

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Inchelium Wood Treatment Plant - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region X

Subject: POLREP #3
PROGRESS
Inchelium Wood Treatment Plant
10MZ
Inchelium, WA
Latitude: 48.2944454 Longitude: -118.2065997

To: EPA HQ, EPA HQ (POLREP List)

From: Jeffrey Fowlow, On-Scene Coordinator

Date: 9/27/2014

Reporting Period: 9/22/2014 - 9/27/2014

1. Introduction

1.1 Background

Site Number:	10MZ	Contract Number:	
D.O. Number:		Action Memo Date:	8/14/2014
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	9/8/2014	Start Date:	9/8/2014
Demob Date:		Completion Date:	
CERCLIS ID:	WAD980977847	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Inactive Production Facility

1.1.2 Site Description

1.1.2.1 Location

The Site is located at 18 Blackbird Drive, Inchelium, Ferry County, Washington, 99138 on the Colville Reservation. The Site is mostly located in Section 12 (with a small portion in the Section 1) of Township 32 North, Range 36 East, Willamette Meridian (latitude 48° 17' 40" north, longitude 118° 12' 23" west).

The area surrounding the Site is a mixture of rural and residential, with several residences located to the north, south, and northwest of the Site.

For additional details, please refer to POLREP 1.

1.1.2.2 Description of Threat

Substantial environmental information exists about the Site. Environmental investigations completed at the Site in the 2000s show that soil and groundwater are contaminated with arsenic, chromium, and copper and that the source of these metals is wood treatment operations using chromated copper arsenate (CCA). CCA-contaminated sludge and wastewater are present in containers at the Site, including above-ground storage tanks (ASTs) and sumps. Spent formulations, residuals, drippage, and other wastewaters from wood preserving processes that use arsenic or chromium (i.e., CCA) are RCRA listed hazardous wastes (waste code F035).

In addition to arsenic, chromium, and copper, lead is also a contaminant of concern (COC) at the Site. Although the source of the lead contamination has not been determined, lead has been detected in Site soil at concentrations as high as over 100 times the natural background levels for Washington State and over 10 times the Site cleanup level. The lead contaminated soil known to be at the Site is mostly collocated with contamination from wood treating chemicals.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

2008 - URS Site Investigation

URS conducted a Site investigation at IWTP in July-August 2008. The field investigation concluded that soil and concrete at IWTP is contaminated with metals, including chromium, copper, arsenic, and lead, at concentrations exceeding established Site-specific cleanup levels, which were based on Washington Department of Ecology Model Toxics Control Act (MTCA) cleanup levels. The URS report estimated that

approximately 6,000 cubic yards/tons of soil are contaminated with metals.

2014 – EPA Removal Assessment

In May 2014, the EPA performed a removal assessment at the Site, which involved the collection of soil, concrete, water (surface water, wastewater, and groundwater) samples. The purpose of the sampling event was to further delineate specific areas of the Site (e.g., the UCV and portions of the Treated Wood Storage Area [TWSA]) and to determine whether Site materials were characteristic hazardous wastes.

EPA confirmed elevated levels of metals including arsenic, chromium, and copper in soil and concrete at the North and South Drip Pads and Treated Wood Storage Area and delineated the extent of metals contamination in soil in specific areas of the Treated Wood Storage Area. EPA determined that the metals-contaminated soil at the Site did not fail the TCLP analysis for metals and so is not a RCRA characteristic hazardous waste. However, some of the metals-contaminated concrete is a RCRA characteristic hazardous waste (for chromium), as determined by TCLP metals analyses. EPA also determined that the wastewater present in the Retort Chamber Sump and the UCV is a RCRA characteristic hazardous waste (for arsenic), as determined by a comparison of total metals results to TCLP limits.

For additional detail, please refer to POLREP 1.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The Scope of Work for the IWTP removal action includes:

- Removal disposal of contaminated concrete in the North Drip Pad, South Drip Pad, and Treatment Building.
- Excavation and disposal of contaminated soil in the NDP, SDP, TWSA, and the Treatment Building.
- Decontamination and disposal (by recycling) the retort, 9 ASTs, and piping in the Treatment Building and 2 ASTs in the Tank Enclosure.
- Removal and disposal of liquids and sludge found or generated in ASTs, retort, and/or the UCV.
- Removal and disposal of the UCV.

During this reporting period (9/22/2014-9/27/2014), the following removal activities occurred:

- **North Drip Pad:** The bedding sand, located immediately below the concrete slab, was analyzed by XRF and metal concentrations were above cleanup levels. The sand and underlying liner (see POLREP 2) was removed and stockpiled for disposal. Below the liner was another 4-6 inch layer of bedding sand installed to protect the liner from the underlying rocky material. This sand was tested using XRF and metals were detected below action levels. However, during removal of the liner and sampling of the underlying sand, underlying sandy, angular cobbles were exposed that are similar to the fill material used in the TWSA. These sandy, angular cobbles were analyzed by XRF in multiple locations and concentrations of metals exceeded site cleanup levels. The 2-foot thick layer of cobble material was excavated and removed. The exposed, underlying soil was analyzed by XRF and metals were detected below action levels. See the Issues section below for discussion of the cobble fill material.
- **South Drip Pad:** The concrete foundation was sawed into pieces manageable for excavation. Excavation of the South Drip Pad is scheduled to begin next week.
- **Treatment Building:** ERRS used an oxygen propylene torch to begin cutting the retort and ASTs, During this reporting period, approximately 50% of the retort has been cut down to recycleable size. ERRS also removed a large steel condenser and two pressure vessels that were mounted on or attached to the retort. These vessels also will be cut and scrapped.
- **Treated Wood Storage Area:** Approximately 1,800 cubic yards of soil was excavated and stockpiled in the western and central TWSA. Please see the Issues section for further discussion of contaminant distribution in the TWSA.
- **Underground Containment Vault:** The UCV is a 40' x 40' x 12' concrete vault (approximate volume: 120,000 gallons) used to store wastewater from the wood treatment process. Currently, approximately 3,000-4,000 gallons of wastewater is present in the UCV. No activity was conducted during this reporting period.
- **Tank Enclosure ASTs:** ERRS decontaminated (by pressure washing) the two 9,520-gallon ASTs located in the Tank Enclosure.

2.1.2 Response Actions to Date

An Action Memo was prepared and signed by EPA on August 14, 2014.

Five Underground Storage Tanks, located on the east side of the Maintenance and Treatment Buildings, were removed several years ago (date uncertain).

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

A Settlement Agreement between EPA and Colville Tribal Enterprise Corporation (CTEC) was signed on August 22, 2014. The settlement agreement provides funds from CTEC to EPA to conduct this removal action.

2.1.4 Progress Metrics

Below is a summary of material transported off site during this reporting period:

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

F035 Concrete debris	Concrete	128.46 tons	multiple	TBD	RCRA Subtitle C landfill, Grandview ID
Non-hazardous waste soil	Soil	629.45 tons	multiple	TBD	RCRA Subtitle D landfill, Boardman, OR
F035 Wastewater	Liquid	0			PSC facility, Kent, WA

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

Over the next operational period (9/22/2014-9/27/2014), the planned removal activities include:

- North Drip Pad: Backfill the excavation with 5/8" minus pit run and compact.
- South Drip Pad: Begin breaking up and stockpiling the concrete drip pad.
- Treatment Building: On Monday, September 29, a tank truck from PSC (Kent) will mobilize to site to remove the decontamination water/wastewater from the ASTs, retort sump, and UCV.
- Treated Wood Storage Area: Continue excavation of the contaminated soil in the TWSA. Soil will be stockpiled for loading, transportation, and off-site disposal. During excavation, START will be analyzing soil samples with the XRF to confirm removal of contaminated soil.
- Underground Containment Vault: Approximately 3,000-4,000 gallons of wastewater will be removed from the UCV on September 29. The demolition and removal of the UCV is scheduled to occur during the week of October 6.
- Tank Enclosure ASTs: On Tuesday, September 30, the Tank Enclosure ASTs will be topped for safer cutting and scrapping.

2.2.2 Issues

Background concentrations of metals in fill material used at the site may be making it difficult to determine whether the metals detected in material from the TWSA and Drip Pads are the result of contamination from wood treating operations.

START is conducting a limited study in areas not known to have ever been used to store treated wood to determine if the concentrations of metals within the fill material are similar to those in the TWSA and below the drip pads.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

2.4.1 Narrative

ERRS costs are as of 9/25/2014. START costs are as of 9/13/2015. Estimated EPA costs are as of 9/27/2014.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$1,647,234.00	\$1,472,512.00	\$174,722.00	10.61%
TAT/START	\$329,000.00	\$108,370.00	\$220,630.00	67.06%
Intramural Costs				
USEPA - Direct	\$87,000.00	\$18,000.00	\$69,000.00	79.31%
Total Site Costs				
	\$2,063,234.00	\$1,598,882.00	\$464,352.00	22.51%

* 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

No information available at this time.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

Colville Tribe Environmental Trust Department

4. Personnel On Site

Colville Tribe Environmental Trust Department - 2
US EPA - 1
ERRS - 11
START - 3

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

POLREP #3 Last Updated 9/27/2014