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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VII

Subject: **POLREP #1**
Initial Pollution Report
Ellisville Site (RV007)
MOD980633010
Wildwood, MO
Latitude: 38.6001000 Longitude: -90.6041000

To:
From: Heath Smith, OSC
Date: 4/2/2014
Reporting Period: 3/24/2014 - 4/2/2014

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

Due to proposed development of the Strecker Forest subdivision, the EPA conducted reassessment actions that focused on the three vacant parcels of land, totaling approximately 18.3 acres, west of the former Bliss-Ellisville Site from August 2011 through February 2012, to determine, among other things, if contaminants were present in soil and groundwater at concentrations that could present a threat to human health and the environment for the proposed land use. Information and recommendations from this reassessment were summarized in the "Site Reassessment Report for an Expanded Site Review, Proposed Strecker Forest Development Site, Wildwood, Missouri," dated June 13, 2012.

One of the findings of this reassessment was the discovery of elevated dioxin toxic equivalent (TEQ) concentrations in surface and subsurface soil samples collected in the northeastern portion of the Strecker Forest parcel (Site) on and along the western edge of the former Bliss-Ellisville Site. Dioxin TEQ concentrations as high as 26,684 parts per trillion (ppt) were detected in subsurface soils; concentrations as high as 5,822 ppt were detected in surface soils.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The June 13, 2012, Site reassessment concluded that, with regard to the Site, "immediate actions are not warranted in the short-term to mitigate exposure, while further site assessment is on-going."

On October 30, 2012, the construction of a fence around the Site was completed. A report entitled "Preliminary Removal Action Report Proposed Strecker Forest Development Site, Wildwood, Missouri," dated July 24, 2013, summarizes activities associated with this action. The fence serves, among other things, to keep the landowner and potential trespassers from unknowingly disturbing the contaminated soil as the Site was further evaluated.

On July 16, 2013, the EPA returned to conduct additional assessment. Surface and subsurface soils were sampled at the Site to evaluate concentration profiles and spatial distribution of contamination. The expanded assessment verified elevated concentrations of dioxin TEQ at the Site in surface and subsurface soils. In addition, subsurface contamination was verified around Soil Boring #20 in an area north (outside) of the existing fence line. Dioxin TEQ concentrations as high as 9,744 ppt were identified, subsurface, in an area centered approximately 5 feet north (outside) of the fenced in area and and 20 feet south of the midpoint of Caulks Creek.

The EPA conducted a toxicological evaluation to determine health-based standards for the area based on youth recreational receptors. The report, "Preliminary Remediation Goals (PRGs) for Dioxin in Surface Soil Proposed Strecker Forest Development, Wildwood, Missouri," was made final on July 25, 2013. The report established cleanup goals for surface soils at the Site at a concentration less than or equal to 820 ppt dioxin TEQ where land use controls will be established to restrict future development and prevent residential use.

Because concentrations exist at the Site that exceed the site-specific cleanup goals for the youth recreational/trespass scenario and because source areas exist which, if disturbed by future development, could cause elevated levels of dioxin-contaminated soil to migrate, the EPA is conducting this removal action.

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.

2.1.2 Response Actions to Date

The EPA mobilized to the site on March 24, 2014, and began establishing a base of operations. Operations included clearing small trees and underbrush to establish staging areas, constructing an access road down to the site as well as mobilzing necessary equipment.

By Tuesday April 1, 2014, all necessary equipment had been mobilized and crews in position to begin excavation. With significant wet weather predicted for Wednesday/Thursday, groundbreaking was postponed until the weather system pushed through.

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

A PRP investigation is ongoing.

2.1.4 Progress Metrics

As of Wednesday April 2, 2014, no waste has been generated at the site.

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*
Dioxin	Soil	0	n/a	n/a	Lone Mountain Landfill, Waynoka, Oklahoma

2.2 Planning Section

2.2.1 Anticipated Activities

Once the current weather system pushes through groundbreaking will occur at the site.

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.

Work will begin in Excavation Area #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 break ground in Excavation Area #3 and begin filling the red roll-off boxes with contaminated soil. 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 observed 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

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
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EPA	Environmental Protection Agency
ERRS	Emergency & Rapid Response Services Contract
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
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
Sitrep	Situation Report
START	Superfund Technical Assessment and Response Team
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.