

**UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

IN THE MATTER OF:

River Mile 11E Project Area within
Portland Harbor Superfund Site
Portland, Multnomah County, Oregon

Cargill, Inc., CBS Corporation, City of
Portland, DIL Trust, Glacier Northwest, Inc.,
and PacifiCorp

Respondents.

) ADMINISTRATIVE SETTLEMENT
) AGREEMENT AND ORDER ON
) CONSENT FOR SUPPLEMENTAL
) RI/FSWORK
)
) U.S. EPA Region 10
) CERCLA Docket No. 10-2013-0087
)
) Proceeding Under Sections 104,
) 106(a), 107 and 122 of the
) Comprehensive Environmental
) Response, Compensation, and
) Liability Act, as amended, 42 U.S.C.
) §§ 9604, 9606(a), 9607 and 9622
)
_____)

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I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent (Settlement Agreement) is entered into voluntarily by the United States Environmental Protection Agency, Region 10 (EPA), Glacier Northwest, Inc., Cargill, Inc., PacifiCorp, CBS Corporation, DIL Trust, and City of Portland (Respondents). This Settlement Agreement provides for the performance of supplemental remedial investigation and feasibility study work in support of preliminary design activities by Respondents; and the payment of response costs incurred by the United States, the State of Oregon and Tribal Governments at or in connection with an area known as the River Mile 11E Project Area within the boundaries of the Portland Harbor Superfund Site in Portland, Oregon (Site). The response action is more fully described in the Statement of Work (SOW), Appendix A hereto.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622, as amended (CERCLA). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580 (52 Fed. Reg. 2926, January 29, 1987), and was further delegated to EPA Regional Administrators by EPA Delegation Nos. 14-14-C and 14-14-D and was redelegated to the Director, Office of Environmental Cleanup, by Region 10 Delegation 14-14-C and 14-14-D, both dated April 20, 2012, and further redelegated to the Associate Director, Remedial Program Manager and Emergency Management Program Manager by Region 10 Delegations 14-14-C(1) and 14-14-D(1), both dated May 3, 2012.

3. EPA has notified the State of Oregon Department of Environmental Quality (DEQ) of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

4. EPA and Respondents recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondents in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondents do not admit, and retain the right to controvert in any subsequent proceedings, other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of fact, conclusions of law, and determinations in Sections I, IV and V of this Settlement Agreement. Respondents agree: (1) to undertake all Work required by this Settlement Agreement and comply with and be bound by the terms of this Settlement Agreement, subject to the dispute resolution process, and; (2) further agree that they will not contest EPA's authority to issue or enforce this Settlement Agreement, or the basis or validity of this Settlement Agreement or its terms.

5. EPA has entered into a Memorandum of Understanding for the Portland Harbor Site (the "MOU") with, among others, the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Grand Ronde Community of Oregon, the Confederated Tribes of Siletz Indians, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Nez Perce Tribe (collectively, "the Tribal Governments"), a copy of which has been provided to Respondents, to acknowledge the federal government's consultation requirements concerning the Portland Harbor Superfund Site, and to ensure the Tribal

Governments' participation in the response actions at the Portland Harbor Superfund Site (Site).

6. The Tribal Governments have treaty-reserved rights and resources and other rights, interests, or resources in the Site. The National Oceanic and Atmospheric Administration, the United States Department of the Interior, the Oregon Department of Fish & Wildlife, and the Tribal Governments are designated Natural Resource Trustees overseeing the assessment of natural resource damages at the Site. To the extent practicable, and if consistent with the objectives of the response action, the work under this Settlement Agreement will be conducted so as to be coordinated with any natural resource damage assessment and restoration of the Site. The Tribal Governments and the federal and state Natural Resource Trustees will be provided an opportunity to review and comment on plans, reports, and other deliverables submitted by Respondents to EPA under this Settlement Agreement.

7. Pursuant the MOU, EPA and DEQ have agreed to share responsibility for investigation and cleanup of the Portland Harbor Superfund Site. DEQ is the lead agency for conducting upland work necessary for source control, and EPA is the support agency for that work. EPA is lead agency for conducting in-water work, including coordination of EPA's lead work with DEQ's source identification and source control activities. DEQ is the support agency for EPA's in-water work. DEQ will be provided an opportunity to review and comment on plans, reports, and other deliverables that Respondents submit to EPA under this Settlement Agreement. EPA will determine when sources have been controlled sufficiently for response action(s) to be implemented.

8. To the extent practicable and consistent with the objectives of this response action, the work under this Settlement Agreement will be coordinated with work implemented under the Administrative Settlement Agreement on Consent for Remedial Investigation and Feasibility Study of the Site, dated September 29, 2001, Docket No. CERCLA-10-2001-0240 and DEQ-led uplands source control actions.

II. PARTIES BOUND

9. This Settlement Agreement applies to and is binding upon EPA and upon Respondents and their successors and assigns. Any change in ownership or corporate status of any Respondent including, but not limited to, any transfer of assets or real or personal property, shall not alter such Respondent's responsibilities under this Settlement Agreement.

10. Respondents are jointly and severally liable for carrying out all activities required by this Settlement Agreement. In the event of the insolvency or other failure of any one or more Respondents to implement the requirements of this Settlement Agreement, the remaining Respondents shall complete all such requirements.

11. Respondents shall ensure that their contractors, subcontractors, and representatives receive a copy of this Settlement Agreement prior to performing any work on the project, and that they comply with this Settlement Agreement. Respondents shall be responsible for any noncompliance with this Settlement Agreement.

III. DEFINITIONS

12. Unless otherwise expressly provided herein, terms used in this Settlement Agreement which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

- a. “CERCLA” shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, *et seq.*
- b. “Day” shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.
- c. “DEQ” or “State” shall mean the State of Oregon Department of Environmental Quality and any successor departments or agencies thereof.
- d. “DEQ Response Costs” shall mean all direct and indirect costs that DEQ incurs in coordinating and consulting with EPA in conjunction with EPA’s planning and implementation of this Settlement Agreement. DEQ Response Costs are only those costs incurred to fulfill the requirements of this Settlement Agreement and pertaining to the River Mile 11 Project Area, including review of plans, reports, and assessments prepared pursuant to this Settlement Agreement; and scoping, planning, and negotiating this Settlement Agreement, but excluding any costs related to natural resource damages assessments, liability or restoration. DEQ Response Costs are not inconsistent with the NCP, 40 C.F.R. Part 300, and are recoverable response costs pursuant to Sections 104

and 107 of CERCLA, 42 U.S.C. §§ 9604 and 9607. DEQ Response Costs shall not include the costs of oversight or data gathered by DEQ concerning any other response action or Settlement Agreement associated with the Site.

e. “Effective Date” shall be the effective date of this Settlement Agreement as provided in Section XXX.

f. “EPA” shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

g. “EPA Future Response Costs” shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in negotiating, reviewing, implementing, and enforcing this Settlement Agreement. EPA Future Response Costs, include, but are not limited to, scoping, planning, developing and negotiating this Settlement Agreement prior to the Effective Date; and after the Effective Date, reviewing or developing plans, reports and other items pursuant to this Settlement Agreement; verifying the work; reviewing documents, attending meetings, and otherwise coordinating with DEQ on upland cleanup actions affecting the River Mile 11E Project Area, including, but not limited to, reviewing and commenting on upland source control documents; coordinating with DEQ, the Tribal Governments, and Natural Resource Trustees regarding the Work; cooperative agreement or other interagency agreement costs related to the response action; or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, costs incurred pursuant to Paragraph 29 (costs and attorneys’ fees and any monies paid to secure access, including the amount of just compensation), Paragraph 39 (emergency response), and Paragraph 69 (work takeover),

as well as any other enforcement activities undertaken by EPA or the U.S. Department of Justice related to this Settlement Agreement and response action. EPA Future Response Costs shall not include the costs of oversight or data gathered by EPA concerning any other response action or Settlement Agreement associated with the Portland Harbor Superfund Site. EPA Future Response Costs shall not include costs incurred by any department, instrumentality, or agency of the United States that are not related to overseeing the Work, providing technical or legal support to EPA, or assessing human health and ecological issues related to the River Mile 11E Project Area or this Settlement Agreement.

h. “Interest” shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

i. “National Contingency Plan” or “NCP” shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

j. “Paragraph” shall mean a portion of this Settlement Agreement identified by an Arabic numeral.

k. “Parties” shall mean EPA and Respondents.

l. “Portland Harbor Superfund Site” shall mean the site in Portland, Multnomah County, Oregon listed on the National Priorities List (NPL) on December 1,

2000. 65 Fed. Reg. 75179-01. The Portland Harbor Superfund Site consists of the areal extent of contamination, including all suitable areas in proximity to the contamination necessary for implementation of response action, at, from and to the Portland Harbor Superfund Site Assessment Area from approximately River Miles 1.9 to River Mile 11.8, including uplands portions of the Site that contain sources of contamination to the sediments at, on, or within the Willamette River. The boundaries of the Site will be initially determined upon issuance of a Record of Decision for the Portland Harbor Superfund Site.

m. “RCRA” shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901, *et seq.* (also known as the Resource Conservation and Recovery Act).

n. “River Mile 11E Project Area” shall mean the area on the east side of the Willamette River, generally spanning from River Mile 10.9 to River Mile 11.6 and encompassing approximately 38 acres, within the Portland Harbor Superfund Site, and generally located on or adjacent to properties owned by Cargill, Inc., Glacier Northwest, and Ross Island Sand & Gravel at 800 North River Street, 1050 North River Street, and 1208 North River Street, respectively in Portland, Multnomah County, Oregon. The River Mile 11E Project Area is generally depicted in Appendix B to this Settlement Agreement. The River Mile 11E Project Area includes sediment, surface water, and groundwater where elevated concentrations of polychlorinated biphenyls (PCBs) and other contaminants have been detected and which are presenting unacceptable risk in the Willamette River. The final extent of the area will be determined in accordance with the process described in the SOW.

- o. “Section” shall mean a portion of this Settlement Agreement identified by a Roman numeral.
- p. “Settlement Agreement” shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto (listed in Section XXIX). In the event of conflict between this Administrative Settlement Agreement and Order on Consent and any appendix, this Administrative Settlement Agreement and Order on Consent shall control.
- q. “Statement of Work” or “SOW” shall mean the statement of work for implementation of the response action as set forth in Appendix A to this Settlement Agreement, and any modifications made thereto in accordance with this Settlement Agreement.
- r. “Tribal Governments” shall mean the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Grand Ronde Community of Oregon, the Confederated Tribes of Siletz Indians, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Nez Perce Tribe. References to “Tribal Governments” in this Settlement Agreement may be a reference to an individual tribe, the tribes collectively, or some combination thereof.
- s. “Tribal Response Costs” shall mean all direct and indirect costs that the Tribal Governments and their employees, agents, contractors, consultants and other authorized representatives incur in coordinating and consulting with EPA in conjunction with EPA’s planning and implementation of this Settlement Agreement. Tribal Response costs are only those costs incurred to fulfill the requirements of this

Settlement Agreement and pertaining to the River Mile 11 Project Area, including review of plans, reports, and assessments prepared pursuant to this Settlement Agreement; development of common positions and coordination among the Tribes; briefings to tribal leaders and tribal communities; and scoping, planning, and negotiating this Settlement Agreement and budgets, but excluding any costs related to natural resource damages assessments, liability or restoration. Tribal Response Costs are not inconsistent with the NCP, 40 C.F.R. Part 300, and are recoverable response costs pursuant to Sections 104 and 107 of CERCLA, 42 U.S.C. §§ 9604 and 9607. Tribal Response Costs shall not include the costs of oversight or data gathered by Tribal Governments concerning any other response action or Settlement Agreement associated with the Site.

t. “Waste Material” shall mean 1) any “hazardous substance” under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); 2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); 3) any “solid waste” under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and 4) any “hazardous substance” under ORS 465.200 *et seq.*

u. “Work” shall mean all activities Respondents are required to perform under this Settlement Agreement.

IV. FINDINGS OF FACT

13. EPA finds the following facts which Respondents neither admit nor deny.

a. Respondent, Cargill, Inc. owns property located at 800 North River Street in Portland, Oregon, which is within the River Mile 11E Project Area. The Cargill, Inc. property is located adjacent to the Willamette River, at approximately River Mile 11.4 -

11.6 and is known as the Irving Dock. Cargill owns the property at least extending to the Ordinary high water line. Since 1995, Cargill or its affiliates have operated a bulk grain storage and transfer business at the Irving Dock, which includes use of adjacent submerged lands through a Wharf Registration Agreement with the Oregon Department of State Lands. Also since 1995, Cargill has conducted maintenance dredging at its dock during that time. Investigations conducted as part of the Portland Harbor remedial investigation detected elevated concentrations of PCBs, dioxin/furans, chlordanes, aldrin, dieldrin, total DDx (constituting the sum of DDT, DDE, and DDD), and PAHs in the vicinity of Cargill's Irving Dock property. Stormwater from Cargill's Irving Dock property drains through private outfalls to the Willamette River. Cargill has also owned or leased several other properties along the Willamette River within the Portland Harbor study area since the 1940's. Hazardous substances used, stored, handled, or disposed of at one or more of these properties now owned or previously owned or leased by Cargill include, but are not limited to, PCBs, pesticides, waste oil, and hydraulic oil.

b. Respondent, Glacier Northwest, Inc. owns property located at 1050 North River Street in Portland, Oregon, which is within the River Mile 11E Project Area. Glacier Northwest's property is located adjacent to the Willamette River, at approximately River Mile 11.1 to 11.3 and its operations extend 100 feet into the river. Glacier Northwest and its predecessors have operated a cement distribution terminal at this property since approximately 1987. Operations include unloading bulk cement materials from ships, transferring and storing the material in silos, and subsequently loading bulk materials into trucks and rail cars for distribution. Glacier Northwest has conducted maintenance dredging at its dock during its ownership. Glacier Northwest and

its predecessors also lease property and operate a concrete batch plant facility located at 5034 NW Front Avenue, Portland, Oregon within the Portland Harbor Site Assessment Area. Hazardous substances used, stored, handled, or disposed of by Glacier Northwest include, but are not limited to, metals and PAHs contained in fly ash and Portland Cement, solvents, waste oil, and hydraulic oil. Elevated concentrations of PCBs, dioxin/furans, chlordanes, aldrin, dieldrin, total DDx (constituting the sum of DDT, DDE, and DDD), PAHs, and copper were detected in sediment in the vicinity of Glacier Northwest's property.

c. Respondent, PacifiCorp, both currently and historically, has owned and operated on multiple properties known as the Albina area properties. PacifiCorp has owned properties in this area from 1915 to the present. These properties are located along North Loring Street and North River Street, roughly bordered by Interstate 405 and North Albina Avenue. PacifiCorp's properties and operations extend from approximately River Mile 11.1 to River Mile 11.3 and are located about 300-500 feet east to northeast from the Willamette River. PacifiCorp conducted several different operations on the Albina area properties, such as, vehicle maintenance garage, electrical equipment storage, storage of treated utility poles and other electrical equipment; radio repair, transformer and electrical equipment repair, along with operating an electrical substation with a control house. One of PacifiCorp's former Albina area properties was known as the Tucker Building, located at 2110 North Lewis Street. Prior to PacificCorp's sale of this property in 1991, transformers, some of which contained PCB-contaminated oil were repaired and maintained in the Tucker Building. Stormwater from the Tucker Building property drains through City of Portland stormdrains. Since 2002, stormwater from the

Tucker Building property has drained to the Willamette River through City of Portland Outfall 43 (OF-43), which discharges to the River Mile 11E Project Area. Prior to 2002, the majority of the Tucker Building property drained to the City's Outfall 44 (OF-44) which discharges to the River Mile 11E Project Area. Contaminants, such as PCBs and PAHs, have been discovered via sampling efforts in site soil and in catch basin sediment on and adjacent to the Tucker Building property. The majority of the other Albina area properties owned and operated by PacifiCorp have drained through one or more municipal storm drains to Outfall 44. Since 1972, PacifiCorp has owned and operated the Knott Street Substation located at 44 NE Knott Street. Since 1974, stormwater from the vicinity of the Knott Street Substation has drained to OF-44A, and discharged to the River Mile 11E Project Area, prior to diversion to the publicly owned treatment works in 2011. PCBs were detected in catch basin sediment in the vicinity of the Knott Street substation. Hazardous substances used, stored, handled, or disposed of by PacifiCorp include, but are not limited to, PCBs, PAHs, used oil, and hydraulic oil. Sediment data in the vicinity of the OF-43 contains PCBs, Lead, Mercury, 4,4'-DDT and Phthalates. Sediment data in the vicinity of OF-44 and OF-44-A contains of PCBs, PAHs, chlordanes, aldrin, dieldrin, copper, and zinc .

d. Respondent, CBS Corporation, is the successor to Westinghouse Electric Corporation that in the past (1) owned and operated a property located at 614 N. Tillamook Street (the Tillamook Property) within the River Mile 11E Project Area and (2) leased a small parcel of property on Kirby Avenue adjacent to the Tillamook Property for an underground oil storage tank (the Kirby Property). Westinghouse owned the Tillamook Property from 1943 to 1978 and leased the Kirby Property from 1950 to 1985.

The Tillamook Property was used for electrical equipment repair, maintenance and/or storage. The property located at 614 N Tillamook Street was known as the Portland Apparatus Service Plant. Westinghouse was involved in repairing electrical equipment, some of which contained PCBs and conducted steam cleaning and oil storage at the Plant. Contaminants, such as PCBs and PAHs, have been discovered via sampling efforts in soil and in catch basin sediment at the Portland Apparatus Service Plant. Stormwater from the facility flowed through municipal storm drains to the Willamette River via OF-43, which discharged to the River Mile 11E Project Area prior to diversion to the publicly owned treatment works in December 2011. Sediment in the vicinity of OF-43 contains PCBs, Lead, Mercury, 4,4'-DDT and Phthalates.

e. Respondent, City of Portland, is the current owner of the Portland Apparatus Service Plant property formerly owned and operated by Westinghouse Electric Corporation as a transformer repair facility. The City is the current owner of the property formerly known as the Tucker Building where PacifiCorp used to own and operate a transformer repair facility. The City has owned and operated, and continues to own and operate the municipal storm drain collection system that discharged to the River Mile 11E Project Area and at times continues to discharge to the area. Contaminants, such as PCBs and PAHs, have been discovered via sampling efforts in site soil and in catch basin sediment on and adjacent to the Tucker Building property. Contaminants, such as PCBs and PAHs, have been discovered via sampling efforts in soil and in catch basin sediment at the Portland Apparatus Service Plant. Both properties drained to the Willamette River through the OF-43, which discharged to the River Mile 11E Project Area. While stormwater from the basin containing the former Westinghouse facility has now been

diverted to the publicly owned treatment works and only drains occasionally in extreme storm events, some stormwater from the Tucker Building property continues to discharge to the River Mile 11E Project Area. Sediment in the vicinity of OF-43 contains PCBs, Lead, Mercury, 4,4'-DDT and Phthalates.

f. Respondent, DIL Trust, is a Delaware liquidating trust responding to claims against Albina Engine and Machine Works (Albina) and Dillingham Ship Repair (DSR) that formerly owned property adjacent to the Willamette River that currently comprises portions of Glacier Northwest's property and Cargill, Inc.'s properties spanning approximately River Mile 11.2 to River Mile 11.6. Albina and DSR operated a ship building and repair facility on the property from approximately 1904 to 1973. Sediment data in the vicinity of the former Albina Engine and Machine Works found elevated concentrations of PCBs, dioxin/furans, chlordanes, aldrin, dieldrin, total DDx (constituting the sum of DDT, DDE, and DDD), PAHs, and copper. Hazardous substances used, stored, handled or disposed of by shipbuilding and repair operations are known to include, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), PAHs, PCBs, petroleum hydrocarbons, copper, zinc, chromium, lead, mercury, phthalates, and butyltins.

g. A final baseline human health risk assessment (BHHRA) has concluded that the greatest risks to human health within the River Mile 11E Project Area are from consumption of resident fish. For all fish consumption scenarios, PCBs were the primary contributor to cumulative excess cancer risks in the River Mile 11E Project Area exceeding 1×10^{-4} . Other contaminants identified within the River Mile 11E Project Area contributing to elevated cumulative cancer risks associated with consumption of

resident fish include: dioxin/furans, organochlorine pesticides (dieldrin, chlordane, DDT, DDE, and DDD), BEHP, and arsenic. Elevated non-cancer risks (Hazard Indices of 500 to 1,000 depending on fish consumption level) were also identified for a breastfeeding infant of an adult consumer of resident fish from RM 11E. In the RM 11E area, arsenic, mercury, PCBs, and dioxin/furans pose a risk greater than 1E-6 or a hazard > 1 to one or more receptors via one or more exposure pathways. In the River Mile 11E Project Area, PCBs are the primary contributor to non-cancer risks and total dioxin/furan TEQ contributes to elevated hazard indices for non-cancer risks under the breastfeeding scenario.

h. A draft baseline ecological risk assessment (BERA) was conducted and has preliminarily concluded that exposure to uncontrolled releases of hazardous substances to the Lower Willamette River might be occurring in the River Mile 11E Project Area under baseline conditions. Benthic invertebrate risk was evaluated by multiple lines of evidence, including sediment bioassays using the midge *Chironomus dilutus* and the amphipod *Hyalella azteca* to directly determine any adverse effects caused by exposure to contaminants in surface sediments collected from River Mile 11E. Moderate sediment toxicity was detected at River Mile 11E based on significant reductions in *Hyalella azteca* survival. Benthic macroinvertebrate tissue samples were analyzed to obtain empirical tissue residue data, with zinc found to pose low levels of potentially unacceptable risks. Chromium, copper, lead, nickel, several PAHs, total PCBs, several pesticides, and two petroleum hydrocarbon fractions were identified in sediment at concentrations posing potentially unacceptable risk to the River Mile 11E benthic community via the dermal contact and/or the direct ingestion pathways. Total

PCBs, bis(2-ethylhexyl)phthalate and/or copper were identified as posing potentially unacceptable risk to various fish species via the bioaccumulation pathway. PCBs and total TEQs were identified as posing potentially unacceptable risk to minks and river otters through the dietary ingestion pathway (i.e., mixed diet of fish and invertebrates).

k. The River Mile 11E Project Area is within the Portland Harbor Superfund Site which was listed on the National Priorities List (NPL) on December 1, 2000. 65 Fed. Reg. 75179-01 (December 1, 2000).

V. CONCLUSIONS OF LAW AND DETERMINATIONS

14. Based on the Findings of Fact set forth above, EPA makes the following conclusions of law and determinations, which Respondents neither admit nor deny:

a. Properties currently or formerly owned or operated by the Respondents, the River Mile 11E Project Area, and the Portland Harbor Superfund Site constitute a “facility” as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

b. The contamination found on and adjacent to the River Mile 11E Project Area, as identified in the Findings of Fact above, includes “hazardous substances” as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), and/or pollutants or contaminants which may present an imminent and substantial danger to the public health or welfare.

c. Respondents are “persons” as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

d. Respondents are responsible parties under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and are liable for performance of response action and for response costs incurred and to be incurred for the River Mile 11E Project Area.

Respondents are current or past “owners” and/or “operators” of a facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) and (2) of CERCLA, 42 U.S.C. § 9607(a)(1) and (2); and/or arranged for disposal or treatment of hazardous substances at a facility, within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).

e. The conditions described in the Findings of Fact above constitute an actual or threatened “release” of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

f. The response action required by this Settlement Agreement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement Agreement, will be considered consistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

g. EPA has determined that Respondents are qualified to conduct supplemental RI/FS work within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), if Respondents comply with the terms of this Settlement Agreement.

VI. SETTLEMENT AGREEMENT AND ORDER

15. Based upon the foregoing Findings of Fact, Conclusions of Law and Determinations, and the administrative record for the River Mile 11E Project Area, it is hereby Ordered and Agreed that Respondents shall comply with all provisions of this Settlement Agreement, including, but not limited to, all appendices to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

VII. DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR

16. Respondents shall retain one or more contractors to perform the work and shall notify EPA of the name(s) and qualifications of such contractor(s) within 30 days of the Effective Date. Respondents shall also notify EPA in writing of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the Work at least 7 days prior to that contractor's or subcontractor's commencement of such Work. EPA retains the right to disapprove any or all of the contractors and/or subcontractors retained by Respondents. If EPA disapproves a selected contractor, Respondents shall retain a different contractor and shall notify EPA of that contractor's name and qualifications within 30 days of EPA's disapproval.

17. Within 7 days after the Effective Date, Respondents shall designate a Project Coordinator who shall be responsible for administration of all actions by Respondents required by this Settlement Agreement and shall submit to EPA the designated Project Coordinator's name, address, telephone number, and qualifications. To the greatest extent possible, the Project Coordinator shall be present or readily available during field work. EPA retains the right to disapprove the designated Project

Coordinator. If EPA disapproves the designated Project Coordinator, Respondents shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within 10 days following EPA's disapproval. Receipt by Respondents' Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by Respondents.

18. EPA has designated Sean Sheldrake of the Office of Environmental Cleanup (ECL), Region 10, as its Project Coordinator. Except as otherwise provided in this Settlement Agreement, Respondents shall direct all submissions required by this Settlement Agreement to the EPA Project Coordinator at 1200 Sixth Avenue, Suite 900, M/S ECL-115, Seattle, WA 98101 via electronic files to sheldrake.sean@epa.gov. Upon request by EPA, Respondents will also provide submissions on a compact disc. All requested electronic submissions must be formatted as directed by the EPA's Project Coordinator in order to be official file copies. Unless otherwise requested, EPA will not require hardcopy submissions of documents.

19. EPA and Respondents shall have the right, subject to Paragraph 17, to change their respective designated Project Coordinator. Respondents shall notify EPA 3 days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notice.

20. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct of the supplemental RI/FS work, as required by Section 104(a) of CERCLA, 42 U.S.C. Section 9604(a). Such person shall have the authority to observe

Work and make inquiries in the absence of EPA, but not to modify the Respondents' Work Plan.

VIII. WORK TO BE PERFORMED

21. Respondents shall perform, at a minimum, all actions necessary to implement the Statement of Work (SOW), which is attached as Appendix A, and comply with the schedule attached to the SOW.

22. CERCLA, the NCP, and the EPA Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA (OSWER Directive 9355.3-01) and any additional guidance specified by EPA as relevant shall be followed in implementing the SOW.

23. The response action goals are the further characterization, studies, and analysis, in support of preliminary design for the River Mile 11E Project Area which are supplementary to the RI/FS for the Portland Harbor Superfund Site being conducted pursuant to the Administrative Settlement Agreement on Consent for Remedial Investigation and Feasibility Study (Docket No. CERCLA-10-2001-0240) and that will facilitate selection and design of a final remedy at the River Mile 11E Project Area. Conducting this work now will facilitate final design and construction of the final remedy for the River Mile 11E Project Area to begin expeditiously following issuance of a Record of Decision (ROD) for the Portland Harbor Superfund Site. To the extent appropriate and relevant, some or all of the studies and other work under the SOW will be incorporated by EPA into the feasibility study (FS), Proposed Plan, or otherwise in the administrative record for the remedy decision to be made for the Portland Harbor

Superfund Site. It is further anticipated that final remedial action for the River Mile 11E Project Area will be implemented under a consent decree following EPA issuance of the ROD. EPA and Respondents may agree to amend the SOW to also include remedial design work for the River Mile 11E Project Area to be conducted after issuance of the ROD but before entry of a consent decree to avoid delays in remedial design during consent decree negotiations. No later than one year after the Effective Date of this Settlement Agreement, EPA and Respondents will meet and confer regarding whether such amendment to the SOW can be agreed upon. EPA reserves its claims and does not waive its authority to order the Respondents and/or others to perform response actions at the River Mile 11E Project Area under CERCLA's order authorities either before or after a ROD is issued. Respondents agree that this Settlement Agreement does not address the timing or performance of cleanup work at River Mile 11E and that such work may be the subject of future orders or settlement agreements.

24. After review of any plan, report, or other item that is required to be submitted for approval pursuant to this Settlement Agreement and SOW, in a written notice to Respondents, EPA may: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondents modify the submission; or (e) any combination of the above. If EPA requires revisions, Respondents shall submit a revised document within 30 days of receipt of EPA's notification of the required revisions. However, EPA shall not modify a submission itself without first providing Respondents at least one notice of deficiency and an opportunity to cure within 30 days, except where to do so would cause serious

disruption to the Work or where previous submission(s) have been disapproved due to material defects. In the event that EPA modifies the submission to cure the deficiencies pursuant to this Section, EPA retains the right to seek stipulated penalties, as provided in Section XVIII. (Stipulated Penalties).

25. Respondents shall implement the Work as approved in writing by EPA. Once any plan, report or other document is approved, or approved with modifications, the subject document and any subsequent modifications, shall be incorporated into and become fully enforceable under this Settlement Agreement. Respondents shall not commence any Work except in conformance with the terms of this Settlement Agreement. Respondents shall not commence implementation of the Work until after receiving written EPA approval.

26. Quality Assurance and Sampling.

a. All sampling and analyses performed pursuant to this Settlement Agreement shall conform to EPA direction and approval regarding sampling, quality assurance/quality control (“QA/QC”), data validation, and chain-of-custody procedures. Respondents shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance. Respondents shall follow, as appropriate, “Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures” (OSWER Directive No. 9360.4-01, April 1, 1990), as guidance for QA/QC and sampling. Respondents shall only use laboratories that have a documented Quality System that complies with ANSI/ASQ E4-2004, “Quality Systems for Environmental Data and Technology Programs - Requirements with Guidance for Use” (American National

Standard/American Society for Quality, August 2004) and “EPA Requirements for Quality Management Plans (EPA QA/R-2) (EPA/240/B-01/002, March 2001),” or equivalent documentation as determined by EPA. A Quality Assurance Project Plan shall be prepared for each sample collection activity in accordance with: (1) “EPA Requirements for Quality Assurance Project Plans (EPA QA/R5) (EPA/240/B-01/003, March 2001)” or the most current version; (2) for data validation, “Guidance on Environmental Data Verification and Data Validation (EPA QA/G8) (EPA/240/B-01/003, November 2002)”, or the most current version; and (3) the EPA National Functional Guidelines for Data Review. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program (“NELAP”) as meeting the Quality System requirements.

b. Upon written request by EPA, Respondents shall have such a laboratory analyze samples submitted by EPA for QA monitoring. Respondents shall provide to EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

c. Upon request by EPA, Respondents shall allow EPA or its authorized representatives to take split and/or duplicate samples. Respondents shall notify EPA not less than 14 days in advance of any sample collection activity, unless shorter notice is agreed to by EPA. EPA shall have the right to take any additional samples that EPA deems necessary. EPA shall use its best efforts to notify Respondents not less than 14 days in advance of any sample collection activity EPA conducts, and allow Respondents to take split or duplicate samples of any samples it takes as part of its oversight of Respondents’ implementation of the Work.

27. Reporting.

a. After the Effective Date and until EPA issues a Notice of Completion of Work pursuant to Section XXVIII, Respondents shall submit a written progress report to EPA concerning actions undertaken pursuant to this Settlement Agreement on the fifteenth day of each month, unless otherwise directed in writing by the EPA Project Coordinator. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

b. Respondents shall, at least 30 days prior to the conveyance of any interest in the River Mile 11E Project Area or any of Respondents' adjacent riverfront property described in Section IV give: (1) written notice to the transferee that the River Mile 11E Project Area is addressed by this Settlement Agreement; and (2) written notice to EPA of the proposed conveyance, including the name and address of the transferee. Respondents shall also, as a condition of the transfer, require that the transferee and its successors comply with Sections IX (Access) and X (Access to Information) of this Settlement Agreement unless, based on the specific circumstances of the transfer and/or transferee, EPA determines in writing that conditioning the transfer in that manner is not necessary.

28. Off-Site Shipments.

a. Respondents shall, prior to any off-site shipment of Waste Material from the River Mile 11E Project Area generated from Work performed under this

Settlement Agreement to an off-site waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to the EPA Project Coordinator. However, this notification requirement shall not apply to any off-site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

i. Respondents shall include in the written notification the following information: 1) the name and location of the facility to which the waste material is to be shipped; 2) the type and quantity of the waste material to be shipped; 3) the expected schedule for the shipment of the Waste Material; and 4) the method of transportation. Respondents shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the waste material to another facility within the same state, or to a facility in another state.

ii. The identity of the receiving facility and state will be determined by Respondents following the award of the contract for the response action. Respondents shall provide the information required by Paragraph 28(a) and 28(b) as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

b. Before shipping any hazardous substances, pollutants, or contaminants from the River Mile 11E Project Area to an off-site location, Respondents shall obtain EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondents shall only send hazardous substances, pollutants, or contaminants from the River Mile 11E Project Area to an off-site facility

that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

IX. ACCESS

29. If any portion of the River Mile 11E Project Area, or any other property where access is needed to implement this Settlement Agreement, is owned or controlled by Respondents, Respondents shall, commencing on the Effective Date, provide EPA and DEQ, their representatives, including contractors or agents, with access at all reasonable times to the River Mile 11E Project Area, or such other property, for the purpose of conducting any activity related to this Settlement Agreement. Respondents shall, commencing on the Effective Date and, after reasonable advance notice unless accompanied by EPA or DEQ to Respondents' Project Coordinator , provide the Tribal Governments, and Natural Resource Trustees, and their representatives, including contractors and agents, with access at all reasonable times to the River Mile 11E Project Area , or such other property, for the purpose of consulting on the Work required under this Settlement Agreement, or in the case of cultural resource issues, overseeing the Work required under this Settlement Agreement .

30. Where any action under this Settlement Agreement is to be performed on property or in areas, managed or owned by or in possession of someone other than Respondents, Respondents shall use best efforts to obtain all necessary access agreements. For property under the management of the Oregon Department of State Lands, Respondents shall use best efforts to obtain necessary access agreement for Work required under this Settlement Agreement within 90 days of the Effective Date of this Settlement Agreement. For property owned or controlled by any other person,

Respondents shall use best efforts to obtain all necessary access agreements no later than 30 days after EPA determines such access is needed. The access agreements shall provide access to EPA, DEQ, the Tribal Governments, and Natural Resource Agencies to the same extent as provided in Paragraph 29 above. Respondents shall notify EPA if, after using its best efforts, it is unable to obtain access agreements. In such notice, Respondents shall describe in writing their efforts to obtain access. For purposes of this Paragraph, “best efforts” includes the payment of reasonable sums of money in consideration of access or loss of use. EPA may then assist Respondents in gaining access, to the extent necessary to effectuate the response action as described herein, using such means as EPA deems appropriate. Respondents shall reimburse EPA for all costs and attorney’s fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XV (Payment of EPA Future Response Costs and Tribal Response Costs).

31. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its access authorities and rights, as well as all of its rights to require land/water use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

X. ACCESS TO INFORMATION

32. Respondents shall provide copies to EPA, upon request and subject to Paragraphs 33 and 34, of all documents and information within their possession or control or that of their contractors or agents relating to the River Mile 11E Project Area or to the implementation of this Settlement Agreement, including, but not limited to,

sampling, analysis, chain-of-custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondents shall also make available to EPA, upon request, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

33. Respondents may assert business confidentiality claims covering part or all of the documents or information submitted to EPA under this Settlement Agreement, to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to EPA, or if EPA has notified Respondents that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondents.

34. Respondents may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If any Respondent asserts such a privilege in lieu of providing documents, it shall provide EPA with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document,

record, or information; and 6) the privilege asserted by Respondents. However, no documents, reports or other information required to be created or generated by this Settlement Agreement shall be withheld on the grounds that they are privileged.

35. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at the River Mile 11E Project Area or at or around the Portland Harbor Superfund Site.

XI. RECORD RETENTION

36. Until 10 years after Respondents' receipt of EPA's notification pursuant to Section XXVIII (Notice of Completion of Work), Respondents shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the River Mile 11E Project Area, regardless of any internal retention policy to the contrary unless Respondents have received EPA's written permission to destroy such documents. Until 10 years after Respondents' receipt of EPA's notification pursuant to Section XXVIII (Notice of Completion of Work), Respondents shall also instruct their contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work.

37. At the conclusion of this document retention period, Respondents shall notify EPA at least 90 days prior to the destruction of any such records or documents, and, upon request by EPA, Respondents shall deliver any such records or documents to EPA. Respondents may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondents assert such a privilege, they shall provide EPA with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or information; and 6) the privilege asserted by Respondents. However, no documents, reports or other information required to be created or generated by this Settlement Agreement shall be withheld on the grounds that they are privileged.

38. Each Respondent hereby certifies individually that, to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Portland Harbor Superfund Site since notification of potential liability by EPA and it has fully complied with any and all EPA requests for information pursuant to Section 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e) and Section 3007 of RCRA, 42 U.S.C. § 6927.

XII. COMPLIANCE WITH OTHER LAWS

39. Respondents shall perform all actions required pursuant to this Settlement Agreement in accordance with all applicable local, state, and federal laws and regulations except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and 40 C.F.R. §§ 300.400(e). No local, state, or federal permit shall be required for any action conducted entirely on-site within the Portland Harbor Superfund Site, including studies, where such action is selected and carried out in compliance with this Settlement Agreement and Section 121 of CERCLA, 42 U.S.C. • 9621. Where any portion of the Work is to be conducted off-site and requires a federal or state permit or approval, Respondents shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. This Settlement Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

40. In the event of any action or occurrence during performance of the Work which causes or threatens to cause a release of Waste Material from the River Mile 11E Project Area that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action. Respondents shall take these actions in accordance with all applicable provisions of this Settlement Agreement, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondents shall also immediately notify the EPA Project Coordinator or, in the event of his/her unavailability,

the Regional Duty Officer, Environmental Cleanup Office, Emergency Response Unit, EPA Region 10, (206) 553-1263, of the incident or conditions. In the event that Respondents fail to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondents shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XV (Payment of Response Costs).

41. In addition, in the event of any release of a hazardous substance from the River Mile 11E Project Area, Respondents shall immediately notify the EPA Project Coordinator and the National Response Center at (800) 424-8802. Respondents shall submit a written report to EPA within 7 days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11001, *et seq.*

XIV. AUTHORITY OF EPA PROJECT COORDINATOR

42. The EPA Project Coordinator shall be responsible for overseeing Respondents' implementation of this Settlement Agreement. The Project Coordinator shall have the authority vested in an On-Scene Coordinator (OSC) by the NCP, including the authority to halt, conduct, or direct any Work required by this Settlement Agreement, or to direct any other response action undertaken at the River Mile 11E Project Area, as well as the authority of a Remedial Project Manager (RPM) as set forth in the NCP.

Absence of the EPA Project Coordinator from the River Mile 11E Project Area shall not be cause for stoppage of work unless specifically directed by the EPA Project Coordinator.

43. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct of the RI/FS, as required by Section 104(a) of CERCLA, 42 U.S.C. Section 9604(a). Such person shall have the authority to observe Work and make inquiries in the absence of EPA, but not to modify Respondents' Work Plan.

XV. PAYMENT OF EPA, DEQ AND TRIBAL RESPONSE COSTS

44. Payments for EPA Future Response Costs.

a. Respondents shall pay EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, EPA will send Respondents' Project Coordinator a bill requiring payment that includes a certified Agency Financial Management System summary (SCORPIOS) cost summary report or other regionally prepared cost summary. The bill will include Future Response Costs as defined in this Settlement Agreement. Respondents shall make all payments within 30 days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 47 of this Settlement Agreement.

b. Respondents shall make all payments to EPA required by this Paragraph by a certified or cashier's check or checks made payable to "EPA Hazardous Substance Superfund," referencing the name and addresses of the Respondents, the Docket Number of this Settlement Agreement, and EPA Site/Spill ID Number 10EW and shall be clearly designated as Response Costs: Portland Harbor Superfund Site, River Mile 11E Project Area. Respondents shall send the check(s) to the following address:

US Environmental Protection Agency
Superfund Payments
Cincinnati Finance Center
P.O. Box 979076
St. Louis, MO 63197-9000

c. At the time of payment, Respondents shall send notice that payment has been made to: (1) the EPA Project Coordinator; (2) to the following email: acctsreceivable.cinwd@epa.gov; and (3) to EPA Cincinnati Finance Office, 26 Martin Luther King Drive, MS-NWD, Cincinnati, OH 45268.

45. The total amount to be paid to EPA by Respondents pursuant to Paragraph 44(a) of this Settlement Agreement shall be deposited in the Portland Harbor Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Portland Harbor Superfund Site, or to be transferred by EPA to the Hazardous Substance Superfund.

46. If payments for Future Response Costs are not made (or deposited into an escrow account, as provided in Paragraph 47 of this Settlement Agreement) within 30 days of Respondents' receipt of a bill, Respondents shall pay Interest on the unpaid balance. The Interest on Future Response Costs shall begin to accrue on the date of Respondents' receipt of the bill and shall continue to accrue until the date of payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondents' failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties pursuant to Section XVIII.

47. Respondents may dispute all or part of a bill for Future Response Costs submitted under this Settlement Agreement, if Respondents allege that EPA has made an

accounting error, or if Respondents allege that a cost item is inconsistent with the NCP or outside the scope of the Settlement Agreement. Such dispute shall be made in writing within 30 days of receipt of the bill and must be sent to the EPA Project Coordinator. Any dispute shall specifically identify the contested Future Response Costs and the basis for the objection. If any dispute over costs is resolved before payment is due, the amount due will be adjusted as necessary. If the dispute is not resolved before payment is due, Respondents shall pay the full amount of the uncontested costs to EPA as specified in Paragraph 44(b) of this Settlement Agreement on or before the due date. Within the same time period, Respondents shall pay the full amount of the contested costs into an interest-bearing escrow account in a federally-insured bank duly chartered in the State of Oregon. Respondents shall simultaneously transmit a copy of both checks to the persons listed in Paragraph 44(c) above, together with a copy of the correspondence that established and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account to the EPA Project Coordinator. Respondents shall ensure that the prevailing party or parties in the dispute shall receive the amount upon which they prevailed from the escrow funds plus all interest earned on the funds while they were in escrow within 10 days after the dispute is resolved.

48. Payment of DEQ Response Costs.

a. Following the issuance of this Settlement Agreement, DEQ will submit a detailed accounting to Respondents on a monthly basis of all Support Agency oversight costs incurred by DEQ for the implementation and oversight of this Settlement

Agreement. Respondents shall pay all direct and indirect Support Agency costs incurred by DEQ for implementation and oversight of this Settlement Agreement, pertaining to the River Mile 11E Project Area and not inconsistent with the NCP, including but not limited to DEQ's costs of coordinating with EPA the following for the River Mile 11E Project Area: uplands source identification and control and in-water investigations, identifying state ARARs and reviewing data and documents in relation to state ARARs, including but not limited to ORS 465. Respondents are not responsible under this Settlement Agreement for DEQ's Lead Agency response costs incurred in conducting or overseeing site assessments and RI/FSs pursuant to ORS Chapter 465, which include source identification and source control.

b. Except for any DEQ oversight costs that they dispute in accordance with Paragraph 48(d), (1) Respondents shall, within 30 days of receipt of each DEQ invoice, remit a check payable to "State of Oregon, Hazardous Substance Remedial Action Fund", mailed to Oregon Department of Environmental Quality, Accounting, 811 S.W. Sixth Ave., Portland, OR 97204, and (2) Respondents shall pay simple interest of 9% per annum on the balance of any unpaid DEQ costs, which interest shall begin to accrue at the end of the 30-day payment period.

c. DEQ invoices will include a summary of costs billed to date and all underlying documentation including but not limited to: DEQ personnel time sheets; travel authorizations and vouchers; DEQ contractor monthly invoices; and all applicable laboratory invoices.

d. Disputes regarding DEQ oversight bills shall be resolved in accordance with a process agreed to between DEQ and Respondents outside of this Settlement

Agreement, and neither ruled by or conducted under Section XVI. of this Settlement Agreement. Respondents agree to limit any disputes concerning costs to purported accounting errors and the inclusion of costs outside the scope of this Settlement Agreement, including, but not limited to, costs for work which is alleged to be inconsistent with this Settlement Agreement, not pertaining to the River Mile 11E Project Area or inconsistent with the NCP. Respondents shall identify any contested costs and the basis for their objection. All undisputed costs shall be remitted by Respondents in accordance with the schedule set forth above. Respondents bear the burden of establishing a DEQ accounting error or the inclusion of costs outside the scope of this Settlement Agreement, or that such costs do not meet the standard for recovery of costs set forth in ORS 465.200(23). It shall not be considered a violation of this Settlement Agreement for Respondents to fail to pay any DEQ Response Costs that are contested, disputed, or disapproved pursuant to Paragraph 47 or Paragraph 48 (d) of this Settlement Agreement.

49. Payment of Past Tribal Response Costs.

a. Within 30 days of the execution of this Settlement Agreement, the Tribal Governments shall submit detailed invoices to the Respondents' Project Coordinator for past costs associated with the development of this Settlement Agreement. Respondents shall notify the Tribal Governments in writing within forty-five (45) days of receipt of invoices for the Tribal Governments' past Tribal Response Costs whether Respondents approve them for payment. For all past Tribal Response Costs not approved by Respondents, this written notice must include a detailed justification for non-approved response costs. Past response costs for which Tribal Governments do not receive written

notice within forty-five (45) days are deemed approved and uncontested. Respondents and the Tribal Governments may negotiate to reach agreement on past cost payments. Respondents shall pay approved response costs within thirty (30) days of the date of Respondents notice of the approval. The invoices shall cover the Tribal Governments' Tribal Response Costs that are not inconsistent with the NCP and that were incurred for the period between notification by EPA of the possible Work in June 2012 and the effective date of this Settlement Agreement. The Tribal Governments' supporting documentation shall consist of timesheets and/or payroll reports, travel expense reports, and contractor invoices. For tribal consultants, for each project manager, senior associate and principal, a spreadsheet shall detail the following information: date, task, staff member, and hours billed. Expenses shall be detailed, and backup documentation shall be provided for all expenses.

b. Respondents and the Tribal Governments reserve all rights and claims they may have regarding any amounts in the past cost invoices not approved and paid by Respondents. Respondents reserve all rights, privileges, and defenses they may have to challenge and/or defend such claims. All claims arising from and related to unpaid Tribal Response Costs shall be brought in the United States District Court for the District of Oregon

c. Respondents, or any of them, may, in their sole discretion, dispute all or part of an invoice for Past Tribal Response Costs submitted under this Settlement Agreement, if Respondents allege that the Tribal Government has made an accounting error, if Respondents allege that a cost item is inconsistent with the NCP, if Respondents allege that a cost item is not within the definition of "Tribal Response Costs," or if

Respondents allege that the Tribal Governments failed to provide the documentation required in Paragraph 49(a). Respondents shall identify any disputed costs and the basis for their objection. Respondents shall bear the burden of establishing facts sufficient to support their allegation(s). Disputes of Past Tribal Response Costs shall be handled pursuant to Paragraph 50.e.

50. Payment of Future Tribal Response Costs.

a. After the effective date of this Consent Settlement Agreement, Respondents shall pay the Tribal Governments, in advance, for Tribal Response Costs incurred pursuant to this Settlement Agreement.

b. Within thirty (30) days of the effective date of this Settlement Agreement, and forty-five (45) days prior to the beginning of each fiscal year thereafter until EPA issues a Notice of Completion of Work, Respondents and the Tribal Governments shall meet to discuss the work to be performed under this Settlement Agreement and to negotiate an estimated annual budget for Tribal Response Costs. The Tribal Governments shall develop a reasonable estimated budget (with an appropriate contingency) for Tribal Response Costs for the fiscal year, which shall separately identify anticipated costs for each Tribal Government and their technical consultants. The estimated annual budget shall separately identify the activities to be performed with an estimate of costs associated with such types of activities. Respondents shall notify the Tribal Governments of their approval or disapproval of the estimated budget within thirty (30) days of receipt. Within fifteen (15) days of the date of Respondents' written notification to the Tribal Governments of Respondents' approval of the estimated budget, Respondents shall remit a check for the amount identified in the approved estimated

budget made payable to the corresponding Tribal Government at the appropriate address. The amount identified for the five tribes' shared technical consultant (Stratus Consulting) shall be sent to the Confederated Tribes of the Grand Ronde Community of Oregon. The amount identified for Ridolfi shall be sent to the Confederated Tribes and Bands of the Yakama Nation. Respondents and the Tribal Governments reserve all rights and claims they may have regarding any amounts in the estimated budget not approved and paid by Respondents. Respondents reserve all rights, privileges and defenses they may have to challenge and/or defend such claims. All claims arising from and related to unpaid Tribal Response costs shall be brought in the United States District Court for the District of Oregon. The addresses of the Tribal Governments are as follows:

The Confederated Tribes of the Grand Ronde Community of Oregon

Attn: Accounting Department
The Confederated Tribes of the Grand Ronde Community of Oregon
9615 Grand Ronde Road
Grand Ronde, Oregon 97347

The Confederated Tribes of Siletz Indians of Oregon

Attn: Karen Bell
Accounting Department
The Confederated Tribes of Siletz Indians of Oregon
P.O. Box 549
Siletz, Oregon 97380

The Confederated Tribes of the Umatilla Indian Reservation

Attn: Accounts Receivable, Finance Department
The Confederated Tribes of the Umatilla Indian Reservation
P.O. Box 638
Pendleton, Oregon 97801

The Confederated Tribes of the Warm Springs Reservation of Oregon

Attn: Finance Department
The Confederated Tribes of the Warm Springs Reservation of Oregon
P.O. Box C

Warm Springs, Oregon 97761

The Nez Perce Tribe

Attn: Office of Legal Counsel
The Nez Perce Tribe
P.O. Box 305
Lapwai, Idaho 83540

The Confederated Tribes and Bands of the Yakama Nation

Central Accounting
The Confederated Tribes and Bands of the Yakama Nation
P.O. Box 151
Toppenish, WA 98948

c. Within sixty (60) days after the close of the estimated budget period, the Tribal Governments shall provide supporting documentation to the Respondents for Response Costs paid in advance by the Respondents. The Tribal Governments' supporting documentation shall consist of timesheets and/or payroll reports, travel expense reports, and contractor invoices. For tribal consultants, for each project manager, senior associate and principal, a spreadsheet shall detail the following information: date, task, staff member, and hours billed. Expenses shall be detailed, and backup documentation shall be provided for all expenses.

d. In the event that the Tribal Governments have overestimated the amount of funding required for a budget period and the Respondents have paid more than the amount of Tribal Response Costs incurred for work during such budget period, the Tribal Governments shall apply such overpayments to reimburse approved Tribal Response Costs in the following budget period. To the extent that the Tribal Governments have incurred Tribal Response Costs in addition to the estimated budget for the budget period, the additional costs shall be included in the estimate for the subsequent

budget period. At the completion of the Work under this Settlement Agreement, all unexpended funds advanced to the Tribal Governments for Tribal Response Costs shall be refunded to Respondents .

e. Following the receipt of support documentation provided in Subsection c. above, Respondents may dispute all or a portion of Tribal Response Costs paid in advance by Respondents during the previous budget period under this Settlement Agreement, if Respondents allege that the Tribal Government has made an accounting error, if Respondents allege that a cost item is inconsistent with the NCP, if Respondents allege that a cost item is not within the definition of “Tribal Response Costs,” or if Respondents allege that the Tribal Governments failed to provide the documentation required in Paragraph 50(c). Respondents shall identify any disputed costs and the basis for their objection. Respondents shall bear the burden of establishing facts in support of their allegations. Respondents, in their sole discretion, may choose to invoke the dispute resolution provisions of Section XVI, provided that Respondents’ notice of their objections under paragraph 51 shall be made to the appropriate Tribal Government, in addition to EPA, and the appropriate Tribal Government shall prepare a written response to Respondents’ written objections. If Respondents in their sole discretion choose to invoke the dispute resolution provisions of Section XVI, EPA shall make the final decision on the dispute subject to the rights reserved by Respondents and the Tribal Governments in this Settlement Agreement. Nothing in this paragraph shall in any way be construed to limit the rights of the Tribal Governments to seek to recover response costs incurred by the Tribal Governments related to this Settlement Agreement and not reimbursed by Respondents, or for natural resource damages as defined by 42 U.S.C.

9607(a)(4)(C) ("natural resource liability"). Nothing in this paragraph shall in any way be construed to limit any rights, privileges and defenses Respondents may have to challenge and/or defend claims arising from or related to unpaid Tribal Response Costs or natural resource liability. All claims arising between the Tribal Governments and Respondents related to Tribal Response Costs or natural resource liability shall be brought in the United States District Court for the District of Oregon. It shall not be considered a violation of this Settlement Agreement for Respondents to fail to pay any Tribal Response Costs that are contested, disputed, or disapproved pursuant to Paragraph 49 or Paragraph 50 of this Settlement Agreement.

XVI. DISPUTE RESOLUTION

51. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally. In accordance with Section XV., Paragraphs 49(c) and 50(e) of this Settlement Agreement, if Respondents in their sole discretion invoke the dispute resolution process regarding Tribal Response Costs, the Tribal Governments shall provide written responses to Respondents' disputes about Tribal Response Costs, and Respondents and the Tribal Governments will engage in negotiations to resolve disputes in accordance with Paragraph 52 below. EPA may be a decision maker pursuant to Paragraph 53 below.

52. If Respondents object to any EPA action taken pursuant to this Settlement Agreement, including billings for EPA Future Response Costs, they shall notify EPA in writing of their objection(s) within 14 days of such action (or for actions taken in writing, within 14 days of receipt of such claim), unless the objection(s) has/have been resolved informally, or EPA has agreed in writing to extend the informal dispute resolution period. Respondents' notice shall provide all of the reasons for their objections and attach any supporting information or documentation that they are relying on to raise the dispute. EPA and Respondents shall then have 30 days from EPA's receipt of Respondents' written objection(s) to resolve the dispute through formal negotiations (the "Negotiation Period") with EPA's Remedial Action Unit Manager. EPA may, in its sole discretion, prepare a written response to Respondents' written objections. The Negotiation Period may be extended at the sole discretion of EPA. Any Party may supplement the dispute record during the Negotiation Period.

53. Any agreement reached by the parties pursuant to this Section shall be in writing and shall, upon signature by all Parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the Parties are unable to reach an agreement within the Negotiation Period, EPA's position shall be the final decision and binding upon Respondents, unless within 5 days after the end of the Negotiation Period, Respondents requests the determination of EPA Region 10's Director of the Office of Environmental Cleanup (ECL). If the Director is not available to render a timely decision, the Director may delegate the decision-making function to the Associate Director of ECL. The Director will issue a written decision on the dispute to Respondents based on the record created pursuant to Paragraph 52 above. EPA's

decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Respondents' obligations under this Settlement Agreement that are not affected by the disputed issue(s) shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondents shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.

XVII. FORCE MAJEURE

54. Respondents agree to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement and SOW, unless the performance is delayed by a *force majeure*. For purposes of this Settlement Agreement, a *force majeure* is defined as any event arising from causes beyond the control of Respondents, or of any entity controlled by Respondents, including but not limited to their contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondents' best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the Work, or increased cost of performance, or a failure to attain performance standards/action levels selected by EPA.

55. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondents shall notify EPA orally within 48 hours of when Respondents first knew that the event might cause a delay. Within 10 days thereafter, Respondents shall provide to EPA in writing an explanation and description of the reasons for the delay; the

anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondents' rationale for attributing such delay to a *force majeure* event if they intend to assert such a claim, including supporting documentation for such a claim; and a statement as to whether, in the opinion of Respondents, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall preclude Respondents from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure.

56. If EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Settlement Agreement that is affected by the *force majeure* event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, EPA will notify Respondents in writing of its decision. In that event, Respondents may invoke the dispute resolution provisions of Section XVI. If EPA agrees that the delay is attributable to a *force majeure* event, EPA will notify Respondents in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

XVIII. STIPULATED PENALTIES

57. Respondents shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 58 and 59 for failure to comply with the requirements of this Settlement Agreement specified below, unless excused under Section XVII (*Force Majeure*). “Compliance” by Respondents shall include completion of the activities under this Settlement Agreement or any work plan, or other plan approved under this Settlement Agreement, in accordance with all applicable requirements of law, this Settlement Agreement, all Appendices, and any plans, reports or other documents approved by EPA pursuant to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement.

58. Stipulated Penalty Amounts - Work.

a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph 58(b):

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 500	1 st through 7 th day
\$ 1,000	8th through 14th day
\$ 2,500	15th through 30th day
\$ 5,000	31st day and beyond

b. The final and all submitted drafts of the following Compliance Milestones:

- i. Work Plan and Support Plans
- ii. Field Sampling and Data Report
- iii. Recontamination Assessment Report

iv. Implementability Study Report

59. Stipulated Penalty Amounts - Reports, Other Non-Compliance, including late Payment of Future Response Costs. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate final and all submitted draft reports or other written documents pursuant to this Settlement Agreement that are not listed in Paragraph 58(b). The following stipulated penalties shall accrue per violation per day for any non-compliance with the requirements of this Settlement Agreement, including late payments of EPA Future Response Costs.

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 250	1 st through 7 th day
\$ 500	8 th through 14 th day
\$ 1,500	15 th through 30 th day
\$ 2,500	31 st day and beyond

60. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 71 of Section XX, Respondents shall be liable for a stipulated penalty in the amount of \$75,000 or 25% of the cost of the Work EPA performs, whichever is less.

61. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: 1) with respect to a deficient first draft submission under Section VIII (Work to be Performed), during the period, if any, beginning on the

31st day after EPA's receipt of such submission until the date that EPA notifies Respondents of any deficiency; and 2) with respect to an issue that Respondents choose to seek a decision by the ECL Director or Associate Director under Section XVI (Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period ends until the date that the ECL Director or Associate Director issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

62. Following EPA's determination that Respondents have failed to comply with a requirement of this Settlement Agreement, EPA may give Respondents written notification of the failure and describe the noncompliance. EPA may send Respondents a written demand for payment of the penalties. Except for deficient first draft submissions as provided in the preceding Paragraph, penalties shall accrue regardless of whether EPA has notified Respondents of a violation.

63. All penalties accruing under this Section shall be due and payable to EPA within 30 days of Respondents' receipt from EPA of a demand for payment of the penalties, unless Respondents invoke the dispute resolution procedures under Section XVI (Dispute Resolution). All payments to EPA under this Section shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," shall be mailed to the address set forth in Paragraph 44.c, above, shall indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site/Spill ID Number 10EW, the EPA Docket Number of this Settlement Agreement, and the name and address of the parties making payment. Copies of check(s) paid pursuant to this

Section, and any accompanying transmittal letter(s), shall be sent to EPA as provided in Paragraph 17, and to other receiving officials at EPA identified in Paragraph 44.c, above.

64. The payment of penalties shall not alter in any way Respondents' obligation to complete performance of the Work required under this Settlement Agreement.

65. Penalties shall continue to accrue during any dispute resolution period, except as provided in Paragraph 61 above, but need not be paid until 15 days after the dispute is resolved by agreement or by receipt of EPA's decision.

66. If Respondents fail to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondents shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to this Section. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondents' violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Sections 106(b) and 122(l) of CERCLA, 42 U.S.C. §§ 9606(b) and 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that EPA shall not seek civil penalties pursuant to Section 106(b) or 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of a willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Section XX, Paragraph 71.

67. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XIX. COVENANT NOT TO SUE BY EPA

68. In consideration of the actions that will be performed and the payments that will be made by Respondents under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against Respondents pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and EPA Future Response Costs. This covenant not to sue shall take effect upon the Effective Date and is conditioned upon the complete and satisfactory performance by Respondents of all obligations under this Settlement Agreement, including, but not limited to, payment of EPA Future Response Costs pursuant to Section XV. This covenant not to sue extends only to Respondents and does not extend to any other person.

XX. RESERVATIONS OF RIGHTS BY EPA

69. Except as specifically provided in this Settlement Agreement, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the River Mile 11E Project Area or Portland Harbor Superfund Site. Further, nothing herein shall prevent

EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondents in the future to perform additional response actions or activities pursuant to CERCLA or any other applicable law.

70. The covenant not to sue set forth in Section XIX above does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondents with respect to all other matters, including, but not limited to:

- a. claims based on a failure by Respondents to meet a requirement of this Settlement Agreement;
- b. liability for costs not included within the definition of EPA Future Response Costs;
- c. liability for injunctive relief or administrative order enforcement under Section 106 of CERCLA, 42 U.S.C. § 9606 for performance of response action other than the Work;
- d. criminal liability;
- e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the River Mile 11E Project Area; and

g. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the River Mile 11E Project Area or the Portland Harbor Superfund Site.

71. Work Takeover. In the event EPA determines that Respondents have ceased implementation of any portion of the Work, are seriously or repeatedly deficient or late in their performance of the Work, or are implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portion of the Work as EPA determines necessary. Respondents may invoke the procedures set forth in Section XVI (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by the United States in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Respondents shall pay pursuant to Section XV (Payment of Response Costs). Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXI. COVENANT NOT TO SUE BY RESPONDENTS

72. Subject to the reservations contained in Paragraph 74 below, Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, EPA Future Response Costs, or this Settlement Agreement, including, but not limited to:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107,

111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law; or

b. any claim arising out of response actions at or in connection with the Work, including any claim under the United States Constitution, the Oregon State Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law.

73. Subject to the reservations contained in Paragraph 74 below, Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States, or its contractors or employers, with respect to the Work or EPA's Future Response Costs pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613.

74. a. Except as provided in Paragraph 81, these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an Order pursuant to the reservations set forth in Paragraphs 70 (b), (c) and (e) - (g), but only to the extent that Respondents' claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

b. Respondents reserve, and this Settlement Agreement is without prejudice to, claims against the United States subject to the provisions of Chapter 171 of Title 28 of the United States Code, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States while acting within the scope of his office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred.

However, any such claim shall not include a claim for any damages caused, in whole or in part, by the act or omission of any person, including any contractor, who is not a federal employee as that term is defined in 28 U.S.C. § 2671; nor shall any such claim include a claim based on EPA's selection of response actions, or the oversight or approval of Respondents' plans or activities. The foregoing applies only to claims that are brought pursuant to any statute other than CERCLA and for which the waiver of sovereign immunity is found in a statute other than CERCLA.

c. Respondents reserve, and this Settlement Agreement is without prejudice to, any potential CERCLA contribution or cost recovery claims Respondents may have against the United States for response costs incurred in performing the Work under this Settlement Agreement or for Respondents' payments of EPA Future Response Costs, DEQ Response Costs or Tribal Response Costs.

75. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

XXII. OTHER CLAIMS

76. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents. The United States or EPA shall not be deemed a party to any contract entered into by Respondents or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.

77. Except as expressly provided in Section XIX and XXIII (Covenant Not to Sue by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondents or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

78. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 2 U.S.C. § 9613(h).

XXIII. CONTRIBUTION

79. a. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C. §9613(f)(2), and that Respondents are entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), or as may be otherwise provided by law, for “matters addressed” in this Settlement Agreement. The “matters addressed” in this Settlement Agreement are the Work as described in the SOW, EPA Future Response Costs, DEQ Response Costs and Tribal Response Costs, as defined in this Settlement Agreement. Nothing in this subparagraph modifies, waives, or impairs any contractual agreements among Respondents, and/or any claims that may arise amongst Respondents related to potential restrictions on use of any Respondent’s property (other than

reasonable access as provided in this Settlement Agreement), such as claims related to business interruption or loss.

b. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. §9613(f)(3)(B), pursuant to which Respondents have, as of the Effective Date, resolved their liability to the United States for the Work and EPA Future Response Costs.

c. Nothing in this Settlement Agreement precludes the United States or Respondents from asserting any claims, causes of action, or demands for indemnification, contribution, or cost recovery against any persons not parties to this Settlement Agreement. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. §9613(f)(2-3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

80. Each Respondent agrees that with respect to any suit or claim for contribution brought by it for matters related to this Settlement Agreement, it will notify EPA in writing no later than 60 days prior to the initiation of such suit or claim. Respondents further agree that with respect to any suit or claim for contribution brought against them for matters related to this Settlement Agreement, it will notify EPA in writing within 10 days of service of the complaint on it. In addition, Respondents shall notify EPA within 10 days of service or receipt of any Motion for Summary Judgment and within 10 days of receipt of any Order from a court setting a case for trial.

81. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, recovery of response costs, or other appropriate relief relating to the River Mile 11E Project Area, Respondents shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been addressed in this Settlement Agreement; provided, however, that nothing in this Paragraph affects the enforceability of the covenants not to sue set forth in this Settlement Agreement.

XXIV. INDEMNIFICATION

82. Respondents shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondents agree to pay the United States all costs incurred by the United States, including but not limited to attorneys fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf

of Respondents in carrying out activities pursuant to this Settlement Agreement. Neither Respondents nor any such contractor shall be considered an agent of the United States.

83. The United States shall give Respondents prompt notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondents prior to settling such claim.

84. Except as set forth in Paragraph 74, Respondents waive all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondents and any person for performance of Work on or relating to the River Mile 11E Project Area, including, but not limited to, claims on account of construction delays. In addition, Respondents shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondents and any person for performance of Work on or relating to the River Mile 11E Project Area, including, but not limited to, claims on account of construction delays. Provided, however, the waiver in this Paragraph does not apply to any potential CERCLA contribution or cost recovery claims Respondents may have against the United States for response costs incurred in performing Work under this Settlement Agreement.

XXV. INSURANCE

85. At least 7 days prior to commencing any field work under this Settlement Agreement, Respondents or their contractors and/or subcontractors shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability

insurance and automobile insurance with limits of \$1 million (\$1,000,000), per occurrence, plus umbrella insurance in excess of the comprehensive general liability and automobile liability coverage in the amount of \$4 million (\$4,000,000) per occurrence. Within the same time period, Respondents shall provide EPA with certificates of such insurance and a copy of each insurance policy. In addition, for the duration of the Settlement Agreement, Respondents shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondents in furtherance of this Settlement Agreement. If Respondents demonstrate by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondents need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXVI. FINANCIAL ASSURANCE

86. Within 60 days of the Effective Date and on the anniversary of the Effective Date every year thereafter until Notice of Completion of the Work in accordance with Section XXVIII below is received from EPA, Respondents shall establish and maintain financial security for the benefit of EPA in the amount of \$1.5 million (\$1,500,000) in one or more of the following forms, in order to secure the full and final completion of Work by Respondents. The financial security under this Settlement Agreement shall be established in one or more of the following forms for the full amount required:

- a. A surety bond unconditionally guaranteeing payment and/or performance of the Work;
- b. One or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institution(s) acceptable in all respects to EPA;
- c. A trust fund administered by a trustee acceptable in all respects to EPA;
- d. A policy of insurance issued by an insurance carrier acceptable in all respects to EPA, which ensures the payment and/or performance of the Work;
- e. A written guarantee to pay for or perform Work provided by one or more parent companies of Respondents, or by one or more unrelated companies that have a substantial business relationship with at least one of Respondents; including a demonstration that any such guarantor company satisfies the financial test requirements of 40 C.F.R. Part 264.143(f); and/or
- f. A demonstration of sufficient financial resources to pay for the Work made by one or more of the Respondents, which shall consist of a demonstration that any such Respondent satisfies the requirements of 40 C.F.R. Part 264.143(f).

87. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to EPA, determined in EPA's sole discretion. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) are inadequate, Respondents shall, within 30 days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 86, above. In addition, if at any time

EPA notifies Respondents that the anticipated cost of completing the Work has increased, then, within 30 days of such notification, Respondents shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondents' inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.

88. If Respondents seek to ensure completion of the Work through a guarantee pursuant to Subparagraph 86(e) or 86(f) of this Settlement Agreement, Respondents shall (i) demonstrate to EPA's satisfaction that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f); and (ii) resubmit sworn statements conveying the information required by 40 C.F.R. Part 264.143(f) annually, on the anniversary of the Effective Date or such other date as agreed by EPA, to EPA. For the purposes of this Settlement Agreement, wherever 40 C.F.R. Part 264.143(f) references "sum of current closure and post-closure costs estimates and the current plugging and abandonment costs estimates," the dollar amount to be used in the relevant financial test calculations shall be the current cost estimate of \$1.5 Million for the Work at the Site plus any other RCRA, CERCLA, TSCA, or other federal environmental obligations financially assured by the relevant Respondent or guarantor to EPA by means of passing a financial test.

89. If, after the Effective Date, Respondents can show that the estimated cost to complete the remaining work has diminished below the amount set forth in Paragraph 86 of this Section, Respondents may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining work to be

performed. Respondents shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security upon approval by EPA. In the event of a dispute, Respondents may reduce the amount of the security in accordance with the written decision resolving the dispute.

90. Respondents may change the form of financial assurance provided under this Section at any time, upon notice to and approval by EPA, provided that the new form of assurance meets the requirements of this Section. In the event of a dispute, Respondents may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

XXVII. MODIFICATIONS

91. EPA may determine that in addition to tasks defined in the SOW, or initial approved work plan, other additional work may be necessary to accomplish the goals of the response action as described in Paragraph 23, and to perform such work prior to issuance of the ROD unless subsequent agreement is reached to perform a broader scope of work as described in Section I., Paragraph 23 above.. EPA may request Respondents in writing to perform these response actions and Respondents shall notify EPA within 14 days of receipt of EPA's request whether they are willing to perform the additional work. Respondents may invoke dispute resolution in accordance with Section XVI. Subject to EPA resolution of any dispute, Respondents shall implement the additional tasks which EPA determines are necessary. Any other requirements of this Settlement Agreement may be modified in writing by mutual agreement of the parties.

92. If Respondents seek permission to deviate from any approved work plan or schedule or the Statement of Work, Respondents' Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondents may not proceed with the requested deviation until receiving written approval from the EPA Project Coordinator pursuant to Paragraph 25.

93. No informal advice, guidance, suggestion, or comment by the EPA Project Coordinator or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondents shall relieve Respondents of their obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXVIII. NOTICE OF COMPLETION OF WORK

94. Upon the request of Respondents or on its own initiative, EPA may determine, after its review of the Recontamination Assessment Report and Implementability Study Report that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including but not limited to, monitoring, if any, payment of EPA Future Response Costs, or record retention, and EPA will provide written notice to Respondents. EPA will use best efforts to respond to Respondents' request in a timely manner. If EPA determines that any such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondents, provide a list of the deficiencies, and require that Respondents correct such deficiencies, or modify the Work Plan], if

necessary. Respondents shall correct the deficiencies or, if appropriate, implement the modified Work Plan, and shall submit a modified Recontamination Assessment Report and/or modified Implementability Study Report, in accordance with the EPA notice, subject to its right to invoke dispute under Section XVI of this Settlement Agreement. Failure by Respondents to implement the approved and/or modified Work Plan shall be a violation of this Settlement Agreement. This Settlement Agreement shall be terminated if all obligations and uncompleted Work required by this Settlement Agreement is included in a consent decree with Respondents and/or other persons and entered as a final judgment.

XXIX. INTEGRATION/APPENDICES

95. This Settlement Agreement and its appendices constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following appendices are attached to and incorporated into this Settlement Agreement:

- a. Appendix A: Statement of Work.
- b. Appendix B: Map Generally Depicting the River Mile 11E Project Area.

XXX. EFFECTIVE DATE

96. This Settlement Agreement shall be effective on the day it is issued by EPA. Each undersigned representative of Respondents certify that (s)he is fully

authorized to enter into the terms and conditions of this Settlement Agreement and to bind Respondents.

XXXI. NOTICES AND SUBMISSIONS

97. Work plans, reports, approvals, disapprovals, and other correspondence required to be submitted under this Settlement Agreement, shall be sent to the individuals at the addresses specified below in the format indicated. All agencies and governments are responsible for giving written notice of a change to Respondents and the other parties. All notices and submissions shall be considered effective one business day after receipt by Respondents' Project Coordinator, unless otherwise provided.

a. One (1) copy of EPA correspondence or other communications to Respondents' Project Coordinator in electronic form: and

b. Respondents shall submit all documents in electronic form to sheldrake.sean@epa.gov or via CD-ROM. Only if requested, three (3) hard copies of documents to be submitted to EPA shall be forwarded to:

Sean Sheldrake
U.S. Environmental Protection Agency
1200 Sixth Avenue, Suite 900
MS ECL-115
Seattle, Washington 98101

c. Two (2) hardcopies of documents and two CD-ROMS or electronic file shall be submitted to DEQ:

James M. Anderson
DEQ Northwest Region
2020 SW Fourth Ave, Suite 400
Portland, Oregon 97201
anderson.jim@deq.state.or.us

Electronic file or CD-ROM transmissions to the following contacts:

d. Oregon Department of Fish & Wildlife:

Rick Kepler
Oregon Department of Fish & Wildlife
2501 SW First Avenue
Portland, Oregon 97207
rick.j.kepler@state.or.us

e. NOAA:

Rob Neely
Coastal Resources Coordination
c/o EPA Region 10
1200 Sixth Avenue (MS ECL-117)
Seattle, WA 98101
Rob.neely@noaa.gov

Genevieve Angle
NOAA Fisheries
525 NE Oregon Street, Suite 500
Portland, Oregon 97232-2737
nancy.munn@noaa.gov

f. USFW:

Jeremy Buck
US Fish & Wildlife
2600 SE 98th Avenue, Suite 100
Portland, Oregon 97266
jeremy_buck@r1.fws.gov

Paul Henson, State Supervisor
U.S. Fish and Wildlife Service
Oregon Fish and Wildlife Office
2600 SE 98th Ave., Suite 100
Portland, Oregon 97266
Paul_Henson@fws.gov

g. U.S. Department of Interior:

Preston Sleeper
Regional Environmental Officer
Pacific Northwest Region
500 NE Multnomah St., Suite 356
Portland, Oregon 97232

reopn@mindspring.com

h. Confederated Tribes of the Warm Springs Reservation of Oregon:

Brian Cunninghame
5520 Skyline Drive
Hood River, Oregon 97031
cunninghame@gorge.net

i. Confederated Tribes and Bands of the Yakama Nation:

Rose Longoria
Yakama Nation
Fisheries Management Program
P.O. Box 151
4690 SR 22
Toppenish, Washington 98948
rose@yakama.com

j. Confederated Tribes of the Grand Ronde Community of Oregon:

Michael Karnosh
Confederated Tribes of the
Grand Ronde Community of Oregon
47010 SW Hebo Road
Grand Ronde, Oregon 97347
Michael.Karnosh@grandronde.org

k. Confederated Tribes of the Siletz Indians:

Tom Downey
Environmental Specialist
Confederated Tribes of the Siletz Indians
P.O. Box 549
Siletz, Oregon 97380
tomd@ctsi.nsn.us

l. Confederated Tribes of the Umatilla Indian Reservation:

Audie Huber
Confederated Tribes of the Umatilla Indian Reservation
Department of Natural Resources
73239 Confederated Way
Pendleton, Oregon 97801
audiehuber@ctuir.com

m. Nez Perce Tribe:

Erin Madden
Cascadia Law, P.C.
917 SW Oak, Ste. 300
Portland, OR 97205

XXXI. ADMINISTRATIVE RECORD AND PUBLIC COMMENT

98. EPA will determine the contents of the administrative record file for selection of the remedial action for the Portland Harbor Superfund Site and/or River Mile 11E Project Area. In accordance with this Settlement Agreement and the SOW, Respondents shall submit to EPA documents developed during the course of the Work upon which selection of the remedial action may be based. Respondents shall assist EPA, as requested, before and during the comment period with its community relations activities concerning the ROD as it pertains to the RM11E Project Area.

It is so Ordered and Agreed this 15th day of April, 2013.

By: Cami Grandinetti
Cami Grandinetti,
Program Manager
Remedial Cleanup Program
Office of Environmental Cleanup
U.S. EPA, Region 10

Agreed this _____ day of _____, 2013.

For Respondent _____
Cargill, Inc.

By: _____

Printed Name

Title

Agreed this _____ day of _____, 2013.

For Respondent _____
CBS Corporation

By: _____

Printed Name

Title

Agreed this 10th day of April, 2013.

For Respondent _____
DIL Trust

By: 

Kirk A. Wilkinson
Printed Name

Counsel for the DIL Trust
Title

Agreed this 8th day of APRIL, 2013.

For Respondent _____
Cargill, Inc.

By: [Signature]
Robert Taylor
Printed Name
AVP of Operations
Title

Agreed this _____ day of _____, 2013.

For Respondent _____
CBS Corporation

By: _____

Printed Name

Title

Agreed this _____ day of _____, 2013.

For Respondent _____
DIL Trust

By: _____

Printed Name

Title

Agreed this 26 day of March, 2013.

For Respondent CBS CORPORATION
Company Name

By: 

Eric J. Sobczak
Printed Name
Senior Vice President & Associate General Counsel
Title

Agreed this _____ day of _____, 2013.

For Respondent _____
Company Name

By: _____

Printed Name

Title

Agreed this _____ day of _____, 2013.

For Respondent _____
Company Name

By: _____

Printed Name

Title

Agreed this _____ day of _____, 2013.

For Respondent _____
City of Portland

By: _____

Printed Name

Title

Agreed this _____ day of _____, 2013.

For Respondent _____
Glacier Northwest, Inc.

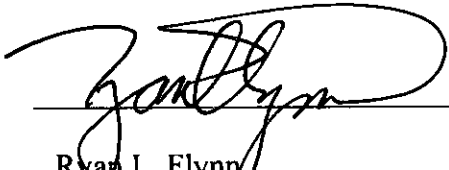
By: _____

Printed Name

Title

Agreed this _____ day of _____, 2013.

For Respondent _____
PacifiCorp

By:  _____

Ryan L. Flynn
Printed Name

VP / General Counsel, Pacific Power
Title

Agreed this _____ day of _____, 2013.

For Respondent _____
City of Portland

By: _____

Printed Name

Title

Agreed this 29th day of March, 2013.

For Respondent _____
Glacier Northwest, Inc.

By: _____



BRUCE SHAFER

Printed Name

SR VP CEMENT OPERATIONS
Title

Agreed this _____ day of _____, 2013.

For Respondent _____
PacifiCorp

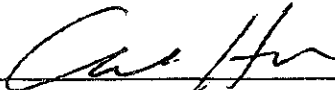
By: _____

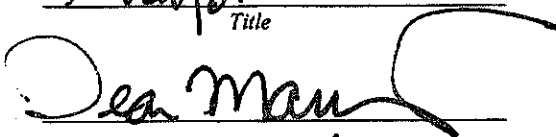
Printed Name

Title

Agreed this 12th day of April, 2013.

For Respondent City of Portland
Company Name

By: 
Charlie Hales
Printed Name
Mayor
Title

By: 
DEAN MARRIOTT
Printed Name
Director, Bureau of Environmental Services
Title

Appendix A to Settlement Agreement Docket No. 10-2013-0087

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STATEMENT OF WORK		
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Portland Harbor Superfund Site, Portland, Oregon		
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Acronyms and Abbreviations

CERCLA	Comprehensive Environmental Response Compensation and Liability Act
COC	Contaminant of Concern
CSM	Conceptual Site Model
DEQ	Oregon Department of Environmental Quality
DQO	Data Quality Objective
EMS	Environmental Management System
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FSP	Field Sampling Plan
HASP	Health and Safety Plan
LWG	Lower Willamette Group
NCP	National Contingency Plan
NMFS	National Marine Fisheries Service
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyl
PDF	Portable Document Format
PHSS	Portland Harbor Superfund Site
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
QC	Quality Control
RAO	Remedial Action Objective
RD/RA	Remedial Design/Remedial Action
RI/FS	Remedial Investigation/Feasibility Study
RM 11E	River Mile 11 East
ROD	Record of Decision
SAP	Sampling and Analysis Plan
SOW	Statement of Work

1 Introduction

This Statement of Work (SOW) describes the work that shall be carried out by the Respondents (Respondents as listed in Attachment A) as they conduct pre-Record of Decision (ROD) supplemental Remedial Investigation/Feasibility Study (RI/FS) efforts, including field work, research and preparation of supplemental study reports for the River Mile 11 East (RM 11E) Project Area (Project Area) within the Portland Harbor Superfund Site (PHSS or Site). The response action goals are the further characterization, studies, and analysis to support the preliminary design for the River Mile 11E Project Area that are supplementary to the RI/FS for the Portland Harbor Superfund Site being conducted pursuant to the Administrative Settlement Agreement on Consent for Remedial Investigation and Feasibility Study (Docket No. CERCLA-10-2001-0240) and that will facilitate selection and design of a final remedy at the River Mile 11E Project Area. Conducting this work now will facilitate final design and construction of the final remedy for the River Mile 11E Project Area to begin expeditiously following issuance of a ROD for the PHSS. This SOW is attached to the Administrative Settlement Agreement and Order on Consent (Settlement Agreement) for the Project Area and is incorporated as an enforceable part of the Settlement Agreement. This SOW is consistent with both the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the National Contingency Plan (NCP). Any discrepancies between the Settlement Agreement and SOW are unintended, but in the event of an inconsistency, the Settlement Agreement will control.

For purposes of this SOW, the Project Area under consideration is shown in Figure 1 and includes the riverbank area to the top of the bank (hereinafter identified as the Project Area). Riverbank soils will be evaluated to determine if there are recontamination concerns, design and/or remedial action implementability considerations associated with the riverbank areas. Further upland source control assessments, if needed, will be addressed as upland source issues by the Oregon Department of Environmental Quality (DEQ) and individual property owners.

This SOW describes the work to be conducted to meet the above project goals including:

- Section 2: Work To Be Performed, which describes the tasks to be performed and deliverables to be submitted.
- Section 3: Project Schedule for Major Deliverables, which describes the proposed schedule and assumed dates for key activities.

2 Work To Be Performed

This section describes the work that shall be performed under the Settlement Agreement as well as Remedial Action Objectives (RAOs), key decision factors, and criteria that will govern project work.

2.1 Ongoing Coordination

The Respondents shall coordinate meetings and/or teleconferences with the United States Environmental Protection Agency (EPA), Oregon Department of Environmental Quality (DEQ), the Tribes, and the Natural Resource Trustees to discuss the status of work described in this SOW. After approval of the Work Plan (see Section 2.3), such meetings shall be monthly, if needed. EPA will coordinate feedback on deliverables from other Agencies and the Tribes that are overseeing the work to be performed by the Respondents. The DEQ, Tribes, and Trustees will submit their questions and comments on the work that is being performed to EPA. The EPA will provide the comments, if necessary, to Respondents. A detailed schedule for project deliverables and Agency response periods will be developed and documented in the Work Plan (see Section 2.4). Consistent with the February 2001 Memorandum of Understanding, the DEQ will provide upland source control documents to EPA for review, to ensure consistency and compatibility with the contemplated in-water remedial action designs for recontamination analysis.

2.2 Remedial Action Objectives

Because the goal of this project is to gather supplemental data to inform the selection of a remedy, the RAOs shall be consistent with those developed for the Portland Harbor FS:

- **Human Health Sediments:** Reduce to acceptable levels human health risks from exposure to contaminated sediments resulting from incidental ingestion of and/or dermal contact with sediments.
- **Human Health Biota Ingestion:** Reduce to acceptable levels human health risks from indirect exposures to COCs through ingestion of fish and shellfish that occur via bioaccumulation pathways from sediment and/or surface water.
- **Human Health Surface Water:** Reduce risks from COCs in surface water to acceptable exposure levels that are protective of human health risks from ingestion of, inhalation of, and dermal contact with surface water; and protect the drinking water beneficial use of the Willamette River.
- **Human Health Groundwater:** Reduce to acceptable levels human health risks resulting from direct exposure to contaminated groundwater and indirect exposure to contaminated groundwater through fish and shellfish consumption.
- **Ecological Sediments:** Reduce to acceptable levels the risks to ecological receptors resulting from the ingestion of and direct contact with contaminated sediments.
- **Ecological Biota (Prey) Ingestion:** Reduce to acceptable levels risks to ecological receptors from indirect exposures to COCs through ingestion of prey that occur via bioaccumulation pathways from sediment and/or surface water.

- **Ecological Surface Water:** Reduce risks from COCs in surface water to acceptable exposure levels that are protective of ecological receptors based on the ingestion of and direct contact with surface water.
- **Ecological Groundwater:** Reduce to acceptable levels the risks to ecological receptors resulting from the ingestion of and direct contact with contaminated groundwater and indirect exposures through ingestion of prey via bioaccumulation pathways from groundwater.

Additionally, there are active docks in the RM 11E Project Area. Maintaining navigation access and minimizing disruption to ongoing shipping activities is an important consideration for future remedial action in this area.

Definitions of terms such as “reduce risks” and “acceptable levels” shall be consistent with the Portland Harbor RI/FS Work Plan or as modified by the harbor wide RI/FS process. Likewise, if through the RI/FS process, the RAOs for the Portland Harbor site are changed or revised, RAOs for this project shall be revised.

2.3 Assessment of Data Gaps in Project Area

In preparing the SOW, the Respondents inventoried and reviewed existing data for RM 11E. Based on investigations conducted by the Lower Willamette Group (LWG) as well as the City of Portland, a comprehensive set of data exists for RM 11E and is documented in Section H 3.0 of the August 29, 2011, Draft Final RI Report for Portland Harbor. In addition to describing the nature and extent of contamination of sediment, fish tissue, sediment traps, and surface water in RM 11E, the Draft Final RI also contains site bathymetry, and an assessment of risk. The framework for the selection of a remedial alternative at RM 11E is contained within the March 30, 2012 Draft FS for Portland Harbor (Integral et al., 2012). Additional data for RM 11E is also presented in the City of Portland’s 2011 high resolution bathymetry study and the smallmouth bass tissue studies completed by the EPA and the City of Portland in 2011 and the LWG in 2012.

As presented to EPA at the November 16, 2012, technical briefing, the Respondents reviewed the existing data set with a focus on data that would be needed to select a remedy and prepare a remedial design, and identified pre-remedial design data gaps. To fill these gaps and to develop the data necessary to inform the selection of the remedial alternative for the Project Area, the Respondents and EPA have identified a set of pre-ROD supplemental RI/FS investigations, including field work, research, and preparation of supplemental study reports that will inform remedy selection and expedite the final design following establishment of the sediment cleanup levels in the site-wide Portland Harbor ROD.

Data gaps that influence the selection of a remedial alternative and how an alternative is ultimately designed fall into two primary categories of information: a recontamination assessment and an implementability study.

A recontamination assessment shall be performed to evaluate whether potential sources of recontamination have been adequately investigated and controlled. The recontamination

assessment will include an upland evaluation of pathways to the river through storm water, groundwater, and river bank erosion to ensure that upland sources have been controlled. The assessment will also evaluate potential in-water sources of recontamination including the resuspension of bedded sediments. Details of the recontamination assessment are described in Section 2.7.

The implementability study shall be performed to assess how the current site configuration and river dynamics (natural and anthropogenic) may impact the remedial design. It will include a survey of underwater debris and structures, an analysis of marine operations, and an infrastructure evaluation. Details are presented in Section 2.8.

2.4 Work Plan

The Work Plan shall be submitted in accordance with the schedule contained in Section 3. The Work Plan shall provide a detailed description of work to be conducted for the project consistent with this SOW. The Work Plan shall reference existing information and analysis from the PHSS RI/FS to the extent practicable to avoid duplication of effort and the potential for inconsistency, and shall contain at a minimum the following information:

- Introduction/Purpose.
- Project Area Definition: The Project Area lies between River Miles 10.9 and 11.6 along the eastern bank of the Willamette River. This area will be targeted for the supplemental investigation because it will be the primary focus of a future Remedial Design/Remedial Action (RD/RA) consistent with the findings of the site wide RI/FS.
- Summary of Existing Information: This shall include a brief description of the RM 11E Project Area, including physical, ecological, and chemical characteristics as well as ongoing facility operations. Existing reports and previous studies as they relate to this SOW will be cited in this section. The Work Plan shall describe existing information sufficiently to conduct the necessary investigations, but will not repeat information presented in prior documents.
- Conceptual Site Model (CSM): A CSM for the Project Area shall be included in the Work Plan with the objective of highlighting conditions that could impact the potential for recontamination and implementability. A more refined CSM will be developed with the recontamination report.
- Contaminants of Concern (COCs): The COCs to be reviewed for the Work Plan shall be based on the draft or revised list of COCs from the Feasibility Study for the PHSS. The currently available list is presented on Table 3.1-1 in the Draft Feasibility Study that was submitted to the EPA on March 30, 2012. An updated list will be reviewed if available at the time of Work Plan preparation. In addition, the final Baseline Human Health Risk Assessment dated February 11, 2013, and the Baseline Ecological Risk Assessment tables transmitted by EPA to the Lower Willamette Group on January 11, 2013 shall be used as references to develop COCs for the Work Plan. The Baseline Ecological Risk Assessment tables are subject to revision and the most current versions should be confirmed with EPA at the time of Work Plan development. The CSM shall focus on those COCs that represent the greatest risks and/or extent of chemicals associated with the

River Mile 11E Project Area. A rationale for selecting this subset of COCs for CSM mapping shall be presented in the Work Plan based on the existing chemistry data review.

- Identification of Data Needs: The Work Plan shall identify data needs for the supplemental investigation based on requirements for a remedial design and identification of gaps in the existing data set for the Project Area. This section will include identification of Data Quality Objectives (DQOs) for the new data collected under this program. Based on the initial assessment of data needs for the Project Area, the Respondents and EPA determined that additional tasks are necessary to determine if upland and in-water sources of recontamination have been adequately investigated and controlled and to assess how the current site configuration and river dynamics may impact remedial design. Information will be collected and utilized to complete two primary reports: a Recontamination Assessment Report and an Implementability Study Report. The following supplemental investigations shall be completed to support these reports:
 - Surface and Subsurface Sediment Investigation: It is anticipated that additional surface and subsurface near dock and potentially under dock sediment data will be required to refine depth of impact and to determine dredging setbacks from docks and in-water structures. The results of this investigation will be presented in the Field Sampling and Data Report (Section 2.7) and evaluated in the Implementability Study Report (Section 2.9), as appropriate.
 - Upland Groundwater Investigation: This task is expected to use existing wells and, as necessary, include installation of additional monitoring wells along the river bank to evaluate groundwater quality and hydraulic gradients. Depth discrete soil samples will also be collected to evaluate upland soil quality relative to any additional groundwater wells. This information will be used to evaluate groundwater as a potential recontamination pathway. The results of this investigation will be presented in the Field Sampling and Data Report (Section 2.7) and evaluated in the Recontamination Assessment Report (Section 2.8), as appropriate.
 - Bank Contamination Characterization: The potential impact of any existing bank contamination will be evaluated based upon an assessment of existing data and further sampling, as needed. The results will be used to determine the potential for recontamination; to identify upland source information that is needed from current or future DEQ source evaluations in upland areas; or to inform EPA whether bank cleanup is required as part of the remedial action in the river. The results of the characterization effort will be presented in the Field Sampling and Data Report (Section 2.7) and evaluated in the Recontamination Assessment Report (Section 2.8).
 - Porewater and Empirical Data to Inform Cap Design: Porewater quality, hydraulic gradients, sediment texture, and other empirical data will be collected and evaluated for input into a sediment cap isolation (advection/diffusion) model in order to inform cap design. Information from this study will be incorporated into the Field Sampling and Data Report (Section 2.7), and evaluated in the Recontamination Assessment Report (Section 2.8), and/or Implementability Study Report (Section 2.9), as appropriate.

- Geotechnical Evaluation: The steepness and stability of the bank is anticipated to be a factor in the remedy design. Geotechnical characteristics of sediment also need to be evaluated for implementability. It is anticipated that additional sample collection and laboratory testing may need to be conducted to provide geotechnical data needed for conceptual design. The findings from this task will be incorporated into the Field Sampling and Data Report (Section 2.7) and discussed in the Implementability Study Report (Section 2.9).
- Hydrodynamic Evaluation: Available information will be reviewed and an empirical assessment of near shore flow patterns will be conducted to better understand the presence and implications of localized eddy flow along the shoreline. Shipping operations will be evaluated in relationship to sediment re-suspension and stability. The results of this evaluation will be incorporated into the Recontamination Assessment Report (Section 2.8).
- Storm Water Evaluation: Available storm water information will be reviewed including information provided by DEQ as part of their upland source control effort. Additional stormwater sampling may be required under this Settlement Agreement if EPA determines that supplemental storm water sampling is required to further assess recontamination of the sediment or to inform implementability of the remedial action.
- Procedures to protect and address cultural resources consistent with the cultural resources surveys conducted for the Harbor by the LWG. An Inadvertent Discovery Plan will be prepared and appended to each Sampling and Analysis Plan (SAP).
- Recontamination Assessment Report: Information from existing upland source control reports, the Portland Harbor upstream dataset, and newly collected groundwater, soil, porewater, and potentially additional storm water data shall be evaluated to determine if upland and in-water sources of recontamination have been adequately investigated and controlled. An evaluation of recontamination potential from upland pathways (storm water, groundwater, and bank erosion), in-water sources (upstream inputs, re-suspension of bedded sediments, and sediment cap effectiveness), and potential future land-use will be compiled in a Recontamination Evaluation Report as described in Section 2.8 of this SOW.
- Implementability Study Report: Additional tasks are necessary to assess how the current site configuration and river dynamics may impact remedial design. The implementability study shall include assessing ongoing commercial marine operations and local navigation access, identifying utility locations, and conducting a survey of in-water structures and debris. The integrity of existing infrastructure will also be evaluated to determine potential impacts to remedy selection and design elements. This information will be compiled along with relevant data from previously identified tasks (e.g., sediment and porewater data) in an Implementability Study Report as described in Section 2.9 of this SOW.
- General Description of Methodologies and Data Management Procedures: Supplemental RM 11E data shall be collected and managed to ensure that the data are comparable to the site wide RI/FS data. The work shall be conducted to the extent practical using field methods, laboratory procedures, Quality Assurance/Quality Control (QA/QC) protocol, and data management procedures consistent with EPA-approved methods from the Portland Harbor RI/FS. Deviations from these methods will be described in the task-specific

sampling and analysis plans in Section 2.5. SAPs will be prepared to document the specific sampling approach and procedures for each task described above, as discussed in Section 2.5 of this SOW. A comprehensive project-specific Quality Assurance Project Plan (QAPP) for work under this SOW is not anticipated (see Section 2.5).

- Project Schedule: A schedule for completion of all project tasks per Section 3, with additional details as needed to describe the work timeline shall be prepared.
- Project Coordination: The Work Plan shall also outline the process for engaging partner agencies on a timely basis to ensure that substantive requirements are identified and data needs are filled. To address Endangered Species Act (ESA) compliance, the Work Plan shall describe a process for engaging National Marine Fisheries Service (NMFS).

2.5 Sampling and Analysis Plans for Specific Field Activities

The procedures the Respondents plan to implement when conducting all field activities shall be detailed in two or more SAPs. The SAPs shall describe the procedures for planning and executing field activities, and for collecting and analyzing samples to ensure that the data meets the required quality for use in the evaluation. All of the results are designed to be consistent with current protocols and procedures to facilitate combination of the data sets. The information and data proposed to be compiled in the work plan will be used to close the data gaps identified in the Work Plan (Section 2.4) and utilize methods already approved for the PHSS (where available). The plans will incorporate by reference the Portland Harbor Programmatic Work Plan, Field Sampling Plans (FSPs), QAPPs, and other previously approved work planning documents. The limited modifications to these plans necessary to reflect the proposed scope of work will follow DEQ and EPA guidelines and further reference these approved plans. QAPP addendums will be produced that identify laboratory and analysis specific information for each field activity in accordance with Paragraph 25 of the Settlement Agreement. The data will be collected by EPA approved methods and shall result in the collection of data of adequate quality and technical content to meet the project objectives identified in the Work Plan (Section 2.4).

To accommodate the accelerated project schedule (Section 3), the tasks identified in the Work Plan (Section 2.4) may be split into two or more SAPs. By grouping tasks of similar nature (e.g., the in-water activities vs. the upland activities) into separate SAPs, it is anticipated that the approval process and schedule can be expedited. Each task covered by this SOW shall be described in one of the SAPs. Each SAP shall contain at a minimum the following information:

- introduction/purpose;
- project organization;
- sampling objectives, approach, and schedule;
- proposed sample locations;
- station positioning (i.e., navigation and station locating);
- sample collection procedures;
- field documentation procedures (e.g., field logbooks, data sheets, sample IDs);
- cultural resource monitoring (if necessary);

- sample handling, transport, and chain-of-custody procedures;
- equipment decontamination procedures;
- field quality control (QC) samples;
- waste management;
- laboratory analysis and QA/QC procedures;
- data validation procedures; and
- electronic data management procedures (e.g., database management, data reduction and handling).

The SAPs shall be submitted to EPA in accordance with the schedule contained in Section 3.

2.6 Health and Safety Plan

Consultants, subconsultants, and subcontractors shall prepare their own Health and Safety Plan (HASP). The HASP is designed to protect personnel from physical, chemical, and other hazards posed by field sampling efforts and shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992) and comply with Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. Additionally, the diving subcontractor shall refer to EPA's diving safety recommendations (posted at [http://yosemite.epa.gov/R10/CLEANUP.NSF/6d62f9a16e249d7888256db4005fa293/31ae45c9c90a674988256e470062ced9/\\$FILE/Dive%20Safety%206%2022%202005.pdf](http://yosemite.epa.gov/R10/CLEANUP.NSF/6d62f9a16e249d7888256db4005fa293/31ae45c9c90a674988256e470062ced9/$FILE/Dive%20Safety%206%2022%202005.pdf)) in preparing their HASP. Diving safety steps shall meet or exceed EPA requirements for scientific dives (<http://yosemite.epa.gov/r10/oea.nsf/investigations/dive+team+safety>). Project HASPs shall be provided to EPA for review.

2.7 Field Sampling and Data Report

The Field Sampling and Data Report shall present the findings of the multiple data collection efforts in one comprehensive document. The objective is to provide a single point of reference for the supplemental data collected under this SOW, as well as field logs, laboratory reports, and QA/QC information. This report will document field activities and analytical results from each task, and describe any deviations from the associated SAPs. Detailed interpretation and discussion of these data will be contained in the separate Recontamination Assessment Report and Implementability Study Report.

The Field Sampling and Data Report shall include the following:

- summary of sampling approach and objectives;
- summary of field sampling activities, sample collection procedures, and any deviations from the SAP;
- results of cultural research and archeological monitoring;
- maps showing actual sampling stations and tables providing the sample coordinates;
- tables providing analytical results (post data validation and data reduction);

- supporting figures to illustrate results of each task (e.g., updated total PCB concentration maps for subsurface sediment);
- field documentation (e.g., field logbooks, core logs, data sheets, photographs, chain of custody forms);
- data validation memoranda (including discussion of data quality/usability);
- laboratory reports (provided on a CD or DVD in the final data report);
- an electronic data file (provided on a CD or DVD in the final data report); and
- waste characterization results and disposal documentation.

The Field Sampling and Data Report shall be submitted in accordance with the schedule contained in Section 3.

2.8 Recontamination Assessment Report

As specified in the approved Work Plan schedule, after receipt of validated groundwater, soil, porewater, and storm water (if needed) data, a draft Recontamination Assessment Report shall be submitted to EPA for review. The objective of the Recontamination Assessment is to consider and evaluate upland, riverbank and in-water sources of potential recontamination and whether they have been adequately investigated and controlled. The information will also help inform EPA's decision making under the ROD for this area of the PHSS. The report will focus on sources of the site specific COCs that are identified in the Work Plan. The assessment will consider whether potential recontamination from upland and in-water sources will adversely impact the short or long term effectiveness of different remedial alternatives. The 2002 sediment management guidance document and the Contaminated Sediment Remediation Guidance for Hazardous Waste Sites both direct definition and evaluation of on-going sources during remedy evaluation.

The Recontamination Assessment shall consider potential impacts from the following:

- upland pathways (storm water, groundwater, and bank erosion);
- in-water sources of recontamination including localized near shore water flow patterns and resuspension of sediments from natural and anthropogenic activities;
- factors that may impact sediment cap effectiveness; and
- potential future use for near shore land and in-water uses.

Upland activities will be focused on three potential pathways. A proposed upland groundwater and soil investigation is expected to include installation of monitoring wells along the river bank to evaluate groundwater quality and hydraulic gradients. Individual depth discrete soil samples will also be collected to evaluate upland soil quality relative to groundwater wells. Storm water impacts will be evaluated through review of existing storm water data from public and private outfalls and supplemented, if needed. To assess the potential for soil erosion, the Respondents shall complete an initial reconnaissance of the bank areas and, nearby uplands along the RM 11E Project Area to document the presence of erosion gullies or other features that could indicate potential erosion. During the reconnaissance, the condition of the shoreline erosion

protection system will also be documented to identify areas where shoreline improvements may be appropriate. Based upon the results of the reconnaissance, additional tasks may be considered for inclusion within the recontamination assessment or addressed after remedy selection.

In-water sources of recontamination shall also be considered. The potential for sediments to be resuspended by a range of activities including storm events, vessel traffic, and maintenance dredging will be evaluated in conjunction with the work being performed concurrently in the Implementability Study. Potential constraints on cap effectiveness will be reviewed through consideration of porewater and the potential for localized sediment resuspension. The preliminary porewater evaluation will include a desktop estimation of the mass of COCs diffused from sediment or groundwater into porewater and the implications on remedy effectiveness from diffusion of porewater from sediment. Resuspension impacts shall consider both near shore hydrodynamic conditions and sediment stability. A localized hydrodynamic evaluation will be conducted that includes both a review of available information and an empirical assessment of near shore flow patterns to understand the presence and implications of localized eddy flow along the shoreline. Resuspension considerations will include sediment particle size; depth of contamination within the sediment column; and the projected amount and depth of sediment that could be resuspended based upon the potential disturbances likely in the area. Finally, the implications of changes to the existing shoreline configurations and anticipated future land use will be considered in the overall recontamination assessment.

The components of the Recontamination Assessment Report are expected to include:

- Introduction: This section will provide a brief description of the site setting, the upland source areas being evaluated by the State and an overview of the remainder of the report.
- Conceptual Site Model: This section will describe the pathways for recontamination, summarize existing information, identify sources that could impact the remedial alternative selection and identify specific data needs that were addressed in this evaluation.
- Components of the Recontamination Assessment Process: This section will outline the components of the recontamination assessment, an overview of the data collection activities and present a synopsis of the results.
- Recontamination Evaluation: This section will present and interpret the results separately for the upland issues and the in-water issues. The evaluation will consider the magnitude of the recontamination effects and discuss implications to the remedial alternatives proposed for RM 11E Project Area. The discussion will also present the limitations of the evaluation approaches and any remaining data gaps.
- Conclusions and Recommendations
- References

2.9 Implementability Study Report

The Implementability Study activities shall be performed concurrent with activities associated with the recontamination assessment. Specifically, the Implementability Study shall be performed to assess how the current site configuration and river dynamics (natural and

anthropogenic) may impact both the selection of the remedial alternatives and the remedial design. As specified in the approved Work Plan schedule, after completion of related field activities and receipt of validated data, an Implementability Study Report shall be prepared.

The objective of the Implementability Study tasks is to gain a more complete understanding of the physical, structural, and administrative (i.e., marine operations) factors that will impact the selection of a remedial alternative for the Project Area as well as its design. It is very important that these factors be understood early in the selection and design process. The Implementability Study activities shall specifically consider the following factors that affect remedy implementability, ease of construction, reliability, operation, and maintenance of the alternative; potential problems that could be encountered during the implementation of an alternative including the on-going operations of existing facilities, the implications of business disruption and lost time on potential remedy costs; the implementation limitations of completing remedial actions around the existing structures; the required approvals and permits from regulatory agencies; the availability of required off-site treatment or disposal services; and the availability of necessary equipment, materials, and personnel.

After review of existing data needs, the Respondents and EPA identified the following activities to be conducted as part of this SOW to inform RM 11E remedial design, regardless of which remedy is selected by EPA:

- Identify the location and types of underground utilities including fiber optics and electrical cable crossings to provide information on the practicability of certain actions in light of existing infrastructure.
- Summarize current and projected in-water operations including loading and unloading activities, types of vessel traffic within the Project Area, monitoring requirements, and other operation and maintenance activities associated with the various facilities.
- Summarize projected maintenance dredging operations, including private dredging at shore side terminals and dredging of the federal navigation channel.
- Complete an expanded survey of underwater debris and structures, especially in areas likely targeted for dredging, capping, or other active remedial action. This is expected to include a more detailed review of the existing data; potential interviews with local dredge operators familiar with the area and, if needed additional side scan sonar surveys or in-water diver assessments.
- Evaluate the configuration and integrity of existing infrastructure to determine potential impact to remedy selection and design elements. The effort will require coordination with facility owners to review specific information regarding dock construction materials, foundations, and other surface and subsurface components, repair history, and design details to the extent possible. The dock assessment will evaluate the stability, life expectancy, near dredging tolerances (see following bullet), capping constraints, demolition issues, and remaining data gaps associated with the docks within the Project Area.
- Where necessary, collect selected surface and subsurface samples near the dock structures to refine the depths of impact and establish needed dredging setbacks from docks and in-water structures. Supplemental sediment data will be collected in the near or

under dock areas, as necessary, to evaluate the depth of sediment impacts and better evaluate alternatives and risk to human health and the environment.

- Assess slope stability to inform the remedial design.
- Identify and evaluate Institutional Controls that may be utilized in remedial alternatives. The analysis should include the following: 1) potential objectives for the Institutional Controls, 2) the specific types of Institutional Controls that can be considered for use to meet RAOs, 3) investigate when such Institutional Controls may need to be implemented and/or secured and how long they must be in place, 4) research, discuss, and document any existing or potential agreements with the proper entities (e.g., state and/or local government entities, local landowners, conservation organizations, Respondents) on exactly who will be responsible for securing, maintaining, and enforcing the Institutional Controls. For guidance see Institutional Controls: A Site Managers Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups (EPA 540-F-00-005), OSWER Directive 9355.0-74FS-P, September 2000.
- Identify economic implications associated with access limitations to dock facilities within the Project Area.
- Identify remedial technologies and potential alternatives that could be adapted to minimize adverse economic impacts and business interruptions in the Project Area.

The components of the Implementability Study Report are expected to include:

- Introduction: This section will provide a brief description of the Project Area and describe the factors being considered as well as an overview of the remainder of the report.
- Site Setting: This section will describe current in-water and near shore activities associated with the Project Area.
- Summary of the Information obtained during the Implementability Study Tasks: This section will outline the results of the information compilation and data collection activities conducted during this task.
- Implementability Considerations: This section will evaluate the information obtained during the task activities against the factors that affect remedy implementation within the Project Area:
 - ease of construction, reliability, operation, and maintenance of different alternatives and what types of modifications could be considered to improve the implementability;
 - potential problems that could be encountered during the implementation of an alternative, including those related to the types and conditions of the current dock structures, anticipated routine maintenance dredging, potential business interruptions and the potential construction problems that could be encountered that could increase potential risk to human health and the environment;
 - required approvals and permits from regulatory agencies; and
 - availability of necessary equipment, materials, and personnel.
- Conclusions and Recommendations

- References

2.10 Progress Report

As described in the Settlement Agreement, unless otherwise required by the EPA, monthly progress reports delineating the status of the site activities shall be submitted to EPA. The progress reports shall include:

- activities conducted during the period;
- problems encountered during the period;
- schedule variances and corrective actions, if necessary; and
- projected activities for the next month.

In addition, as data becomes available, these reports shall include a summary of results and a table of validated data received in the reporting period. When completed, interim technical memos that address components of the Recontamination Assessment and the Implementability Study shall be included as well.

2.11 Submission of Deliverables

All deliverables identified in this SOW shall be submitted to EPA in a Portable Document Format (PDF) that conforms to EPA's "Creating Accessible PDFs" guidelines (version 9-28-2010 or more recent version). These guidelines specify formatting requirements for readability, web-posting for public use, and to make the documents accessible to people with disabilities.

2.12 Community Involvement Support

If requested by EPA, Respondents shall provide information supporting EPA's community involvement programs related to the work performed pursuant to this Settlement Agreement and SOW, and shall participate in public meetings that may be held or sponsored by EPA to explain activities at the Project Area or concerning work performed pursuant to the Settlement Agreement and SOW. EPA will coordinate its community outreach efforts with DEQ, other Agencies, and the Tribes.

2.13 Clean and Green Policy Compliance

As part of the mission to protect human health and the environment, EPA is committed to using effective and environmentally sustainable strategies to restore contaminated land for beneficial uses. EPA's Clean and Green Policy and Region 10 requirements (<http://yosemite.epa.gov/R10/extaff.nsf/programs/greencleanups>) applies to all Superfund cleanups. The objectives of the policy are to:

- Protect human health and the environment by achieving remedial action goals.
- Support sustainable human and ecological use and reuse of remediated land.
- Minimize impacts to water quality and water resources.
- Reduce air toxics emissions and greenhouse gas production.
- Minimize material use and waste production.

- Conserve natural resources and energy.

The Clean and Green Policy encourages cleanup practices that:

- Employ 100% use of renewable energy, and energy conservation and efficiency approaches including EnergyStar equipment.
- Use cleaner fuels, diesel emissions controls and retrofits, and emission reduction strategies.
- Utilize water conservation and efficiency approaches including WaterSense products.
- Incorporate sustainable site design.
- Utilize reused or recycled industrial materials within regulatory requirements.
- Require recycling or reuse of materials generated at or removed from the site.
- Use environmentally preferable purchasing.
- Use “green concrete” (coal combustion products in place of Portland Cement).
- Support greenhouse gas emission reduction technologies.
- Use Environmental Management System (EMS) practices such as reducing the use of paper by moving to fully electronic transmittal of project documents and implementation of waste reduction and recycling programs at all work sites.

Green remediation technologies and practices shall be considered for all work activities conducted under the Settlement Agreement. Evaluation and selection of green remediation technologies and practices shall be discussed in each planning document submitted for review. A comprehensive set of greener approaches to site cleanup may be found at <http://www.clu-in.org/greenremediation>.

3 Project Schedule for Major Deliverables

Table 1 contains the Schedule for Project Deliverables which is incorporated as an enforceable requirement of this SOW and the Settlement Agreement.

As noted throughout this SOW, two key linkages between the RM 11E Project Area process and larger Portland Harbor process are expected:

- The results of the Portland Harbor RI/ FS will inform the RM 11E Project Area supplemental data collection efforts outlined in this SOW.
- The results of the RM 11E Recontamination Assessment and Implementability Study will:
 - inform the selection of a preferred alternative for the Project Area to be described in EPA’s Proposed Plan and the ROD for Portland Harbor, and
 - expedite design and implementation of the remedy by providing information to ensure that the remedy selected is compatible with Project Area specific conditions.

Table 1: Schedule of Project Deliverables

Work Item	Deliverable	Schedule
Work Plan and Support Documents	Draft Work Plan, Sampling and Analysis Plans for Specific Field Activities, and Health and Safety Plans	Within 75 days after the effective date of Settlement Agreement.
	Final Work Plan and Support Plans	Within 30 days after receipt of EPA comment on draft Work Plan and support documents.
Supplemental Data and Sampling Documentation	Draft Field Sampling and Data Report	Consistent with the schedule in the EPA approved Final Work Plan (targeted for approximately 210 days after Final Work Plan approval, pending validated data receipt).
	Final Field Sampling and Data Report	Within 30 days after receipt of EPA comments on draft report.

Table 1: Schedule of Project Deliverables

Work Item	Deliverable	Schedule
Evaluation of Potential Sources of Recontamination to identify appropriate sequencing of remedial activities and inform design	Draft Recontamination Assessment Report	Consistent with the schedule in the EPA approved Final Work Plan (targeted for approximately 270 days after Final Work Plan approval, pending validated data receipt).
	Final Recontamination Assessment Report	Within 30 days after receipt of EPA comments on draft report.
Review of specific implementability consideration in RM 11E to inform remedy selection and design approaches.	Draft Implementability Study Report	Consistent with the schedule in the EPA approved Final Work Plan (targeted for approximately 240 days after Final Work Plan approval, pending validated data receipt).
	Final Implementability Study Report	Within 30 days after receipt of EPA comments on draft report.
Monthly updates of work activities	Progress Reports	Submitted on the 15 th day of each month after effective date of Settlement Agreement until approval of final deliverables.

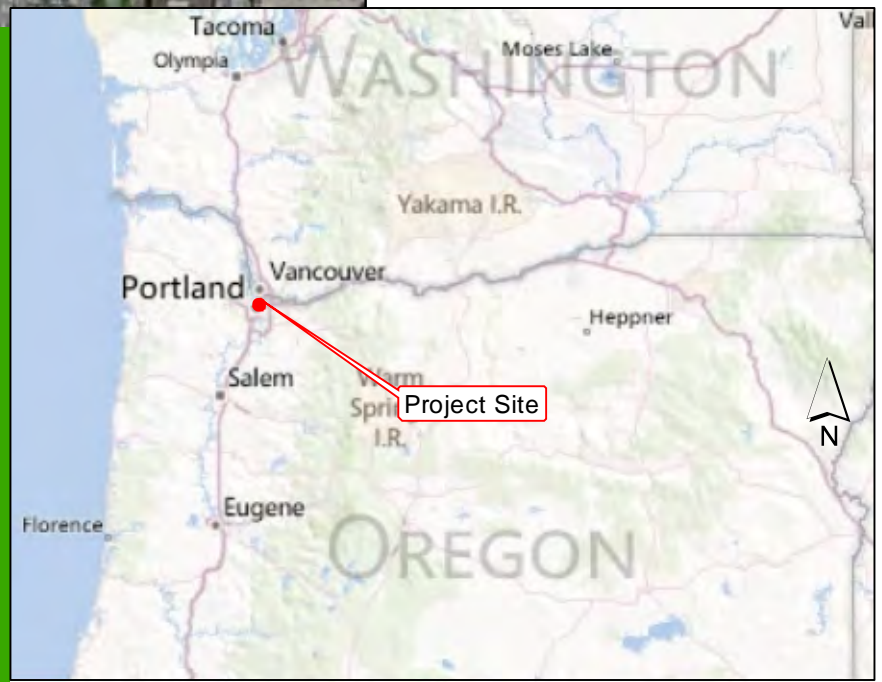
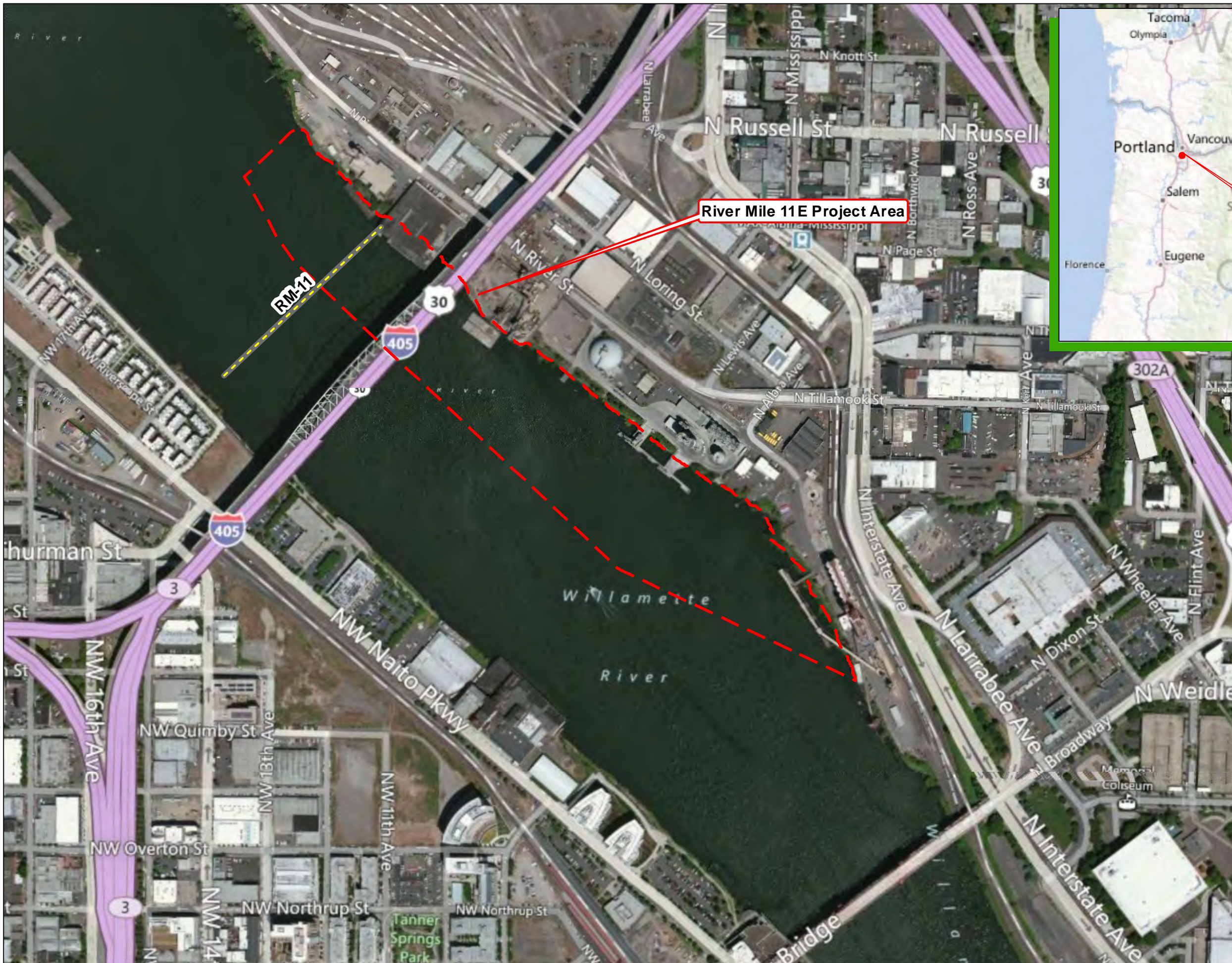
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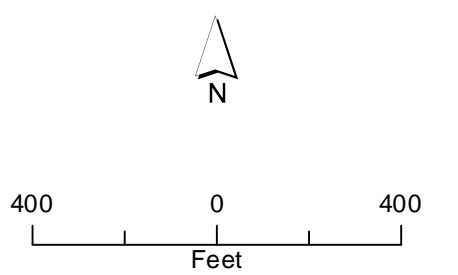
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**Appendix B to RM 11E
Settlement Agreement,
Docket No.
CERCLA 10-2013-0087**

Legend

- River miles
- River Mile 11E Project Area



- Sources:
1. Bing Maps
 2. ESRI - ArcGIS base maps

**Figure 1
River Mile 11E Project Area**