

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region VII

**Subject:** POLREP #9  
Progress Report  
Ellisville Site (RV007)  
MOD980633010  
Wildwood, MO  
Latitude: 38.6001000 Longitude: -90.6041000

**To:**  
**From:** Heath Smith, OSC  
**Date:** 6/12/2014  
**Reporting Period:** 5/27/2014 through 6/12/2014

**1. Introduction**

**1.1 Background**

|                            |              |                                |                |
|----------------------------|--------------|--------------------------------|----------------|
| <b>Site Number:</b>        | 0708         | <b>Contract Number:</b>        | EP-S7-13-05    |
| <b>D.O. Number:</b>        | 0029         | <b>Action Memo Date:</b>       | 9/26/2013      |
| <b>Response Authority:</b> | CERCLA       | <b>Response Type:</b>          | Time-Critical  |
| <b>Response Lead:</b>      | EPA          | <b>Incident Category:</b>      | Removal Action |
| <b>NPL Status:</b>         | NPL          | <b>Operable Unit:</b>          | 00             |
| <b>Mobilization Date:</b>  | 3/24/2014    | <b>Start Date:</b>             | 3/24/2014      |
| <b>Demob Date:</b>         |              | <b>Completion Date:</b>        |                |
| <b>CERCLIS ID:</b>         | MOD980633010 | <b>RCRIS ID:</b>               | MOD052623717   |
| <b>ERNS No.:</b>           |              | <b>State Notification:</b>     |                |
| <b>FPN#:</b>               |              | <b>Reimbursable Account #:</b> |                |

**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 ppt in the upper 12 inches will be removed. At depths equal to or greater than 12 inches, 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 are 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

#### May 27 through June 10, 2014

- 1) During this operation period, crews focused on removal of oil stained soil from within excavation area 3 cell's A through F. To date, approximately 350 cubic yards of oil stained soil have been removed from an area approximately 67 feet long by 25 feet wide by 5-8 feet deep within excavation area 3 (cells A through F).
- 2) Additional bore hole samples were collected between excavation area 2 and excavation area 3. Analytical results received to date have been favorable with no additional soil exceeding removal action levels.
- 3) During this operational period, 18 boxes were filled with soil. The number shipped off-site was 10 boxes with 19 empty boxes received.

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

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

**Excavation area 3, cell F.** Additional removal of stained soil was conducted in cell F. Confirmation samples collected from the base and sidewalls of excavation in cell F.

**Excavation area 3, cell D/E.** Additional removal of stained soil was conducted in cell D/E. Confirmation samples collected from the base and sidewalls of excavation in cell D/E.

**Excavation area 3, cell A/B/C.** The primary focus in cell A/B/C was the area of stained soil running along the ravine that runs through cell A/B/C. Confirmation sampling of cell A/B/C is pending.

**Excavation area 2, cell A/B.** Subsurface sampling was conducted between excavation area 2 and excavation area 3 to ensure contamination did not extend into the area. Sample results were below removal action levels as established by the Site Action Memorandum.

**Excavation area 1.** No removal activities in excavation area 1 during this operational period. Subsurface sampling was conducted between excavation area 1 and excavation area 2. Results are pending.

#### **Waste Box Inventory (as of June 10, 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: 47

Boxes on-Site exceeding alternative LDR treatment standard for contaminated soil and which will be managed by a facility capable of meeting the UTS for F027 dioxin bearing waste: 12

Boxes on-Site awaiting profiling results: 13

Boxes on-Site empty and waiting to be filled: 2

**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.epaossc.org/ellisville> in the documents section.

**Transportation and Disposal.** To date 720.25 tons in 47 roll-off boxes have been shipped to the Lone Mountain Landfill, Waynoka, Oklahoma.

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

Enforcement options are being evaluated.

### 2.1.4 Progress Metrics

| <i><b>Waste Stream</b></i> | <i><b>Medium</b></i> | <i><b>Quantity</b></i> | <i><b>Manifest #</b></i> | <i><b>Treatment</b></i> | <i><b>Disposal</b></i>                    |
|----------------------------|----------------------|------------------------|--------------------------|-------------------------|-------------------------------------------|
| Dioxin                     | Soil                 | 720.25 tons            | n/a                      | n/a                     | Lone Mountain Landfill, Waynoka, Oklahoma |
|                            |                      |                        |                          |                         |                                           |

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## 2.2 Planning Section

### 2.2.1 Anticipated Activities

As analytical is 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 deeper.

#### 2.2.1.1 Planned Response Activities

All dioxin contaminated soil exceeding removal action levels described in the site 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 and 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

The next step will be to evaluate analytical data collected from excavation area 3 to determine if any additional soil requires removal. Crews will work in excavation area 1 over the next operational period. 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

Oil stained soil with elevated 2,3,7,8-TCDD TEQ dioxin was discovered in cells A-F. The area, approximately 67 feet long by 20 feet wide by 5-8 feet deep was unanticipated.

## 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 improving the existing road was the best option. In addition to on-Site considerations, impacts to local residents was also considered. The path chosen allows for the least direct impact to 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 of Wildwood.

## 4. Personnel On Site

During this operational period 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/m <sup>3</sup> | 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                                             |
| yd <sup>3</sup>   | 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](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.