



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10**

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OFFICE OF  
ENVIRONMENTAL CLEANUP

August 6, 2015

**SUBJECT:** Action Memorandum for the Upper Columbia River Site Residential Properties Soil Removal near Northport, Stevens County, Washington

**FROM:** Jeffrey Fowlow, Federal On-Scene Coordinator  
Emergency Preparedness and Prevention Unit

**THRU:** Wally Moon, Unit Manager  
Emergency Preparedness and Prevention Unit

**TO:** Chris D. Field, Manager  
Emergency Management Program

**I. PURPOSE**

The purpose of this Action Memorandum is to document approval of the time-critical removal action ("TCRA") described herein for the Upper Columbia River Site Residential Properties Soil Removal near Northport, Stevens County, Washington (Site).

The Upper Columbia River Site is currently the subject of a remedial investigation / feasibility study (RI/FS) to investigate contamination along the Upper Columbia River from the Grand Coulee Dam to the United States (U.S.)-Canada border related to historical smelting operations. As a part of field sampling activities for the RI/FS, the U.S. Environmental Protection Agency ("EPA") identified several residential properties and tribal allotments<sup>1</sup> in the Columbia River valley north of the town of Northport, Washington, which contained lead and/or arsenic at elevated levels. The residential properties are the focus of the time-critical removal action described herein. Any future time-critical removal actions taken on the tribal allotments will be addressed as a separate action. The residential properties and tribal allotments are located on land that is historically and culturally significant to both the Confederated Tribes of the Colville Reservation (Colville Confederated Tribes) and the Spokane Tribe of Indians.

Teck Metals, Limited (TML), a potentially responsible party ("PRP") at the Site, is currently negotiating a Settlement Agreement and Order on Consent ("Settlement Agreement") with EPA in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") for the funding and performance of the removal action. Under that Settlement Agreement, Teck American

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<sup>1</sup> For the purpose of this Action Memo, the term "allotment" refers to parcels of land outside the borders of an established Indian reservation that are owned by private tribal members.

Incorporated (TAI) would be the party performing the work, though both TAI and TML will be held jointly and severally responsible for the work, and herein referred to as “Teck”.

## **II. SITE CONDITIONS AND BACKGROUND**

The Superfund Enterprise Management System (formerly CERCLIS) ID Number for the Upper Columbia River Site is WASFN1002171 and the Site/Spill ID is 10NZ.

### **A. Site Description**

#### **1. Removal site evaluation**

EPA is performing an RI/FS along the Upper Columbia River. The Upper Columbia River consists of the areal extent of hazardous substances contamination within the U.S. in or adjacent to the Upper Columbia River, including the Franklin D. Roosevelt Lake (“Lake Roosevelt”), from the border between the U.S. and Canada downstream to the Grand Coulee Dam.

A smelter owned by Teck located in Trail, British Columbia, on the Columbia River approximately 10 miles north of the U.S./Canada border has discharged metals-laden slag and liquid wastes into the Columbia River, as well as discharges from the smelter to the properties and allotments that are the subject of this removal action. Under the RI/FS, which is being funded by Teck, sampling has been conducted to determine levels of contamination in fish, river sediment, beach sediment, river water, and soil to support human health and ecological risk assessments.

As part of the RI/FS, in 2014 EPA collected and analyzed soil samples from residential properties in the Columbia River valley north of Northport, WA to the U.S.-Canada border to investigate potential airborne metals contamination from the Trail smelter and the former LeRoi Smelter that had historically operated in Northport. A total of 74 properties along both sides of the river were sampled. At each property, EPA identified representative decision units that had high human contact with soil (i.e., yards, gardens, play areas, etc.). Once the sampling areas were identified, EPA used an incremental composite (IC) sampling approach to collect IC samples from each decision unit (“DU”). A DU is an identified area within a property that is distinguishable from other areas by factors such as location or use and include areas within a property with a high likelihood of exposure to humans from contaminated soil. Examples of decision units are play areas, gardens, or lawns. Most DUs had three IC samples collected. Each IC sample was collected from shallow surface soil (usually 0-1” deep), except gardens which went to tilling depth (usually 0-12” deep). A total of 237 DUs were sampled.

The action level (i.e., the level at which action is triggered) for lead (“Pb”) is 700 milligrams per kilogram (“mg/kg”), and the removal action will result in achieving a cleanup level of 250 mg/kg or less, based on a project-specific determination by EPA

(Memorandum from Richard Albright to Mr. Pendowski et al *“Dispute Decision Regarding Upper Columbia River Action Levels for Time-Critical Removal Action Dispute, Upper Columbia River Superfund Site”*, April 21, 2015). The cleanup level for arsenic (As) is 20 mg/kg, based on the Washington State Model Toxics Control Act Method A Unrestricted use concentration. The results of the RI/FS sampling effort identified 17 properties, including 14 residential properties and three tribal allotments, which contained lead at concentrations near or above the Site action level.

In May 2015, the EPA Region 10 Removal Program conducted a removal site evaluation. During this removal site evaluation, EPA prepared for the proposed removal action by documenting the condition and layout of each property designated for cleanup and coordinating with each of the property owners. At some of the properties, EPA either extended the size of some DUs, or added new DUs, based on additional observations of property use and interviews with the landowners that indicated areas of the property with a high likelihood of exposure to humans from contaminated soil. EPA also collected and analyzed soil samples from the original DUs to better delineate the horizontal and vertical extent of contamination and to assist in removal planning (i.e., measuring quantities and depths of contaminated soil for logistics, disposal, and cost estimating).

Sampling conducted in 2014 and 2015 also identified tribal allotments where lead and arsenic concentrations exceed action levels; however, this removal action does not include those tribal allotments because the benefits of alternative removal or remedial techniques are being further evaluated for potential future cleanup actions.

## **2. Physical location**

The community of Northport (population 295) is located along the eastern shoreline of the Upper Columbia River, approximately six miles south of the border with Canada and 35 miles north of Colville, Washington. Surrounding land use is primarily forestry and agricultural, with a number of rural residential properties.

The area has a humid continental climate characterized by cold winters and hot summers. The average annual precipitation is 19.5 inches, and the average annual snowfall is 53.7 inches. Average maximum temperatures are as high as 88.4 degrees Fahrenheit (°F) in the summer (July) and average minimum temperatures are as cold as 19.8 °F in winter (January).

## **3. Site characteristics**

The area within the Site in which the removal actions will be conducted consists of 14 residential properties within the Columbia River valley near Northport, Washington (Figure 1). Specific property details including property owner names and locations are included in the confidential enforcement addendum.

Each residential property has one or more DUs designated for removal activities. Each residential property DU is located in an area of the property likely to be used by the residents and/or visitors and so poses an increased exposure risk to the elevated arsenic and lead in the soil. Specifically, most of the DUs at the properties are areas of the residential yard where the residents or visitors are likely to perform recreational, gardening, and/or yard maintenance activities that would likely expose them to the contaminated soil.

#### **4. Release or threatened release into the environment of a hazardous substance or pollutant or contaminant**

The primary contaminants of concern (COCs) are lead and arsenic. These contaminants are hazardous substances or pollutants or contaminants as defined by sections 101(14) & (33) of CERCLA, 42 U.S.C. § 9601(14) and (33).

The primary source of the lead and arsenic contamination at each of these properties is believed to be emissions from the Teck smelter in nearby Trail, British Columbia.

Numerous studies have been performed at the Site since 2000 as part of the Upper Columbia River site assessment process and RI/FS. Sampling efforts relevant to the current residential soil removal action are discussed below.

##### 2014 Residential Soil Sampling

In 2014, EPA sampled soil at multiple residential properties and tribal allotments in the Columbia River valley between Northport and the U.S./Canada border that may have elevated metals as a result of regional smelter operations. Property owners volunteered to have their property sampled, and the sampling was conducted between August and October 2014.

The results of this investigation indicated that 14 properties and three tribal allotments contained at least one area (i.e., a decision unit) with concentrations of lead over or near the TCRA action level of 700 mg/kg. The average lead concentration from the IC sampling approach for these properties was 985 mg/kg, which is approximately 4 times higher than the cleanup level of 250 mg/kg. The maximum IC sample lead concentration was 1,936 mg/kg, which is approximately 8 times higher than the cleanup level. The average and maximum IC sample concentrations for arsenic were 52.4 and 103 mg/kg, respectively, which are 2.5 and 5 times the cleanup level for arsenic of 20 mg/kg. Each IC sample was collected from shallow surface soil (usually 0-1" deep), except gardens samples from which were collected from tilling depth (usually 0-12" deep).

##### 2015 Removal Sampling

During EPA's site visit in May 2015, EPA reviewed the DUs from the 2014 sampling event. At certain properties, EPA either extended the boundaries of the DUs, or added new DUs, to ensure that high-risk property areas (i.e., yards or gardens with an elevated risk of potential human contact) were included. From these DUs, EPA

collected and analyzed additional samples to further characterize the vertical and horizontal extent of contamination. At each DU sampled in 2014, EPA assumed that the soil at depths from 0 to 6 inches below ground surface (bgs) was contaminated, and new grab samples were collected at depths from 6 to 12 inches bgs. At new DUs, EPA collected grab samples at intervals of 0 to 6 inches and 6 to 12 inches bgs. The samples were analyzed in the field using field-portable X-ray fluorescence (XRF) instruments, with a subset of the samples analyzed at an off-site laboratory.

During the May 2015 sampling event, a total of approximately 480 grab samples were collected and analyzed in the field by XRF, and 100 of these samples were submitted to an off-site laboratory for metals analysis. The results indicated that 80 of the samples exceeded the site cleanup level for either lead or arsenic based on the laboratory data or XRF field screening data if laboratory data was not available. For the laboratory data, lead was detected as high as 1,590 mg/kg, which is 6 times the cleanup level of 250 mg/kg, and arsenic was detected as high as 89 mg/kg, which is 4.5 times the cleanup level of 20 mg/kg.

EPA also submitted five of the samples for toxicity characteristic leaching procedure (TCLP) lead and arsenic analyses at the off-site laboratory to determine if the contaminated site soil was a characteristic hazardous waste. The samples selected for TCLP analyses included those with the highest total lead and arsenic concentrations as determined by XRF. All of the samples were well below the applicable TCLP limits for lead and arsenic, indicating that the site soil can likely be disposed of as non-hazardous waste.

## **5. NPL Status**

Although the Upper Columbia River Site is not currently on the National Priorities List (NPL), it is being investigated through an RI/FS conducted by TAI (formerly Teck Cominco American Incorporated) subject to EPA oversight.

## **6. Maps, pictures, and other graphic representations**

Figure 1 indicates the location of the Site, including the general area on both sides of the Columbia River between Northport and the U.S./Canadian Border where the 14 residential properties and several tribal allotments are located. For specific details including maps of each individual property, please refer to the confidential enforcement addendum.

### **B. Other Actions to Date**

#### **1. Previous actions**

In 2004, EPA performed a time-critical removal action at the LeRoi Smelter Site in the town of Northport. The site included a 20-acre smelter operations complex and a 10-acre adjacent lumber mill complex which was formerly part of the original smelter

complex. The smelter operated intermittently from 1896 to 1921 and processed copper, gold, silver, and lead ores from nearby mines in Washington State and British Columbia. The primary contaminants of concern for the removal action were lead and arsenic.

In addition to cleanup of the smelter site itself, the scope of the removal action included the removal of lead and arsenic contaminated soil from 29 residential and common-use properties within or near the town limits of Northport, followed by backfill with clean top soil and property restoration. The removal action was performed to address lead and arsenic contamination associated with nearby and distant smelting operations, mine-waste disposal practices, and construction practices using mine-waste contaminated materials.

## **2. Current actions**

There are no government or known private cleanup activities that are currently being performed at the Site that have not been previously described.

### **C. State and Local Authorities' Roles**

#### **1. State and local actions to date**

The Washington State Department of Ecology (Ecology) has been involved in the RI/FS at the Site. Teck American Incorporated entered into a voluntary agreement with Ecology to remove contaminated sediment from Black Sand Beach in the Fall of 2010. The beach is located about three miles south of the Canadian border near Northport, WA and is located within the Site.

#### **2. Potential for continued State/local response**

Ecology is expected to remain involved in the RI/FS and in any future remedial cleanup actions.

### **D. Tribal Government Coordination**

Staff-to-staff level coordination has occurred between EPA and the Colville Confederated Tribes regarding the proposed TCRA. EPA offered formal government-to-government consultation to the Chairman of the Confederated Tribes of the Colville Indian Reservation and the Spokane Tribe of Indians on May 27, 2015. On July 7, 2015, the Colville Tribe Business Council ("Council") accepted the offer of consultation and a meeting between EPA and Council occurred on July 21, 2015, in Nespelem, Washington. Prominent topics discussed in the consultation include the Council's desire to be informed of and participate in any ongoing and future negotiations between EPA and Teck at this tribal site where tribal lands and resources are affected. Also discussed was the Council's desire for a long-term cleanup plan for the overall Upper Columbia River Site in general and long term plans for the tribal allotments beyond removal actions in 2015 to include multiple possible options available which have yet to be fully

explored and discussed. In addition, the Council emphasized the requirement of Tribal Cultural Resource Monitors where any soil disturbing actions are undertaken.

### **III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT**

The current conditions at this Site meet the following factors which indicate that the Site may pose an unacceptable risk to the public health or welfare or the environment and a removal action is appropriate under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. § 300.415(b)(2).

#### **A. 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)]**

The data from previous environmental investigations shows that surface soil at the properties is contaminated with elevated concentrations of lead and arsenic, and that the primary source of the elevated concentrations of metals is from releases from Teck's smelting operations in nearby Trail, British Columbia.

Potential human exposure routes include direct contact with and ingestion of contaminated soil and inhalation of windblown dust. Human receptors include residents, visitors, trespassers, and passers-by. The potential for exposure is increased by the fact that the majority of these properties are residential with full-time residents.

At each property, the portion of the property subject to investigation and subsequently designated for removal action (i.e., the DUs) were selected based on their proximity to the residences and likelihood that the decision units would be used frequently by residents or visitors. The DUs include lawn and garden areas used by residents for property access, recreation, lawn and house maintenance, and gardening, and therefore represent an increased risk of exposure to the elevated levels of lead and As in the soil.

The effects of exposure to the contaminants of concern on organ systems is influenced by several factors, including dose, duration of exposure, and route of exposure, as well as the age and health of the receptor exposed. Lead is known to be toxic to humans. Children are most susceptible to the effects of lead and even low levels of lead in the blood of children can result in behavior and learning problems, lower IQ and hyperactivity, slowed growth, hearing problems, anemia, and in rare cases, ingestion of lead can cause seizures, coma and even death. Pregnant women are also particularly vulnerable to the effects of lead contamination and exposure to lead can result in serious effects to the mother and her developing fetus, including reduced growth of the fetus and premature birth.

**B. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate (40 C.F.R. § 300.415[b][2][iv])**

Portions of the DUs on the properties are only partially vegetated. Lead and arsenic are present at elevated concentrations in shallow surface soil (i.e., 0-6 inches bgs), which create the likelihood of exposure from residential and recreational use, and the soils are susceptible to migration within and off of the properties because of water- and wind-borne and mechanical influences.

**C. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released (40 C.F.R. § 300.415(b)(2)(v))**

The climate in the region of the site includes cold, freezing winters with a large amount of snow and hot, often dry summers. These weather conditions can increase the likelihood that the contaminants in shallow surface soil are susceptible to dispersion (e.g., snow melt and rains in the spring may disperse contaminants in surface water runoff, and the dry and hot conditions in summer and early fall may cause contaminants to disperse by wind, especially in areas that are not protected by a vegetated cover).

**D. The availability of other appropriate federal or state response mechanisms to respond to the release (40 C.F.R. § 300.415(b)(2)(vii))**

The proposed TCRA is expected to be conducted by Teck in accordance with CERCLA and with oversight by EPA. There are no known other appropriate federal or state response mechanisms capable of providing the appropriate resources in the prompt manner needed to address the potential human health and ecological risks associated with the hazardous substances described herein.

#### **IV. ENDANGERMENT DETERMINATION**

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. PROPOSED ACTIONS AND ESTIMATED COSTS**

**A. Proposed Actions**

The proposed action is intended to mitigate the potential human health threats posed by exposure to lead and arsenic, including direct contact, ingestion, and inhalation pathways.

## 1. Proposed action description

Soil in each DU above cleanup levels (250 mg/kg for lead and/or 20 mg/kg for arsenic) will be excavated to a maximum depth of 12 inches (24 inches for gardens) for off-Site disposal in an appropriate landfill (selected consistent with the off-site rule) followed by backfill and restoration. The Site consists of 14 residential properties. The general approach to be used at all locations is described below.

### *Property Preparation*

Property-Specific Work Plans are being developed based on interviews with the affected property owner and EPA observations made during site reconnaissance activities. The pre-removal condition of the property (e.g., the house or any other structure, driveways, paved parking areas, fences, utilities, trees or other vegetated areas, gardens, etc.) will be documented. The presence (or evidence) of any children, pets, and/or livestock will also be noted. Items that cannot be temporarily relocated during removal activities will be identified and protected from damage. Removal activities will be conducted in a way that considers property features and uses. The removal activities will be coordinated with the property owner and performed in such a manner as to minimize impacts to the property and the residents.

If necessary, access roads and driveways to the property and DUs will be improved to allow access for equipment and vehicles. Work areas and roads for site traffic will be established in project work plans. Any residential items or personal belongings in the work zone (i.e., DU and support zones) will be temporarily relocated or marked and protected. The location of any underground or aboveground utilities will be identified and marked.

### *Excavation*

In each DU where soil excavation occurs, the contaminated soil will be excavated to an initial depth of 6 inches bgs. In most areas, excavation will primarily be with mechanical equipment (e.g., excavators, skid steers, and loaders), while in some sensitive locations (i.e., near houses, buried utilities, or trees/vegetation), excavation will be performed by hand using shovels and other hand tools.

At the bottom of the initial 6-inch excavation, the soil will be screened using XRF to determine whether additional excavation is required. Screening samples will be located in a grid pattern at a frequency of at least one sample every 400 square feet. If analysis of samples from any location indicates that the soil at the bottom of the excavation contains either lead or arsenic above the cleanup levels, excavation will continue at that location to a maximum depth of 12 inches bgs. The lateral extent of any additional excavation will be determined by soil sampling and analysis to ensure all soil with concentrations exceeding the lead or arsenic cleanup levels is removed. At the bottom of any 12-inch excavation area, the soil will be screened by XRF to determine whether the soil is still above lead or arsenic cleanup levels. If soil at the 12-inch depth is below

both lead and arsenic cleanup levels, backfilling can proceed. If soil is above cleanup levels for lead or arsenic, a geotextile fabric or similar material will be laid down at the bottom of the excavation area before backfilling as a visual indicator between contaminated soil and clean backfill.

Around mature trees, excavation will be performed by hand and will only extend to approximately 2 inches bgs within the tree's root radius to avoid damage to the tree.

Field screening with the XRF will be supported by a site-specific sampling plan (SSSP) and quality assurance project plan (QAPP) and will include the collection of confirmation samples and analysis at an off-site laboratory to validate the precision and accuracy of the field XRF screening. The SSSP/QAPP will be reviewed and approved by EPA prior to removal activities.

Personnel and equipment exiting work areas will be decontaminated to avoid the spread of contaminants.

#### *Waste Management and Disposal*

Excavated soil should be managed within the confines of each DU and then will be loaded directly into haul trucks to minimize short-term cleanup impacts to the property. The haul trucks will then transport the contaminated soil to a centrally located stockpile area or, if necessary and/or feasible, directly to a disposal facility consistent with the off-site rule. If needed, the specific locations of any stockpile will be determined on a case-by-case basis. At the stockpile location, contaminated soil from each property will be loaded on to trucks for transport to an appropriate landfill consistent with the off-site rule.

Based on the results of EPA's sampling in May 2014, the soil may be able to be disposed of as non-hazardous waste in a Subtitle D landfill, although this is subject to verification and final waste profiling by the intended disposal facility.

#### *Property Backfill and Restoration*

Following the excavation of the contaminated soil at each DU, the excavated area will be backfilled to the original grade with pit run gravel and/or top soil, depending on the property. Additionally, as appropriate grass seed can be added to areas backfilled with clean top soil.

Sources of pit run gravel and top soil will be screened by XRF in accordance with the SSSP/QAPP to ensure that the backfill material does not contain lead or arsenic at concentrations greater than the site cleanup levels.

Following backfill, the property will be restored to a condition comparable to its pre-removal condition, based on pre-removal documentation. If the removal activities require the removal of fencing or shrubs/vegetation, they will be repaired or replaced.

### *Best Management Practices*

Best Management Practices (BMPs) will be implemented during removal activities to protect workers, residents, the community, and the environment from short-term construction impacts such as erosion, sedimentation, fugitive dust, noise, and other similar potential impacts. Removal activities on residential properties will be closely coordinated with the property owners and residents to minimize disruption and impacts to the residents and property.

### *Greener Cleanup Best Management Practices*

Appropriate and practicable greener cleanup BMPs will be implemented during cleanup activities, including, but not limited to, minimizing energy consumption (e.g., using new and well-maintained equipment), minimizing generation and transport of fugitive dust (e.g., implementation of construction BMPs), minimizing waste generation through reuse and recycling, minimizing impacts to water resources (e.g., implementation of construction storm water and surface water BMPs), minimizing areas requiring activity or use limitations (e.g., source removal), minimizing unnecessary soil and habitat disturbance, and minimizing lighting and noise disturbance (e.g., implementation of construction BMPs).

### *Post-Removal Site Controls*

If soil contamination in excess of the cleanup level is detected below 12 inches, a geotextile fabric or other similar visual marker will be installed to act as a warning to current or future property owners regarding the contaminated soil below. Following the removal action, a report detailing the removal activities will be provided to each property owner that will document the location of known areas above lead and arsenic cleanup levels. EPA expects that any necessary additional post-removal site controls will be addressed through the anticipated future remedial action.

On properties where sod, grass seed, and/or plants have been installed, a maintenance plan will be provided to each property owner so that the new plantings establish roots and survive.

## **2. Contribution to remedial performance**

The proposed removal action will not impede future actions based upon available information. The proposed removal action may be the first and only action or one of a series of actions depending on post-removal activities such as those necessary to maintain the protectiveness of the cleanup.

The proposed removal action has been and will continue to be closely coordinated with the Remedial Program to ensure that the action will contribute to the efficient

performance of any long-term remedial action with respect to the release or threatened release concerned.

### **3. Engineering Evaluation/Cost Analysis**

An Engineering Evaluation/Cost Analysis is not required because this is a TCRA.

### **4. Applicable or relevant and appropriate requirements**

The NCP requires that removal actions attain Applicable or Relevant and Appropriate Requirements (ARARs) under federal or state environment or facility siting laws, to the extent practicable. (40 C.F.R. § 300.415(j)) In determining whether compliance with ARARs is practicable, EPA may consider the scope of the removal action and the urgency of the situation. (40 C.F.R. § 415(j)) The scope of the removal action proposed in this Action Memorandum is limited.

**Endangered Species Act [16 U.S.C. §§ 1531 – 1544; 50 C.F.R. Parts 17, 402].** The Endangered Species Act (ESA) protects species of fish, wildlife, and plants that are listed as threatened or endangered with extinction. It also protects designated critical habitat for listed species. The ESA outlines procedures for federal agencies to follow when taking actions that may jeopardize listed species, including consultation with resource agencies. The requirements of the ESA are potentially applicable to the Site since listed threatened or endangered species habitat areas will or could be impacted by response action. Consistent with ESA Section 7, if any federally designated threatened or endangered species are identified in the vicinity of removal work and the action may affect such species and/or their habitat, EPA will consult with USFWS to ensure that response actions are conducted in a manner to avoid adverse habitat modification and jeopardy to the continued existence of such species.

**National Historic Preservation Act [16 U.S.C. § 470f; 36 C.F.R. Parts 60, 63, 800].** Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of their undertakings on historic properties and seek ways to avoid, minimize or mitigate any adverse effects on those properties. This includes archaeological sites, historic sites and traditional cultural properties that are eligible to the National Register of Historic Places.

The Section 106 process seeks to accommodate historic preservation concerns with the needs of federal undertakings through consultation among the agency official and the affected parties, commencing at the early stages of project planning. The EPA is the lead Agency responsible for ensuring that all work is conducted in compliance with Section 106 of the National Historic Preservation Act. EPA will consult with other parties that have an interest in the effects of the planned undertaking and provide them a reasonable opportunity to comment on such undertakings. These parties include, but

are not limited to, the State Historic Preservation Officer and the concerned Tribal Historic Preservation Officers (THPOs).

On June 16, 2015, EPA representatives met with the Colville Confederated Tribes THPO and staff archaeologist regarding the planned soil removal work and discussed the field protocol to be followed by the work crews in coordination with the cultural monitors. A detailed description of the agreed upon field coordination/communication protocol is contained in the Statement of Work (Appendix C to the Administrative Settlement Agreement and Order on Consent for the performance of a removal action by TAI). This protocol will also be included in the Cultural Resources Coordination Plan to be completed by TAI. All field personnel are expected to be familiar with the cultural resources coordination plan and the field coordination/communication protocol to be followed on all properties. As contained in the protocol, the cultural monitors will have stop work authority if a suspected archaeological object or archaeological resource is encountered. Additionally, EPA personnel on-site will have stop work authority if there is any deviation from the coordination/communication protocol without prior approval by EPA. EPA has provided a copy of the field protocol to the Washington State Department of Archaeology and Historic Preservation Office which serves as the State Historic Preservation Office (SHPO) and provides continued updates regarding the planned work and its coordination efforts with the Colville Confederated Tribes.

On July 20, 2015, representatives for EPA, TAI and the CCT History/Archaeology Program discussed TAI's preliminary start date for conducting soil removal work so that the CCT can arrange for the availability of cultural monitors.

The performance of the removal action are expected to achieve the standards set forth under Washington State's MTCA (Chapter 173-340 of the Washington Administrative Code [WAC]) to address potential threats to public health and welfare and the environment from a release or threat of release of hazardous substances. As discussed above, soil cleanup levels for the removal action are based on MTCA Method A cleanup levels and the Work will achieve these levels. The State of Washington's solid waste and dangerous management regulations, found at WAC 173-300 *et seq.*, are potentially applicable to solid waste generation and management at the Site.

Clean Water Act. The removal action shall comply with substantive stormwater requirements for construction activities, including erosion and sediment controls. (90.48 RCW, 33 U.S.C. §1251 *et seq.*)

## **5. Project schedule**

The removal action activities are expected to start in August 2015 and the residential properties are expected to be completed by October 2015. The project is expected to last approximately eight to twelve weeks. Excavation is expected to be completed before winter weather arrives (usually November) before snowfall covers the planned

excavation areas and because the access roads/driveways to some of the properties will become impassable.

**B. Estimated Costs**

Teck is expected to pay for past costs and the cost of the removal action, including EPA's oversight costs. If EPA were to undertake implementation of the work described in this Action Memorandum, an Amendment will be written.

**VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN**

A delay in action or no action at the Site would increase the actual or potential threats to the public health and/or the environment associated with exposure to Site contaminants and would allow Site contaminants to continue to migrate from surface soils.

**VII. OUTSTANDING POLICY ISSUES**

None.

**VIII. ENFORCEMENT ADDENDUM**

Refer to attached confidential enforcement addendum.

**IX. RECOMMENDATION**

This decision document sets forth the recommended removal action for the Site that has been developed in accordance with CERCLA, and is consistent with the NCP. The recommended removal action is based on the administrative record for the Site.

Conditions at the Site meet the NCP 40 C.F.R. § 300.415(b) criteria for a removal action, and I request your approval of the recommended removal action. The recommended removal action is expected to be funded and conducted by Teck with oversight provided by EPA. However, if Teck is unwilling or unable to fund or conduct the recommended removal action, and EPA must undertake all removal action work, the total project ceiling is currently estimated to be \$5,291,850.

**X. APPROVAL/DISAPPROVAL**

By the approval which appears below, EPA selects the removal action for the Site as set forth in the recommendations contained in this Action Memorandum.

Approve:   X  



\_\_\_\_\_  
Chris D. Field, Manager  
Emergency Management Program

Disapprove: \_\_\_\_\_

\_\_\_\_\_  
Chris D. Field, Manager  
Emergency Management Program

Effective date of this Decision: \_\_\_\_\_

**ATTACHMENTS:**

- References
- Figure
- Enforcement Addendum

ATTACHMENT:  
REFERENCE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

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OFFICE OF  
ENVIRONMENTAL  
CLEANUP

April 21, 2015

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Ms. Christine Lehnertz, Pacific West Regional Director  
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Re: Dispute Decision Regarding Upper Columbia River Action Levels for Time-Critical Removal  
Action Dispute, Upper Columbia River Superfund Site

Dear Mr. Pendowski, Mr. Kieffer, Mr. Passmore, and Ms. Lehnertz:

This letter sets forth my determination with respect to the Washington Department of Ecology's February 13, 2015, request for dispute resolution, the Spokane Tribe of Indians' February 19, 2015, notification of participation in the dispute resolution process and subsequent submittal, the Confederated Tribes of the Colville Reservation's February 20, 2015 request for dispute resolution and subsequent submittal, and the U.S. Department of the Interior's March 19, 2015 comments via telephone on the dispute, regarding EPA's proposal of a lead action level for a Time-Critical Removal Action for various residential properties within the Upper Columbia River Superfund Site ("Site"). In summary, I hereby determine:

1. The lead action level for the Time-Critical Removal Action at residential properties at the Site must be determined through CERCLA removal action procedures and tribal consultation policies and will be documented in an Action Memorandum and the associated administrative record;

2. EPA intends to select an action level for the Time-Critical Removal Action for lead of 700 parts per million which will result in a cleanup level of less than 250 parts per million; and
3. EPA will continue to follow all appropriate CERCLA remedial action procedures, including the Memorandum of Agreement, and tribal consultation policies, for determining final cleanup levels for lead for the Remedial Action at the Site.

## I. Background

On June 2, 2006, EPA and Teck Cominco Metals, Ltd. and Teck Cominco American Incorporated (collectively “Teck Cominco”) entered into a settlement agreement for the performance of a CERCLA Remedial Investigation and Feasibility Study (“RI/FS”) at the Site. On May 18, 2007, five governmental parties (“Participating Parties”) entered into the Intergovernmental Memorandum of Agreement for the Upper Columbia River Superfund Site (“MOA”).<sup>1</sup> The MOA provides a framework for coordination and cooperation among the Participating Parties to address the RI/FS process at the Site. While the governmental parties, except for EPA, are not parties to the settlement agreement with Teck Cominco, they have statutory and regulatory mandates applicable to the RI/FS and are active government oversight participants in Teck Cominco’s performance of the RI/FS. The current dispute is raised under Section VII of the MOA.

In December 2014, EPA began the process of considering action levels for a potential Time-Critical Removal Action at the Site to address lead contamination in soils at residential properties, pursuant to Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and 40 C.F.R. § 300.415, that pose an immediate threat to human health. EPA initiated conversations with the Washington Department of Ecology on December 16, 2014, and with the Confederated Tribes of the Colville Reservation on December 18, 2014, regarding a potential Time-Critical Removal Action at residential properties with lead levels over 1,000 ppm, and for children’s play areas with lead levels over 700 ppm. At that time, EPA expressed that complete data regarding lead levels in soils at the Site were not expected until January 29, 2015, and therefore the discussions regarding an action level range of 700 ppm to 1,000 ppm were preliminary and were not meant to convey a final agency decision on the action level. Throughout December 2014, January 2015, and February 2015, EPA conducted weekly telephone calls with the Participating Parties and was in regular communication with Teck Cominco. On March 11, 2015, following the official commencement of this dispute, EPA met with the parties to the dispute in Spokane, Washington. At that meeting, the concerns of the parties to the dispute were discussed, and EPA presented the perspective of its technical team regarding the proposed action level for the Time-Critical Removal Action. The conversations that occurred over the past few months were intended to provide for open communication among all parties regarding a Time-Critical Removal Action from residential properties at the Site, and were not intended to convey or determine an action level. To date, EPA has not made a determination of the action level for the Time-Critical Removal Action for residential properties at the Site.

## II. The Issues

In its request for dispute resolution, the Washington Department of Ecology contends that applying the same action levels developed for the Bunker Hill Superfund Site is inappropriate because it is

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<sup>1</sup> The signatories to the MOA, referred to as the Participating Parties, are the United States Environmental Protection Agency, the Washington Department of Ecology, the Confederated Tribes of the Colville Reservation, the Spokane Tribe of Indians, and the United States Department of the Interior.

inconsistent with EPA policy, with current scientific consensus on health risks associated with lead exposure, with more recent bioavailability studies, with Washington's policies, and with other EPA actions.

In its request for participation in the dispute resolution process, the Spokane Tribe of Indians did not initially raise any specific issues, but requested to participate in the process, as provided for in the MOA. In follow up written communication dated March 12, 2015, Dr. F. E. Kirschner of AESE, Inc., on behalf of the Spokane Tribe of Indians, contends that the proposed use of action levels at the Site that were developed for the Bunker Hill Superfund Site are inappropriate, and that the proposed action level would provide disproportionate protection of human health at the Site than is provided for under Washington State policy.

In its request for dispute resolution, the Confederated Tribes of the Colville Reservation contends that EPA did not coordinate with the Confederated Tribes of the Colville Reservation prior to communicating EPA's cleanup intent and proposed cleanup levels to Teck Cominco, and gave no meaningful consideration to Tribal cleanup standards. Additionally, the Confederated Tribes of the Colville Reservation contends that it shares the Washington Department of Ecology's concerns regarding application of cleanup levels from the Bunker Hill Superfund Site.

In its comments via telephone regarding the current dispute, the U.S. Department of the Interior expressed its support for EPA's proposed action level for the Time-Critical Removal Action and the technical basis used to reach the proposal.

#### A. Removal Action Authority and Procedures

In the present action level determination process, EPA must follow the procedures of its removal action authority, as laid out in CERCLA, 42 U.S.C. §§ 9601, *et seq.*, the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"), 40 C.F.R. Part 300, and relevant EPA guidance documents. Section 104(a)(1) of CERCLA, 42 U.S.C. § 9604(a)(1), grants EPA the authority to act, consistent with the NCP, to remove a hazardous substance, pollutant, or contaminant, whenever there is a release or a threat of such a release into the environment. Additionally, pursuant to Section 104(a)(2) of CERCLA, 42 U.S.C. § 9604(a)(2), any removal action taken should, to the extent practicable, contribute to the efficient performance of any long term remedial action with respect to the release or threatened release concerned. Therefore decisions made regarding action levels or cleanup levels of a removal action do not constitute final remedial actions, but rather should contribute to final remedial actions. Conducting the Time-Critical Removal Action for residential properties at the Site is intended to address the immediate threat to human health from lead exposure, and will contribute to the long term cleanup of the Site through the remedial action process.

The removal program is in the final stages of the site evaluation and has determined that a Time-Critical Removal Action is appropriate to address immediate threats to human health due to lead contaminated soils. Factors EPA must consider when making this determination include, but are not limited to, actual or potential exposure to humans, actual or potential contamination of drinking water, and threat of fire or explosion.<sup>2</sup> Since EPA has not completed the required process for starting a Time-Critical Removal Action, EPA is now in the final stages of determining action levels, cleanup levels, and the scope of this

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<sup>2</sup> 40 C.F.R. § 300.415(b)(2).

Time-Critical Removal Action for residential properties at the Site. Pursuant to 40 C.F.R. § 300.415(j), when conducting a removal action, EPA shall, to the extent practicable considering the urgency of the situation and the scope of the removal, attain applicable or relevant and appropriate requirements under federal or state environmental laws (“ARARs”). EPA recognizes that many of the concerns raised in this dispute address ARARs and EPA will consider those issues, in addition to the urgency of the situation and the scope of the removal, as it determines whether the Time-Critical Removal Action will attain ARARs. As noted above on page 2, removal activities conducted by EPA with an action level of 700 ppm will result in a cleanup level of 250 ppm, which is consistent with the State of Washington’s cleanup standard for lead.

When a final determination is made to implement a Time-Critical Removal Action, EPA prepares an Action Memorandum in accordance with EPA guidance which provides a concise written record of the removal decision.<sup>3</sup> The Action Memorandum authorizes the initiation of on-site activities, pursuant to Section 104(a) of CERCLA, 42 U.S.C. § 9604(a). There is no opportunity for official public comment regarding selection of a Time-Critical Removal Action prior to initiation of on-site activities because of the time-critical element of such actions. Pursuant to 40 C.F.R. § 300.415(n)(2)(i), within 60 days of initiation of on-site removal activity, EPA will publish an administrative record providing supporting documentation of EPA’s decision to conduct the Time-Critical Removal Action. Pursuant to 40 C.F.R. § 300.415(n)(2)(ii), EPA will then provide for a public comment period, as appropriate, for a period of not less than 30 days. That public comment period, which follows determination of removal action levels and initiation of on-site removal activity, is the mechanism for official public comment regarding Time-Critical Removal Actions. Tribal consultation regarding Time-Critical Removal Actions will be addressed in Section II.D, below.

EPA understands the importance of public participation in its decision-making process and recognizes the specific interests of the parties involved in the present dispute in determining final remedial cleanup levels. However the very nature of, and legal procedures for, Time-Critical Removal Actions require rapid decision-making to address immediate threats to human health.

#### B. Remedial Action Authority and Procedures – Including the RI/FS and MOA

While the removal action procedures described above authorize the determination of the action levels for a Time-Critical Removal Action, remedial action procedures, including the RI/FS process and the MOA, govern the determination of the long term remedial cleanup levels at the Site. Remedial action authority and the selection of cleanup standards are authorized under Sections 104 and 121 of CERCLA, 42 U.S.C. §§ 9604 and 9621. Following a preliminary assessment and site inspection, 40 C.F.R. § 300.430 authorizes the RI/FS. As mentioned in Section I above, EPA and Teck Cominco entered into a settlement agreement under which Teck Cominco agreed to conduct the RI/FS, consistent with EPA guidance and the NCP. The purpose of an RI/FS is to assess site conditions and evaluate alternatives to the extent necessary to select a remedy and includes project scoping, data collection, risk assessment, treatability studies, and analysis of alternatives.<sup>4</sup> The MOA, under which the current dispute was raised, is “intended to assist the Participating Parties in achieving enhanced communication, coordination and

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<sup>3</sup> EPA *Superfund Removal Guidance for Preparing Action Memoranda, Final Guidance, September 2009*, available at [http://www2.epa.gov/sites/production/files/2014-02/documents/superfund\\_removal\\_guide\\_for\\_preparing\\_action\\_memo.pdf](http://www2.epa.gov/sites/production/files/2014-02/documents/superfund_removal_guide_for_preparing_action_memo.pdf).

<sup>4</sup> 40 C.F.R. § 300.430(a)(2).

efficiencies during the RI/FS process.”<sup>5</sup> Therefore the MOA and its dispute resolution procedures apply only to the RI/FS process (not to determinations made by EPA pursuant to its removal authority). EPA is committed to adhering to the letter and spirit of the MOA and will take into account comments and critiques raised by the Participating Parties regarding the RI/FS process.

Following completion of the RI/FS process, EPA will follow legal requirements in CERCLA and the NCP, specifically 40 C.F.R. § 300.430(f), to select a remedial action. Remedial actions involve long-term actions designed to provide a permanent solution to threats posed by hazardous substances, pollutants, or contaminants. Cleanup levels and remediation goals for selected remedial actions must address ARARs, and the site-specific evaluation of ARARs is based on a number of factors in the NCP.<sup>6</sup> The comments and issues raised in the current dispute, such as using data from the Bunker Hill Site, using IEUBK modelling, not attaining cleanup standards from Washington state law and policies, not applying ATSDR and CDC standards, and not mirroring cleanup levels selected at other Superfund sites, are issues that will be relevant to the discussion surrounding ARARs and the applicability of ARARs to the remedy. Additionally, pursuant to 40 C.F.R. § 300.430(f)(3), EPA will provide for a public comment period on the proposed remedy prior to making a final decision. EPA encourages input and participation from state and tribal partners, as well as other members of the public, in selecting the appropriate remedy for the Site.

### C. Removal Action Level for Lead

In December 2014, EPA proposed an action level for lead for a potential Time-Critical Removal Action for residential properties at the Site of 700-1,000 ppm. That action level was proposed based on EPA’s concern that a number of residential soil samples had lead levels above 1,000 ppm. EPA proposed the lower action level of 700 ppm for children’s play areas where children’s risk for exposure to lead would be higher. That proposal, and subsequent conversations, led to the initiation of the current dispute in February 2015. That initial proposal was not a decision under the remedial program procedures. As described in Section II.A above, the decision to conduct a Time-Critical Removal Action and the proposal of certain action levels was made pursuant to removal action authorities and procedures, which falls outside the purview of the dispute resolution mechanism of the MOA. EPA does not have the legal authority to make a decision regarding a Time-Critical Removal Action in a response to a dispute raised under the MOA. However, the MOA dispute resolution process has provided a valuable mechanism for the exchange of information regarding lead action levels and EPA is taking the opportunity to use the MOA dispute resolution process to provide the Participating Parties with information on EPA’s intended action level for the upcoming Time-Critical Removal Action for residential properties at the Site.

As mentioned above, EPA is currently in the process of determining the scope and action level of the Time-Critical Removal Action. While I am not in a position to make a final decision regarding action levels or cleanup levels for lead in this dispute resolution decision letter, EPA intends to select an action level for lead of 700 ppm for the Time-Critical Removal Action. Therefore, residential soils that are above 700 ppm of lead would undergo a removal action and would be cleaned up to less than 250 ppm of lead. The Time-Critical Removal Action will be focused on immediate threats to human health and there will be additional assessment, through the RI/FS process which provides for input from the Participating Parties under the MOA, and additional opportunity for public comment on the proposed

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<sup>5</sup> MOA, page 1.

<sup>6</sup> 40 C.F.R. § 300.400(g).

remedy, to determine a final remedial cleanup level. During that remedial process, EPA will address possible changes in acceptable modelling methods, potential expansion of the sampling area, ARARs, and other relevant issues.

EPA's project team considered a number of factors in proposing the action level for the Time-Critical Removal Action for residential properties, including results of site-specific bioavailability data gathered through the RI/FS process, and other studies regarding bioavailability, lead ingestion rates, and blood lead levels. The project team also reviewed blood lead level and bioavailability data from the Bunker Hill Superfund Site, as well as studies conducted as recently as 2013 and 2014, to propose in December 2014 that removal of soils from residential properties with lead levels of 700 ppm to 1,000 ppm or higher would adequately address the immediate threat to human health.<sup>7</sup> Following bioavailability and blood lead level studies, and calculation of the lead ingestion rate for the Bunker Hill Superfund Site, the project team used that data to estimate the lead ingestion rate at the Upper Columbia River Superfund Site. The project team used this data in its risk evaluation for the Upper Columbia River Superfund Site for purposes of proposing the action level for the Time-Critical Removal Action because the bioavailability data at the two sites is comparable. Additionally, the data and studies from the Bunker Hill Superfund Site have been reviewed extensively by EPA and a distinguished panel from the National Academy of Sciences who published their supportive findings.<sup>8</sup> The current proposal of a blanket action level of 700 ppm (as opposed to an action level of 700 ppm for residential properties where children live and an action level of 1,000 ppm for residential properties where children do not live) was proposed because the demographics of residents can and does change over time, and a property without children present currently may have children present at the property in the future.

In the past EPA has approved different lead cleanup levels at other sites based on site-specific analyses. For example, at the Tar Creek Superfund Site, Ottawa County, Oklahoma, EPA conducted a Time-Critical Removal Action to address lead contaminated soil in 1995 and 1996. The removal in 1995 focused only on areas where children tend to congregate such as schools, playgrounds, and parks and set an action level of 500 milligrams per kilogram ("mg/kg").<sup>9</sup> The removal in 1996 focused on residential properties, and an action level of 500-1,500 mg/kg was selected. For residential properties where children less than 72 months of age resided who had blood lead levels higher than or equal to 10 µg/dL and soil lead concentrations were identified as a significant contributor to that level, the action level was 500 mg/kg. For residential properties that did not meet those criteria, the action level was 1,500 mg/kg. Additionally, the Action Memorandum, dated March 21, 1996, specifically states "the final remediation goal for lead and all other contaminants will be established in the Record of Decision for the Site."<sup>10</sup> Ultimately, the cleanup level selected through the remedial program in the Record of Decision was 500 mg/kg.

At the Jefferson County Mining Site, Jefferson County, Missouri, EPA initiated a Time-Critical Removal Action in 2007 to address lead contaminated soil. The action level ranged from 400-1,200

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<sup>7</sup> Large scale reviews and integration of data from tracer, mechanistic, validation modeling/measurement, and empirical relations (biomonitoring/environmental concentration) studies have found that mean ingestion rates in children were less than 100 milligrams per day and may be as low as 40-80 milligrams per day. Estimating Children's Soil and Dust Ingestion Rates Using Blood Lead Biomonitoring at the Bunker Hill Superfund Site in the Silver Valley of Idaho.

<sup>8</sup> Superfund and Mining Megsites: Lessons from the Coeur d'Alene River Basin, available at <http://www.nap.edu/catalog/11359/superfund-and-mining-megasites-lessons-from-the-coeur-dalene-river>.

<sup>9</sup> 1 mg/kg = 1 ppm.

<sup>10</sup> Action Memorandum for Tar Creek Superfund Site, dated March 21, 1996, page 7.

mg/kg. For properties that were high-use areas for children 84 months of age or younger, or residential properties where children resided who had blood lead levels greater than 10 µg/dL, the action level was 400 mg/kg. For other properties that did not meet those criteria, the action level was 1,200 ppm. While EPA selected different cleanup levels for the removal actions at the Tar Creek Superfund Site and the Jefferson County Mining Site than it has proposed for the Time-Critical Removal Action at the Upper Columbia River Superfund Site, EPA has always applied a site-specific analysis. EPA has also been clear that cleanup levels selected for removal actions are not the final remedial action cleanup levels.

#### D. Meaningful Tribal Consultation

EPA's policy is to consult on a government-to-government basis with tribal governments when EPA actions and decisions may affect tribal interests.<sup>11</sup> EPA is committed to engaging in consultation with the Confederated Tribes of the Colville Reservation and the Spokane Tribe of Indians throughout the removal and remedial actions at the Site, pursuant to EPA policy and the MOA, as applicable. Specifically regarding Time-Critical Removal Actions in Region 10, "EPA should offer formal consultation directly to Tribal leadership prior to approval of the Action Memorandum, whenever time allows."<sup>12</sup>

I apologize for any miscommunications or misunderstandings regarding consultation that occurred as a result of communications between EPA, the Confederated Tribes of the Colville Reservation, and the Spokane Tribe of Indians in December 2014 through the present on the matter of EPA's proposed action level of 700-1,000 ppm for lead for a Time-Critical Removal Action at the Site. The communications between EPA and these parties were meant to serve as initial informal consultation to discuss the potential action level for the Time-Critical Removal Action. EPA should have been clearer in those early discussions that a decision had not yet been made, and should have ensured that proper procedures for meaningful formal tribal consultation were followed. EPA fully intends to consult with the Confederated Tribes of the Colville Reservation and the Spokane Tribe of Indians prior to approval of the Action Memorandum for the Time-Critical Removal Action at the Site. In the near future, EPA will initiate formal consultation regarding the Time-Critical Removal Action.

As EPA and the Confederated Tribes of the Colville Reservation and the Spokane Tribe of Indians proceed with formal consultation, EPA will take into consideration the issues raised regarding action levels during this dispute, and welcomes any additional input from the Tribes.

#### III. Decision

The dispute raised by the Washington Department of Ecology, the Spokane Tribe of Indians, and the Confederated Tribes of the Colville Reservation, is resolved as of the date of this letter. EPA's proposal to conduct a Time-Critical Removal Action for residential properties at the Site with an action level of 700 ppm for lead are governed by the authorities and requirements of CERCLA and the NCP regarding removal actions. The MOA and its dispute resolution procedures address the RI/FS process of the remedial action for the Site.

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<sup>11</sup> EPA Region 10 Tribal Consultation and Coordination Procedures, page 1.

<sup>12</sup> EPA Region 10 Tribal Consultation and Coordination Procedures, Appendix A.

Accordingly:

1. The lead action level for the Time-Critical Removal Action at residential properties at the Site must be determined through CERCLA removal action procedures and tribal consultation policies and will be documented in an Action Memorandum and the associated administrative record;
2. EPA intends to select an action level for the Time-Critical Removal Action for lead of 700 parts per million which will result in a cleanup level of less than 250 parts per million; and
3. EPA will continue to follow all appropriate CERCLA remedial action procedures, including the Memorandum of Agreement, and tribal consultation policies, for determining final cleanup levels for lead for the Remedial Action at the Site.

#### IV. Administrative Record

An administrative record includes the documents that provide the basis for an EPA decision. The administrative record for the Time-Critical Removal Action for the Site will include documents that were used in reaching the decisions detailed in the Action Memorandum. Pursuant to 40 C.F.R. § 300.415(n)(2), EPA will publish the administrative record within 60 days of initiation of on-site removal activity.

EPA acknowledges the importance of the critical issues brought up through this dispute resolution process and will work with the Participating Parties to address those concerns through the proper procedures. EPA is committed to continuing dialog with the Participating Parties throughout the RI/FS process, in accordance with the MOA, and into the selection of the remedy to ensure a long-term solution to contamination at the Site.

Sincerely,

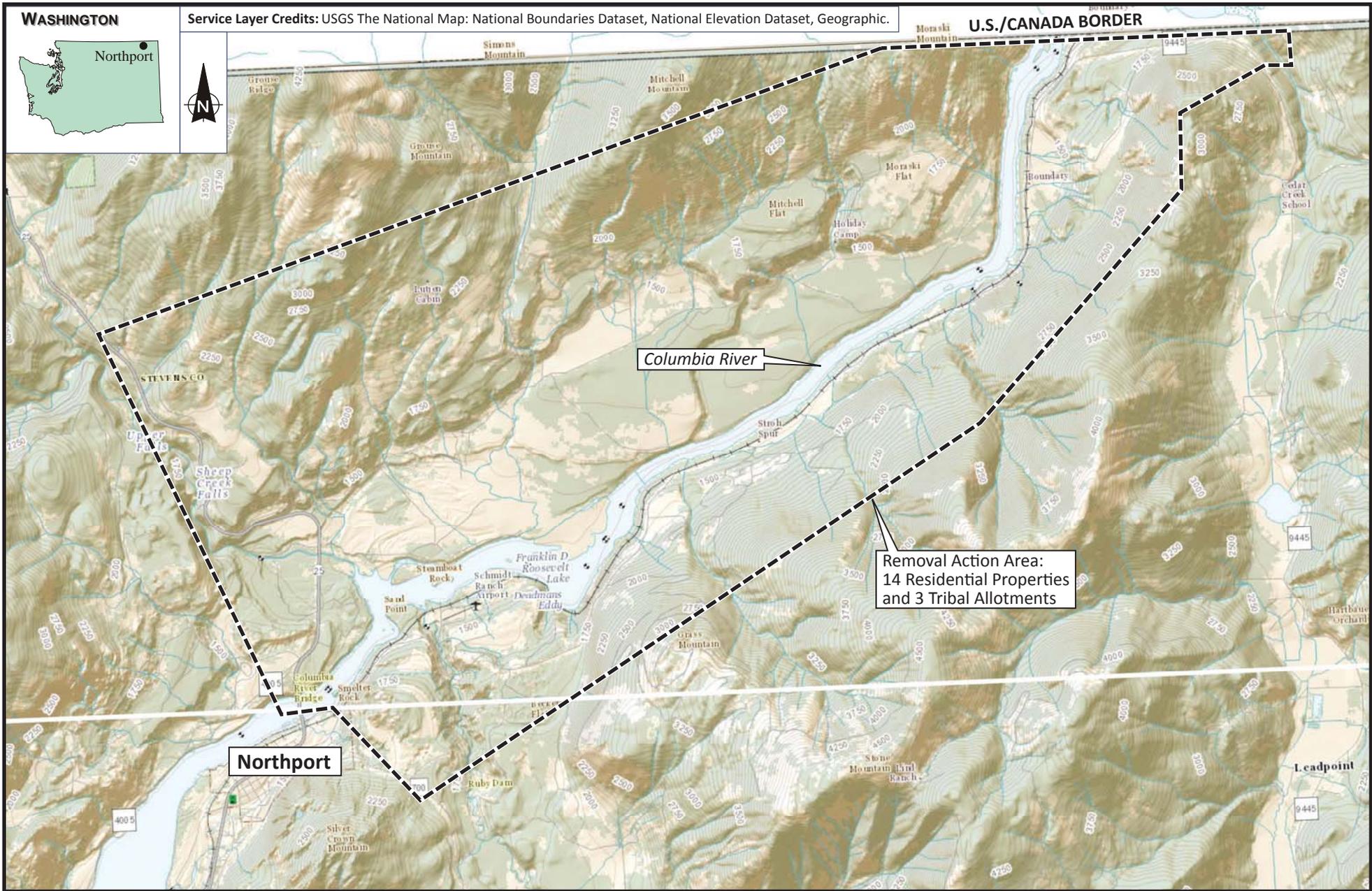


Richard Albright, Director  
Office of Environmental Cleanup

cc: Ms. Patty Bailey, Colville Tribe  
Mr. Dan Audet, National Park Service  
Mr. Mike Hibbler, Washington State Dept. of Ecology  
Mr. John Rowland, Washington State Dept. of Ecology  
Mr. Fred Kirschner, AESE, Inc.  
Mr. Dennis Faulk, EPA  
Ms. Laura Buelow, EPA

ATTACHMENT:

FIGURE 1



 <p><b>ecology and environment, inc.</b> Global Environmental Specialists Seattle, Washington</p>	<p>UPPER COLUMBIA RIVER - RESIDENTIAL SOIL REMOVAL ACTION Northport, Washington</p>		<p>Figure 1 SITE VICINITY MAP</p>	
	<p>0 1 2 Approximate Scale in Miles</p>		Date: 7/15/15	Drawn by: AES

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ATTACHMENT:

CONFIDENTIAL ENFORCEMENT ADDENDUM

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