

## A. Background [\[help\]](#)

1. Name of proposed project, if applicable: [\[help\]](#)

Former Reynolds Metals Reduction Plant Longview (Former Reynolds Plant) Model Toxics Control Act (MTCA) Cleanup Action

2. Name of applicant: [\[help\]](#)

Northwest Alloys, Inc. (NWA) - site owner

Millennium Bulk Terminals – Longview, LLC (MBT-Longview) – site tenant and facility operator

3. Address and phone number of applicant and contact person: [\[help\]](#)

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4. Date checklist prepared: [\[help\]](#)

January 2016

5. Agency requesting checklist: [\[help\]](#)

Washington State Department of Ecology (Ecology)

6. Proposed timing or schedule (including phasing, if applicable): [\[help\]](#)

This checklist has been prepared as part of the review process associated with a Model Toxics Control Act (MTCA) Cleanup Action proposed at the Former Reynolds Plant, on property now owned by NWA and leased by MBT-Longview. Cleanup actions will start as soon as practicable upon the receipt of necessary permits and authorizations.

Construction of the cleanup action is expected to begin within 1 year of Ecology's approval of the Final Engineer Design Report (EDR) and will likely be implemented in 2017 or 2018. Based on the anticipated scope of work, the construction will likely require at least two construction seasons to complete. Ecology may approve construction in one or more site units (SUs) in advance of the Final EDR to the extent that Ecology has reviewed and approved the design for cleanup in that SU and required permits necessary for such construction have been obtained.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. [\[help\]](#)

The proposed work consists solely of the cleanup actions that will be implemented in accordance with the draft Cleanup Action Plan (CAP; Ecology 2015a) and associated draft Consent Decree (Ecology 2015b) to be executed between Ecology, NWA, and MBT-Longview. See response 9 for information on other applications and proposals directly affecting the NWA property.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [\[help\]](#)

The following documents have been prepared for the cleanup action:

- Former Reynolds Metals Reduction Plant – Longview: Final Remedial Investigation and Feasibility Study (RI/FS) (Anchor QEA 2015)
- Draft CAP and Appendices – Former Reynolds Metals Reduction Plant – Longview, Cowlitz County, Washington (Ecology 2015a). Appendices include but are not limited to the Compliance Monitoring and Contingency Response Plan; the Closed BMP Facility Post-Closure Plan Amendment and the on-Site Media Management Plan.
- Draft Consent Decree. Proposed for execution by Ecology, MBT-Longview, and Northwest

Alloys (Ecology 2015b).

The following documents will be prepared for this project:

- Plans for Pre-Design Activities
- Engineering Design Report (EDR)

The following documents were prepared previously as part of the Interim Remedial Action (addresses cleanup of SU12; SEPA checklist submitted for review in 2014)

- Amendment to Agreed Order DE-8940 authorizing Interim Action (Ecology, 2014)
- Interim Action Work Plan (Anchor QEA 2014)
- Engineering Design Report (Anchor QEA 2014b)
- Former Reynolds Metals Reduction Plant – Longview: Draft Remedial Investigation and Feasibility Study Report (Anchor QEA 2014)
- SEPA Checklist (Anchor QEA 2014)
- JARPA (Grette Associates 2014)
- Biological Evaluation (Grette Associates 2014)

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. [\[help\]](#)

NWA and MBT-Longview are pursuing permits for repairs and maintenance of existing Dock 1 structure and a maintenance dredge program for the Dock 1 berthing and navigation areas.

MBT-Longview intends in the future to expand the existing bulk terminal facility that is served by the existing dock (Dock 1). The maintenance dredge and dock repair work it proposes to undertake through the pending U.S. Army Corps of Engineers (USACE) permitting process, however, does not include work necessary to expand the existing bulk commodity terminal. Such future expansion work would potentially include new upland facilities to facilitate the trans-loading of additional products. MBT-Longview is also proposing to develop a coal export terminal, including construction of new docks and berth facilities in the Columbia River. NEPA and SEPA EIS's are currently being prepared for that proposal.

These actions are separate, distinct, and unrelated to the proposed CAP (draft) and from a SEPA perspective, have independent utility from the proposed CAP.

Work at SU12 consists of remediation of a localized area of sediment contamination in the Columbia River (Sheet 2). Remediation at SU12 was initially authorized by Ecology under an amendment to MTCA Agreed Order No. DE-8940. It was to be designed, permitted, and implemented separately over a shorter timeline. Materials, including a SEPA checklist, were

submitted for review over the course of 2014 (see response A.8 above). Ecology issued a SEPA determination for remediation of SU12 as an Interim Action on May 28, 2014.

In developing its final cleanup decision for the Former Reynolds Plant, Ecology has confirmed that the Work at S U12 as specified in the A O Amendment remains appropriate for final remediation of that area. Completion of that work within SU12 has been administratively incorporated by Ecology as requirements of the proposed Consent Decree and Cleanup Action, but without modification of the proposed work. Therefore, SU12 has been included without substantive changes as part of the draft CAP that will be implemented pursuant to a Consent Decree. Inclusion of the work in the Consent Decree does not change the scope of the work, nor does it require supplemental environmental review or permitting.

Activities related to SU12 are referenced or described in some responses of this SEPA checklist to provide context for the entire Clean up Action. Therefore, when SU12 is discussed in this checklist, it is noted that the information is provided for context only, and that SEPA review for this element has already occurred.

10. List any government approvals or permits that will be needed for your proposal, if known. [\[help\]](#)

Procurement of or compliance with the following permits and environmental reviews will be required:

- USACE Nationwide Permit 6
- USACE Nationwide Permit 38, including associated reviews and consultations.
- State Environmental Policy Act
- NPDES Permit No. WA 000008-6.

In addition, although procedurally exempt, the cleanup action will substantively comply with the following requirements and regulations:

- Section 401 Water Quality Review, Washington State Department of Ecology
- Hydraulic Project Approval, Washington State Department of Fish and Wildlife
- Shoreline Management Act, Chapter 90.58 RCW/Cowlitz County Shoreline Master Program; Cowlitz County Code (CCC) 19.20
- Major Grading Permit; Cowlitz County Grading Ordinance, CCC 16.35
- Cowlitz County Stormwater Requirements, CCC 16.22
- Critical Areas Permit: Cowlitz County Critical Areas Ordinance, CCC 19.15

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.) [\[help\]](#)

The proposed cleanup action (project) addresses 12 distinct site units (SUs) and two areas of affected groundwater (i.e., the West Groundwater Area and the East Groundwater Area) that were identified during RI/FS investigations.

The cleanup action also addresses a small area of stained soil containing petroleum hydrocarbons that was identified in the northern area of the project during demolition activities. This area contains less than 10 cubic yards of impacted soil and has been identified as SU13. These soils are to be removed for offsite disposal.

Section 2 of the draft CAP (attached) describes the activities summarized here.

Several of the fill deposits (SU1, SU2, SU6 and SU7) within the project will be managed using long-term containment, engineering controls, and monitoring. Impacted materials from other areas (SU3, SU5, and SU10) will be removed and consolidated with these fill deposits prior to placement of low permeability caps. The final consolidation areas may be modified (subject to Ecology review and approval) during final design and permitting. The consolidation and capping will minimize the potential for direct contact and migration of hazardous substances.

- Materials excavated from SU8 and SU10 will be consolidated within SU7. The excavation areas within SU8 will receive backfill and a new soil cover and hydroseed, whereas SU10 will be backfilled with general fill.
- Materials excavated from SU3 and SU5 will be consolidated within SU6. The excavation area within SU3 will be backfilled with reactive backfill below the water line and general fill above the water line to further immobilize residual fluoride. The excavation area within SU5 will be backfilled with general fill and will be resurfaced with gravel.
- The eastern and western portions of SU2 will be excavated and consolidated within the same SU to minimize the potential for direct contact and migration of fluoride. The excavated areas will be filled with reactive fill below the water line and general fill above the water line.

After consolidation, the fill areas (SU1, SU2, SU6, and SU7) will be managed in place and capped with low permeability caps to prevent future exposure to the contained material.

Impacted soils will be excavated and managed by off-site disposal from three areas, SU9, SU11 and SU13. Soil removed from these areas will be disposed at an appropriately permitted treatment/storage/disposal facility. These areas will then be backfilled with general fill after contaminated materials have been removed.

The selected cleanup action includes the construction of two permeable reactive barriers (PRBs)—vertical trenches, perpendicular to contaminated groundwater flow, that are backfilled with selected reactive media—to further limit the mobility of contaminants in shallow groundwater of the upper alluvium and satisfy requirements for groundwater cleanup actions.

- One PRB approximately 350-feet-long will be located at the western perimeter of SU2, where groundwater flows from the Site towards CDID Ditch No 14.
- A second PRB approximately 725-feet-long will be “L-shaped” and located northwest of the Closed BMP Facility.

The selected cleanup action also includes the use of reactive backfill for select areas. Similar to the PRB composition, the reactive backfill will have mineral amendments, such as calcite and apatite, to reduce fluoride concentrations in groundwater flowing through the backfill. Portions of SU2 in the eastern and western areas and SU3 will receive reactive backfill below the water table. Reactive backfill will also be placed within SU4 and SU5 to augment the natural geochemical processes and other interactions occurring at the point of exchange between groundwater and ditch water. Above the water line, these areas will receive general fill.

Work at SU12 has already undergone SEPA review (see response A.9), but is described here for context because it is included in the draft CAP. Remediation at SU12 will include dredging and the backfilling of an area of sediment from the vicinity of Outfall 002A (Sheets 2 and 4). The sediments will be managed by upland placement on-site (within SU1 and SU2) as directed by Ecology, unless they are managed by off-site disposal in a permitted, commercial, Subtitle D landfill. All sediments managed on-site will be covered by a low-permeability soil cap during implementation of the final upland cleanup actions at SU1 and SU2. The original SEPA checklist and determination did not include an off-site disposal option for the work at SU12. Both options are described in the Site Unit 12 Work Plan (Anchor QEA 2015).

In addition to construction activities the cleanup includes a long-term monitoring and inspection program to verify compliance with cleanup standards. Environmental covenants will be recorded and implemented to maintain industrial land use for the portion of the site south of Industrial Way, limit consumptive use of shallow groundwater, and restrict activities that could damage the caps and groundwater treatment features constructed during the cleanup action. Ecology will provide oversight to the cleanup during its construction and during long-term monitoring activities.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. [\[help\]](#)

The project is located at 4029 Industrial Way in Longview, Cowlitz County, WA; on the north bank of the Columbia River, in Sections 25, 26, 36, and 53 of Township 8N, Range 3W and Section 31 of Township 8N, Range 2W W.M; 46.1354 N lat. / -123.0022 W long; Cowlitz County Tax Parcel Numbers 619530400, 61950, and 61953.

Site Units (SUs) for the cleanup actions (excluding SU12) comprise approximately 44 acres (see draft CAP Figure 2-1).

The legal description of the project is:

A portion of land in the Crumline LaDue Donation Land Claim No. 38 in Sections 35 and 36, Township 8 North, Range 3 West of the Willamette Meridian, Cowlitz County, Washington, described as follows:

All that tract of land lying Southerly of the Northerly right of way line of the Columbia River Dike of Consolidated Diking Improvement District No. 1 as Established by judgment filed November 16, 1923, under Civil Court Order No. 5362, Cowlitz County, Washington said tract of land being bounded on the North by the Northerly right of way line of the Columbia River Dike of the said Consolidated Diking Improvement District No. 1; and on the East by the Westerly line of the Weyerhaeuser Timber Company property, as described by deed recorded in Volume 122, Page 358, Cowlitz County Deed records; and bounded on the West by the West line of the Crumline LaDue Donation Land Claim; together with all tidelands of the second class in front of and adjacent thereto, lying Easterly of the West line of said Donation Land Claim, produced South. EXCEPT any portion of the above described property deeded to the Consolidated Diking Improvement District No. 1 of Cowlitz County under Auditor's File No. 900718047.

SU12 comprises less than 1 acre of substrate in the Columbia River, adjacent to the project location, see Interim Action SEPA Checklist (Anchor QEA 2014).

## B. ENVIRONMENTAL ELEMENTS [\[help\]](#)

### 1. Earth

#### a. General description of the site [\[help\]](#)

(circle one):  Flat, rolling, hilly, steep slopes, mountainous,  
other \_\_\_\_\_

The cleanup action evaluated by this checklist will take place entirely landward of the Columbia River ordinary high water mark.

The site is typical of shoreline/floodplain areas in this section of the Columbia River. It is essentially flat, with minor relief associated with built features such as the Consolidated Diking Improvement District No. 1 (CDID) levee and associated road (raised), the closed Reynolds Landfill (aka, BMP Facility) (raised), and various ditches and minor depressions from previous and/or current uses, as well as wetland areas.

#### b. What is the steepest slope on the site (approximate percent slope)? [\[help\]](#)

The upland is typically sloped at less than 2 percent. The CDID levees are constructed at approximately a 3H:1V (33 percent) slope.

#### c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [\[help\]](#)

Geological conditions within and adjacent to the Former Reynolds Plant are described in the RI/FS (Anchor QEA 2015). The soils found on the upland portions of the site are primarily clay and loam with the exception of an area of peat soils found in the northeastern portion of the property. The Natural Resource Conservation Service (NRCS) Web Soil Survey map for Cowlitz County identifies six different soil series on the site, including Arents, Caples silty clay loam, Maytown silt loam, Pilchuck loamy fine sand, Semiahmoo muck, and Snohomish silty clay loam (NRCS 2014). Soils found in the upland portion of the project area where the sediment placement area will be located include Arents, Caples silty clay loam, Maytown silt loam, and Pilchuck loamy fine sand (NRCS 2014). No prime farmland exists on the site. Soils within the site have been significantly disturbed by historical grading, filling, and excavation

activities associated with historical and current industrial activities.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [\[help\]](#)

No.

- e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [\[help\]](#)

Estimates of area and volume of SUs to be addressed in the cleanup action and PRBs to be constructed were developed as part of the RI/FS. The current estimate of these areas is approximately 44 acres (excluding the area of SU12 which was reviewed previously). Areas and volumes are subject to refinement during engineering design. Final volumes will be documented in the EDR.

Filling, excavation, and grading estimates for the proposed cleanup include:

- Excavation and backfill of soils as part of onsite consolidation and subsequent capping will occur over approximately 21 acres (169,800 cubic yards for SU3, 5, 8, 10 and a portion of SU2).
- Excavation of soils for off-site disposal will occur over less than 1 acre (approximately 240 cubic yards for SU9, 11, and 13).
- Fill at the SUs will include approximately 25 acres of low permeability soil caps (approximately 91,000 cubic yards) over SU1, 2, 6 and 7. In addition, approximately 118,000 cubic yards of clean fill (including combinations of standard soil/gravel fill and reactive backfill) will be placed over an area of approximately 19 acres to backfill excavated areas within SU2, 3, 4, 5, 8, 9, 10, 11, and 13.
- Excavation for vertical trenching for the PRBs will occur over less than 0.3 acre (up to approximately 4,600 cubic yards). The trench will be backfilled with the same volume of reactive media.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [\[help\]](#)

Erosion could occur during upland construction activities; however, best management practices (BMPs) will be employed to minimize erosion. Erosion control measures will be documented as part of the EDR and adhered to during construction activities.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? [\[help\]](#)

The cleanup action includes the placement of caps, which represents an increase of approximately 6 percent (approximately 28 acres) of impervious surface at the site.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [\[help\]](#)

The final project engineering will include geotechnical design to document practices to achieve stability of caps and other earth work associated with the project. BMPs will be implemented to reduce and control erosion.

## 2. Air

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [\[help\]](#)

Short-term air emissions during construction will include those from construction equipment and vehicles (e.g., exhaust from diesel and gasoline powered equipment and vehicles). Earth work will also generate emissions of fugitive dust (e.g., dust). These emissions are related to implementation of the project.

Long-term care of the cleanup action will include periodic monitoring and maintenance activities. These activities will include short-term emissions from vehicles and equipment. Maintenance activities may include earth work that would generate air emissions (e.g., exhaust from diesel and gasoline powered vehicles and equipment) and vehicles and fugitive dust emissions (e.g., dust). These emissions relate to activities on the property that will occur after the project is completed.

Greenhouse gas emissions associated with the cleanup action, including construction and implementation of long-term monitoring and maintenance activities, are not expected to exceed 10,000 MTE/yr.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [\[help\]](#)

The cleanup action includes the use of offsite disposal, and acquisition of clean fill materials (including low-permeability capping materials, standard sand/gravel backfill and reactive media). There will be associated transportation emissions associated with the acquisition and delivery of these materials (e.g., exhaust from diesel and gasoline powered vehicles and equipment used to procure and deliver the materials).

- c. Proposed measures to reduce or control emissions or other impacts to air, if any: [\[help\]](#)

BMPs related to emissions control and other impacts to air will be documented as part of the EDR and adhered to during construction activities. These BMPs will address both the control of air emissions from construction equipment and vehicles (e.g., exhaust from diesel and gasoline powered equipment and vehicles) and the control of emissions of fugitive dust (e.g., dust).

### 3. Water

- a. Surface Water: [\[help\]](#)

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. [\[help\]](#)

The project is adjacent to the Columbia River. This portion of the Columbia River is freshwater and tidally influenced.

CDID Ditches nos. 10 and 14 are adjacent to the northern and western edges of the site (see Sheet 2). These ditches were excavated by the USACE to drain both stormwater and shallow groundwater from properties within the district (CDID) and permit development within the floodplain. Groundwater and

stormwater are actively pumped by the CDID from the ditches to maintain water levels below those in the Columbia River. The CDID ditches are structurally isolated from Columbia River but ultimately discharge to Columbia River through a series of pump stations and gated valves. See the final RI/FS for additional information on the CDID ditches (Anchor QEA, LLC 2015)

There are also a number of wetlands and existing non-wetland ditches (conveyance and other) located on the site, see tables below. Review of on-site wetlands and existing non-wetland ditches is occurring in conjunction with the USACE.

SU12 is located in the Columbia River. Remediation at SU12 has already undergone SEPA review (see response A.9).

Parcel	Wetland Feature	Size (ac)	Cowardin Class	HGM Class	Category
619530400	A	6.28	PFO	Depressional	III
619530400	C	3.38	PEM/FO	Depressional	III
619530400	Y	11.22	PEM	Depressional	III
619530400	Z	3.4	PEM/SS	Depressional	III
619530400	P2	2.65	PEM	Depressional	IV
61950	X	0.44	PSS	Riverine	III
61953	D	5.43	PSS	Depressional	III
61953	E	9.43	PEM	Depressional	III
61953	F	0.45	PEM	Depressional	III
61953	G	2.6	PSS	Depressional	III
61953	H	0.24	PEM	Depressional	III

Parcel	Non-wetland Ditches*	Feature Type
619530400	SC01 through SC16	stormwater conveyance ditches
619530400	I1	interception ditch
61950	no features delineated	
61953	CD01 through CD04	stormwater conveyance ditches
61953	CR01 through CR03, P01	Cryolite area ditches

\*Non-wetland ditch identifiers are not shown in Sheets 1 through 4, but will be identified individually during permitting.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. [\[help\]](#)

For the cleanup actions addressed in this checklist, areas of SU2 and SU10 are within 200 feet of the Columbia River. SU2 is located on the landward side of the levee. SU10 is located approximately 100 feet landward from the ordinary high water line.

The draft CAP provides a preliminary layout for cleanup actions (draft CAP Figure 2-1). The layout for the cleanup actions will be refined during the Engineering and Design phase of the MTCA process, which may reduce the scope of work over, in, or adjacent to wetlands and existing non-wetland ditches. Based on the preliminary layout in the draft CAP, potential impacts to wetland, wetland buffers, and existing non-wetland ditches are as follows (see Sheets 3 and 4).

Cleanup actions at SU1, SU2, SU3, SU9, SU11, and SU 13 are not expected to impact wetlands, wetland buffers, or existing non-wetland ditches. Refinements to the preliminary layout for SU2 may necessitate a small amount (well under 1 acre) of temporary and/or permanent fill in an existing non-wetland ditch (SC11) feature.

Cleanup actions at SU4 and SU5 are not expected to impact wetlands or wetland buffers. The 3 ditches comprising SU4 are existing non-wetland ditches (Cryolite area ditches CD01, CD02, CD03). SU5 includes another non-wetland ditch, Cryolite area ditch P01. The Cleanup Action will fill all four ditches to surface grade, comprising a small amount of fill (less than 1 acre). These ditches are not part of the conveyance network. Cleanup (removal) of contaminated soils from these ditches occurred in 2008.

Cleanup actions at SU6 are expected to impact wetlands and wetland buffers. SU6 overlaps with Wetland F, and the cleanup action will fill a very small amount (anticipated less than 0.1 acre, pending final design) of that wetland. Construction also will affect approximately 1.6 acre of buffer during construction (buffer for Wetlands F, G, and H), but effects of this will be temporary. Conditions (grass and forb vegetation) and function of the wetland buffer will be similar pre- and post-construction. Non-wetland ditches CD03 and CD04 are directly adjacent to SU6. Due to proximity to SU6, it is possible that additional capping material could be accidentally

discharged to the ditches during construction outside of the final cap footprint. Should this happen, material would be removed, and any effects to the ditches and their function would be temporary.

Cleanup actions at SU7 are not expected to impact wetlands, but will affect wetland buffers (Wetland D and F). Construction will affect a small amount (less than 1 acre, pending final design), but effects of this will be temporary. Conditions (grass and forb vegetation) and function of the wetland buffer will be similar pre- and post-construction. Non-wetland ditches CD02 and CD01 are directly adjacent to SU7. Similar temporary impacts to those described for CD03 and CD04 could occur (accidental discharge of capping material).

Cleanup actions at SU8 are expected to impact wetlands and wetland buffers (Wetland G). SU8 overlaps with Wetland G, and the Cleanup Action will fill a very small amount (anticipated less than 0.1 acre, pending final design) of that wetland. Construction will affect approximately less than 1 acre of buffer during construction, but this will be temporary. Conditions (grass and forb vegetation) and function of the wetland buffer will be similar pre- and post-construction.

Based on the current design, Cleanup actions at SU10 are not expected to impact wetlands or existing non-wetland ditches, but will affect wetland buffers (Wetland X). Construction will affect a small amount (less than 1 acre, pending final design), but this will be temporary. Conditions (grass and forb vegetation) and function of the wetland buffer will be similar pre- and post-construction. However, SU10 is in close proximity with an unsurveyed area called the Dredged Material Storage area. Refinements to the preliminary layout for SU10 may necessitate a small amount (well under 1 acre) of temporary and/or permanent fill in this feature.

Cleanup actions associated with the installation of PRBs are expected to impact wetland buffers, but at a much smaller scale than at the SUs. The northern PRB overlaps with the Wetland Y buffer. Construction could include trenching and then backfilling reactive media within a very small area of wetland buffer (less than 0.1 acre, pending final design). These effects will be temporary, with conditions and functions similar pre- and post-construction. Non-wetland ditch SC11 is in close proximity to the southern PRB; similar temporary impacts to those described for other ditches in close proximity to capping could occur. Refinements to the preliminary layout for the southern PRB may necessitate a small amount (well under 1 acre) of temporary and/or permanent fill in this feature.

Cleanup actions at the both of the PRBs will occur within 200 feet of CDID Ditch 14, but there will be no actions within the ditch itself. This will include trenching and backfilling as described in the previous paragraph.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.  
[\[help\]](#)

Work associated with the remediation of sediments within SU12 will include dredge and fill work within the Columbia River. This work was previously reviewed in 2014 at the time the work was authorized by Ecology as an interim action under an amendment to MTCA Agreed Order DE-8940. Refer to the answer to question No. 9 for additional information.

For cleanup actions addressed in this checklist, no fill or dredge material will be placed in or removed from the Columbia River, or CDID Ditches 14 and 10.

The draft CAP provides a preliminary layout for cleanup actions. The layout for the cleanup actions will be refined during the Engineering and Design phase of the MTCA process, which may influence fill and excavation material volumes that will be placed in or removed from surface water (existing non-wetland ditches) or wetland areas.

Cleanup actions at SU1, SU2, SU3, SU7, SU9, SU10, SU11, SU13, and the two PRBs are not expected to result in permanent fill to wetlands or existing non-wetland ditches.

Cleanup actions at SU4 and SU5 will fill the four existing non-wetland ditches (less than 1 acre, pending final design), requiring approximately 976 cubic yards of material.

Cleanup actions at SU6 will fill a very small area (less than 0.1 acre, pending final design) of existing wetland, requiring approximately 107 cubic yards of material.

Cleanup actions at SU8 will fill a very small area (less than 0.1 acre, pending final design) of existing wetland, requiring approximately 26 cubic yards of material.

Existing non-wetland ditches CD01 through 04 and also SC11 are in close proximity to proposed capping and/or PRB installation activities. It is possible that capping material could be accidentally discharged to the ditches during construction. Should this happen, material would be removed, and any effects to the features and their function would be temporary.

Refinements to the preliminary layout for SU10 may necessitate a small amount (well under 1 acre) of temporary and/or permanent fill in the unsurveyed area known as the Dredged Material Storage Area. Similarly, the cleanup of SU2, and the construction of the southern PRB may impact the adjacent ditch, SC11

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [\[help\]](#)

No.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. [\[help\]](#)

For the cleanup actions addressed in this checklist, work associated with SU10 will occur within a 100-year floodplain and everything else is the landward side of the levee. According to the Federal Emergency Management Agency (FEMA) Cowlitz County Flood Insurance Rate Maps (FIRMs) the Columbia River, waterward of the levee (aka CDID No. 1 dike) that runs parallel to the shoreline, is documented as an A4-rated floodplain (FEMA 1993). Floodplains rated A1 through A99 are areas of 100-year flood, and base elevations and flood hazard factors are already determined in these areas (FEMA 1993).

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. [\[help\]](#)

The former Reynolds Plant is covered by NPDES Permit No. WA000008-6. The NPDES permit for the Site was issued when the former Reynolds Plant was an operating smelter. Ecology is in the process of revising this permit to

reflect activities conducted at the site, including discharges from the planned cleanup activities. Once ready, the proposed update to the permit will be made available to the public for review and comment prior to being issued.

Future cleanup-related waters generated requiring specific management, such as construction waters and remediation waters accessed from the shallow water bearing zone underlying the Site (isolated by the upper alluvium), will be managed in compliance with the Site's NPDES permit (and updates to that permit) using the on-site wastewater and stormwater management facilities. A plan for management of remediation waters will be included in the EDR. To the extent estimable, types and volumes of wastewater discharges will be provided in in the EDR.

Remediation at SU12 has already undergone SEPA review (see response A.9), the following information is provided for context. Waters generated during upland placement will be managed according to the Ecology approved EDR for the Interim Action (Anchor QEA 2014b).

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [\[help\]](#)

The site has nine deep water wells used for process and production water. This well water will be used during construction, if needed, for dust suppression.

Earthwork associated with the cleanup action may include temporary dewatering activities including potential extraction from temporary wells, sumps or other collection methods. If applicable, dewatering methods will be documented in the EDR.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. [\[help\]](#)

The cleanup action includes consolidation and capping of contaminated soils and fill deposits using methods specified by Ecology. Consolidation and capping areas are defined in the draft CAP. These areas will be covered with a low-permeability cap to minimize infiltration and protect groundwater.

Remediation at SU12 has already undergone SEPA review (see response A.9), the following information is provided for context. Dredged material may be placed on a landfill within containment for beneficial reuse as a component of a landfill cap in the final cleanup action.

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. [\[help\]](#)

The project includes 25 acres of low-permeability caps. The caps will prevent stormwater from coming into contact with the underlying material. Surface water runoff will be collected and managed in compliance with NPDES Permit No. WA 000008-6.

Contact stormwater generated during construction activities will be managed as cleanup-related water as described in Response B.3.a.6.

- 2) Could waste materials enter ground or surface waters? If so, generally describe. [\[help\]](#)

The cleanup action includes consolidation and capping of contaminated soils and fill deposits using methods specified by Ecology. Consolidation and capping areas are defined in the draft CAP. These areas will be covered with a low-permeability cap to minimize infiltration and protect groundwater.

Remediation at SU12 has already undergone SEPA review (see response

A.9), the following information is provided for context. It is unlikely that waste materials would enter surface waters from the site. Risks of spills during construction would be managed through BMPs as described in Attachment A of the Site Unit 12 Work Plan (Anchor QEA 2015). The chemical constituents present in the dredged sediments are similar in type and concentration to those in soils and fill underlying the sediment placement area (if materials are not disposed off-site). The sediment placement area is located above the elevation of groundwater. The dredged materials are to be covered with a temporary synthetic material until implementation of the final upland cleanup action.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No, the project does not affect drainage patterns offsite.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

BMPs will be implemented to avoid or minimize adverse impacts to the surface, ground, and runoff water during cleanup action activities. Specific BMPs will be documented as part of the EDR , and adhered to during construction activities.

Management of remediation waters is described in Response B.3.a.6.

4. **Plants** [\[help\]](#)

a. Check the types of vegetation found on the site: [\[help\]](#)

- deciduous tree:  , maple, aspen,  : cottonwood, Oregon ash
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- Orchards, vineyards or other permanent crops.
- wet soil plants:  , buttercup, bullrush, skunk cabbage,  : rush, sedge

\_\_\_\_water plants: water lily, eelgrass, milfoil, other  
\_\_\_\_other types of vegetation

The vast majority of the site (approximately 80 percent) is comprised of paved surfaces, buildings, and unvegetated surfaces, or areas of upland grasses and forbes. Much of the upland grass and forb areas have been previously altered through grading, filling, or other development. The remainder of the site is comprised of (in decreasing order) wetland, surface water/stormwater ditches, and upland forest and scrub-shrub areas.

Vegetation in the wetlands is dominated by emergent species, with smaller component of shrub-scrub and tree species. Non-native species including reed canary grass and Himalayan blackberry are present; reed canary grass is dominant in much of the wetland area.

b. What kind and amount of vegetation will be removed or altered? [\[help\]](#)

The SUs comprise approximately 44 acres. Conservatively estimated, up to 80 percent of this is currently vegetated, mostly consisting of grasses and forbs in disturbed areas. These areas will be altered during cleanup actions. After cleanup, SU3, 5, and 9 will be gravel surface, and the remainder of the SUs will be hydroseeded or left as unvegetated general fill, typically consistent with both the existing condition and the existing use in the area. There may be a small (anticipated to be a few acres) increase in unvegetated area, depending on the final surface treatments. Small areas of woody or shrub vegetation may be removed, most likely to include in the PRBs footprints, along the north margin of SU2, south margin of SU10, and where woody or shrub vegetation exists in SU6.

c. List threatened and endangered species known to be on or near the site. [\[help\]](#)

No threatened, endangered, rare, or imperiled plant species are documented to occur on or near the site according to the WDNR Natural Heritage Program (NHP) Geographic Information System (GIS) database (WDNR 2014, current June 2015). The U.S. Fish and Wildlife Service (USFWS) identifies Nelson's checkermallow (*Sidalcea nelsoniana*) to occur within Cowlitz County, but the site does not contain the appropriate habitat for the species nor is it documented to occur on site via the WDNR NHP database.

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [\[help\]](#)

The project includes areas where vegetation will be disturbed or new surfaces created (i.e., cap covers). Any restoration, re-vegetation or landscaping of these areas will be documented in the EDR.

- e. List all noxious weeds and invasive species known to be on or near the site.

The noxious weeds and invasive species observed on or near the site consist of those species typically found on developed industrial areas in and around Longview, WA. The following noxious weeds and invasive plant species have been observed on or near the site: Scotch broom (*Cytisus scoparius*), Canada thistle (*Cirsium arvense*), bull thistle (*Cirsium vulgare*), English ivy (*Hedera helix*), policeman's helmet (*Impatiens glandulifera*), reed canarygrass (*Phalaris arundinacea*), Himalayan blackberry (*Rubus bifrons*), common tansy (*Tanacetum vulgare*), cattail (*Typha* spp.), and false indigo bush (*Amorpha fruticosa*).

## 5. Animals

- a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include: [\[help\]](#)

birds: , , , , : waterfowl, shorebirds, corvids, osprey

mammals: , bear, elk, beaver, : harbor seal, California sea lion, Steller sea lion, small upland mammals

fish: , , , herring, shellfish, : steelhead, eulachon, white sturgeon, green sturgeon, walleye, northern pikeminnow, river lamprey, Pacific lamprey

b. List any threatened and endangered species known to be on or near the site. [\[help\]](#)

Species, ESU/DPS if applicable	Federal Status	Critical Habitat Designated	Critical Habitat in Action Areas
<b>Chinook salmon (<i>Oncorhynchus tshawytscha</i>)</b>			
Snake River fall ESU	threatened	yes	yes
Snake River spring/summer ESU	threatened	yes	yes
Upper Columbia River spring ESU	endangered	yes	yes
Lower Columbia River ESU	threatened	yes	yes
Upper Willamette River ESU	threatened	yes	yes
<b>Coho salmon (<i>O. kisutch</i>)</b>			
Lower Columbia River ESU	threatened	no	yes <sup>1</sup>
<b>Chum salmon (<i>O. keta</i>)</b>			
Columbia River ESU	threatened	yes	yes
<b>Sockeye salmon (<i>O. nerka</i>)</b>			
Snake River ESU	endangered	yes	yes
<b>Steelhead trout (<i>O. mykiss</i>)</b>			
Snake River DPS	threatened	yes	yes
Upper Columbia River DPS	endangered	yes	yes
Middle Columbia River DPS	threatened	yes	yes
Lower Columbia River DPS	threatened	yes	yes
Upper Willamette River DPS	threatened	yes	yes
<b>Bull trout (<i>Salvelinus confluentus</i>)</b>	threatened		
Columbia River DPS	threatened	yes	yes
<b>Other species</b>			
Eulachon ( <i>Thaelichthys pacificus</i> ), southern DPS	threatened	yes	yes
Green sturgeon ( <i>Acipenser medirostris</i> ), southern DPS	threatened	yes	no
Streaked horned lark ( <i>Eremophila alpestris strigata</i> )	threatened	yes	no
Yellow-billed cuckoo ( <i>Coccyzus americanus</i> ), western DPS	threatened	proposed <sup>2</sup>	no
Columbian white-tailed deer ( <i>Odocoileus virginianus leucurus</i> ), Columbia River DPS	endangered	no	n/a

<sup>1</sup> Critical habitat for coho was proposed in January 2013; a final decision to designate critical habitat is anticipated at any time.

<sup>2</sup> Critical habitat for western yellow-billed cuckoo was proposed in August 2014, but does not include critical habitat units in Washington or Oregon

Species and critical habitat listings for the streaked horned lark were finalized in October 2013, and the western Distinct Population Segment (DPS) of the yellow-billed cuckoo was listed in October 2014. Despite the developed nature of the site and surrounding areas and lack of suitable habitat, streaked horned larks and yellow-

billed cuckoo are included in this table because of the recentness of these listings.

c. Is the site part of a migration route? If so, explain. [\[help\]](#)

Yes. The site is also within the Pacific Flyway for migrating waterfowl.

Adjacent to the site, all anadromous Columbia River salmonids migrate through the lower Columbia River en route to the Pacific Ocean. The peak of juvenile salmonid migration through the lower Columbia River primarily occurs in late spring and early summer. Eulachon migrate up the lower Columbia River in winter-early spring to spawn. California sea lion, Steller sea lion and to a lesser degree harbor seal migrate past the site up to Bonneville Dam to feed on salmon and sturgeon in winter/spring.

d. Proposed measures to preserve or enhance wildlife, if any: [\[help\]](#)

Objectives of the cleanup action include protection of terrestrial, aquatic, and benthic ecological receptors, which include wildlife. The cleanup action will remove, isolate, and/or remediate known contaminants on the site, which may benefit wildlife both on and off the site. Further, the BMPs and conservation measures (see Response B.3.d.) minimize potential for construction-related impacts such as unanticipated discharges from equipment.

e. List any invasive animal species known to be on or near the site.

There are no documented occurrences of aquatic invasive species (as defined by WDFW, <http://wdfw.wa.gov/ais/species.html>) on or near the site.

## 6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. [\[help\]](#)

The completed cleanup action will not have on-going energy needs. Electricity, natural gas, gasoline, and diesel will continue to be used on site.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. [\[help\]](#)

No.

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: [\[help\]](#)

The cleanup action includes the use of onsite consolidation and capping. The cleanup action was selected according to MTCA criteria. The use of onsite consolidation and capping involves lower energy use than other cleanup alternatives considered (e.g., offsite disposal).

The cleanup action project will include the use of energy efficient equipment and vehicles provided the use is appropriate to the required work.

## 7. Environmental health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. [\[help\]](#)

The cleanup action will remove, isolate, and/or remediate known contaminants on the site and reduce potential risks to human health and the environment, as described in the draft CAP (Ecology 2015).

- 1) Describe any known or possible contamination at the site from present or past uses.

Site contamination being addressed by the cleanup action is described in detail in the final RI/FS (Anchor QEA, LLC 2015) and summarized in the draft CAP (Ecology 2015).

Site contaminants are associated with historical aluminum manufacturing activities. The cleanup action includes measures to contain and/or treat soils and shallow groundwater containing fluoride, to remove or contain soils containing PAH compounds, and to remove soils containing TPH compounds; and also to remove contaminated sediment in vicinity of outfall 002A (SU12, which has already undergone SEPA review, see response A.9).

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

The cleanup action will be implemented in a manner that controls human health and environmental risk associated with contaminated groundwater, soil, and sediments (SU12, which has already undergone SEPA review, see response A.9).

There are no other known hazardous chemicals/conditions that might affect project development and design.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

The project will include the use of fuels, lubricants, and other materials associated with construction equipment and vehicles. The cleanup also includes offsite disposal (e.g., contaminated soils from SU9, SU11 and SU13; and potentially also for contaminated sediments from SU12 [has already undergone SEPA review, see response A.9]).

- 4) Describe special emergency services that might be required.

No special emergency services are expected to be required.

- 5) Proposed measures to reduce or control environmental health hazards, if any:

- Compliance with spill control plans
- Compliance with applicable traffic control requirements
- Compliance with project health and safety plan
- Use of appropriate BMPs to protect stormwater

- Use of appropriate BMPs for air emissions
- Containment of contaminated soils managed onsite as part of the cleanup action using low permeability caps to prevent contact with stormwater and to minimize potential impacts to groundwater.
- Treatment of shallow groundwater to enhance existing processes that prevent fluoride migration in groundwater
- Implementation of project earthwork consistent with applicable worker safety, training and notification requirements. including development of a site-specific Health and Safety Plan
- Implementation of restrictive covenants to provide for long-term management of caps, soil and fill deposits, and including restrictions on groundwater and land use as described in the draft CAP (Ecology, 2015a).
- Implementation of appropriate long term monitoring program to verify the effectiveness of the cleanup action as described in the draft CAP (Ecology, 2015a).

**b. Noise**

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [\[help\]](#)

Existing site noise includes sound from site operations, road and rail traffic, adjacent industrial uses, and Columbia River traffic. These noise sources will not affect the cleanup action.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. [\[help\]](#)

Short-term construction noise (noise from construction equipment and trucks or other vehicles) will result from the cleanup action, this is expected to be negligible with respect to existing noise levels and will be consistent with the industrial nature of the area.

The cleanup action will not affect long-term noise conditions at the site.

3) Proposed measures to reduce or control noise impacts, if any: [\[help\]](#)

Project BMPs will be documented in the EDR and will include provisions for use of properly functioning mufflers, engine-intake silencers, and engine enclosures according to federal standards. Work activities will be performed in accordance with county and federal requirements for noise and obtain site-specific requests for variances or other construction-related noise issues associated with the project.

## 8. Land and shoreline use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [\[help\]](#)

### Site

The Former Reynolds Plant was previously used for the manufacture of aluminum. Aluminum manufacturing operations ended in 2001, and portions of the Former Reynolds Plant have since been decommissioned. The site is currently a bulk products terminal that handles multiple products, including alumina, which is required for operation of Alcoa's aluminum manufacturing facility near Wenatchee, Washington. Although Alcoa will be idling its Wenatchee facility in 2016, it will remain in a "ready to restart" mode, which extends to Dock 1 and its berthing area. MBT-Longview is required to maintain the facility so that operations can immediately resume once market conditions are favorable for Alcoa Wenatchee to restart. In addition, MBT-Longview has an operating contact with Hydrosyntec that governs the handling of additional products and expects to enter into additional contracts with new clients in the months and years to come. Current import and export activities are conducted by ship, railroad, and truck.

### Adjacent Properties

The Port of Longview properties immediately downstream and north of the Project site (parcel #s 107180100, 107170100, 106990100, 106980100, 106970100) are currently undeveloped but include electrical line conveyance towers. The CDID property includes structures related to the diking improvement infrastructure (parcel #619530201). BNSF Railway Company properties along Industrial Way are used for a railroad (parcel #s 61951, WI3100003, 61948). The BPA properties, surrounded by NWA property adjacent to Industrial Way, are primarily used as an electrical substation (parcel #s 6195303, 61954). The Weyerhaeuser Company property is

located upstream from the site (parcel #s WI3110001, 61947). The property has a number of large buildings used in pulp and paper production, and includes a sawmill and a chemical plant.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [\[help\]](#)

There is no documentation of agricultural or forestry use at the site.

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No.

- c. Describe any structures on the site. [\[help\]](#)

There are a number of existing upland structures on the property. These structures house a variety of industrial related activities, including the storage of bulk materials, laboratories, maintenance buildings, and administrative offices.

The primary shoreline structure is Dock 1, which includes an approach trestle, approach platform, main wharf, south catwalk and mooring dolphin, and north catwalk and mooring dolphin.

- d. Will any structures be demolished? If so, what? [\[help\]](#)

No structures will be demolished as part of the cleanup action.

- e. What is the current zoning classification of the site? [\[help\]](#)

MH (Heavy Manufacturing).

f. What is the current comprehensive plan designation of the site? [\[help\]](#)

The site uplands along the shoreline are designated as Industrial Heavy.

g. If applicable, what is the current shoreline master program designation of the site? [\[help\]](#)

The current designation is Urban, the designation in the draft Shoreline Management Program (SMP) update is Water Dependent Industrial. Note that the only small portions of SU2 and SU10 are potentially within 200 feet landward of OHW. SU12 (in-water) has already undergone SEPA review (see response A.9).

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [\[help\]](#)

The Columbia River, Columbia River shoreline, Columbia River floodplain, and wetlands have all been identified as critical areas per the Cowlitz County Code 19.15.

i. Approximately how many people would reside or work in the completed project? [\[help\]](#)

This question is not applicable to the cleanup action.

j. Approximately how many people would the completed project displace? [\[help\]](#)

This question is not applicable to the cleanup action.

k. Proposed measures to avoid or reduce displacement impacts, if any: [\[help\]](#)

This question is not applicable to the cleanup action.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [\[help\]](#)

The site is located within an existing industrial area and is zoned and used for industrial purposes. The cleanup action as described in the draft CAP (Ecology 2015) considers potential exposure risks and cleanup requirements within the context of ongoing industrial uses.

Portions of the Former Reynolds Plant are currently used for transloading and shipping bulk materials. Although MBT-Longview has applied for permits for a proposed project at the property for the export of coal (Coal Export Terminal [CET]), the environmental review process for MBT-Longview's proposed project is separate from the final MTCA cleanup of the facility. Ecology's cleanup decision and its implementation are separate actions that are needed regardless of any particular reuse plan for the Former Reynolds Plant or vicinity. In SEPA parlance, the CET proposal has independent utility from the draft CAP.

- m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

The cleanup action is not expected to affect nearby agricultural lands or forest lands.

## 9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [\[help\]](#)

This question is not applicable to the cleanup action.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [\[help\]](#)

This question is not applicable to the cleanup action.

- c. Proposed measures to reduce or control housing impacts, if any: [\[help\]](#)

This question is not applicable to the cleanup action.

## 10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

[\[help\]](#)

No new structures are proposed as part of the cleanup action.

- b. What views in the immediate vicinity would be altered or obstructed?

[\[help\]](#)

The earthworks associated with the cleanups action will include consolidation and capping within the interior of the site. Views in the immediate vicinity of the site will not be significantly altered or obstructed by the cleanup action, and the site will retain its existing industrial character.

- c. Proposed measures to reduce or control aesthetic impacts, if any: [\[help\]](#)

None proposed.

## 11. Light and glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [\[help\]](#)

Existing lighting on site is typical of industrial areas, including night lighting. During the cleanup action, additional lighting in working areas may be necessary during low-light periods and during the night. The cleanup areas are removed from public roads, nearby residences (those north of Mount Solo Highway) areas, and the Columbia River. Over the long-term, no changes to lighting or glare are anticipated.

- b. Could light or glare from the finished project be a safety hazard or interfere with views? [\[help\]](#)

No – the finished project will not change nighttime lighting at the site.

- c. What existing off-site sources of light or glare may affect your proposal?  
[\[help\]](#)

None.

- d. Proposed measures to reduce or control light and glare impacts, if any:  
[\[help\]](#)

No measures have been identified to be needed.

## 12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity? [\[help\]](#)

Recreational boating and fishing opportunities exist in the Columbia River, adjacent to the site.

- b. Would the proposed project displace any existing recreational uses? If so, describe. [\[help\]](#)

No. The cleanup action will not affect existing recreational uses.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:  
[\[help\]](#)

None proposed.

## 13. Historic and cultural preservation

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe. [\[help\]](#)

The USACE is conducting a National Historic Preservation Act Section 106 consultation for the MBT-Longview coal export terminal (“CET 106 consultation”), USACE reference number NWS-2010-1225. The 106 review is also relevant to the

company's dock repair and maintenance dredging proposals, and is similarly applicable to the draft CAP. The USACE determinations regarding historic properties and archaeological resources were sent to the Washington State Department of Archaeology and Historic Preservation (DAHP) in a letter dated November 12, 2015; the DAHP concurred with these determinations in a return letter dated November 18, 2015. Because these determinations are also pertinent to the draft CAP they are paraphrased below (responses B.13.a-d), or directly quoted where indicated.

As part of the CET 106 consultation, the USACE has determined that there are National Register of Historic Places (NRHP) eligible historic properties within and also in the vicinity of the coal export terminal project area. These findings also are pertinent to the proposed cleanup action.

The U.S. Army Corps of Engineers has determined that the following are NHRP-eligible elements of the built environment:

- The Former Reynolds Aluminum Plant Complex. The determination is that 39 of 53 reviewed resources contribute toward a proposed Reynolds Aluminum Plan Historic District (RAPHD).
- CDID #1 Levee. The determination is that this resource is individually NHRP-eligible and is also a contributed element to the RAHPD.
- The BPA Longview Substation. The determination is that this resource is individually NRHP-eligible and is also a contributed element to the RAHPD.

The cleanup action will occur within the RAPHD. Six of the NRHP-eligible landfill areas are cleanup action site units (SU2, 3, 6, 7, 8, and 10). SU10 also overlaps with the CDID #1 Levee, which is individually NHRP-eligible.

The USACE determined that Reynolds Federal Credit Union (1960s bank building) is not eligible for listing in the NRHP. The Lewis and Clark National Historic Trail (LCNHT) corridor falls in the general vicinity of the coal export terminal study area, but no individual sites or features associated with it have been identified within the project area. The NHRP-listed J.D. Tennant House, or Rutherglen Mansion, is located approximately 0.5 mile north of the Study Area on Mount Solo. The USACE determined that the proposed CET would not adversely affect the LCNHT or the J.D. Tennant House. By extension, the cleanup action is not expected to adversely affect either of these features.

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [\[help\]](#)

As part of the CET 106 consultation, the USACE has considered the potential for precontact archaeological resources within and also in the vicinity of the coal export terminal project area. These findings also are pertinent to the proposed cleanup action.

The USACE has determined that “the setting was not conducive to long-term human occupation, and significant unidentified precontact and historic archaeological deposits are unlikely to be present”.

The USACE has determined that “Mount Coffin, an important burial place...[was] located about 0.25-mile southeast of the Former Reynolds Aluminum Plant Complex. Mount Coffin was quarried to its foundation and is outside the project area.” By extension, it is also outside the cleanup action area.

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [\[help\]](#)

The USACE has been closely coordinating with MBT-Longview, AECOM, and the DAHP on the CET 106 consultation. AECOM recently finalized and submitted a comprehensive technical report (see response b immediately above) that documents the methods used to assess potential impacts to cultural and historic resources and results. This report and the USACE’s concurrence therewith are pertinent to the proposed cleanup action. Methods employed during this effort have included background research, pedestrian survey, and exploratory deep testing.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

As part of the above-described 106 consultation, the USACE recently concurred with AECOM’s recommendation for archaeological monitoring when “ground-disturbing activities are likely to encounter native deposits beneath the fill within the Study Area” and will make this a permit requirement. The USACE is expected to be

consistent in its requirements for excavation related to the cleanup action.

#### 14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [\[help\]](#)

The site can be accessed via 38th Avenue or Industrial Way (SR 432). The existing designated truck route is Industrial Way.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [\[help\]](#)

The nearest transit stop to the upland facility is approximately 0.7 mile to the north at the intersection of 38th Avenue and Ocean Beach Highway (SR 4).

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [\[help\]](#)

The cleanup action will not affect parking availability.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [\[help\]](#)

No.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [\[help\]](#)

The NWA and MBT-Longview facility currently uses water and rail transportation, and will continue to use these after cleanup action has been completed.

The cleanup action is not expected to use water, rail or air transportation.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [\[help\]](#)

The completed cleanup action will maintain existing facilities to current uses and will not increase vehicular trips.

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

- h. Proposed measures to reduce or control transportation impacts, if any: [\[help\]](#)

Project construction and transportation activities will comply with applicable traffic control requirements. Traffic control measures will be refined as part of the EDR.

## 15. Public services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [\[help\]](#)

The cleanup action will not result in an increase need for public services.

- b. Proposed measures to reduce or control direct impacts on public services, if any. [\[help\]](#)

None proposed.

**16. Utilities**

a. Circle utilities currently available at the site: [\[help\]](#)

electricity, natural gas,  water,  refuse service,  telephone,  sanitary sewer,  
septic system,

other \_\_\_\_\_

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. [\[help\]](#)

None proposed.

**C. Signature [\[HELP\]](#)**

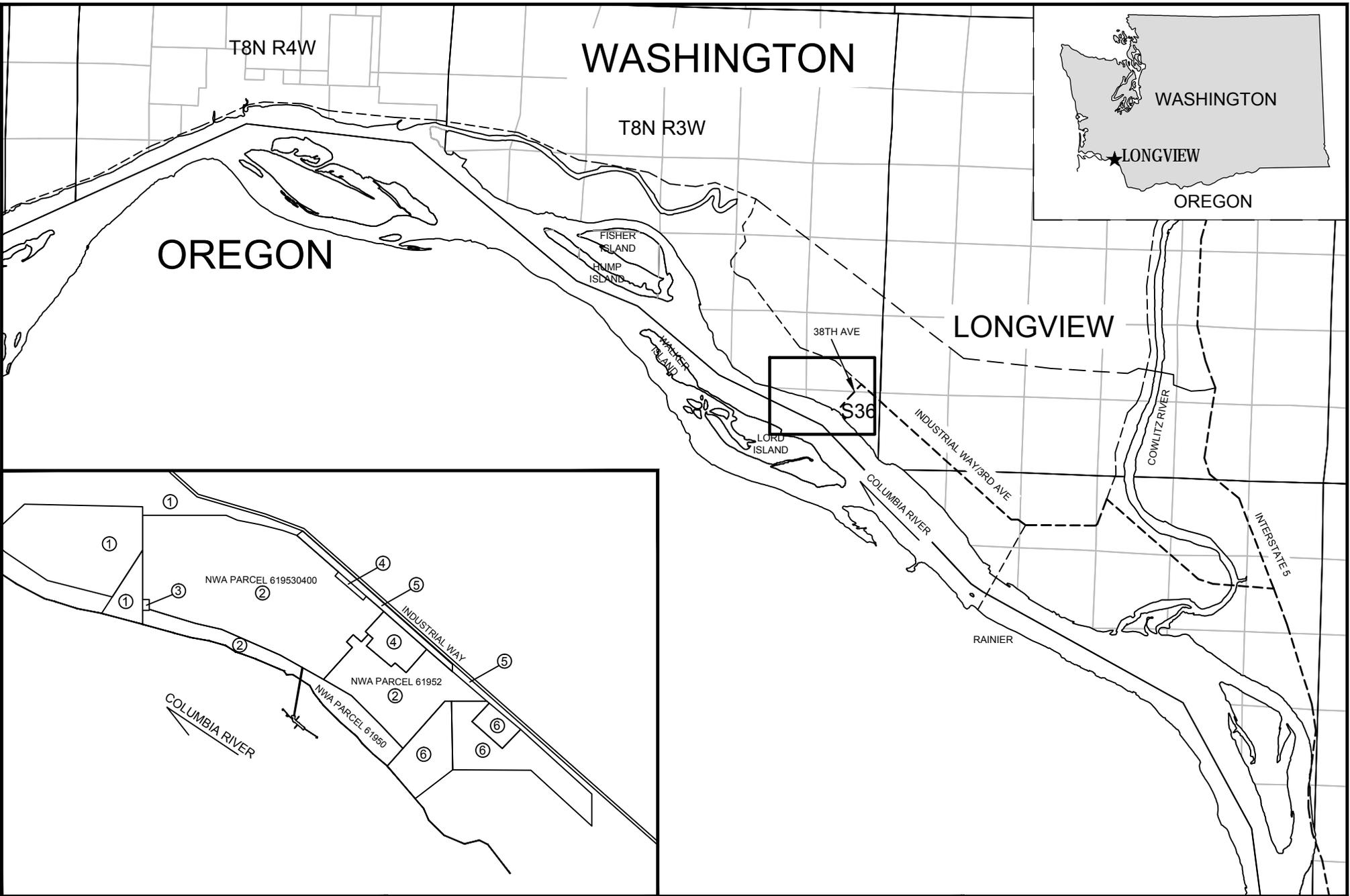
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: 

Name of signee Glenn Grette

Position and Agency/Organization Principal, Grette Associates, LLC

Date Submitted: January 13, 2016



PURPOSE: SEPA / JARPA FIGURE SUPPLEMENT

Adjacent Property Owners:

- |                              |                                 |
|------------------------------|---------------------------------|
| ① Port of Longview           | ④ Bonneville Power Admin. (BPA) |
| ② NW Alloys (NWA)            | ⑤ BNSF                          |
| ③ Consol. Diking Impv. Dist. | ⑥ Weyerhaeuser Co.              |

# VICINITY MAP

S-T-R: SECTION 36 TOWNSHIP 8 NORTH 3 WEST  
 ADDRESS:  
 4029 INDUSTRIAL WAY  
 LONGVIEW, WA 98632

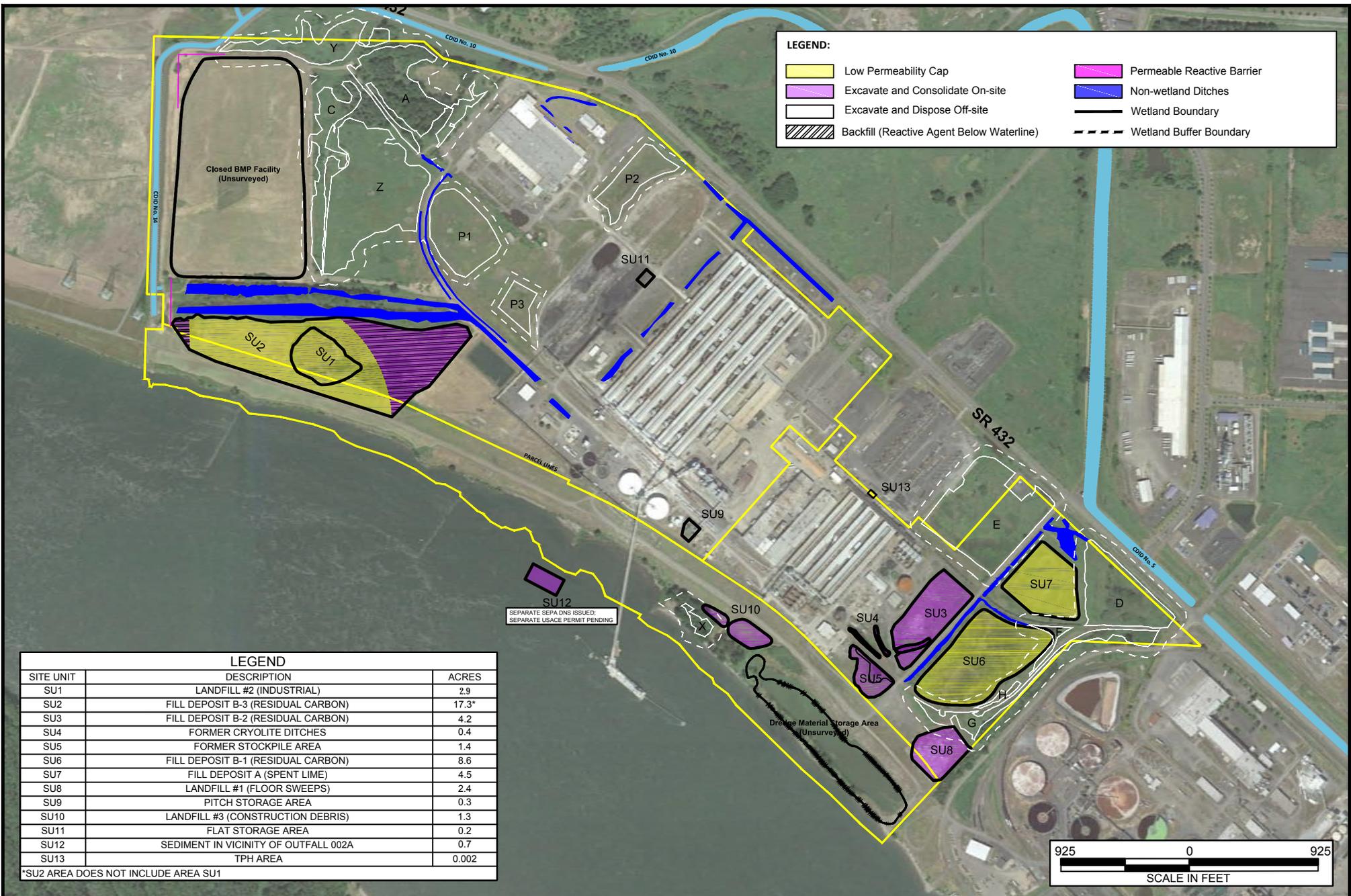


PROJECT: FORMER REYNOLDS PLANT MTCA CLEANUP ACTION

LATITUDE: 46.1354 N  
 LONGITUDE: -123.0022 W  
 COUNTY OF: COWLITZ  
 STATE: WA  
 APPLICANT: MBTL

SHEET NO. 1 OF 4 DATE: 1/13/16





**LEGEND:**

- Low Permeability Cap
- Permeable Reactive Barrier
- Excavate and Consolidate On-site
- Non-wetland Ditches
- Excavate and Dispose Off-site
- Wetland Boundary
- Backfill (Reactive Agent Below Waterline)
- Wetland Buffer Boundary

SU12  
SEPARATE SEPA ONS ISSUED;  
SEPARATE USAGE PERMIT PENDING.

LEGEND		
SITE UNIT	DESCRIPTION	ACRES
SU1	LANDFILL #2 (INDUSTRIAL)	2.9
SU2	FILL DEPOSIT B-3 (RESIDUAL CARBON)	17.3*
SU3	FILL DEPOSIT B-2 (RESIDUAL CARBON)	4.2
SU4	FORMER CRYOLITE DITCHES	0.4
SU5	FORMER STOCKPILE AREA	1.4
SU6	FILL DEPOSIT B-1 (RESIDUAL CARBON)	8.6
SU7	FILL DEPOSIT A (SPENT LIME)	4.5
SU8	LANDFILL #1 (FLOOR SWEEPS)	2.4
SU9	PITCH STORAGE AREA	0.3
SU10	LANDFILL #3 (CONSTRUCTION DEBRIS)	1.3
SU11	FLAT STORAGE AREA	0.2
SU12	SEDIMENT IN VICINITY OF OUTFALL 002A	0.7
SU13	TPH AREA	0.002

\*SU2 AREA DOES NOT INCLUDE AREA SU1

PURPOSE: SEPA / JARPA FIGURE SUPPLEMENT

# OVERVIEW MAP

S-T-R: SECTION 36 TOWNSHIP 8 NORTH 3 WEST  
 ADDRESS:  
 4029 INDUSTRIAL WAY  
 LONGVIEW, WA 98632

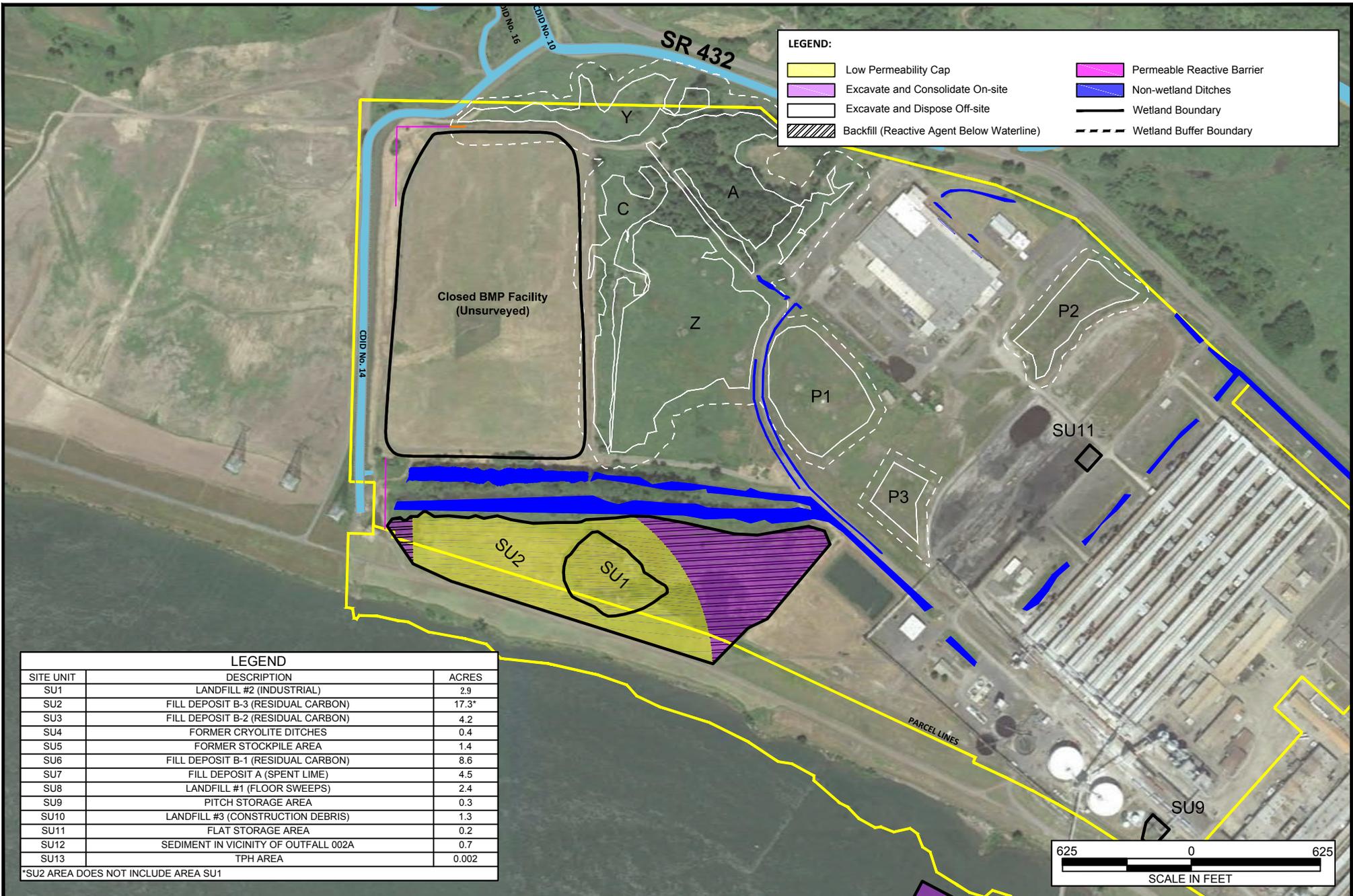


PROJECT: FORMER REYNOLDS PLANT MTCA CLEANUP ACTION  
 LATITUDE: 46.1354 N  
 LONGITUDE: -123.0022 W  
 COUNTY OF: COWLITZ  
 STATE: WA  
 APPLICANT: MBTL

SHEET NO. 2 OF 4 DATE: 1/13/16

NOTE:  
AERIAL PHOTO IS FOR CONTEXT ONLY AND MAY NOT EXACTLY ALIGN WITH SURVEYED SITE FEATURES.





**LEGEND:**

	Low Permeability Cap		Permeable Reactive Barrier
	Excavate and Consolidate On-site		Non-wetland Ditches
	Excavate and Dispose Off-site		Wetland Boundary
	Backfill (Reactive Agent Below Waterline)		Wetland Buffer Boundary

LEGEND		
SITE UNIT	DESCRIPTION	ACRES
SU1	LANDFILL #2 (INDUSTRIAL)	2.9
SU2	FILL DEPOSIT B-3 (RESIDUAL CARBON)	17.3*
SU3	FILL DEPOSIT B-2 (RESIDUAL CARBON)	4.2
SU4	FORMER CRYOLITE DITCHES	0.4
SU5	FORMER STOCKPILE AREA	1.4
SU6	FILL DEPOSIT B-1 (RESIDUAL CARBON)	8.6
SU7	FILL DEPOSIT A (SPENT LIME)	4.5
SU8	LANDFILL #1 (FLOOR SWEEPS)	2.4
SU9	PITCH STORAGE AREA	0.3
SU10	LANDFILL #3 (CONSTRUCTION DEBRIS)	1.3
SU11	FLAT STORAGE AREA	0.2
SU12	SEDIMENT IN VICINITY OF OUTFALL 002A	0.7
SU13	TPH AREA	0.002

\*SU2 AREA DOES NOT INCLUDE AREA SU1

PURPOSE: SEPA / JARPA FIGURE SUPPLEMENT

IMPACTS:

- Wetland Impacts (Wetland Impacts: 140 sq. ft.)
- Wetland Buffer Impacts: 4,660 sq. ft.)
- Non-wetland Ditch Impacts (25,278 sq. ft.)

# CLEANUP ACTION WEST

S-T-R: SECTION 36 TOWNSHIP 8 NORTH 3 WEST  
 ADDRESS:  
 4029 INDUSTRIAL WAY  
 LONGVIEW, WA 98632

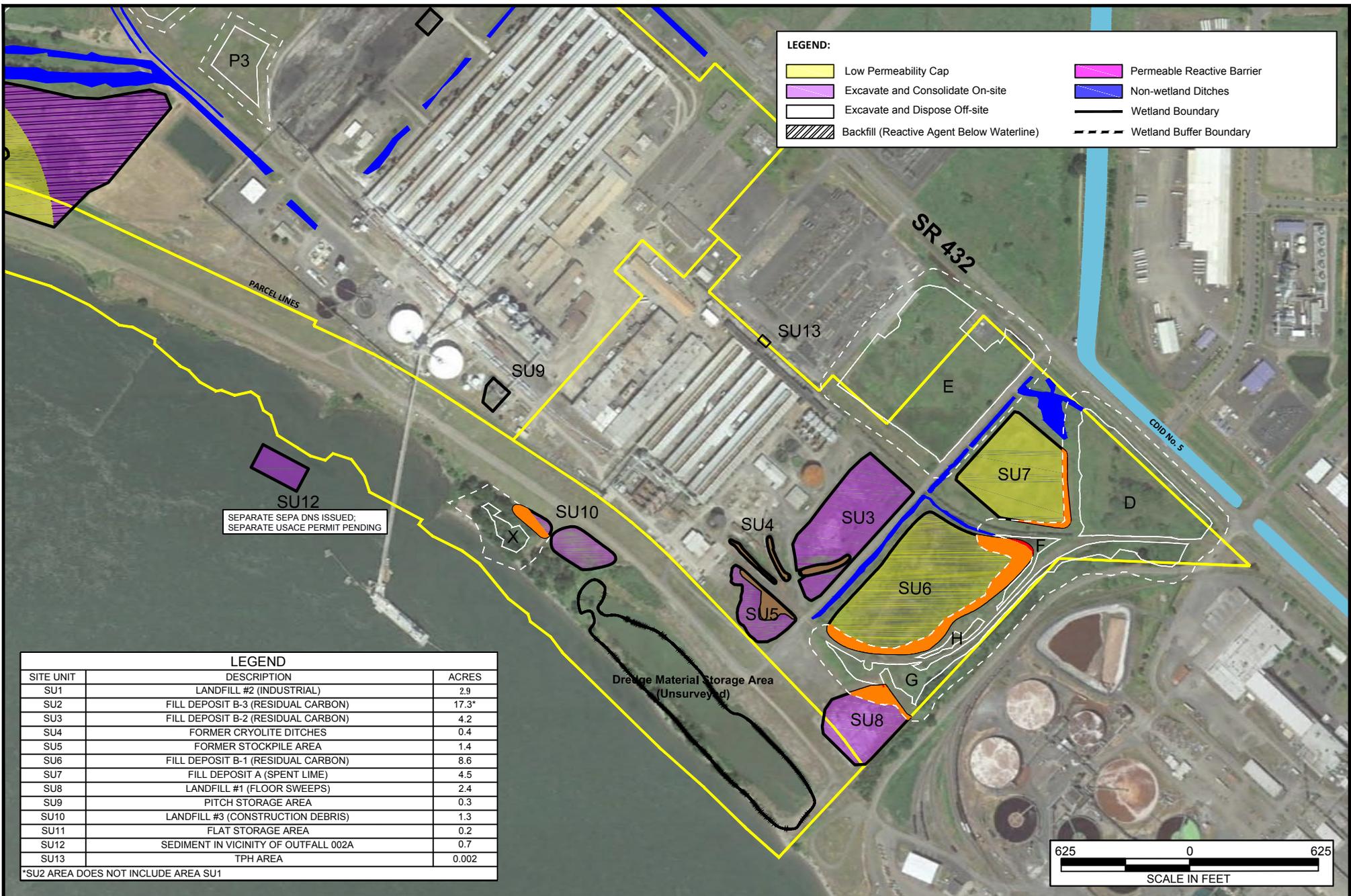


PROJECT: FORMER REYNOLDS PLANT MTCA CLEANUP ACTION

LATITUDE: 46.1354 N  
 LONGITUDE: -123.0022 W  
 COUNTY OF: COWLITZ  
 STATE: WA  
 APPLICANT: MBTL

SHEET NO. 3 OF 4 DATE: 1/13/16





**LEGEND:**

- Low Permeability Cap
- Excavate and Consolidate On-site
- Excavate and Dispose Off-site
- Permeable Reactive Barrier
- Backfill (Reactive Agent Below Waterline)
- Non-wetland Ditches
- Wetland Boundary
- Wetland Buffer Boundary

LEGEND		
SITE UNIT	DESCRIPTION	ACRES
SU1	LANDFILL #2 (INDUSTRIAL)	2.9
SU2	FILL DEPOSIT B-3 (RESIDUAL CARBON)	17.3*
SU3	FILL DEPOSIT B-2 (RESIDUAL CARBON)	4.2
SU4	FORMER CRYOLITE DITCHES	0.4
SU5	FORMER STOCKPILE AREA	1.4
SU6	FILL DEPOSIT B-1 (RESIDUAL CARBON)	8.6
SU7	FILL DEPOSIT A (SPENT LIME)	4.5
SU8	LANDFILL #1 (FLOOR SWEEPS)	2.4
SU9	PITCH STORAGE AREA	0.3
SU10	LANDFILL #3 (CONSTRUCTION DEBRIS)	1.3
SU11	FLAT STORAGE AREA	0.2
SU12	SEDIMENT IN VICINITY OF OUTFALL 002A	0.7
SU13	TPH AREA	0.002

\*SU2 AREA DOES NOT INCLUDE AREA SU1

PURPOSE: SEPA / JARPA FIGURE SUPPLEMENT IMPACTS:

- Wetland Impacts (Wetland Impacts: 7,410 sq. ft.)
- Wetland Buffer Impacts: 56,125 sq. ft.)
- Non-wetland Ditch Impacts (45,299 sq. ft.)

# CLEANUP ACTION EAST

S-T-R: SECTION 36 TOWNSHIP 8 NORTH 3 WEST  
 ADDRESS:  
 4029 INDUSTRIAL WAY  
 LONGVIEW, WA 98632



PROJECT: FORMER REYNOLDS PLANT MTCA CLEANUP ACTION

LATITUDE: 46.1354 N  
 LONGITUDE: -123.0022 W  
 COUNTY OF: COWLITZ  
 STATE: WA  
 APPLICANT: MBTL

SHEET NO. 4 OF 4 DATE: 1/13/16

