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SUPERFUND &
EMERGENCY
MANAGEMENT DIVISION

March 30, 2020

MEMORANDUM

SUBJECT: Action Memorandum and $2 Million Exemption Request for a Removal Action at Properties in Northport, Stevens County, Washington

FROM: Monica Tonel, On-Scene Coordinator
Spill Prevention and Removal Section

THRU: Wally Moon, Section Chief
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TO: Sheila Fleming, Acting Director
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I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the proposed time-critical removal action (TCRA) described herein for properties in the Northport area within the Upper Columbia River Site (Site). These properties are located in Northport, Stevens County, Washington. This request includes approval of an emergency exemption to the statutory limit for a total project cost that will exceed $2 million. Soil contamination from lead at the Site poses a threat to public health and the environment pursuant to Section 104 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) that meets the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) section 300.415(b)(2) criteria for removal actions. The Northport properties include residential properties and a park where soils have been contaminated by hazardous substances, including lead, from smelting operations and construction practices using mine-waste contaminated materials. The proposed time-critical removal action will be performed by the U.S. Environmental Protection Agency (EPA) and in accordance wih CERCLA, as amended. The total project ceiling for this time-critical removal action, if approved, will be $2,498,892 funded by the Regional Removal Allowance.

II. SITE CONDITIONS AND BACKGROUND

The Superfund Enterprise Management System ID Number for the properties in the Northport area within the Upper Columbia River Site where the proposed TCRA will be performed is WAN001020185 and the Site/Spill ID is 10SF.

A. Site Description

1. Removal site evaluation

The town of Northport, with land area of approximately 0.6 square miles is situated within the Site remedial investigation and feasibility study (RI/FS) project area in northeast Washington state. The population of Northport was estimated at 295 during the 2010 United States (U.S.) census[1]. The major industry is self-sustaining community businesses such as education, health, and social services, and tourism and recreation. The removal site evaluation (RSE) addresses residential properties and common use areas[2] located within Northport town limits west of a former smelter, i.e., Le Roi Smelter. Please refer to the attached figure (Attachment 1).

In 2002, the EPA Site Assessment Program completed a Site Reassessment of the former Le Roi Smelter property located in the town of Northport and referred the area assessed to the EPA Removal Program for further consideration. In 2003, EPA conducted an RSE at the former Le Roi Smelter property. Impacts from historical Le Roi Smelter operations may have extended beyond the private property boundary; therefore, the 2003 RSE was expanded into a project area comprised of the former smelter property and properties within or near the Northport town limits through a voluntary soil sampling effort. Contamination from the operation of the LeRoi Smelter is likely commingled with contamination attributable to the Teck Resources, Inc., lead and zinc smelter in Trail, British Columbia. Based on the findings of the 2003/2004 RSE, EPA identified several residential and common use areas for a removal action. From July 19, 2004 through October 22, 2004, EPA completed TCRAs at the former Le Roi Smelter property and at 29 residential properties located within or near Northport town limits. In 2004, the TCRA action level for lead in soil was 1,000 milligrams per kilogram (mg/kg).

Additionally, in 2003, EPA began a RI/FS at the Upper Columbia River Site in northeast Washington state to investigate contamination along the upper Columbia River from the Grand Coulee Dam to the U.S.-Canada border including the bed and banks of the Columbia River and adjacent upland areas related to smelting operations impacting the Site. As part of the RI/FS field sampling activities, EPA identified several residential properties and tribal allotments located outside the Northport town limits with lead and/or arsenic in soil at elevated levels. In 2015, a TCRA was conducted by Teck American Incorporated (Teck) with EPA oversight at residential properties and a Tribal allotment located outside the Northport town limits using a removal action level for lead in soil of 700 mg/kg. EPA determined that 700 mg/kg was the action level for TCRAs at the Upper Columbia River Site above which lead contamination may present an imminent and substantial endangerment to public health or welfare or the environment based on more protective guidance from EPA and Centers for Disease Control. The removal action cleanup level for lead in soil was 250 mg/kg or less, and 20 mg/kg or less for arsenic, based on a project-specific determination by

[1] https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

[2] "Common use areas" are areas that are publicly owned and/or areas to which the general public has access and the right to use.

EPA (Memorandum from Richard Albright, EPA to Jim Pendowski, et al., Washington State Department of Ecology (Ecology), entitled *"Dispute Decision Regarding Upper Columbia River Action Levels for Time-Critical Removal Action Dispute, Upper Columbia River Superfund Site",* April 21, 2015) (Attachment 2). In 2017 and 2018, additional removal actions were conducted by Teck with EPA oversight at residential properties located outside Northport town limits.

In 2019, the Region 10 Superfund and Emergency Management Division, Emergency Management Branch conducted a RSE of the properties located within Northport town limits that were sampled in 2003/2004 that contained lead in soil at concentrations near or above the action level of 700 mg/kg, but at which no soil removal action was taken. For those properties with soil sampling results near 700 mg/kg, EPA included in the RSE those properties within ten percent (10%) of the action level of 700 mg/kg, to account for a margin of safety. EPA visited the properties from October 24 to October 28, 2019, documented the condition and layout of each property designated for potential cleanup and interviewed each of the property owners regarding their use of the property and any changes to the property since the 2003/2004 soil sampling. At some of the properties, EPA either extended the size of some decision units (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. A DU is an identified area within a property that is distinguishable from other areas by factors such as location or use and includes 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. EPA also collected and analyzed soil samples, as determined appropriate by the On-Scene Coordinator (OSC), to better delineate the horizontal extent of contamination and to assist in removal planning (i.e., disposal, and cost estimating).

Based on the findings of the 2019 RSE, 16 residential properties and common use areas were identified as meeting the established criteria for a TCRA. The analytical results of soil samples collected from these properties revealed the presence of lead at concentrations near or above the removal action level for lead in soil of 700 mg/kg. Among the 16 properties, four are common use areas: a community park/playground, the Northport Community Library yard/picnic area, a community garden play area, and the Northport American Legion lot used for children's play activities. Potential contaminants of concern, transport mechanisms, and potential receptors are provided in the table below.

Conceptual Site Model

Source	Transport	Exposure
Aerial deposition of metals from smelter operations	Re-suspension from wind or surface water transport	Incidental ingestion from direct contact with contaminated soil
Fugitive dusts from smelter operations	Vehicular tracking of dusts	Incidental ingestion of soil tracked into homes

Fugitive dusts from smelter feed stock	Re-suspension from wind Surface water transport Vehicular tracking of dusts	Pre-school children are most susceptible to adverse health effects from lead because they are more highly exposed and biologically susceptible to cognitive health effects
Placement of slag or other waste materials	NA	Incidental ingestion

A removal action would address the following issues:

- eliminate the pathway between contaminated soil and human receptors via incidental ingestion of soil from direct contact with contaminated soil and soil tracked into homes; and

- address potential migration/mobilization of contaminants by wind and rain.

2. Physical location

The town of Northport lies in the northeastern section of Washington state along the eastern shoreline of the upper Columbia River, approximately seven miles south of the U.S./Canada border and 35 miles north of Colville, Washington. The Northport High School is approximately half a mile from the community park/playground that is among the properties with elevated lead concentrations in soil. The surrounding land use is primarily forestry and agricultural and rural residential properties.

The area has a humid continental climate characterized by cold winters and hot summers. Average annual precipitation is 23 inches, and the average annual snowfall is 49 inches. Average maximum temperatures are as high as 88.1 degrees Fahrenheit (°F) in the summer (July) and average minimum temperatures are as cold as 19.2 °F in winter (January)[3].

The Site is situated within the Colville Confederated Tribes' usual and accustomed treaty rights area. EPA staff worked closely with the Colville Confederated Tribes in planning the 2019 RSE. Tribal cultural monitors were present during the RSE property visits to monitor soil sampling activities. EPA is continuing to maintain close communication and coordination with the Colville Confederated Tribes regarding any planned work involving ground disturbance activities at the town of Northport.

3. Site characteristics

The 16 properties within which the TCRA will be conducted consist of residential properties and common use areas within the Columbia River valley in Northport, Washington.

[3] https://en.wikipedia.org/wiki/Northport,_Washington#Climate

Each property has one or more DUs designated for removal activities. Each DU includes areas used by the residents and/or visitors and so poses an increased exposure risk to the elevated lead concentration in the soil. Activities including recreational activities, gardening, and/or yard maintenance would likely expose them to the contaminated soil. Each property revealed soil lead concentrations near or above the removal action level for lead of 700 mg/kg, and four of the properties revealed soil lead concentrations greater than 1,000 mg/kg. This is the first removal action at these properties.

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) and (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 impacts from smelter operations and construction practices using mine-waste contaminated materials.

Of the 18 properties visited in the October 2019 RSE, sampling was conducted at 12 properties using a 30-point incremental composite soil sampling approach. Examples of areas sampled are gardens, play areas, and lawns. A total of fourteen (14) 30-point increment composite soil samples were collected and submitted to an accredited laboratory for metals analysis. This includes one field duplicate sample. The results indicated that eight of the samples exceeded the removal action level for lead of 700 mg/kg based on the laboratory data. For the 2019 laboratory data, lead was detected as high as 1,990 mg/kg. Soil data is summarized below.

Residential and Common Use Areas

Soil Chemical	Location	Number of samples	Depth	Concentration (mg/kg)
Lead	Northport community park/playground	1 sample/30-point increment composite	Surface	1,110
	Northport Community Library lawn/ picnic area	1 sample/5-point increment composite	Surface	771[a]
	Northport American Legion lot	1 sample/5-point increment composite	Subsurface (6 inches below ground surface)	917[a]
	Residences	13 samples/30-point increment composite	Surface	117 – 1,990

[a] – concentration is 2004 analytical laboratory result

5. NPL Status

The Upper Columbia River Site within which the Northport properties are located is not listed on the NPL.

6. Maps, pictures, and other graphic representations

Figure-1 indicates the location of the properties that were the subject of the RSE, including the general area on both sides of the Columbia River between Northport and the U.S./Canadian Border where the 16 residential properties and common use areas are located.

B. Other Actions to Date

1. Previous actions

In 2004, EPA performed a TCRA at a property on which the Le Roi smelter operations were located in the town of Northport. The area in which the actions were taken included a 20-acre smelter 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 and British Columbia. The primary contaminants of concern for the removal action were lead and arsenic.

In addition to cleanup of the property on which the Le Roi smelter operations were located, the scope of the TCRA included the removal of lead and arsenic contaminated soil from 29 residential and common-use properties within or near the Northport town limits, followed by backfilling excavations with clean top soil and property restoration. The TCRA was performed to address lead and arsenic contamination associated with smelting operations, mine-waste disposal practices, and construction practices using mine waste-contaminated materials.

2. Current actions

Ecology is directing and funding an investigation and evaluation of cleanup options of smelter-related metals contamination on Northport's boat launch waterfront area. The project area includes all permanently and seasonally exposed areas of the bank and shore of the Columbia River next to the Northport boat launch.

C. State and Local Authorities' Roles

1. State and local actions to date

The State of Washington Department of Health (Health) and Ecology, the Northeast Tri-County Health District, and the Stevens County Commissioner, District #3, have been kept informed of EPA's 2019 RSE. EPA worked closely with the Mayor of Northport and the Town Council in planning RSE field activities and is continuing to work with the Mayor and Town Council regarding the anticipated EPA response activities.

2. Potential for continued State/local response

The State of Washington has not communicated to EPA that it has current plans to conduct response actions at the properties on which EPA intends to conduct removal actions.

3. Confederated Tribes of the Colville Reservation

EPA has coordinated and will continue to work with the Confederated Tribes of the Colville Reservation regarding the proposed TCRA, including the Tribal Historic Preservation Officer, Tribal archaeologists, and the Colville Confederated Tribes CERCLA Coordinator. Staff-to-staff level coordination occurred between EPA and the Colville Confederated Tribes in planning the 2019 RSE and will continue in planning the proposed TCRA. Tribal cultural monitors were present during the October 2019 property visits to monitor EPA's soil sampling activities. EPA communication and coordination with the Colville Confederated Tribes regarding investigation and field activities in northeast Washington state has been ongoing since 1999 when the CERCLA pre-remedial investigation of hazardous substance contamination at the Upper Columbia River Site commenced.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

The current conditions at the Northport properties meet the following factors which indicate that soil contamination at the residential properties and common use areas 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 that the primary source of the elevated concentrations of metals is from releases from smelting operations.

Potential human exposure routes include direct contact with and ingestion of contaminated soil. Human receptors include residents, visitors, and passers-by. The potential for exposure is increased by the fact that there are full-time residents at most of the properties.

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 DUs would be used frequently by residents or visitors. The DUs include yard, garden and play 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 in the soil. Common use areas including the community park/playground, the community library lawn/picnic area, the community garden play area, and the American Legion lot used by the residential community and visitors for recreation, lawn maintenance and gardening represent an increased risk of exposure to the elevated levels of lead 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. Young children are most susceptible to the effects of lead and even low levels of lead in the blood of children can cause behavioral or learning problems, lower IQ and hyperactivity, slowed growth, hearing problems, anemia, and in acute cases, 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 developing fetus, including reduced growth of the fetus and premature birth[4].

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 is present at elevated concentrations in shallow surface soil (i.e., 0-6 inches below ground surface [BGS]), which create a high potential exposure scenario. Bare soils are susceptible to migration, including via water or air.

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 area within which the properties are located includes 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))

There are no known other appropriate federal or state response mechanisms capable of providing timely and necessary resources to address the potential human health risks associated with the hazardous substances.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from the properties that are subject to the removal actions may present an imminent and substantial endangerment to the public health, or welfare, or the environment.

[4] National Toxicology Program (2012). NTP Monograph on Health Effects of Low-Level Lead Research Triangle Park, NC, U.S. Department of Health and Human Services: 185 p. plus Appendices. https://www.ncbi.nlm.nih.gov/pubmed/23964424

V. EXEMPTION FROM STATUTORY LIMITS

A. Emergency Exemption

1. There is an immediate risk to public health or welfare at 16 contaminated properties. Soil currently found in the yards and gardens of the residents, and in community common use areas such as a park, playgrounds, and picnic areas are contaminated above the 700 mg/kg TCRA action level for lead in soil. The owners of these contaminated properties and community members who enjoy these common use areas are subject to daily exposure to lead. Exposures can occur when residents conduct routine activities such as cutting the grass, gardening, or playing in the yard, park, playground or picnic areas.

2. Response actions are required immediately to prevent, limit or mitigate further exposure to contaminated soil. The analytical results of soil samples collected by the EPA show high levels of contamination in the top few inches of soil. Concentrations of lead detected in soil at the properties proposed for this TCRA are as high as 1,990 mg/kg. Gardening and construction activity such as installing recreational use improvements, playground swing sets, slides, horseshoe or barbeque pits, alter the surface soil and foster migration of loosened soil during heavy rain events. The contaminated soil must be addressed to eliminate risk of ingestion by neighborhood children or inhalation of dusts by community residents.

3. Unless the EPA conducts a removal action, assistance will not otherwise be provided on a timely basis. Neither the State nor local governments intend to take action to address the contamination.

VI. 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 action levels (near or above 700 mg/kg for lead and/or 90 mg/kg for arsenic) will be excavated to a maximum depth of 12 inches below ground surface (BGS) or as determined by the OSC based on field conditions (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 project area consists of 16 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(s) and EPA observations made during property 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 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 six inches BGS or as determined by the OSC based on the site-specific conditions. 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 excavation, soil samples will be collected and screened using a field portable x-ray fluorescence (XRF) unit to acquire immediate data to determine whether additional excavation is required. Screening sample locations will be established in a grid pattern at a frequency of at least one sample every 400 square feet. If the soil screening results are below the removal action cleanup level for lead (250 mg/kg) and arsenic (20 mg/kg), samples will be submitted to an off-site fixed laboratory for analysis. If the laboratory results indicate that the lead and arsenic levels are below the removal action cleanup levels, the area will be backfilled. If analysis of samples from any location at the bottom of the excavation indicates that the soil contains either lead or arsenic above the respective cleanup levels of 250 mg/kg and 20 mg/kg, excavation will continue at that location to a maximum depth of 12 inches BGS or as determined by the OSC. 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, then 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 two inches BGS within the tree's root radius to avoid damaging 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 a landfill consistent with the off-site rule.

- *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 topsoil, depending on the property. Additionally, as appropriate grass seed or sod can be added to areas backfilled with clean topsoil.

Sources of pit run gravel and topsoil 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 placed at the base of the excavation. The geotextile will be installed as a visual barrier to the contaminated soil below. Following the removal action, a document will be provided to the property owner that will contain the following information:

- summarizing the work performed on the property and sampling results;
- providing a map showing the location of cleanup work and areas where fabric barrier or other visual marker was installed;
- describing homeowner maintenance and care of sod, hydroseed, plants and/or protective barriers;
- identifying homeowner practices to prevent recontamination of clean areas if doing outdoor work involving digging below a fabric barrier and reducing contact with this soil;
- providing information resources for sellers and realtors disclosure requirements, i.e., Chapter 64.06 of the Revised Code of Washington, including a seller disclosure statement known as Form 17; and
- provide contact persons at the Washington State Department of Ecology or other appropriate local authority for questions about future digging and disturbance of protective barriers and healthy actions information.

On properties where sod, grass seed, and/or plants have been installed, general maintenance instructions will be provided to each property owner so that the new plantings establish roots and survive. EPA contact information will also be provided for follow up concerns or questions related to the EPA work.

2. Contribution to remedial performance

The proposed removal action will be the first and only action at these properties necessary to prevent, limit or mitigate further exposure to contaminated soil. The proposed removal action has been and will continue to be 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, given the exigencies of the situation. (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))

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 consider 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 NHPA. EPA has and will continue to consult with parties that have an interest in the effects of the planned undertaking and will provide them a reasonable opportunity to comment on such undertakings. These parties include, but are not limited to, the Washington State Department of Archaeology and Historic Preservation (DAHP) and the Colville Confederated Tribes (CCT) History & Archaeology Program.

On January 21, 2020, the EPA OSC and a representative for DAHP discussed the planned soil removal work. On January 30, EPA submitted a letter to DAHP initiating Section 106 NHPA review for the proposed TCRA and area of potential effect (APE). On January 30, DAHP responded in writing concurring with EPA's determination of the APE and supporting its continued efforts to consult with the concerned tribes or other parties.

On January 22, 2020, the EPA OSC and the Colville Confederated Tribes' archaeologist discussed the planned soil removal work and the field protocol to be followed by the work crews and the cultural monitors. On January 30, EPA submitted a written communication to the CCT History & Archaeology Program initiating Section 106 NHPA review and consultation for the proposed TCRA and APE. On February 10, 2020, the CCT History & Archaeology Program responded in writing concurring with the project APE and supporting future discussions regarding the cultural resources work for the project.

A detailed description of the field coordination protocol will be included in the Cultural Resources Coordination Plan to be developed by EPA in close coordination with the CCT. 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.

Endangered Species Act – [16 U.S.C. §§ 1536; 50 C.F.R. Parts 17, Subpart I]

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. The Endangered Species Act (ESA) requires that each federal agency ensure, through consultation, that any action authorized, funded, or carried out by that agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat for endangered or threatened species.

The UCR Site has several threatened or endangered species, including gray wolves, grizzly bears, Canada lynx, bald eagles, bull trout, and Ute ladies'-tresses (a threatened plant species that may occur in the area). Prior to initiating the removal action in Northport in 2004, EPA transmitted a letter to the U.S. Fish and Wildlife Service (FWS) requesting informal consultation pursuant to the ESA. FWS responded to that letter stating that the removal action was not expected to have any adverse effects to any of the listed species. On February 7, 2020, the EPA OSC and a representative of FWS discussed the planned removal work to be performed pursuant to this action memo. The FWS representative asked the EPA OSC to transmit EPA's 2004 letter requesting informal consultation for the 2004 removal work and FWS' reply letter. The FWS reviewed the documents and on February 28, 2020 informed the OSC that the current removal action would not be expected to have greater effects on listed species than the 2004 cleanup and therefore re-initiation of consultation is not necessary.

Resource Conservation and Recovery Act (RCRA) [42 U.S.C. § 6901 et seq.], Subtitle C - Hazardous Waste Management [40 C.F.R. Parts 260 to 279]

RCRA Subtitle C hazardous waste regulations specify hazardous waste identification, management, and disposal requirements. These regulations are applicable for generation, management, and disposal of hazardous waste.

Washington has an authorized state hazardous waste program (RCW 70.105; Chapter 173-303 WAC) that applies in lieu of the federal program. The Washington's hazardous waste requirements will be complied to the extent practicable during the cleanup.

Washington Model Toxics Control Act [RCW 70.105, Chapter 173-340-704 of the Washington Administrative Code (WAC)] Washington's Dangerous Waste Regulations

The performance of the removal action is expected to achieve the standards set forth in Washington State's Washington Model Toxics Control Act (MTCA), Chapter 173-340-704 of the 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 removal action will achieve these levels. The State of Washington's solid waste and dangerous management regulations are potentially applicable to solid waste generation and management at the Site.

On February 3, 2020 the EPA OSC and a representative of Ecology discussed the planned removal work and EPA requested the state to identify state ARARs. Ecology referred EPA to its December 15, 2003 letter to EPA identifying state ARARs for the previous 2004 removal action in Northport. The December 2003 Ecology letter identified MTCA Method A cleanup levels for lead and arsenic in soil of 250 mg/kg and 20 mg/kg, respectively. The 2020 TCRA action will achieve these levels.

Washington State Hazardous Waste Management Act and Dangerous Waste Regulations [RCW 70.105; Chapter 173-303 WAC]

Washington State Dangerous Waste regulations govern the handling and disposition of dangerous waste, including identification, accumulation, storage, transport, treatment, and disposal. The dangerous waste requirements will be complied with to the extent practicable during implementation of the removal action.

Washington State Solid Waste Handling Standards [RCW 70.95; Chapter 173-350 WAC]

Washington State Solid Waste Handling Standards apply to facilities and activities that manage solid waste. The regulations set minimum functional performance standards for proper handling and disposal of solid waste; describe responsibilities of various entities; and stipulate requirements for solid waste handling facility location, design, construction, operation, and closure. These regulations will be complied with to the extent practicable during management of excavated soil, soil-like material, and debris that will be generated during the removal action.

Washington Clean Air Act and Implementing Regulations [RCW 70.94; WAC 173-400-040(8)]

Washington State Clean Air Act regulations require implementation of reasonable precautions to prevent fugitive dust from becoming airborne and to maintain and operate the source to minimize emissions. The response action will comply with, to the extent practicable, the substantive requirements of fugitive dust control at the properties.

5. Project schedule

The removal action activities are expected to start in May 2020 and are expected to be completed by September 2020. The project is expected to last approximately eight to ten weeks.

B. Estimated Costs

The EPA estimated costs are shown below. The Emergency and Rapid Response Services (ERRS) contractor costs and Superfund Technical Assessment and Response Team (START) contractor costs assume that 16 properties will be addressed as part of the response action.

ERRS	$1,585,693.64
START	$ 496,716.00
Contingency (20%)	$ 416,482.00
Total Removal Project Ceiling	$2,498,891.64

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

A delay in action or no action at the properties would increase the actual or potential threats to human health and/or the environment associated with exposure to hazardous substances based on the direct contact (i.e., ingestion and inhalation) pathway and would allow contaminants to continue to migrate from soils.

VIII. OUTSTANDING POLICY ISSUES

None.

IX. ENFORCEMENT ADDENDUM

Refer to attached confidential enforcement addendum (Attachment 3).

X. RECOMMENDATION

This decision document represents the selected removal action for the properties in the Northport area within the Upper Columbia River Site, Stevens County, Washington, developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the administrative record for these removal actions to be taken within the Site.

Conditions at the properties meet the NCP 40 C.F.R. § 300.415(b) criteria for a removal action, and I recommend your approval of the proposed removal action. The total project ceiling, if approved will be $2,498,892. Of this, as much as $2,498,892 comes from the Regional Removal Allowance.

APPROVED: SHEILA FLEMING Digitally signed by SHEILA FLEMING Date: 2020.03.30 21:08:28 -07'00' DATE: March 30, 2020

Sheila Fleming, Acting Director
Superfund and Emergency Management Division

DISAPPROVED: _____ DATE: _____

Sheila Fleming, Acting Director
Superfund and Emergency Management Division

Attachment 1
Figure-1 Vicinity Map

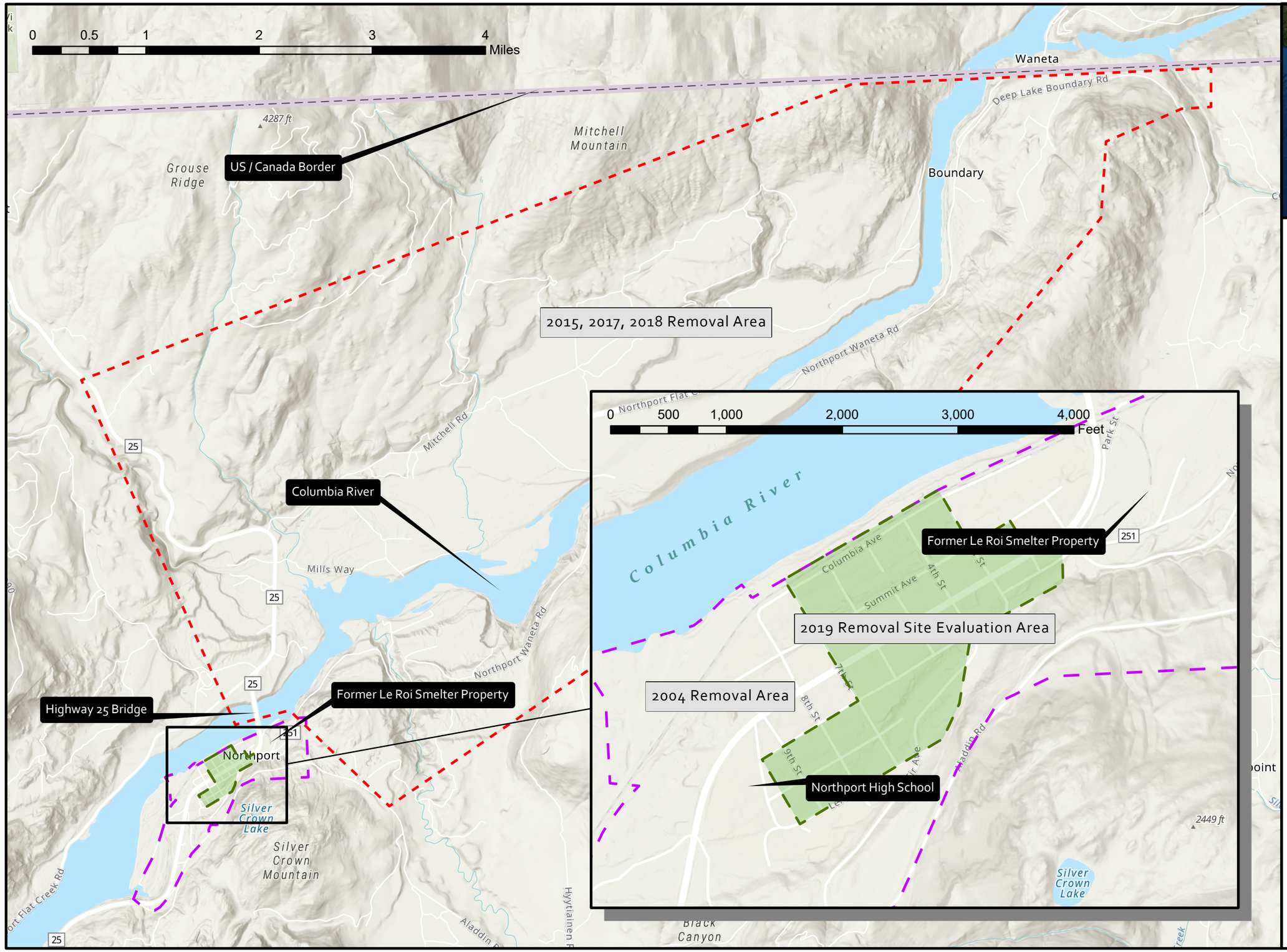

FIGURE 1
VICINITY MAP

Northport Properties
Northport, WA

Legend

- 2019 Removal Site Evaluation
- 2015, 2017, 2018 Removal Area
- 2004 Removal Area

Note: 2019 Removal Site Evaluation Area is partially inclusive of the 2004 Removal Area

ecology and environment, inc.
Member of WSP

Path: C:\Users\burfordd\Documents\ArcGIS\Projects\Northport\Northport.aprx

Date: 1/30/2020 8:26 AM

Attachment 2
UCR Dispute Decision 04/21/2015

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL
CLEANUP

April 21, 2015

Mr. Jim Pendowski, Program Manager
Toxics Cleanup Program
Washington Department of Ecology
P.O. Box 47600
Olympia, Washington 98504-7600

Mr. B.J. Kieffer, Director
Spokane Tribal Natural Resources
Spokane Tribe of Indians
P.O. Box 480
Wellpinit, Washington 99040

Mr. Gary Passmore, Director
Office of Environmental Trust
The Confederated Tribes of the Colville Reservation
P.O. Box 150
Nespelem, Washington 99155

Ms. Christine Lehnertz, Pacific West Regional Director
National Park Service, U.S. Department of the Interior
1111 Jackson Street, Suite 700
Oakland, California 94607

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"). [1] 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

[1] 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.[2] 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

[2] 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.[3] 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.[4] The MOA, under which the current dispute was raised, is "intended to assist the Participating Parties in achieving enhanced communication, coordination and

[3] 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.
[4] 40 C.F.R. § 300.430(a)(2).

efficiencies during the RI/FS process."[5] 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.[6] 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

[5] MOA, page 1.
[6] 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.[7] 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.[8] 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").[9] 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."[10] 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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[7] 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.

[8] Superfund and Mining Megasites: 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.

[9] 1 mg/kg = 1 ppm.

[10] 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.[11] 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."[12]

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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[11] EPA Region 10 Tribal Consultation and Coordination Procedures, page 1.
[12] 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 3
Enforcement Addendum - Confidential