U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Northwest Pipe & Casing/Hall Processing - Removal Polrep
Initial Removal Polrep

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**Region X**

**Subject:** **POLREP #1**
**Initial**
**Northwest Pipe & Casing/Hall Processing**

**Clackamas, OR**
**Latitude: 45.4149000 Longitude: -122.5200000**

**To:**
**From:** Earl Liverman, On-Scene Coordinator
**Date:** 9/12/2015
**Reporting Period:** 9/8/2015 - 9/12/2015

## 1. Introduction

### 1.1 Background

| | | | |
|---|---|---|---|
| **Site Number:** | 10G8 | **Contract Number:** | |
| **D.O. Number:** | | **Action Memo Date:** | 8/17/2015 |
| **Response Authority:** | CERCLA | **Response Type:** | Non-Time-Critical |
| **Response Lead:** | EPA | **Incident Category:** | Removal Action |
| **NPL Status:** | NPL | **Operable Unit:** | |
| **Mobilization Date:** | 9/8/2015 | **Start Date:** | 9/9/2015 |
| **Demob Date:** | 11/21/2015 | **Completion Date:** | 11/21/2015 |
| **CERCLIS ID:** | ORD980988307 | **RCRIS ID:** | |
| **ERNS No.:** | | **State Notification:** | 06/15/2015 |
| **FPN#:** | | **Reimbursable Account #:** | |

#### 1.1.1 Incident Category

The Site is the location of a former pipe-coating facility.

#### 1.1.2 Site Description

The Site covers approximately 53 acres of land and is divided into two parcels for the purposes of Site management. This division is based on historical uses of the property. Parcel A consists of 21 acres and was the historical location of the Northwest Pipe and Casing facility. Parcel B consists of 32 acres and was the historical location of the Hall Process Company and the Northwest Pipe and Casing facility.

Parcel A is subdivided into an eastern and a western lot. The western half of the property is currently owned by the Oregon Department of Transportation (ODOT) and is used for highway maintenance activities. The eastern half of the property is currently owned by Northwest Development Company (NWDC), who has built three low-lying buildings for commercial and light industrial use. Remaining portions of Parcel A are either paved or landscaped.

Parcel B is situated at 9571 Mather Road. The current property owner of Parcel B, CCDA, leases Parcel B to OIW. OIW has developed a streetcar test track, maintenance facility, and laydown yard on Parcel B. The current construction of the Sunrise Corridor highway bisects Parcel B from the northwest to the southeast crossing the existing OIW streetcar test track.

Parcel B was purchased from the Oregon Department of Environmental Quality (ODEQ), as Trustee for the benefit of EPA, by CCDA in October 2005. CCDA began leasing the property to OIW in August 2009. Under the lease agreement, OIW constructed a laydown yard on the northeast corner of Parcel B in the fall and winter of 2009. In 2010, OIW expanded its existing use of Parcel B to include a streetcar test track and maintenance building. Development of Parcel B includes the installation of water, sanitary sewer and electrical lines, service roadway, railroad ballast rock and track, cantilever pole system, and a streetcar load out area to SE Mather Road. With the exception of minor activities which go no deeper than 2 feet bgs, development activities on Parcel B are required to be reviewed and approved in advance by ODEQ and EPA under the terms of an Easement and Equitable Servitudes recorded in the Deed of Records in Clackamas County in 2005.

In 2013, ODOT began development of the Sunrise Corridor Project that crosses Parcel B from the northwest corner to the southeast corner. The roadway will be elevated (on an embankment) on top of a soil cap that

covers previously excavated portions of Parcel B.

#### 1.1.2.1 Location

The Site is located at and in the immediate vicinity of 9585 SE Mather Road, Clackamas, Oregon 97015, approximately 20 miles southeast of Portland. The Site is bounded to the north by SE Lawnfield Road and to the south by SE Mather Road. There are railroad tracks along the western boundary of the Site. Interstate 205 is located approximately one half mile west of the Site. The precise location is 45.4149 Latitude; -122.5200 Longitude.

The Site is located at and in the immediate vicinity of 9585 SE Mather Road, Clackamas, Oregon 97015, approximately 20 miles southeast of Portland. The Site is bounded to the north by and to the south by . There are railroad tracks along the western boundary of the Site. Interstate 205 is located approximately one half mile west of the Site. The precise location is 45.4149 Latitude; -122.5200 Longitude.

The Site is situated among land consisting primarily of light industrial and commercial properties. Clackamas County Development Agency (CCDA) is the owner of Parcel B at the Site, and Oregon Iron Works (OIW) is using this portion of the Site to build and test streetcars and has equipment and materials placed on top of the area proposed to be excavated. The closest residence is located 500 feet west of the Site. There is a small residential area approximately one half mile south of the Site. The City of Milwaukie is located approximately one mile north of the Site.

Groundwater in the wet season is at or near the ground surface. On-Site runoff generally drains into manmade ditches on the eastern and western boundaries of the Site, which in turn flow into Dean Creek. As part of the remedial action an on-Site wetland was constructed which drains to the ditch on the eastern boundary of the Site and then to Dean Creek.

#### 1.1.2.2 Description of Threat

The chemical substances known to be on-Site include tetrachloroethene (PCE), trichloroethene (TCE), 1,2, cis-dichlorothene, polychlorinated biphenyls (PCBs), vinyl chloride (VC), naphthalene and other polycyclic aromatic hydrocarbons (PAHs). Other hazardous substances, pollutants or contaminants may also be on-Site.

The PCE concentration trends in the northern portion of Parcel A show increases in four shallow WBZ wells from 2007 to 2014. MW-200 and MW-202 south of SE Lawnfield Road and MW-108 and MW-111 north of Lawnfield Road display PCE concentrations above the RCG of 7 micrograms per liter (µg/L). Historically, the wells north of SE Lawnfield Road have remained below or at the RCGs for Site COCs.

As long as the residual saturation of DNAPL in soil remains, the DNAPL will continue to percolate downward through the subsurface soil and into the groundwater. The relatively slow but persistent rates of dissolution will continue to feed contamination to the groundwater plume for an indeterminate but likely multi-year period, hence increasing the potential for contamination to migrate to deeper aquifers and toward downgradient drinking water supplies. The Troutdale aquifer is located at depth beneath the Site and is used as a drinking water source by nearby communities.

### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Pipe-coating businesses, run by the Northwest Pipe and Casing/Hall Processing Company (NWPC), operated on the southern part of the 53 acre Site from 1956 to 1985. During pipe-coating operations, contaminants were released at the Site into the soil and groundwater. These contaminants included volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs).

In 1993, EPA performed a time-critical removal action at the Site to restrict public access, demolish existing buildings, and to dispose of demolition debris both on- and off-Site.

A Remedial Investigation/Feasibility Study (RI/FS) process was initiated in 1996. The Remedial Investigation (RI) report was completed in 1998 and the Feasibility Study (FS) was completed in 1999. The FS report was followed by the ROD for the OU1 in 2000, and the ROD for the Groundwater OU (OU2) in 2001. The first phase of the OU1 remedy, which included soil excavation and on-Site thermal treatment followed by off-Site disposal of soil, was initiated in 2001 and completed in the summer of 2002. The second phase of the OU1 remedy, which included placement of a two-foot thick clean soil cap over Parcel B, was initiated in 2003 and completed in September 2004. The selected remedy for OU2 was implemented in 2003, and included source control, treatment of groundwater through in-situ air stripping wells, contaminant attenuation through natural processes, and institutional controls to protect against groundwater use on-Site.

In 2006, EPA conducted the first Five Year Review (FYR) of the Site, and determined that the remedy for OU1 was protective, and that progress to meet the OU2 groundwater remedial goals (RGs) was being made through an operating groundwater treatment system. During the second FYR in 2011, EPA determined that the OU1 remedy was functioning as intended; however, performance monitoring led to the determination that the groundwater circulation wells (GCW) were not functioning as intended and were not effective in removing contaminant mass or hydraulically containing impacted groundwater from monitoring. Eight GCWs were shut down in 2006 and the remaining seven were shut down in 2007.

In 2008, Parametrix implemented a Focused Field Investigation (FFI) to determine why the GACs installed as part of the groundwater OU2 remedy were not functioning as intended. This investigation located three dense non-aqueous phase liquid (DNAPL) bodies presumably composed of coal tars in the subsurface soil at depths of approximately 6 feet bgs with thicknesses of 12 to 16 feet. Based on the results of the 2008 FFI, the EPA Region 10 Remedial Program determined that the three DNAPL bodies must be removed before the groundwater remedy could prove effective. In May 2009, the EPA Region 10 Remedial Program

requested assistance from the EPA Region 10 Removal Program in removing the bulk of soil contamination identified during the FFI. In August 2009, EPA performed a second removal action to excavate and dispose of the contaminated source material found in this area.

In January 2014, an investigation was conducted by Ecology and Environment (E&E). Eight (8) boreholes were installed and collection of up to two samples per borehole were shipped off-Site for laboratory analyses of VOCs. The analytical results generally confirmed the known magnitude and extent of subsurface soil contamination near the outside boundary of the former Plant 4 building, with PCE concentrations in soil of up to 280,000 µg/kg. Visual evidence and odors indicating VOC contamination in six (6) of the boreholes was observed up to 28 feet bgs.

In November 2014, Parametrix performed a Site-wide groundwater monitoring event (Parametrix 2015). During this sampling event, 34 shallow water bearing zone (WBZ) locations, 33 intermediate WBZ locations, and 23 deep WBZ locations were sampled. The analytical results showed that the maximum on-Site concentrations of PCE in the shallow WBZ occur in the vicinity of the former Plant 4 building contaminated soil source with a concentration of 3,900 µg/L at MW-213. PCE and other COCs were also detected in the intermediate and deep WBZs, although at lower concentrations when compared to the shallow WBZ.

## 2. Current Activities

### 2.1 Operations Section

#### 2.1.1 Narrative

The action memorandum and $2 million exemption request for the Site was approved on 17 August 2015. Initial removal activities focused on the mobilization of personnel and equipment to the Site, establishment of Site infrastructure, and coordination with State and local agencies and the Site tenant.

#### 2.1.2 Response Actions to Date

Project office and equipment laydown areas were established; best management practices (BMPs) for control of erosion, fugitive dust, and storm water management, and to avoid adverse impacts on wildlife and their habitat were installed; construction of a temporary crushed rock laydown pad was started (enabling the tenant to relocate material and equipment away from project work areas); started clearing vegetation for construction of new access road; and preparation of project work areas was started such as clearing of vegetation, leveling of ground surfaces, and protection of existing monitoring well casings.

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

#### 2.1.4 Progress Metrics

| *Waste Stream* | *Medium* | *Quantity* | *Manifest #* | *Treatment* | *Disposal* |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |

### 2.2 Planning Section

#### 2.2.1 Anticipated Activities

##### 2.2.1.1 Planned Response Activities

The scope of the removal action includes the following:

*Source area excavation near the former Plant 4 building*

An estimated 10,000 tons of contaminated subsurface soil will be excavated from the outside boundary of the former Plant 4 building. The final depth, estimated to be ± 28 feet bgs, and width of excavations will be determined by visual and olfactory observations, field screening instruments, and laboratory analyses.

The excavated soil will be segregated on-Site by hazard class and disposal method, and will be shipped off-Site for disposal at approved hazardous waste and municipal waste facilities, as appropriate. The excavations will be backfilled with clean soil along with a soil modifier to enhance biotic and abiotic degradation of residual contaminants. The top two feet of fill material will be placed to achieve the OU1 (soil) ROD barrier specifications.

Groundwater cleanup will not be directly addressed by the proposed removal action; however, removing contamination from soil will directly benefit the groundwater by reducing the amount of contaminants potentially impacting the groundwater. Any collected groundwater, surface water, or leachate will be analyzed, treated on-Site and discharged to the on-Site wetland area and/or surface water ditch. Disturbed areas will be graded to facilitate surface water drainage and will be covered with the gravel cap used by OIW.

*Additional Site Investigation and Cleanup Activities*

When mobilized at the Site for the purpose of performing the proposed removal action, EPA may be in a position to investigate further the soil in the southeast and southwest corners of the Site. If so, dependent

on the availability of time and funding, the following additional investigation and cleanup activities may be performed:

a. Additional Soil Source Investigation South Area near MW-01R

This work includes additional source characterization in the south area of the Site in the vicinity of MW-1 replacement. The recent comprehensive site evaluation work conducted by Parametrix in the final report dated April 2015 concludes that there could still be source material in this area. In earlier RI documents this area is designated as Plume 3. This source is estimated to be 3.5 acres in size with the PCE in groundwater at 630 parts per billion (ppb) (the remedial goal is 7 ppb). This area has not been investigated. The investigation for delineating the DNAPL hot spot in this area should include advancing a series of borings along North, South, East and West transects the intersect concentric circles centers on well MW-01R. Four investigatory soil borings would be placed at a radial distance of approximately 20 feet from MW-01R.

If contaminated soil that is considered to be residual source material is discovered in these areas, subject to available resources, this material will be excavated and processed as described herein, provided the work can also be performed safely and without unnecessarily interfering with other non-Site-related activity such as construction of the Sunrise Corridor Project.

b. Comprehensive Groundwater Monitoring

A comprehensive sampling of existing groundwater monitoring wells is needed to evaluate the effectiveness of the prior cleanup actions and to assess options for an amendment to the groundwater OU1 ROD. The sampling strategy will likely include sampling 90 groundwater wells; approximately 30 in the shallow groundwater zone, 30 in the intermediated groundwater zone and 30 in the deep groundwater zone. Historic sampling has been limited to PCE, TCE, VC, a number of PAHs.

c. Groundwater Amendments, Closure of Groundwater MWs and GCWs, and installation of a Deep Aquifer Well

The desirability of adding amendments to certain groundwater MWs to create reducing conditions and to promote biodegradation of the contaminants of concern will be evaluated. If the evaluation determines that groundwater amendments are not beneficial and that those groundwater MWs and ancillary GCWs are no longer needed as part of the groundwater monitoring program, those wells will be permanently abandoned and properly closed, provided the work can also be performed safely and without unnecessarily interfering with other non-Site-related activity such as construction of the Sunrise Corridor Project. The need for installation of a groundwater monitoring well in the deep Troutdale Aquifer will also be evaluated.

*Site Access*

As a result of redevelopment and reuse of the Site by OIW and ODOT, as well as construction of the Sunrise Corridor, large areas of the Site that were available for the 2009/2010 removal action are now unavailable. To accommodate cleanup activities, a culvert must be installed and an unpaved roadway must be constructed between Bordeaux Lane and the Site to enable vehicle access, and an additional laydown yard must be constructed to enable the temporary relocation of OIW materials that must be moved to accommodate cleanup activities. These added features will be left in-place at the completion of the proposed removal action.

*Best-Management Practices (BMPs)*

Temporary Best Management Practices (BMPs) will be employed throughout construction for control of erosion, fugitive dust, and storm water management, and to minimize and to avoid adverse impacts on wildlife and their habitats. Dust and particulate concentrations at the Site will be monitored with particulate monitors and the results used to modify work practices, if particulate levels exceed the on-Site action level of 10 parts per million (ppm) and Site boundary action level of 3 ppm.

*Post Removal Site Controls*

The need for any additional post-removal site control activities and/or institutional controls will be determined by the EPA Region 10 Remedial Program (Program), and will be managed by the Program as provided in the Site RODs and Consent Decrees.

**2.2.1.2 Next Steps**

During the upcoming two to three weeks, removal activities will continue to focus on mobilization of equipment and material, development of site infrastructure in preparation for the excavation of contaminated subsurface soils, and development of the cleanup approach, including: design of the excavation shoring and receipt of shoring components; design of the groundwater treatment system and receipt of treatment components; and construction of the temporary laydown pad.

**2.2.2 Issues**

None.

**2.3 Logistics Section**

Personnel and equipment are arriving on-Site as planned for and scheduled.

**2.4 Finance Section**

No information available at this time.

### 2.5 Other Command Staff

#### 2.5.1 Safety Officer

A project health and safety plan is in-place. Daily safety briefings are attended by all on-Site personnel.

#### 2.5.2 Liaison Officer

When necessary, the EPA OSC functions as the liaison officer with State and local agencies and interests.

#### 2.5.3 Information Officer

When necessary, the EPA OSC functions as the Information Officer. If needed, additional support is available through the EPA Oregon Operations Office.

## 3. Participating Entities

### 3.1 Unified Command

N/A

### 3.2 Cooperating Agencies

ODEQ and EPA have worked together to address the contaminants associated with the Site. ODEQ's ongoing co-management role at the Site is carried out on behalf of the State of Oregon, one of the settling plaintiffs, along with the United States in each of four Consent Decrees associated with the Site. These settlements generally provide for the reimbursement of a portion of the costs incurred by the governments in response to conditions at the Site, and for protections against damage to the integrity of the remedial action performed at the Site.

EPA and ODEQ entered into a State Superfund Contract for the Site under which ODEQ has agreed to provide for maintenance of removal and remedial actions performed at the Site. CCDA, current owner of Parcel B at the Site, and ODEQ and EPA will continue to manage Parcel B of the Site in accordance with a prospective purchaser agreement entered into between CCDA and ODEQ, pertinent Consent Decrees, the Easement and Equitable Servitudes, and all other applicable agreements that are currently in-place for the Site. ODEQ will also continue to co-manage the Site with EPA to ensure that ODOT and NWDC continue to comply with the Consent Decrees they entered into and with institutional controls for the Site.

## 4. Personnel On Site

Personnel currently on-Site include 1 OSC, 1 START, and 7 ERRS. Additional START and ERRS personnel will be on-Site as the project transitions from mobilization to cleanup.

## 5. Definition of Terms

N/A

## 6. Additional sources of information

### 6.1 Internet location of additional information/report

### 6.2 Reporting Schedule

POLREPS will be prepared about every two weeks.

## 7. Situational Reference Materials

N/A