# U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT RAMCO - Removal Polrep



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region X

Subject: POLREP #11

Periodic RAMCO 10HF

Dallesport, WA

Latitude: 45.6253834 Longitude: -121.1312199

To:

From: Jeffry Rodin, OSC

Date: 8/30/2010

Reporting Period: August 30-September 1, 2010

#### 1. Introduction

#### 1.1 Background

 Site Number:
 10HF
 Contract Number:
 ER-R7-07-02

 D.O. Number:
 0029
 Action Memo Date:
 5/13/2010

 Response Authority:
 CERCLA
 Response Type:
 Time-Critical

 Response Lead:
 EPA
 Incident Category:
 Removal Action

NPL Status: Non NPL Operable Unit:

Mobilization Date: 7/26/2010 Start Date: 7/26/2010

Demob Date: Completion Date:

CERCLIS ID: WAN001002793 RCRIS ID:

ERNS No.: State Notification:

FPN#: Reimbursable Account #:

# 1.1.1 Incident Category

**CERCLA Time Critical Removal Action** 

## 1.1.2 Site Description

RAMCO occupied a building located within the Dallesport Industrial Park, where it extracted aluminum from dross it received from primary aluminum smelters. Dross is a by-product from the primary smelting process, and the major constituents of dross are aluminum, aluminum oxides, mixtures of nitrides, mixtures of chlorides, and traces of other impurities.

## 1.1.2.1 Location

The disposal site is located in the Dallesport Industrial Park, which is owned and operated by the Port of Klickitat. The industrial park is a mixed light and heavy industrial facility, and is approximately two miles east of the small community of Dallesport, Washington. The 2007 population of Dallesport is 1,239.

# 1.1.2.2 Description of Threat

The contaminants of concern (cyanide, polycyclic aromatic hydrocarbons [PAHs], ammonia, and metals including aluminum, cobalt, copper, iron, manganese, and vanadium) are potential hazardous substances or pollutants or contaminants as defined by sections 101(14) and 101(33) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. section 9601(14) and (33).

# 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The waste in the landfill contains up to 28 percent aluminum, up to 8 percent sodium, up to 2.8 percent magnesium, up to 2.1 percent calcium, up to 1.5 percent potassium, plus lesser amounts of chromium, manganese, iron, copper, nickel, and zinc.

The waste material placed in the landfill produced ammonia gas when wet. The odor of ammonia has been detected in the past during direct push soil sampling, groundwater monitoring, and after rainfall events.

Nitrates, sodium, chloride, and total dissolved solids in groundwater have been measured at levels exceeding primary or secondary water quality standards. Because major salt-forming chemical elements (sodium, calcium, potassium) measured during groundwater sampling exceeded levels of these elements found in seawater, there is a strong indication that salts from the landfill are leaching into groundwater.

Leaching tests performed to determine whether the waste is a Dangerous Waste indicate that metals also could leach from the aluminum waste. However, groundwater monitoring thus far has not shown elevated levels of metals attributable to leaching from the landfill.

#### 2. Current Activities

#### 2.1 Operations Section

#### 2.1.1 Narrative

8/30/10 Monday

- ERRS loaded out 21 loads for a total of 685.53 tons of non-regulated aluminum salt cake material transported to the Wasco County Landfill.
- ERRS and the sub-contractor moved the crusher out of the removal area and staged it just outside
  the entrance. The crusher was moved so the area under it could be excavated and the material
  pushed up into the pre-screening stockpile.
- ERRS screened material throughout most of the afternoon.
- ERRS excavated more dross material from the bottom of the pit and at the same time excavated to visually clean soil around the pit on the east side.
- START monitored ambient air near the base of the screening plant discharge stockpile, downwind
  from the pre-screening pile and excavation area just to the east of the pile.

8/31/10 Tuesday

- ERRS loaded out 32 loads for a total of 1062.15 tons of non-regulated aluminum salt cake material
  that was transported to the Wasco County Landfill.
- ERRS ran the screening plant all day.
- ERRS continued to sort through the rock stockpile being produced by the screening for K088 materials and metals,(steel and aluminum dross).
- START monitored ambient air for particulates and ammonia near the screened discharge stockpile
  and downwind of the rock separation operations. The ammonia content inside the boxes of two
  loaded trucks were taken to confirm that the trucks were not leaving the site with elevated ammonia
  > 25 ppm.

9/1/10 Wednesday

- ERRS loaded out 26 truck loads for a total of 851.44 tons of non-regulated aluminum salt cake
  material that was transported to the Wasco County Landfill. The cumulative tonnage to date removed
  from this site is 15172.41 tons.
- On the east end of the pit, ERRS excavated down to the bottom of the pit and found river rock that
  was level under the dross. The dross material was pushed up into the pre-screening area to be
  screened
- ERRS excavated material, moving from the east end of the pit towards the screening plant, cleaning
  the walls of the pit as they moved back towards the screening plant.
- ERRS worked from the dross material while visually cleaning the wall and bottom of the pit.
- USCG and START continued to monitor ambient air for particulates and ammonia. The newly
  excavated material in the pit area did have elevated ammonia, but not >25 ppm. There were elevated
  levels of ammonia peaking at 38 ppm at the base of the screening discharge pile from material
  freshly screened in the morning. Ammonia levels dropped down as the material gets aerated during
  the screening process.

# 2.2 Planning Section

# 2.3 Logistics Section

Logistic arrangements are being managed and arranged by EPA contractors.

## 2.4 Finance Section

No information available at this time.

# 2.5 Other Command Staff

# 2.5.1 Safety Officer

**BACKGROUND INFORMATION:** 

The following are part of each morning's routine:

- A safety briefing takes place each morning with EPA/ERRS/START and everyone signs the daily safety sheet.
  - Topics reviewed are weather, air monitoring information related to ammonia and particulates, heat stress, coordination between ground crew and equipment operators, PPE for dust and ammonia.
  - Emergency notification and procedures are reviewed on Monday of each week and/or when new personnel arrive on-site.
  - All personnel are wearing reflective vests, hard hats, steel toe boots, and have radio communication
    when down in the removal area. The ground crew members have access to sealing goggles and dust
    masks. Hearing protection is also required and provided for personnel working near the screening

- plant or crusher.
- Truck drivers coming on-site to load out for the Wasco County Landfill, stay in their trucks during the loading operation if there are elevated ammonia >25 ppm. No material will be loaded if the ammonia level is >50 ppm
- USCG and START do continuous monitoring each day for ammonia and particulates as dictated by weather conditions and ERRS operations on-site.
- A USCG provided weather monitoring station with remote monitoring is placed in service each
  morning. It was also established, as a minimum, while on the ground working on the crusher, rock
  separation pile or screening plant, all personnel will wear a dust mask to minimize the ingestion of
  particulate in the air. Eye protection is also required. If the wind is severe, sealing goggles are
  used.
- Two AreaRaes and a ToxiRae are used by START to closely monitor around the the site for elevated ammonia for worker protection. Two DataRam 4's are used to monitor particulates.
- Ground personnel are upgraded to level C based upon monitoring data. At times ERRS crew
  members may choose to wear level C during the separation activity for their comport, even if
  the levels of ammonia were below 25 ppm.
- The action levels for level C respiratory protection is a peak of >50 ppm and/or a TWA of >25 ppm.
- The tanker spray truck is driven through the site once or twice per day for dust control. Two 1 1/2
  hand hoselines are used around the crusher and screening plant as appropriate.

# **OPERATIONAL PERIOD UPDATE:**

- Temperature for this operational period have been in the high 60's to 70's and some days of light rain. This made the for good working conditions.
- As the work activity becomes more focused on the center of the removal area, the coordination between ground crew members and heavy equipment is a high priority.
- The coodination between heavy equipment operators is a high priority as the removal area gets more congested.

#### 2.6 Liaison Officer

#### 2.7 Information Officer

#### 3. Participating Entities

No information available at this time.

## 4. Personnel On Site

EPA OSC - 1 USCG Strike Team - 1 START - 1 ERRS - 10

# 5. Definition of Terms

No information available at this time.

# 6. Additional sources of information

No information available at this time.

# 7. Situational Reference Materials

No information available at this time.