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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VII

Subject: **POLREP #6**
Progress Report
Ellisville Site (RV007)
MOD980633010
Wildwood, MO
Latitude: 38.6001000 Longitude: -90.6041000

To:
From: Heath Smith, OSC
Date: 5/9/2014
Reporting Period: 5/5/2014 through 5/9/2014

1. Introduction

1.1 Background

Site Number:	0708	**Contract Number:**	EP-S7-13-05
D.O. Number:	0029	**Action Memo Date:**	9/26/2013
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident 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 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 5 through May 9, 2014

1) Backfilling began in excavation area #2
2) Results were received for the burn pit area indicating dioxin levels in excess of the removal action criteria. Additional excavation will be required.
3) Additional characterization of the burn pit area occurred.
4) Results were received for excavation area #1 requiring additional excavation.

Excavation area 3, cell H/I. Clean fill was spread over cell H/I in excavation area 3 this operational period.

Excavation area 3, cell G. Sidewall sample results indicate successful removal of contamination from cell G. Clean fill was spread over cell G in excavation area 3 this operational period.

Excavation area 3, cell F. *No activity in cell F*

Excavation area 3, cell D/E. Additional characterization of the burn pit area occurred this operational period. Samples were collected within the stained soil to depths of 36 inches b.g.s. (or 60 inches below original grade). Dioxin results were received indicating the stained soil contains elevated levels of 2,3,7,8-TCDD.

Excavation area 3, cell A/B/C. The first lift of cell A/B/C in excavation area 3 was completed this operational period.

Excavation area 2, cell A/B. Backfilling of Excavation area 2 began this operational period.

Excavation area 1. Additional excavation is requried around excavation area 1. An additional lift was removed resulting in the base of excavation being 48 inches b.g.s. Sidewall samples were submitted to determine if the excavation should be expanded.

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.epaosc.org/ellisville in the documents section.

Transportation and Disposal. To date 493.28 tons in 32 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

Waste Stream	***Medium***	***Quantity***	***Manifest #***	***Treatment***	***Disposal***
Dioxin	Soil	493.28 tons	n/a	n/a	Lone Mountain Landfill, Waynoka, Oklahoma

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 complete excavation area 3, move into excavation area 2, then onto 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

A drum carcass was unearthed on April 23, 2014, along with stained soil with a pungent odor. Along with the drum carcass, a few other items consistent with a dump area were found, including hay and manure, feedsacks, cans/bottles, and other solid waste items. Dimensions of the area are approximately 40'x20'x5'. Soil collected from the dump area is currently being evaluated to determine if additional action is required. It has been reported that this area was historically used as a trash burn pit.

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 Manger, 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^3	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.