

United States Environmental Protection Agency
Region X
POLLUTION REPORT

Date: Friday, September 4, 2009

From: Kathy Parker, OSC

To: Debbie Bailey, ODEQ
Tara Aarnio, Oregon Iron Work
Ken IteI, Clackamas County

Subject: Initial Polrep - Test Pits
Northwest Pipe and Casing
9585 Mather Road, Clackamas, OR
Latitude: 45.4149000
Longitude: -122.5200000

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|--------------------------|-------------------------|----------------------------|----------------|
| POLREP No.: | 1 | Site #: | 10G8 |
| Reporting Period: | 08/12/2009 - 08/30/2009 | D.O. #: | |
| Start Date: | 8/12/2009 | Response Authority: | CERCLA |
| Mob Date: | 8/12/2009 | Response Type: | Time-Critical |
| Demob Date: | | NPL Status: | NPL |
| Completion Date: | | Incident Category: | Removal Action |
| CERCLIS ID #: | ORD980988307 | Contract # | |
| RCRIS ID #: | ORD980988307 | | |

Site Description

Pipe-coating businesses, run by the Hall Process Company and Northwest Pipe and Casing Company, operated on the southern part of the 53 acre property from 1956 to 1985. During the 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).

Remedial Action (RA) at the Site, which was divided into an Operable Unit (OU) for soil and an OU for groundwater, was performed between August 1, 2001 and September 8, 2004. The RA consisted of soil excavation and treatment of 32,010 tons of contaminated soil and installation of a two foot cap of clean soil on a portion of the Site, installation of a groundwater treatment system consisting of groundwater circulating wells (GCWs) and monitoring wells, and institutional controls to prohibit the use of groundwater at the Site.

In 2006, the Five Year Review (FYR) of the Site concluded that the groundwater remedy was not functioning as designed. As a follow up to the FYR, EPA Region 10 requested that the EPA Headquarters Remedial System Evaluation (RSE) contractor conduct an analysis of the remedy. The findings established that the groundwater treatment system should be shut down and additional site characterization of the main plume be completed to help determine the southern boundary of the plume. A site wide groundwater monitoring event was conducted in November 2007. During this event a non-aqueous phase liquid (NAPL) was discovered in monitoring well MW-207 located within the Plume 1 source area (Parametrix, 2007). Analysis indicated the sample contained PAHs and VOCs with some PCBs and metals; and that the composition of the dense non-aqueous phase liquid (DNAPL) fraction was similar to that of coal tar which was used at the Site (Parametrix, 2008). (See Table 1.)

Based on the RSE recommendations and the discovery of DNAPL in MW-207, in the fall of 2008, a Supplemental Focused Field Investigation (SFFI) was completed. The SFFI identified three DNAPL bodies, a main body and two smaller bodies within the Plume 1 Source Area. These DNAPL bodies are presumably composed of coal tars. See Figures 2 and 3 and Tables 2, 3 and 4.

Analytical results for soils collected within the DNAPL bodies indicate relatively high concentrations of chlorinated volatile organic compounds (CVOCs), naphthalene, and BTEX (benzene, toluene, ethylbenzene, xylene). In general, CVOCs and BTEX concentrations in subsurface soil are limited in extent both laterally and vertically within the DNAPL bodies. However, naphthalene concentrations in subsurface soil are more pervasive throughout the DNAPL bodies, with detectable concentrations up to 65 feet below ground surface (bgs).

In February 2009, the Region held a conference call with Headquarters and the RSE contractor to discuss

the findings, especially considering their previous recommendations and how the discovery of the DNAPL bodies, referred to as coal tar bodies, would affect the groundwater remedy. The RSE contractor indicated that no further effective action could be taken on the groundwater remedy until the coal tar bodies, determined to be sources of soil contamination, were removed or otherwise treated.

In May 2009, the EPA Region 10 Remedial Program requested assistance from the Removal Program in removing the major source of soil contamination remaining at the Site so that a new groundwater remedy could be implemented.

On June 18, 2009, a Removal Assessment site visit was conducted by EPA On Scene Coordinator (OSC) Kathy Parker, EPA Remedial Program Manager (RPM) Mark Ader, Oregon Department of Environmental Quality (ODEQ) Project Manager Debbie Bailey and contractors from Environmental Quality Management, Ecology and Environment and Parametrix. All participants concluded that further site work is necessary to remove remaining soil contamination before the Remedial Action groundwater remedy is expected to be effective.

The Removal Action Memo was signed on July 28, 2009.

Current Activities

This Initial Polrep covers the period from 8/12/2009 through 8/30/2009.

On 08/12/2009, OSC Kathy Parker, RPM Mark Ader, ERRS, START and Parametrix started work on site by digging test pits with an excavator to determine the boundaries for chemical contamination of the soil by source material (rather than contamination of the soil by chemicals carried in by groundwater). The excavator dug 27 test pits over three days and the exposed soil was visibly assessed for visible oil and organic solvent odor. Soil samples were collected from 17 of the test pits and sent to TestAmerica Tacoma for lab analysis by SW846 Methods 8260B, 8270C, and NWTPH- Diesel. One ground water sample was also collected and submitted to provide information for designing an on-site ground water treatment system for dewatering the excavation area. The water sample was analysed for pH, TSS, Cyanide, Flashpoint, Oil and Grease, Arsenic, Cadmium, Chromium, Copper, Lead, Nickel, Silver, Zinc, Mercury, NWTPH- Diesel and by Methods 8260B and 8270C.

Test pits were dug by first removing the 2 feet of clean soil cap and setting that in an isolated pile. The next four feet (variable) of clean overburden was dug up and set in a second pile. Lastly, contaminated soil was dug up and set on a large sheet of visqueen. Each test pit was backfilled in reverse order (including burying the visqueen with the contaminated soil) and then marked with a labelled stake. The ground surface was marked with a spray-painted green line around the edge of soil contamination and included a three foot buffer to account of the width of the shoring.

Each test pit was GPSed. The locations were plotted on an aerial photograph of the map and labelled with the test pit name and analytical results for two indicator compounds - naphthalene and PCE - and the physical description indicating whether odor or visible contamination was detected.

Planned Removal Actions

The Removal Action will be continued and the excavation crew mobilized to the site on 9/1/2009.

Next Steps

Plan shoring of excavations and contract with a shoring supplier.
Plan water treatment system for dewatering of groundwater from excavations.
Determine action levels for soil and water waste disposal.
Write Sampling plan for treated water, waste soil, excavation closure.
Contract with suppliers for gravel, heavy equipment, fuel, lab.
Discuss sharing the site with Oregon Iron Works contractors.

Key Issues

Note on costs:

ERRS costs are through 8/30/09 and do not include pending.

START costs are through 8/22/09 and do not include pending.

EPA costs - both direct and indirect - will not be summarized until the Final Removal Report is completed.