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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region X

Subject:	**POLREP #1** **INITIAL POLREP** **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:	9/11/2014
Reporting Period:	Monday, Sept. 8, 2014 to Saturday, Sept.13, 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:**	
Response Lead:	EPA	**Incident Category:**	
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 IWTP is located on two parcels and is approximately 45 acres. Most of the buildings and operational areas are located on Parcel 63212120001000, which is approximately 10 acres. Parcel 63212120002000 is located to the west of the wood treatment plant facility and is approximately 35 acres. Most of this parcel is composed of vacant fields, with some areas with sawdust and wood waste piles associated with log storage.

The IWTP is no longer operational, but most of the buildings and equipment remain. Buildings that are still present at the Site include the Treatment Building, the North and South Drip Pads (NDP and SDP, respectively), an Underground Concrete Vault (UCV), and other structures. There also is a Maintenance Building on the property; however, that building was not used during wood-treating operations. This building contains ACM and will be addressed by the EPA in a separate removal action.

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.

The area has a dry climate characterized by cold winters and hot summers. The average annual precipitation is 16.6 inches, and the average annual snowfall is 55.1 inches. Average maximum temperatures are as high as 85.9 degrees Fahrenheit (°F) in the summer (July) and average minimum temperatures are as cold as 17.4 °F in winter (January).

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

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. During the Site investigation, approximately 237 soil and 47 concrete samples were collected and submitted for laboratory analysis.

The URS report estimated that approximately 6,000 cubic yards/tons of soil are contaminated with metals.

URS submitted 48 individual concrete samples from 16 concrete cores, with samples representing different depth intervals to an average depth of approximately one-half inch below ground surface (bgs). The cores were collected from the concrete pads in the NDP, the SDP, the Retort Chamber Sump, the Treatment Building, and the Maintenance Building, and many of the cores were collected from cracks or seams in the concrete. The results indicated that high concentrations of the metal COCs were detected in nearly all of the concrete samples from all areas except the Maintenance Building. The results indicate that elevated metals are present near the surface, joints, and fractures of the concrete in the drip pads and other areas where CCA was used.

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.

To achieve these objectives, the EPA performed a field sampling event at the Site from May 5–9, 2014. The EPA advanced 22 Geoprobe boreholes throughout the Site and collected seven concrete cores from the North and South Drip Pads. The EPA used a field-portable XRF to screen soil and concrete samples in the field, and the EPA also collected 30 soil samples, 14 concrete samples, and eight water samples for metals analyses at an off-Site laboratory.

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; delineated the extent of metals contamination in soil in specific areas of the Treated Wood Storage Area; 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. determined that some of the metals-contaminated concrete is a RCRA characteristic hazardous waste (for chromium), as determined by TCLP metals analyses. observed that wastewater was present in the Retort Chamber Sump, despite previous cleanup actions by CTEC, indicating that stormwater falling on the North and South Drip Pads continues to infiltrate into the sump. Additionally, wastewater was observed in the UCV. Because of a suspected crack in the UCV, it is not clear whether the water in the UCV is from infiltrating groundwater or from wastewater draining from the Retort Chamber Sump;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; determined that soil samples collected from the area around the UCV did not contain concentrations of the metal COCs (arsenic, chromium, copper, and lead) above Site-specific cleanup levels.

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, 11 ASTs, and piping in the Treatment Building.
- 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 (9/8/2014-9/13/2014), EPA, ERRS, START, and Colville Tribe ETD mobilized to the site and received and staged equipment and supplies for operations and developed the infrastructure necessary to conduct the removal action. Specific tasks include:

- Received heavy equipment (excavators, front loaders, water truck, mini-excavator), as well as other power equipment (generators, compactors, concrete saw, concrete scabblers, etc.)
- Constructed/augmented site roads.
- Grubbed out brush and prepared areas to stockpile contaminated soil and backfill.
- Received and installed truck scales, truck tire decontamination station, diesel fuel cell, water tower, electrical services, sanitary services, and telephone/internet services.
- Received approximately 1,200 tons of pit-run backfill.

The most significant removal effort during this reporting period has been cutting the 6-12"-thick NDP concrete floor using a large, self-propelled, walk-behind concrete saw. The purpose of cutting the concrete is to segregate the highly contaminated surface and joints of the concrete from the uncontaminated majority of the concrete and, thus, save significant money on disposal fees.

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 est 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

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

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities
Over the next operational period (9/15/2014-9/20/2014), the planned removal activities include:

- Continue saw-cutting the NPD and then the SDP.
- Utilize the concrete scabblers to remove the highly contaminated surface of the NDP and possibly the SDP.
- Begin removing obstructions (small machines, pumps, pipes, etc.) from the Treatment Building in preparation of decontamination and removal of the ASTs.
- Conduct exploratory trenching, sampling, and analysis in the TWSA to refine extent of contamination knowedge.

2.2.1.2 Next Steps

2.2.2 Issues

2.3 Logistics Section
No information available at this time.

2.4 Finance Section
No information available at this time.

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 - 13
START - 2

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.