (figure forthcoming soon). The AreaRAE multi-gas monitors will be used to monitor ammonia in parts per million (ppm), hydrogen sulfide (ppm), VOCs (ppm), and percent lower explosive limit (LEL). Real-time multigas data are transmitted back to the site command post where they are monitored continuously. These data are also available real time through the VIPER system described above.

The perimeter action levels are as follows: ·
Ammonia = 10 ppm
Hydrogen Sulfide = 10 ppm
PM10 particulates = 150 micrograms per cubic meter (µg/m3)
LEL = >5%
VOCs > 5 ppm

Work zone air monitoring results are being compared with the National Institute for Occupational Safety and Health (NIOSH) 10-hour recommended exposure limit (REL) or the OSHA 8-hour time-weighted average (TWA) PEL, whichever is more restrictive.

A MultiRAE Plus 5-gas monitor (loaded with sensors for detection of oxygen, carbon monoxide, hydrogen sulfide, LEL, and VOCs) will also be used to periodically spot check AreaRAE data.

During the week of November 10, 2014, no exceedances of the perimeter or work zone multigas action levels were recorded.

**2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)**
General notice letters were issued to current and former owners of the property. Investigation is ongoing.

**2.1.4 Progress Metrics**

| *Waste Stream* | *Medium* | *Quantity* | *Manifest #* | *Treatment* | *Disposal* |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |

**2.2 Planning Section**

**2.2.1 Anticipated Activities**

**2.2.1.1 Planned Response Activities**
Planned removal activities on-site include:
a) Developing and implementing a site-specific Health and Safety Plan, including an Air Monitoring Plan, and a site Emergency Contingency Plan;

b) Developing and implementing a Site Work Plan that includes a Site Security Plan;

c) Securing, characterizing, and sampling known and suspected hazardous substances, including containers of liquid, baghouse dust, aluminum dross/ash waste piles, at the site;

d) Consolidating and packaging hazardous substances, pollutants and contaminants, including containers of liquid, baghouse dust, aluminum dross/ash waste piles for transportation and off-site disposal;

e) Decontaminating contaminated structures (primarily foundations) as necessary;

f) Transporting and disposing of all characterized or identified hazardous substances, pollutants, wastes, or contaminants that pose a substantial threat of release at a Resource Conservation and Recovery Act/CERCLA-approved disposal facility in accordance with EPA's Off-site Rule (40 C.F.R. § 300.440), as applicable; and

g) Taking 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

Next week, planned work will continue to gather and stage containers within the staging area; consolidate dross from across the site; sort non-conforming debris from large dross piles and shape piles; sample waste; and repackage baghouse dust into intact bags.

#### 2.2.2 Issues

### 2.3 Logistics Section

ERRS is managing site logistics.

### 2.4 Finance Section

No information available at this time.

### 2.5 Other Command Staff

#### 2.5.1 Safety Officer

OSC is serving in this role.

#### 2.5.2 Liaison Officer

OSC is serving in this role.

#### 2.5.3 Information Officer

OSC is serving in this role.

## 3. Participating Entities

### 3.1 Unified Command

n/a

### 3.2 Cooperating Agencies

MDEQ

## 4. Personnel On Site

11/10/14:
EPA: 0
START: 0
ERRS: 4

11/11/14:
EPA: 1
START: 1
ERRS: 4

11/12/14:
EPA: 3
START: 1
ERRS: 5

11/13/14:
EPA: 2
START: 1
ERRS: 5

11/14/14:
EPA: 1
START: 1
ERRS: 5

## 5. Definition of Terms

| | |
|---|---|
| ATSDR | Agency for Toxic Substances and Disease Registry |
| BZ | Breathing Zone |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CERCLIS | Comprehensive Environmental Response, Compensation, and Liability Information System |
| DNR | Department of Natural Resources |
| EPA | Environmental Protection Agency |
| ERNS | Emergency Response Notification System |
| ERRS | Emergency and Rapid Response Service |
| MDEQ | Michigan Department of Environmental Quality |
| NCP | National Oil and Hazardous Substance Pollution Contingency Plan |
| NOAA | National Oceanic and Atmospheric Administration |
| NPL | National Priorities List |

| | |
|---|---|
| NRC | National Response Center |
| OSC | On Scene Coordinator |
| PPE | Personal Protective Equipment |
| PPM | Parts per million |
| RCRIS | Resource Conservation and Recovery Act Information System |
| RP | Responsible Party |
| RRT | Regional Response Team |
| START | Superfund Technical Assessment and Response Team |
| ug/m3 | micrograms per cubic meter |
| US FWS | United States Fish and Wildlife Service |
| USCG | United States Coast Guard |
| VOC | Volatile Organic Compound |

**6. Additional sources of information**

**6.1 Internet location of additional information/report**

www.epaosc.net/alreco

and

viper.ert.org. Once logged in, go to the R05 ALRECO deployment to view site data.

**6.2 Reporting Schedule**

POLREPs will be issued weekly over the course of the removal action.

**7. Situational Reference Materials**

No information available at this time.