U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Ellisville Site (RV007) - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region VII

Subject: POLREP #13

Progress Report Ellisville Site (RV007) MOD980633010 Wildwood, MO

Latitude: 38.6001000 Longitude: -90.6041000

To:

From: Heath Smith, OSC

Date: 7/18/2014

Reporting Period: July 14 through July 18, 2014

1. Introduction

1.1 Background

Site Number:0708Contract Number:EP-S7-13-05D.O. Number:0029Action Memo Date:9/26/2013Response Authority:CERCLAResponse Type:Time-CriticalResponse Lead:EPAIncident Category:Removal Action

 NPL Status:
 NPL
 Operable Unit:
 00

 Mobilization Date:
 3/24/2014
 Start Date:
 3/24/2014

Demob Date: Completion Date:

CERCLIS ID: MOD980633010 **RCRIS ID:** MOD052623717

ERNS No.: State Notification:

FPN#: Reimbursable Account #:

1.1.1 Incident Category

CERCLA incident category: Dioxin (D)

1.1.2 Site Description

1.1.2.1 Location

The Site is located in the extreme northeast corner of the proposed Strecker Forest Subdivision at 173 Strecker Road, Wildwood, Missouri, as well as a portion of the Bliss-Ellisville Site, west of the Mid-America Horse Arena at 149 Strecker Road, Ellisville, Missouri, and is approximately one acre in size. Coordinates for the Site are Latitude 38.600100N, Longitude 090.604100W. The Site has also been called the "northeast area" of the proposed Strecker Forest Subdivision in prior reports.

1.1.2.2 Description of Threat

See POLREP #1 (Initial POLREP).

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

See POLREP #1 (Initial POLREP).

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Due to the presence of elevated levels of dioxin in soil at the Site, the EPA is conducting a time-critical removal action to reduce potential exposure to nearby human populations, animals and the food chain. Removal criteria is set by the site's Action Memorandum. Soils exceeding 820 parts per trillion (ppt) from 0 to12 inches below ground surface (bgs) will be removed. At depths equal to or greater than 12 inches bgs, removal of soils will continue until a residual dioxin concentration of less than three times the site-specific cleanup goal, or 2,460 ppt, is reached.

Samples collected at this Site are being submitted to a laboratory in North Carolina for dioxin analysis. Turn-around between the time a sample is received by the laboratory and the time results are made available is 72 hours.

Dioxin-contaminated waste generated at this site is being treated as F027 dioxin-bearing waste. The Universal Treatment Standard for F027 dioxin-bearing waste is 1 ppb (40 CFR § 268.48). The alternative Land Disposal Restrictions (LDR) treatment standard (40 CFR § 268.49) states that treatment to achieve constituent concentrations less than ten times the UTS is not required. Dioxin-contaminated waste generated during the removal, up to concentrations of 10 ppb 2,3,7,8-TCDD, will be transported to an off-site RCRA-permitted hazardous waste facility located in Waynoka, Oklahoma, for proper management.

Dioxin-contaminated materials with an average concentration greater than the alternative LDR treatment standard for contaminated soil will be managed by a facility capable of meeting the UTS for F027 dioxin-bearing waste.

Contaminated soil is being direct loaded into the red 25-cubic-yard roll-off boxes. Boxes are lined prior to filling and covered immediately after being loaded.

2.1.2 Response Actions to Date

July 14 through July 18, 2014

- 1) Crews continued to excavate contaminated soil from excavation area 1.
- 2) Six boxes of waste were shipped off site during this operational period. Four of the boxes of waste were shipped to a Canadian facility in Saint-Ambroise, Quebec.

Excavation area 3, cell H/I. No activity in cell H/I. Excavation complete. Cell H/I has been backfilled.

Excavation area 3, cell G. No activity in cell G. Excavation complete. Cell G has been backfilled.

Excavation area 3, cell F. No activity in cell F. Excavation complete. Cell F has been backfilled.

Excavation area 3, cell D/E. No activity in cell D/E. Excavation complete. Cell D/E has been backfilled.

Excavation area 3, cell A/B/C. No activity in cell A/B/C. Excavation complete. Cell A/B/C has been backfilled.

Excavation area 2, cell A/B. No activity in cell A/B of excavation area 2; excavation complete. Excavation area 2 has been backfilled.

Excavation area 1. Removal activities continued in excavation area 1. Awaiting analytical results to determine next steps.

Waste Box Inventory (as of July 18, 2014)

Boxes up to concentrations of 10 ppb 2,3,7,8-TCDD that have been transported to the off-site RCRA-permitted hazardous waste facility located in Waynoka, Oklahoma, for proper management: 77 Boxes awaiting shipment to Waynoka: 2

Boxes exceeding concentrations of 10 ppb 2,3,7,8-TCDD that have been transported to the off-site hazardous waste facility located in Saint-Ambroise, Quebec, for treatment and disposal: 8 Boxes awaiting shipment to Saint-Ambroise: 7

Boxes on site awaiting analytical profiling: 4

Boxes on site empty and waiting to be filled: 0

Air Monitoring - Air monitoring stations are established upwind and downwind of the work zone while crews are actively excavating. The air monitoring station consists of a photo-ionization detector (PID) as well as a particulate air monitor. The main function of the PID is to measure Volatile Organic Compounds (VOCs), although other parameters are recorded. Results of daily air monitoring are being provided at http://www.epaosc.org/ellisville in the documents section.

Transportation and Disposal. To date 1,230 tons in 85 roll-off boxes have been shipped off site.

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

Enforcement options are being evaluated.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Dioxin	Soil	1164 tons	multiple	n/a	Lone Mountain Landfill, Waynoka, Oklahoma
Dioxin	Soil	66 tons	multiple	thermal oxidation	RSI high temperature treatment facility, Saint-Ambroise, Quebec

2.2 Planning Section

2.2.1 Anticipated Activities

As analytical results are received from samples collected post excavation, a determination will be made based off the removal criteria described in the site's Action Memorandum whether to backfill a cell or continue excavating.

2.2.1.1 Planned Response Activities

All dioxin-contaminated soil exceeding removal action levels described in the site's Action Memorandum will be excavated and transported to an approved disposal facility. Excavated areas will be backfilled and restored as close as possible to pre-existing conditions.

See POLREP #1 for a description of the three established work zones (Excavation area 1, 2 and 3).

Excavations will be monitored closely. As material is removed and placed into the red roll-off boxes, depths will be checked and samples collected.

A goal of zero visible dust emissions from the work zone has been established. On-site personnel will monitor excavations and apply dust suppression controls if and when necessary. Particulate air monitors will be placed upwind and downwind of the excavation. Upwind monitors will provide information on baseline ambient conditions while downwind monitors will provide information on potential emissions from the site. The particulate air monitors are being used to record daily conditions. If any issues are identified after reviewing the data they provide, changes to operations will be made. The primary control will be observation by on-site personnel of visible dust during excavations. Air monitors will only be run while crews are actively excavating and loading in the work zone.

2.2.1.2 Next Steps

Crews will continue to work in excavation area 1.

Soil will be sampled to verify concentration prior to shipping off-site. Excavated areas will be sampled to verify concentration, and determinations will be made based off the removal action criteria described in the Site Action Memorandum whether to excavate further or backfill the excavation.

2.2.2 Issues

No issues to report during this operational period.

2.3 Logistics Section

The existing road back to the work zone was improved with a 3-to-5 inch gabion stone overlaying a black geotextile fabric. The rock and fabric are used to allow the large equipment access to the back of the property. Due to the way the work zone is situated, including site drainage, it was determined that improving the existing road was the best option. In addition to on-site considerations, the impact on local residents was also considered. The path chosen allows for the least direct impact on local residential properties.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

No safety issues were reported to the EPA by site staff.

2.5.2 Liaison Officer

A liaison officer was not required during this operational period.

2.5.3 Information Officer

The information officer for this project is:

Benjamin M. Washburn Public Affairs Specialist EPA Region 7 (913) 551-7364

3. Participating Entities

3.1 Unified Command

The limited span of control of this removal action does not warrant a full Incident Management Team (IMT) or Unified Command. Operations, safety, logistics, planning and finance functions will be handled by on-site project managers.

3.2 Cooperating Agencies

Coordinating agencies include: ATSDR, MDHSS, MDNR, USEPA Region 7, USEPA Headquarters and the City

4. Personnel On Site

During this operational period the on-site crew was composed of the following:

EPA: One On-Scene Coordinator START: One START Project Manager

ERRS: One Response Manager, One Operator and Two Laborers

5. Definition of Terms

ATSDR Agency for Toxic Substances and Disease Registry

bgs below ground surface

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

EPA Environmental Protection Agency

ERRS Emergency & Rapid Response Services Contract

LDR Land Disposal Restrictions

MDHSS Missouri Department of Health and Senior Services

MDNR Missouri Department of Natural Resources

mg/L milligrams per Liter
mg/kg milligrams per kilogram
NCP National Contingency Plan
NRC National Response Center
ng/m³ nanograms per cubic meter
NPL National Priorities List
OSC On-Scene Coordinator

OSHA Occupational Safety and Health Administration

OU Operable Unit

PID Photo-Ionization Detector

Polrep Pollution Report

PPE Personal Protective Equipment

PPM Part Per Million
PPT Part Per Trillion

PRP Potentially Responsible Party

RCRA Resource Conservation and Recovery Act

RPM Remedial Project Manager
RSE Removal Site Evaluation

Sitrep Situation Report

START Superfund Technical Assessment and Response Team

UTS Universal Treatment Standards
VOC Volatile Organic Compound

yd³ Cubic Yard

6. Additional sources of information

6.1 Internet location of additional information/report

http://www.epaosc.org/ellisville

http://www.epa.gov/Region7/cleanup/strecker_forest/index.htm

6.2 Reporting Schedule

The Pollution Report (Polrep) serves as the OSC's record of the response actions, notifications and decisions made to support the response action. Polreps will be completed and posted as conditions warrant and at the conclusion of site activities.

7. Situational Reference Materials

Please refer to the website http://www.epaosc.org/ellisville for all supporting documentation.