



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
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JAN 17 2013

OFFICE OF
ENVIRONMENTAL
CLEANUP

SUBJECT: Action Memorandum for the a Time-Critical Removal Action at the Lapwai School District Drywell Site

FROM: Greg Weigel, On-Scene Coordinator *GW*

TO: Chris Field, Manager
Emergency Management Program

THRU: Calvin Terada, Manager *WBM for*
Emergency Response Unit

I. Purpose

The purpose of this memorandum is to document the decision to initiate time-critical response action described herein for the Lapwai School District Drywell Site (Site) located within the Nez Perce Reservation in Lapwai, Nez Perce County, Idaho.

II. Site Information

A. Site Description

Site Name: Lapwai School District Drywell
Superfund Site ID (SSID): 10LT
NRC Case Number: none
CERCLIS Number: IDN001003088
Site Location: 204 District Road, Lapwai, ID
County: Nez Perce
Lat/Long: Latitude: 46.39639 Longitude: -116.80432
Potentially Responsible Party (PRP): Lapwai School District
Access: unrestricted
NPL Status: not listed
Removal Start Date: anticipated February 4, 2013

B. Site Background

1. Removal Site Evaluation

The Lapwai School District performs maintenance and repair of school buses and equipment at the Bus Transportation and Maintenance facility. The facility contains a building with two bus repair/equipment bays and an office. The school district conducts oil changes, works on brakes, replaces parts, and fills antifreeze in the bus bays.

In June 2012, the EPA Region 10 Underground Injection Control (UIC) Program conducted an inspection at the facility. The inspection identified a floor drain in the bus and equipment bay and a drain from a shop sink that reportedly emptied into a nearby drywell located underneath an asphalt parking lot next to the building. In followup to the inspection, the UIC Program required that the school district stop discharging fluids into the drywell, and that the drywell be exposed and sampled. A sample of drywell soils was collected by Nez Perce Tribe Water Resources Division personnel on October 23, 2012. The sample was collected from sludge approximately 18 inches below the surface in the drywell. The drywell itself is reportedly made of concrete blocks and is 4' in diameter and 6' deep, with the top approximately 4' below ground surface.

On December 7, 2012 the Nez Perce Tribe provided a report with analytical results from the sample taken in the drywell. The results show elevated concentrations in the well of chlorinated solvents including tetrachloroethylene at 22.5 milligrams/kilogram (mg/Kg), trichloroethylene at 168 mg/Kg, as well as lead at 1,840 mg/Kg. On the same property within approximately 150 feet of the contaminated dry well is one of two public drinking water supply wells installed and operated by the Bureau of Indian Affairs (BIA). The BIA wells supply drinking water for approximately 300 people in Lapwai, including the Lapwai Elementary School that is adjacent to the school district bus maintenance facility. The BIA wells were most recently sampled for volatile organic compounds (VOC) and semi-volatile organic compounds (SVOC), including the contaminants found in the drywell, in 2010. As of that time the BIA wells, including the one closest to the contaminated drywell, did not indicate of any contamination that might be associated with the contaminated drywell.

2. Physical Location and Site Characteristics

The contaminated drywell is on property owned by the Lapwai School District at 204 District Road in Lapwai, and is adjacent to the Lapwai Elementary School. A fence separates the school from the bus maintenance facility. The drywell was located under an asphalt parking lot. The asphalt was recently dug up to expose the drywell for inspection and sampling. A concrete cover has since been placed over the drywell. One BIA drinking water well is approximately 100 to 150 feet to the northeast of the drywell, and the second BIA drinking water well another 100 feet northeast of that. The static water table was reportedly approximately 40 feet below ground surface at the time the closest BIA well was installed in 1983.

3. Release or threatened release into the environment of a hazardous substance, pollutant or contaminant.

Hazardous substances as defined by section 101(14) of CERCLA are known to have been released into the environment at the Site. These include tetrachloroethylene, trichloroethylene and lead.

III. Threats to Public Health Welfare or the Environment

A. Nature of Actual or Threatened Release of Hazardous Substances, Pollutants or Contaminants.

Hazardous substances at the Site present a threat to public health and welfare. Trichloroethylene, also known as TCE, and tetrachloroethylene, also known as PCE, are non-biodegradable chlorinated solvents. Elevated concentrations of TCE and PCE exist in shallow soils at the Site. PCE in soils at approximately 4 foot depth from a single sample is 22.5mg/Kg. TCE concentration is 168 mg/Kg. The EPA Regional Screening Level (RSL) for PCE in soils that is protective of groundwater is .0023 mg/Kg. The RSL for TCE in soils that is protective of groundwater is .0018 mg/kg. Both compounds are dense non-aqueous phase liquids (DNAPLs) that may migrate downward in soils through gravity and capillary action, and tend to sink below the water table when spilled in significant quantities. Its penetration into an aquifer makes them difficult to remediate, once the aquifer becomes contaminated. Even though as of 2010 the nearby drinking water well did not show signs of contamination, DNAPL compounds in the contaminated drywell may migrate downward over time and will continue to pose a threat to the drinking water source until cleaned up.

B. Check applicable factors (from 40 CFR 300.415) which were considered in determining the appropriateness of a removal action: *(delete factors that do not apply)*

Actual or potential exposure to nearby human populations, animals or the food chain from hazardous substances or pollutants or contaminants [300.415(b)(2)(i)].

Elevated concentrations of PCE and TCE exist at the Site at approximately 4 feet below ground surface in the contaminated drywell. Prior to December 2012 the drywell was located under the asphalt cover of a parking lot. The drywell was exposed in December in order to inspect it and collect a sample. Since that time a cover has been put over the drywell, but no further action taken to restrict access. School district workers or visitors, or children from the adjacent elementary school could come into contact with contaminated soils in the drywell if the concrete cover were to be removed or if they were to come into contact with adjacent contaminated soil.

Actual or potential contamination of drinking water supplies or sensitive ecosystems [300.415(b)(2)(ii)].

Soils contaminated with PCE and TCE could contaminate groundwater at the Site, which is a drinking water supply. The nearest drinking water well is located approximately 150 feet to the northeast of the contaminated drywell. Static groundwater level was noted at 40 feet below ground surface when the drinking water well was installed in 1983. The drywell is reportedly is constructed of concrete block, but is presumed to be able to drain liquids. It is reportedly 4 feet in diameter by 6 feet deep, with the top at 4 feet below

ground surface. Over time, any PCE or TCE contaminated liquids draining from the contaminated drywell could be expected to migrate via forces of hydraulic gradient, capillary action and gravity. Any PCE or TCE contaminated liquids draining from the contaminated drywell would only have another 30 vertical feet to travel before penetrating the water table and contaminating the aquifer.

X High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate [300.415(b)(2)(iv)].

Elevated concentrations of PCE and TCE exist at the Site at approximately 4 feet below ground surface in the contaminated drywell. Over time, any PCE or TCE contaminated liquids draining from the contaminated drywell could be expected to migrate via forces of hydraulic gradient capillary action and gravity.

X The availability of other appropriate federal or state or tribal response mechanisms to respond to the release [300.415(b)(2)(vii)].

The Site is located within the boundaries of the Nez Perce Reservation. Representatives of the Nez Perce Tribe indicated that they lack the resources to address this contamination and have indicated that it is appropriate for EPA to address this contamination.

IV. Endangerment Determination under CERCLA Section 104: Pollutant or Contaminants

Actual or threatened releases of hazardous substances from this Site may present an imminent and substantial endangerment to the public health, or welfare, or the environment.

V. Selected Removal Action and Estimated Costs

A. Situation and Removal Activities to Date

1. Current Situation.

The Lapwai School District has proposed conducting a limited cleanup using their own financial resources to hire a qualified contractor or contractors to do the work. They have submitted a work plan that the EPA OSC has reviewed and provided comments on. For the most part, the work plan describes the actions necessary to clean up hazardous substances at the Site. The work plan indicates, however, that excavation of potentially contaminated soils around and below the drywell may be limited due to budget constraints. In a telephone discussion on January 7, 2013, the OSC advised the School District that they should plan to proceed with implementation of their work plan after addressing EPA's comments, and that if there is remaining contamination at the Site that would need to be removed after the School District has exhausted their financial ability to conduct work, then EPA may have to step in to complete the remaining necessary work as a Fund-lead action.

2. Removal activities to date:

In addition to the activities that have already been described in Section II of this Action Memorandum, the BIA on January 4, 2013 collected water samples from the two BIA drinking water wells near the Site. The samples are being analyzed for VOCs and SVOCs using EPA methods 8260 and 8270, to evaluate whether the wells are presently impacted by contaminants associated with those in the drywell. Laboratory analytical results are expected the week of January 14, 2013.

3. Enforcement

This Action Memorandum is the decision document to support an anticipated CERCLA Unilateral Administrative Order (UAO) that EPA anticipated issuing, requiring the Lapwai School District to conduct a cleanup of hazardous substances associated with the contaminated drywell. It is anticipated that the UAO will require the school district to perform actions described in Section V.B. below. See the Confidential Enforcement Addendum for additional information.

B. Planned Removal Actions

1. Proposed action description

The proposed removal action will focus on the following general tasks:

- Removing contaminated drywell sludge and the drywell structure;
- Over-excavating potentially contaminated soil surrounding the drywell, estimated at approximately 15 cubic yards;
- Characterized the removed and excavated waste for waste disposal, and subsequently properly disposing of the waste;
- Collecting soil samples from the horizontal and vertical extent of the over-excavation, and;
- Comparing excavation soil sample analytical results with applicable EPA Regional Screening Levels (RSLs) for protection of groundwater.
- Determining if cleanup goals have been achieved, or if additional excavation needs to take place beyond 15 cubic yards.

The following provides more detail on the key aspects of the proposed removal:

Drywell sludge removal. Approximately 65 cubic feet of sludge will be pumped from the drywell into 55-gallon drums. The drums will be stored on-site until analysis is performed to characterize the waste for disposal. Based upon the reported drywell sludge total VOC, SVOC and Metals concentrations the waste will likely characterize as hazardous requiring disposal at an acceptable hazardous waste disposal facility, likely the Waste Management's Chemical Waste landfill in Arlington, Oregon

Drywell removal and excavation. The drywell and surrounding potentially contaminated soil will be excavated. Presently 15 cubic yards soil are planned for excavation, but that may change based on field screening and laboratory analytical results from excavated and remaining soils. Based upon field screening and field observations,

excavated soil may be segregated into separate stockpiles for waste characterization. One stockpile will be presumed clean, and the other presumed contaminated, based on use of visual and photo-ionization detector (PID) screening data. Composite samples will be collected from each stockpile for waste characterization. The excavated material will be temporarily stored on-site until the waste is properly characterized for disposal.

Cleanup confirmation / extent of contamination soil sampling. After excavation, samples will be collected from the excavation pit for comparison to applicable EPA RSLs. Homogenized multi-increment composite samples will be collected to evaluate horizontal excavation extents (4 samples; 1 each from the north, south, east, and west excavation from 7 to 9 feet below ground surface or 1 to 2 feet above the former drywell bottom elevation), and vertical excavation extents (1 sample from excavation bottom), plus 1 duplicate QA/QC sample; 6 total samples.

2. Contribution to remedial performance

The proposed actions will, to the extent practicable, contribute to the efficient performance of any long-term remedial action at the Site.

3. ARARs

Removal actions conducted under CERCLA are required to attain ARARs to the extent practicable, considering the exigencies of the situation. The Site is within the Nez Perce Reservation. The EPA OSC is in the process of coordinating and will continue to coordinate with appropriate Nez Perce Tribal technical representatives regarding identification of any Tribal ARARs. Below are potential Federal ARARs that have been identified for the Site:

- a.) Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. 6901 et seq., 40 C.F.R. Parts 260, 261, 262 and 265 requirements relating to determination of whether the excavated material is a hazardous waste, and that apply to handling and storage of hazardous waste.
- b.) Safe Drinking Water Act, Underground Injection Control (UIC) requirements found in 40 C.F.R. Parts 144 and 146 specifically relating to sampling for VOCs using EPA Method 8260, semi-volatile organic compounds using EPA Method 8270), and arsenic, cadmium, chromium, and lead) and assurance that backfill material is clean.
- c.) National Historic Preservation Act, Section 106, 16 U.S.C. 470; 36 C.F.R. Part 800. The National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects of their undertakings on historic properties. The State Historic Preservation Officer (SHPO) and Tribal Historic Preservation Officer (THPO) advise and assist Federal agencies in carrying out their section 106 responsibilities and cooperate with such agencies, to ensure that historic properties are taken into consideration.

- d.) Archeological and Historic Preservation Act, 16 U.S.C. 469. This Act establishes procedure to provide for the preservation of historical and archeological data that might be destroyed through alteration of terrain as a result of a federally licensed activity or program. Presence or absence of such data on the Site must be verified. If historic or archeological artifacts are present in the area where the response activity will occur, there response activity must be designed to minimize adverse effects on the artifacts
- e.) Archeological Resources Protection Act, 16 U.S.C. 470aa, 43 C.F.R Part 7. This Act and regulations specify the steps that must be taken to protect archeological resources and sites that are on public and Native American lands and to preserve data uncovered.

4. Project Schedule

Work is expected to begin the week of January 28, 2013, and take approximately 1 week to complete.

C. Estimated Costs*

It is anticipated that the proposed work will be conducted by the Lapwai School District, under a UAO that EPA anticipates issuing. The EPA OSC anticipates providing technical support and coordination with the Nez Perce Tribe, as well as well as oversight per the UAO. The OSC does not anticipate using any EPA extramural (contractor) support for this oversight. However, if the Lapwai School District is unable to conduct or complete the cleanup as described in this Action Memorandum, EPA would then conduct or complete the work using its financial and contractor resources. The below cost estimate is based on if EPA were to be conducting the work.

Contractor costs (ERRS/START staff, travel, equipment)	\$15,000
Other Extramural Costs (Strike Team, other Fed Agencies)	\$85,000
Contingency costs (20% of subtotal)	\$20,000
Total Removal Project Ceiling	\$120,000

*EPA direct and indirect costs, although cost recoverable, do not count toward the Removal Ceiling for this removal action. Liable parties will be held financially responsible for costs incurred by the EPA as set forth in Section 107 of CERCLA. "

VI. Expected Change in the Situation Should Action Be Delayed or Not Taken

A delay in action or no action at this Site would increase the actual or potential threats to the public health and/or the environment.

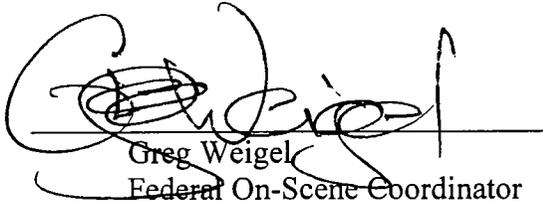
VII. Outstanding Policy Issues

None

VIII. Approvals

This decision document represents the selected removal action for this Site, developed in accordance with CERCLA as amended, and is not inconsistent with the National Contingency Plan. This decision is based on the administrative record for the Site.

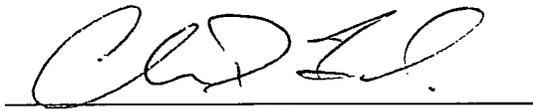
Conditions at the site meet the NCP section 300.415(b) criteria for a removal action and through this document, I am approving the proposed removal actions. The total project ceiling is \$120,000. This amount will be funded from the Regional removal allowance.


Greg Weigel
Federal On-Scene Coordinator

1-16-13
Date

IX. Endangerment Determination under CERCLA Section 106: Hazardous Substances

Actual or threatened releases of hazardous substances from this Site may present an imminent and substantial endangerment to public health, or welfare, or the environment.


Chris Field, Manager
Emergency Response Program
Office of Environmental Cleanup

Date 1/17/13