

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region VII

**Subject:** POLREP #3  
Progress Report  
Ellisville Site (RV007)  
0708  
Wildwood, MO  
Latitude: 38.6001000 Longitude: -90.6041000

**To:** David Williams, Planning & Preparedness North Section

**From:** Heath Smith, OSC

**Date:** 4/17/2014

**Reporting Period:** 4/11/2014 - 4/17/2014

**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 3 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 C.F.R. § 268.48). The alternative Land Disposal Restrictions (LDR) treatment standard (40 C.F.R. § 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

April 11 through 17, 2014

**Excavation area 3, cell H-I.** Excavation completed April 8, 2014, to a depth of 12 inches bgs. Results of composite sampling of the cell floor, post-excavation, was 1.4 ppt. Post-excavation results of cell side-walls was 5 ppt. Three 25 cubic yard boxes were filled with material from H & I or approximately 75 cubic yards removed. The material removed is estimated to be less than 1,000 ppt dioxin.

Excavation of cell's H & I is complete at this time.

**Excavation area 3, cell G.** The first lift of this cell was completed April 10, 2014, to a depth of 24 inches bgs. The initial lift in cell G was set by borehole sample results from previous sampling events where concentrations up to 26,684 ppt were reported within the top 24 inches of soil.

Results of composite sampling of the cell floor, post-excavation, was 7.6 ppt. Post-excavation results of cell sidewalls was 4,966 ppt, exceeding the at depth removal action criteria and requiring additional material to be excavated.

Ten 25 cubic yard boxes were filled with material from cell G or approximately 250 cubic yards removed. Disposal profile samples were collected from boxes 4, 5 and 6 (1,091 ppt average), 7, 8 and 9 (10,340 ppt average), and 10, 11, and 12 (3,596 ppt average). Results of the profile sample that box 13 was included in is pending. Because the composite sample from boxes 7, 8 and 9 exceeded 10,000 ppt samples representing each individual container were submitted to further define the concentrations within each box.

The only remaining area in cell G is re-excavation of a sidewall and will commence once we receive analytical guiding us to the contaminated area. Transportation and disposal of boxes 7, 8 and 9 are pending results of samples submitted for each individual box versus a composite of the three.

**Excavation area 3, cell F.** Excavation in cell F is ongoing. As of the writing of this POLREP, 200 cubic yards of material (8 boxes) have been filled and are awaiting results of profiling and disposal.

**Air Monitoring** - Air monitoring stations are established up-wind and down-wind 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.epaosoc.org/ellisville> in the documents section.

**Transportation and Disposal.** To date seven 25 cubic yard 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

As of Thursday April 17, 2014, 525 cubic yards of waste has been generated at the site. Transportation and disposal of that waste is ongoing as profile samples are received.

| <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                 | 175 yd3                | n/a                      | n/a                     | Lone Mountain Landfill, Waynoka, Oklahoma |
|                            |                      |                        |                          |                         |                                           |
|                            |                      |                        |                          |                         |                                           |

## 2.2 Planning Section

### 2.2.1 Anticipated Activities

Crews will continue to work on cell F in excavation area 3. Once the initial lift has been completed and samples collected, crews will proceed into cell E of excavation area 3.

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.

There are three defined areas that will require removal of elevated levels of dioxin contaminated soil in the work zone. The work zone is simply the zone in the extreme northeast corner of the proposed Strecker Forest development including a portion of the former Bliss-Ellisville Site adjacent to the Mid-America Arena (Site) in which contaminated soil will be removed. Although activity will occur along the staging areas, office and access road visible from Strecker Road, these areas are not considered the work zone, but rather the support zone.

The areas to be excavated will be divided up into multiple excavation cells based upon recorded dioxin concentration and accessibility. There are three excavation areas with composed of 12 excavation cells.

- Excavation area #1 is located north of the fence line and south of Caulks Creek and is composed of one Excavation Cell.
- Excavation area #2 is located at the northwest corner of the Mid America Arena and is composed of two excavation cells.
- Excavation area #3 is located off of the southwest end of the Mid America Arena and is composed of nine excavation cells.

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 complete excavation area 3, and move into excavation area 2. 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 significant issues were identified 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 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

#### Estimated Costs \*

|                           | Budgeted     | Total To Date | Remaining    | % Remaining |
|---------------------------|--------------|---------------|--------------|-------------|
| <b>Extramural Costs</b>   |              |               |              |             |
| ERRS - Cleanup Contractor | \$796,424.00 | \$108,038.00  | \$688,386.00 | 86.43%      |
| TAT/START                 | \$217,077.00 | \$41,650.00   | \$175,427.00 | 80.81%      |
| Contingency               | \$202,700.00 | \$0.00        | \$202,700.00 | 100.00%     |
| <b>Intramural Costs</b>   |              |               |              |             |
|                           |              |               |              |             |

|                         |                |              |                |        |
|-------------------------|----------------|--------------|----------------|--------|
| <b>Total Site Costs</b> | \$1,216,201.00 | \$149,688.00 | \$1,066,513.00 | 87.69% |
|-------------------------|----------------|--------------|----------------|--------|

\* 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**

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                        |
| 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](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.

POLREP #3 Last Updated 4/21/2014