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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region X

Subject:	**POLREP #4** **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:	10/6/2014
Reporting Period:	9/29/2014 - 10/4/2014

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 (9/29/2014-10/4/2014), the following removal activities occurred:

- North Drip Pad: Additional excavation of contaminated soil under the stem wall (supporting wall) of the NDP is ongoing.
- South Drip Pad: Excavation of the SDP began and approximately 25% of the concrete has been removed.
- Treatment Building: The remaining half of the retort was removed from the TB and cut into recycleable pieces. All 9 ASTs from the TB were cut into recycleable pieces and set aside, with the retort, for recycling by the Colville Tribe. All vessels, piping, motors, pumps, etc. have now been removed and site aside for recycling.
- Treated Wood Storage Area: The Western TWSA has been fully excvated and cleared by XRF analysis. Approximately 60% of the Central TWSA has been excavated and cleared. Excavation in the Northern TWSA has begun, but 0% has been cleared. Excavation has not begun in the Northeastern 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. Two tankers were used to remove a total of 9,186 gallons of wastewater from the UCV, retort sump, ASTs, and other small sources. All wastewater has now been removed from the site.
- Tank Enclosure ASTs: Two 9,520-gallon ASTs located in the Tank Enclosure were toppled over and cut into recycleable pieces.
- Off-site Transportation and Disposal: During this reporting period, a total of 42 trucks were loaded with contaminated material and sent off-site for disposal. Two trucks (9,186 gallons) of wastewater (9,186 gallons to date); 7 trucks (223.91 tons) of hazardous waste concrete (352.37 tons to date); and 33 trucks (1040.07 tons) of non-hazardous waste soil (1669.52 tons to date) were sent to appropriate disposal facilities.

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	352.37 tons	multiple	TBD	RCRA Subtitle C landfill, Grandview ID

Non-hazardous waste soil	Soil	1669.52 tons	multiple	TBD	RCRA Subtitle D landfill, Boardman, OR
F035 Wastewater	Liquid	9,186	multiple	TBD	US Ecology, Grandview, ID

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

Over the next operational period (10/6/2014-10/11/2014), the planned removal activities include some or all of the following tasks:

- North Drip Pad: Remove remaining contaminated soil/rock from below the stem wall and backfill the excavation with 5/8" minus pit run and compact.
- South Drip Pad: Remove remaining 75% of concrete drip pad and excavate contaminated soil.
- Treatment Building: Use a concrete saw to cut sections of the highly contaminated TB floor. Excavate floor and contaminated soil below.
- Treated Wood Storage Areas: 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: Demolition and removal of the UCV is scheduled to occur Saturday, October 11, 2014.
- Tank Enclosure ASTs: All work has concluded in this operational unit.
- Off-site Transportation and Disposal: Load trucks for transportation and disposal of contaminated materials.

2.2.2 Issues

Background concentratons 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 conducted 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 above project cleanup levels or are similar to those in the TWSA and below the drip pads and where that material is located. The results of the survey indicated that fill material contains naturally high concentrations of metals, that exceed project cleanup concentrations, and that the material was used extensively throughout the site.

A conference call between EPA and Colville ETD to discuss this issue and resultant next steps is scheduled for Thursday, October 9.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

2.4.1 Narrative

ERRS costs are as of 10/2/2014. Estimated START costs are as of 9/27/2015. Estimated EPA costs are as of 10/4/2014.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	$1,647,234.00	$1,528,273.00	$118,961.00	7.22%
TAT/START	$329,000.00	$165,000.00	$164,000.00	49.85%
Intramural Costs				
USEPA - Direct	$87,000.00	$23,000.00	$64,000.00	73.56%
Total Site Costs	$2,063,234.00	$1,716,273.00	$346,961.00	16.82%

* 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

2.5.1 Safety Officer

OSC Andy Smith performed an on-site safety audit. OSC Smith recommended use of the REL for airborne arsenic (0.002 mg/m3) rather than the OSHA PEL (0.01 mg/m3). OSC Smith also recommended additional hearing protection for workers while using the concrete saw and hammering concrete in the SDP and TB.

An audiodosimeter was ordered from the EPA warehouse and brought to site.

2.5.2 Liaison Officer

2.5.3 Information Officer

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 - 2 (OSC Andy Smith on site for safety audit)
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 #4 Last Updated 10/13/2014