

SEPA ENVIRONMENTAL CHECKLIST WAC 197-11-960

Property Owner:	Port of Vancouver USA <small>(Print or Type Name)</small>	Telephone: (360) 693-3611
Mailing Address:	3103 NW Lower River Road, Vancouver, WA 98660 <small>(No., City, State, ZIP)</small>	
Applicant:	Port of Vancouver, Monty Edberg <small>(Print or Type Name)</small>	Telephone: (360) 693-3611
Mailing Address:	3103 NW Lower River Road, Vancouver, WA 98660 <small>(No., City, State, ZIP)</small>	
Relationship to Owner:	Same	
Tax Assessor Serial Number(s):	Refer to Section A.12 below for proposal location information.	
Legal description: Lot(s)	Block(s)	Plat name
<small>(If a Metes and Bounds description, check here <input type="checkbox"/>, and attach narrative to this application.)</small>		
Site Address (if any):		

A. Background

1. Name of proposed project, if applicable

Port of Vancouver Terminal 5 Berth Rehabilitation Project (the Project)

2. Name of applicant:

Port of Vancouver USA

3. Address and phone number of applicant and contact person:

Address: 3103 NW Lower River Road, Vancouver, Washington 98660

Phone: (360) 693-3611

Contact Person: Monty Edberg, Project Manager

4. Date checklist prepared:

September 2021

5. Agency requesting checklist:

Lead Agency: Port of Vancouver USA

6. Proposed timing or schedule (including phasing, if applicable):

The purpose of the Project is to repair and replace components of the Berth 17 dock to restore its ability to moor vessels and support other maritime activities. Although the Berth 17 dock is in

good condition, the mooring and access components (fender system, mooring dolphins, and pedestrian access catwalks) are in poor to critical condition and are in need of repair. Ancillary improvements would be made to Terminal 5 to support the rehabilitation of the berth. Work is anticipated to occur according to the schedule described below.

Project construction is anticipated to occur in phases throughout 2022, although contractor mobilization to the site may begin as early as December 2021. In-water work would be confined to the allowable in-water work window, which currently extends from September 15 to February 28 annually for vibratory pile driving, with impact pile driving activities currently limited to October 1 to January 31 each year. Overwater, shoreline, and upland work would not be restricted to a work window and would proceed based on project delivery targets, contractor availability, financial ability, and other considerations.

Berth 17 Fender Pile Replacement, Mooring Dolphin Replacement, and Mooring Point Installation: Fender pile replacement is anticipated to occur in early 2022, over approximately 8 weeks. It is assumed that the fender pile replacement would be the first construction activity to be conducted for the fendering and mooring repair work. The replacement of existing mooring dolphins and installation of shoreline mooring points is anticipated to occur in late 2022. Mooring dolphin replacement could take approximately 12 weeks, and the shoreline mooring points are expected to take over approximately 5 weeks to construct.

Crane and Gallery Removal: Removal of the crane and gallery is anticipated to begin in early 2022, concurrent to or after fender pile replacement. This work is expected to take up to 7 weeks.

Water Tower Removal: Removal of the water tower is anticipated to begin in late 2022 and is expected to take up to 4 weeks.

Ancillary Improvements: The utility improvements are expected to occur in late 2022 and are expected to take up to 5 months.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

At this time, there are no plans for future additions, expansion, or further activity related to the Project.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- *Asbestos Survey and Lead Paint Report for the Colby Crane and Structure on Terminal #5 Pier Located at 5701 NW Lower River Road, Vancouver, Washington*, prepared by Certified Environmental Consulting, LLC., prepared for Port of Vancouver. May 2012.
- *Port of Vancouver Berth 17 Historic Resources Review, Alcoa Water Tower, Property ID: 90892*, prepared by Archaeological Investigations, Northwest, Inc. August 2021.
- *Port of Vancouver Berth 17 Historic Resources Review, Alcoa Dock, Property ID: 724469*, prepared by Archaeological Investigations, Northwest, Inc. August 2021.
- *Baseline Bird Surveys – Port of Vancouver, Terminal 5, Berth 17*, prepared by KPFF for Port of Vancouver, August 2021.

- *Berth 17 Pre-Fender Pile Replacement Conditions Memorandum*, prepared by Floyd|Snider for Port of Vancouver, September 2021.

The following document is being prepared as part of the project, and will be complete prior to contract execution:

- *Hazardous Materials Survey Report: Port of Vancouver, Berth 17—Vancouver, Washington*, prepared by Maul Foster & Alongi, Inc. prepared for Port of Vancouver. September 2021

Additional environmental information that has been prepared for the project site (but not for the purpose of this Project) are as follows:

- *Sediment Characterization Report for Terminal 5 Berth 17*, prepared by Floyd|Snider for Port of Vancouver, May 2019.
- *Port of Vancouver Terminal 5 Berth 17 Sediment Sampling Results Memorandum*, prepared by Floyd|Snider for Washington State Department of Ecology, October 2019.
- *Berth 17 Sediment Transport Analysis, Port of Vancouver, WA*, prepared by Mott MacDonald for Port of Vancouver, July 2021.

The following additional document also informs the project activities.

- Environmental Restrictive Covenant, Former Alcoa Vancouver Works #4545480, Recorded in Clark County on March 31, 2009, and Filed with the State of Washington.

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.

In early 2020, the port began the process to update or modify a range of existing governmental approvals and permits to include Berth 17 into the port's Dredging Program. Berth 17 is directly adjacent to the Terminal 5 dock, and vessels using Berth 17 would moor to the dock that would be repaired under this Project.

The following permit updates or approvals for Berth 17 inclusion into the port's Dredging Program are pending:

- Modification to existing Department of the Army Permit (Corps Reference No. NWP-2007-916-2; Section 404 and Section 10)
- Modification to Washington State Department of Ecology (Ecology): Section 401 Water Quality Certification, No. 17584, April 3, 2018.

10. List any government approvals or permits that will be needed for your proposal, if known.

Existing Permits and Approvals

- U.S. Army Corps of Engineers Nationwide 3 Permit
- U.S. Army Corps of Engineers Department of Army Individual Permit NWP-2012-196-5
- Endangered Species Act Section 7 Consultation for 2017 Pile Replacement Project
- Washington Department of Fish and Wildlife Hydraulic Project Approval Permit Number: 2017-5-47+01

- City of Vancouver Shoreline Exemption PRJ-159041/LUP-71966
- Waste Connections Special Waste Permit
- Washington State Department of Ecology Construction Stormwater General Permit

Anticipated Permits or Approvals

- City of Vancouver Shoreline Authorization
- Special Purpose-Miscellaneous Permit under the Migratory Bird Treaty Act
- City of Vancouver Clearing and Grading Permit
- City of Vancouver Demolition Permit
- City of Vancouver Site Development Permit
- Southwest Clean Air Agency Asbestos Notice of Demolition and Notice of Intent to Remove Approval
- A hot work approval, issued by the port authority, may be required for welding, torch cutting, or grinding on steel elements of the subject structure

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.)

Terminal 5 is located on port property along the Columbia River at 5701 NW Old Lower River Road, River Mile 103.3, approximately 3 miles northwest of Interstate 5 in Vancouver, Washington. Berth 17, the existing dock at Terminal 5, was constructed in 1967 by a previous landowner and historically supported vessel moorage, bulk material handling, and other maritime activities. The dock was used as an unloading facility for alumina shipped to Vancouver from South America. The crane and conveyor were used to unload vessels and transport the alumina to storage silos that are no longer present. Figure 1 provides the Vicinity Map for the Project.

The dock is in good condition but mooring and access components are in need of repair; vessels cannot be moored at the dock given the current condition of the fender piles and mooring dolphins. The port owns the dock and the adjacent upland parcels that are part of the Project (Figure 1).

The purpose of this project is to repair and replace components of the dock to restore its ability to moor vessels and support other maritime activities. The port proposes to replace the existing fender pile system, two in-water mooring dolphins, and associated catwalks, and install up to four shoreline mooring points along the shoreline to provide a complete mooring system for large vessels. The port would also remove derelict equipment from the dock and upland remaining from the previous landowner that is no longer functional or necessary, including an existing crane and associated gallery on the dock and an upland water tower. Utility service would also be improved. Collectively, these activities would restore the dock at Terminal 5 to a functional state comparable to its original condition.

The Contractor would select the equipment and construction methods that would achieve the project requirements in the most efficient and cost-effective manner, while complying with all

agency approvals, permit conditions, and best management practices (BMPs) provided throughout this document. The following description provides the anticipated construction methods, based on a preliminary concept plan. Completing this review early in the project design is consistent with WAC 197-11-055(1), which directs the SEPA process to be integrated with agency activities at the earliest possible time to ensure that planning and decisions reflect environmental values. The port acknowledges that design refinements may be subject to further review under SEPA if they result in environmental effects that exceed those addressed in this SEPA checklist.

Fender Pile Replacement

The existing fender pile system consists of approximately 46 12-inch-diameter timber fender piles, spaced approximately 7.5 feet on center along the face of the dock. The fender pile system is considered to be in serious or critical condition due to deterioration from rot and damage from impacts over time. The fender piles would be removed with a vibratory hammer, stationed on a barge adjacent to the dock. The overwater timber apron would also be removed. These materials would be placed on the barge and taken to an upland disposal site.

The replacement fender piles would be 18-inch-diameter steel piles, spaced approximately 11.5 feet on center along the face of the dock. Up to 46 replacement piles would be installed using the vibratory hammer. After pile replacement, waler beams and cell fenders would be bolted to the piles or face of the dock to complete the fender system, providing structural integrity to the fender system and energy absorption capacity. A grated apron and bullrail with bollards would be installed overwater in the same footprint of the former timber apron.

Fender pile replacement is expected to take up to 8 weeks, with half of that time assumed for in-water pile removal and reinstallation.

Crane and Gallery Removal

The existing crane and associated gallery (which houses accessory equipment such as a conveyor for bulk import) are bolted to the Terminal 5 dock. The crane and gallery are industrial equipment.

Prior to work, the crane and gallery will be inspected for active bird nests and use. Bird exclusion measures would be installed as necessary to discourage bird use and nesting on the site. Exclusion measures typically include installation of hardware cloth or chicken wire over openings or sealing off rooms to avoid use.

Prior to removal, the crane and gallery would also be abated for asbestos, lead paint, and other hazardous materials by an abatement Contractor licensed in Washington. All demolition debris would be disposed of according to regulatory requirements. The port encourages recycling to the extent practicable.

The crane on the Terminal 5 dock is expected to be dismantled using a crane located on a derrick barge positioned next to the dock. The crane would be incrementally unbolted and disassembled in large pieces for placement on a supplier barge for disposal. Upon completion, the two rails that the crane moved along the dock on (approximately 400 feet in length each) would be removed and put on a supplier barge for removal.

The gallery would also be removed down to the existing cast-in-place concrete dock surface. It is also assumed that a crane located on a derrick barge would also be used to remove the gallery in pieces. These pieces would be transferred to the supplier barge. The conveyor cover,

conveyor belts, and switching boxes would be recycled to the extent practicable. No dock resurfacing is proposed.

Demolition of the crane and gallery is expected to take up to 7 weeks.

Water Tower Removal

On the adjacent upland parcel, an existing water tower would be disassembled and removed. Prior to demolition of the water tower, the utilities would be cut and capped. The water tower would be removed by a crane, in pieces, down to the foundation. The foundation would be removed down to a depth of 12 feet below ground surface (bgs), and the area would be re-graded with clean aggregate to match the existing surface. In total, approximately 3,600 square feet (SF) of ground surface would be regraded. Demolition of the water tower is expected to take up to 4 weeks.

Replacement of Mooring Dolphins

There is an existing mooring dolphin upstream and downstream of the dock; the mooring dolphins are accessible via elevated timber pedestrian catwalks, supported by timber piles. Each mooring dolphin consists of a cluster of 29 timber piles, a reinforced concrete cap, and steel mooring point. The mooring dolphins and catwalks are in poor or serious condition.

The work to replace these mooring components would be staged from a barge. The existing catwalks would be lifted off in sections. The top of each mooring dolphin would be detached using a chainsaw to separate the superstructure from the mooring piles, with tarping or netting as needed to avoid debris dropping into the water. The mooring piles and catwalk support piles would then be removed using a vibratory hammer. These materials would be placed on the barge and taken to an upland disposal site.

The replacement mooring dolphins would be installed in the same footprint as the existing mooring dolphins. A temporary guide frame, consisting of 5 to 10 piles, would be installed to ensure accurate positioning of the battered piles at each mooring dolphin. A vibratory hammer would be used to install and remove the guide frame. The 24-inch steel replacement piles would be installed with an impact hammer. Between 12 and 18 replacement piles would be installed for each mooring dolphin. Replacement piles would also be driven to support the catwalks. Two 18-inch-diameter replacement piles would be installed at each pile bent; one pile bent is proposed for the upstream catwalk (2 piles total); and three bents would be installed for the downstream catwalk (6 piles total).

After pile installation, the temporary guide frames would be removed, and a steel pile cap would be welded onto each mooring dolphin. Pile bents would be constructed on the catwalk support piles, and new grated steel walkways would be installed as the final component of this work.

Replacement of the mooring piles and catwalk is expected to take approximately 12 weeks, with approximately 4 weeks assumed for in-water pile removal and installation.

Installation of Shoreline Mooring Points

To provide a complete mooring system for large vessels, the two in-water dolphins will be supplemented with two shoreline mooring points installed along the shoreline. Two additional shoreline mooring points could be installed if needed, based on vessel size and other future design requirements, totaling up to four mooring points along the shoreline.

At each shoreline mooring point, up to 10 24-inch steel piles would be driven into the ground approximately 50 feet bgs with an impact hammer. An 18-foot by 18-foot cast-in-place concrete cap would be installed at grade above the piles. These shoreline mooring points have been designed to avoid or minimize disturbance of surface soils given their location within a shoreline environmental restrictive covenant.

A single bollard would be placed on the concrete cap as the mooring point for vessel lines. A short gravel path from the road at Terminal 5 to the mooring point could be installed for ease of access. The path could range in length from 40 feet long to 100 feet long. The duration to construct two shoreline mooring points is estimated at approximately 5 weeks, with up to 3 weeks of upland pile driving assumed for each mooring point.

Ancillary Improvements

The following utility services would be extended from the upland area of Terminal 5 to the dock to improve overall functionality: water supply, sanitary sewer, fire protection, electrical, and communication utilities. In general, the connection points for the utilities are expected to be as described herein. However, if a closer or more favorable connection point is identified as the utility design advances, these locations may be modified.

Domestic water, a fire line, and sanitary sewer would be extended from the nearest active connection points, currently assumed to be located just east of NW Gateway Avenue. Up to approximately 2,500 feet of trenching in the existing gravel roadway at Terminal 5 would be required to bring these utilities to the Berth 17 access bridge. The trench depth would extend approximately 4 feet bgs. The domestic water line would continue past its connection with Berth 17 and would be extended northwest across Terminal 5 to an existing water system connection (for an additional 2,500 feet of trenching).

Following completion of the domestic water, sanitary sewer, and fire protection lines, the roadway area would be backfilled and resurfaced with asphalt paving. A new section of paved road would extend from just west of NW Gateway Avenue to the Berth 17 access bridge. In total, approximately 48,000 SF would be resurfaced from gravel to asphalt.

An asphalt parking lot (approximately 4,000 SF) with up to 20 vehicle spaces would be constructed off the asphalt road, just to the east of the Berth 17 access bridge, along the shoreline. Parking within this lot would be temporary and as needed to support dock activities. Adjacent to the parking lot, a prefabricated restroom would be installed. The restroom structure would be up to 15 feet tall and constructed of concrete block and would be supported by a subgrade lift station. A trash and recycling enclosure, also constructed of concrete block, would be installed next to the parking area.

Electrical service would be extended from an existing Clark Public Utilities (CPU) electrical facility located on the Terminal 5 roadway, in the area of the new parking lot. Electrical line would be extended to a new substation constructed for the Project and located on the shoreline to the west of the Berth 17 access bridge. Up to 400 feet of trenching is anticipated to extend the utility line to the new substation. This substation would provide electricity for shore power, the proposed parking area, and a new stormwater treatment system included in the proposed project (as discussed below). The substation would consist of CPU pad-mounted service transformer enclosed within an approximately 36 SF fenced area with concrete surfacing. Trenching would be required for installation of electrical conduit; it is anticipated that the trench depth would extend up to 3 feet bgs. In total, approximately 400 linear feet (LF) of electrical conduit would be installed.

To provide lighting to the parking lot, four single-head 16-foot light poles would be installed. On the Berth 17 dock, up to eight two-headed 16-foot light poles would be installed along the centerline of the berth. Up to six single-head 16-foot light poles would be installed on the access bridge.

Existing catch basins collect stormwater from the upland area at Terminal 5. The stormwater is discharged to stormwater lagoons located in the southwest corner of Terminal 5. Up to two of the catch basins and laterals would be relocated in order to connect to the existing main line of the conveyance system for eventual discharge to the stormwater lagoons for treatment.

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.

The port owns the Terminal 5 property that is located along the Columbia River at 5701 NW Old Lower River Road, River Mile 103.3, approximately 3 miles northwest of Vancouver, Washington. The Vicinity Map (Figure 1) provides the location of Terminal 5.

Berth 17 Fender Pile Replacement, Mooring Dolphin Replacement, and Mooring Point Installation: The Berth 17 dock is located on tideland parcel number 500501000, which is approximately 16 acres and is located at NW 1/4, S19, T2N, R1E and NE 1/4, S19, T2N, R1E. The shoreline mooring points are located on parcel number 152798000, which is approximately 7 acres and is located at NE 1/4, S19, T2N, R1E and NW 1/4, S19, T2N, R1E.

Crane and Gallery Removal: The crane and gallery are located on the Berth 17 dock, as described above.

Water Tower Removal: The water tower is located in Terminal 5 on upland parcel number 152799000, which is approximately 96 acres and directly adjacent to Berth 17. The water tower is located on a portion of the parcel that is covered by NE 1/4, S19, T2N, R1E.

Ancillary Improvements: The ancillary improvements would occur on the Berth 17 dock and upland parcel 152905000, which is approximately 16 acres and is located at NE 1/4, S19, T2N, R1E, as well as the parcels mentioned above, 500501000 and 152799000.

B. Environmental Elements

1. Earth

a. General description of the site

(circle one) Flat, rolling, hilly, steep slopes, mountainous, other _____

Berth 17 Fender Pile Replacement, Mooring Dolphin Replacement, and Mooring Point Installation: Berth 17 was designed to accommodate vessels from the adjacent shipping channel that is federally maintained. Bathymetry data from 2021 indicate that existing bottom elevations in the project area generally range from just above the ordinary high water mark of +14.88 feet Columbia River Datum (CRD; in the area of the shoreline mooring points) to -55 feet CRD waterward of the Berth 17 dock.

Crane and Gallery Removal: The crane and gallery are located on the Berth 17 dock, which has a flat surface.

Water Tower Removal: The water tower is located on the upland adjacent parcel, which is completely flat and is currently undeveloped.

Ancillary Improvements: The ancillary improvements would occur on the Berth 17 dock and upland parcels, which are described above.

b. What is the steepest slope on the site (approximate percent slope)?

The steepest existing slope is 3:1 and is located under the Berth 17 dock.

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.

Berth 17 Fender Pile Replacement, Mooring Dolphin Replacement, and Mooring Point Installation: The substrate at Berth 17 consists of sand, silt, gravel, and native rock alluvial deposits. Soil along the shoreline, where the shoreline mooring points would be installed, is sand and gravel fill.

Crane and Gallery Removal: Not applicable.

Water Tower Removal: Borings in the vicinity of the water tower indicate the soil is a sandy gravel and gravelly sand (fill).

Ancillary Improvements: Soil on the upland parcels and along the shoreline is sand and gravel fill.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

There are no indications or known history of unstable soils in the vicinity of the project area. However, evaluation of bathymetry surveys conducted by the port over the past decade have shown areas upstream and within the berth that have experienced continued erosion and lowering of the mudline, while an area of localized sloughing or slope failure has occurred adjacent to and under the upriver portion of the Terminal 5 dock.

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.

Please refer to the response to Question A.11, which provides additional detail on the purpose, location, and approximate extents of the proposed filling, excavation, and grading activities.

- Concrete Import for Shoreline Mooring Points—648 SF and up to 220 tons of concrete imported
- Gravel Import for Shoreline Mooring Point Path—up to 100 LF and up to 5 CY of gravel imported
- Fire Supply, Domestic Water, and Sanitary Sewer Trenching—2,500 LF, 4 feet bgs, and up to 1,500 CY excavated and replaced

- Domestic Water Trenching Across Terminal 5—2,500 LF, 4 feet bgs, and up to 1,500 CY excavated and replaced
- Asphalt Paving for Resurfaced Shoreline Road to Berth 17—48,000 SF and up to 2,000 tons of asphalt imported
- Asphalt Paving for New Shoreline Parking Lot—4,000 SF and up to 100 tons of asphalt imported
- Water Tower Import for Regrading after Removal—3,600 SF and up to 540 CY clean aggregate imported
- Electrical Trenching—400 LF and up to 150 CY excavated and replaced

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Berth 17 Fender Pile Replacement, Mooring Dolphin Replacement, and Mooring Point Installation: Erosion associated with construction activities would not be expected during in-water pile installation and replacement. All dock substructure piling will remain in place. Soil erosion could occur during installation of the shoreline mooring points, but these have been designed to avoid excavation and minimize potential ground disturbance. To minimize erosion that may occur from work in the area, the Contractor would implement erosion and sediment control BMPs identified in a project-specific Temporary Erosion and Sediment Control (TESC) Plan.

Crane and Gallery Removal: Erosion would not be expected given that demolition would occur on the cast-in-place concrete dock surface.

Water Tower Removal: Soil erosion could occur during upland ground-disturbing activities. To minimize potential erosion, the Contractor would implement erosion control BMPs identified in the project-specific TESC Plan.

Ancillary Improvements: As stated above, to minimize potential erosion, the Contractor would implement erosion control BMPs identified in the project-specific TESC Plan.

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

Project activities would occur over packed gravel (entire upland area), in water, or on a dock structure. The percentage of impervious surfaces would not change as a result of the Project, although approximately 52,000 SF would be paved after project completion.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

The primary measure to reduce and control erosion is through the project scope and design. Most of the project activities would not disturb soil, and those that do minimize the extent of ground disturbance. The shoreline mooring points have been designed to drive piles directly into the soil and construct a concrete cap atop; there would be minimal soil disturbance and no grading. Excavation to remove the water tower foundation would be the minimum footprint necessary.

A TESC Plan will also be prepared for the Project. Sediment and erosion control measures will be inspected and maintained throughout project construction.

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.**

The primary emissions associated with the proposed project component are related to construction and demolition equipment, and support vessels and other equipment (i.e., tugs, skiffs). Emissions of this kind are typical to an industrial area, such as a working port. Project emissions would be temporary in nature because the proposed demolition is performed only on a short-term construction project duration. The anticipated increase of emissions from during demolition would best be described as negligible. The Project is intended to rehabilitate the dock and restore its ability to moor vessels. Vessels calling at the dock would produce typical vessel emissions.

- b. **Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.**

There are no known offsite sources of emissions or odor that would affect the Project.

- c. **Proposed measures to reduce or control emissions or other impacts to air, if any:**

The Contractor will be required to maintain equipment so that it is in good working order. The port requires contractors to minimize unnecessary idling. The emissions associated with the Project would be limited in nature and would not be anticipated to notably affect air quality.

Improvements would be made to the berth to allow vessels to use shore power in lieu of burning fossil fuels.

3. Water

- a. **Surface Water:**

- 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.**

Terminal 5 is located both in and adjacent to the Columbia River.

- 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.**

Fender pile replacement, mooring dolphin replacement, installation of the shoreline mooring points, and removal of the crane and gallery would occur in, over, and within 200 feet of the Columbia River.

- 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.**

Benthic fill across Berth 17 would increase by approximately 85 SF as a result of the proposed fender pile and mooring dolphin replacement. No dredge material would be placed in or removed from surface water or wetlands.

- 4) **Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.**

The Project would not require surface water withdrawals or diversions.

- 5) **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

The Project would occur within and adjacent to the Columbia River, which is identified as a floodway by the Federal Emergency Management Agency, Flood Insurance Rate Map, effective September 5, 2012 (Map number 53011C0342D).

- 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.**

Waste materials will not be discharged to surface waters. Turbidity may result from pile extraction and installation, but turbidity is suspended river sediments and is not waste material. The BMPs outlined in response to Question B.3.d would be implemented to minimize turbidity during construction and ensure waste materials (such as creosote-treated piles and construction debris) do not enter the surface water.

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.**

The Project would not include groundwater withdrawal for drinking or other purposes. An existing well beneath the water tower is no longer connected to the water tower and would be maintained.

- 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.**

The Project would not include discharge of waste material into the ground from septic tanks or other sources.

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.**

The existing source of runoff within the project area would be stormwater. During demolition of the water tower foundation, appropriate BMPs will be in place to capture stormwater and minimize turbidity laden water from leaving the work area.

Stormwater would continue to fall onto impervious surfaces across the site. As described in response to Question A.11, up to two catch basins and laterals would be relocated in order to connect to the existing main line of the conveyance system for eventual discharge to the

stormwater lagoons for treatment. The remaining collection and conveyance system would not change as a result of the Project.

2) Could waste materials enter ground or surface waters? If so, generally describe.

Given the Project is located within, over, and adjacent to the Columbia River, there is the potential for debris to inadvertently enter surface water during construction. There is also a potential for leaks and spills of fuel, hydraulic fluids, lubricants, and other chemicals from standard construction equipment and storage containers. Refer to the BMPs listed in the response to Question B.3.d, which provides the BMPs the Contractor will be required to implement to ensure that waste materials do not enter surface water.

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

The Project would not alter or affect drainage patterns in the vicinity of the site.

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

The following water quality protection measures will be implemented throughout construction.

- All work in and near the water will be done so as to minimize turbidity, erosion, and other water quality impacts.
- Construction staging will be established in a way that avoids debris or other construction materials from entering the Columbia River.
- All debris or spill material will be properly disposed of at an approved disposal facility. Any spills, other than construction debris, that enter the waterway will be reported immediately to Ecology's Southwest Regional Office.
- Structure demolition and overwater activities will be conducted in a manner to minimize debris and accidental spill material from entering the waterway, including tarping or netting as needed.
- Before demolition, containment booms will be deployed around the work area to contain any floatable debris or spills that may enter the waterway. Containment booms will be cleaned out and maintained daily.
- Containment booms will be deployed around the work area during removal of the creosote-treated piles to contain any potential wood debris or sheens released into the water as the result of pile removal disturbance.
- Any buoyant materials accidentally dropped into the water will be picked up immediately by the Contractor. The Contractor will have a boat available and on site during in-water and overwater activities for floating debris retrieval.
- Equipment will be inspected daily for leaks and accumulation of grease, oil, or mud and repaired immediately.
- Fueling and servicing of all equipment, except for barge derricks, will be confined to an established fueling area with specific fueling BMPs and spill containment systems.
- A written Spill Prevention, Control, and Countermeasure (SPCC) Plan will be prepared for activities that include the use of heavy equipment. The plan will describe measures

to prevent or reduce impacts due to accidental leaks or spills, as well as all hazardous materials that will be used, their proper storage and handling, and the methods that will be used to monitor their use.

- To prevent leaching, construct forms to contain any wet concrete. Place impervious material over wet concrete that will come in contact with waters of the state. Forms and impervious materials must remain in place until the concrete is cured.
- As the piles are pulled from the subsurface, they will be directly placed onto a sealed receiving barge or contained upland facility to minimize potential release of creosote, sheens, and turbidity to the Columbia River. Water will not be allowed to drain from the receiving barge. Piles will not be rinsed or washed in any way. Piles will be properly disposed of at an approved upland disposal facility.
- The BMPs for piling removal and placement in Washington, issued by the USEPA (<<http://www.nws.usace.army.mil/Portals/27/docs/regulatory/Forms/EPA%20BMPs%20for%20Piling%20Removal%202-18-16.pdf>>) Region 10, will be implemented in full.
- The potential BMPs for piling removal and placement from Ecology's Sediment Cleanup User's Manual (SCUM) may be used.
- A Water Quality Monitoring and Protection Plan will be prepared for the Project. Visual and/or metered turbidity monitoring will be during pile installation and removal.

4. Plants

a. Check the types of vegetation found on the site:

- deciduous tree: alder, maple, aspen, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- Orchards, vineyards or other permanent crops.
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation

Little to no aquatic vegetation exists within the established Berth 17, and upland vegetation is sparse (consisting of blackberry and grass) along the shoreline and within the adjacent Terminal 5.

b. What kind and amount of vegetation will be removed or altered?

No vegetation would be removed or altered as a result of the Project.

c. List threatened and endangered species known to be on or near the site.

There are no threatened or endangered plant species known to be on or near the site. The Washington Natural Heritage Information System lists several plant species for Clark County, with one recorded as occurring within the floodplain of the lower Columbia River. However, the potential for this water howellia (*Howellia aquatilis*) to occur within the project site is considered very low because the species requires clay and organic soils, semipermanent water, and overhanging deciduous trees, which are not characteristics of the area surrounding Terminal 5.

Further, the Project would not disturb plant species other than the sparse grass and blackberry that occur on the shoreline.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

No landscaping is proposed as part of the Project and measures to preserve or enhance vegetation on the site are not proposed either, because the Project will not have an adverse effect on plant species.

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

The invasive Himalayan blackberry (*Rubus armeniacus*), false indigo, and invasive grass species existing throughout the lower Columbia River.

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:

birds: hawk, heron, eagle, songbirds, other: bald eagle, streaked horned lark, sandhill cranes, osprey, Canada goose, American crow, barn owl, cliff swallows, European starling, and the Eurasian collared dove

mammals: deer, bear, elk, beaver, other: California and Steller sea lions, harbor seals

fish: bass, salmon, trout, herring, shellfish, other: forage fish typical of freshwater systems, smelt, sturgeon

In August 2021 baseline bird surveys were conducted at the project site. The purpose of the surveys was to observe the site for bird use and to determine whether the site was used for nesting. This was done to determine whether activities were needed before or during construction to deter birds from using the site, and to avoid impacts to protected species and active nests. The crane, gallery, water tower, catwalk, and fender piles were surveyed. Multiple birds were observed on the dock or in the vicinity including osprey, Canada goose, American crow, barn owl, European starling, and the Eurasian collared dove. There are many existing nests, but no active nests at the time of the baseline bird survey. All of the observed species, except for the European starling and the Eurasian collared dove, are protected under the Migratory Bird Treaty Act (MBTA).

No eagle nests were observed during the August 2021 bird surveys conducted at the project site.

b. List any threatened and endangered species known to be on or near the site.

The following threatened and endangered species, or evolutionarily significant units (ESUs) and their distinct population segments (DPS), exist within the Columbia River near Berth 17. Consultation under Section 7 of the Endangered Species Act (ESA) was completed in 2018 and

2019 for pile replacement and repair at the port facilities. Potential effects to these species from the in-water work proposed under this Project is consistent with the effects described in the Biological Opinions issued by NOAA National Marine Fisheries Service (WCR-2017-7322) and U.S. Fish and Wildlife Service (USFWS; 01EWF00-2017-F-1273-R001).

- **Chinook salmon (*Oncorhynchus tshawytscha*):** Lower Columbia River ESU, Upper Willamette River ESU, Upper Columbia River spring-run ESU, Snake River spring/summer-run ESU, Snake River fall-run ESU
- **Chum salmon (*Oncorhynchus keta*):** Columbia River ESU
- **Coho salmon (*Oncorhynchus kisutch*):** Lower Columbia River ESU
- **Sockeye salmon (*Oncorhynchus nerka*):** Snake River ESU
- **Steelhead (*Oncorhynchus mykiss*):** Lower Columbia River ESU, Upper Willamette River ESU, Middle Columbia River ESU, Upper Columbia River ESU, Snake River Basin ESU
- **Green sturgeon (*Acipenser medirostris*):** Southern DPS
- **Eulachon (*Thaleichthys pacificus*):** Southern DPS
- **Bull trout (*Salvelinus confluentus*):** Columbia River DPS

Streaked horned larks have been documented at the port's nearby Parcel 3 dredge deposit site that is located downriver approximately 1.5 miles. However, they have not been noted in surveys since 2016 and streaked horned larks have not been documented at Terminal 5. Streaked horned lark critical habitat includes several specifically identified sandy dredge deposit locations in and adjacent to the Lower Columbia River, but critical habitat is not documented within port facilities or Clark County. The nearest designated critical habitat is downstream of the port, near Kalama, Washington.

The following are other special status species that may occur within or near the port. These special status species may include species protected by other federal regulations (e.g., the Marine Mammal Protection Act, Migratory Bird Treaty Act, or Bald and Golden Eagle Protection Act), state-listed endangered or threatened species, or other sensitive species:

- Steller sea lion (Eastern DPS) (*Eumetopias jubatus*)
- Sandhill crane (*Grus canadensis*): Washington Department of Fish and Wildlife (WDFW) has mapped migratory occurrence locations of sandhill cranes on agricultural land west of the site at the port's Parcel 3, and areas north of the Flushing Channel known as Cranes' Landing. A berm has been constructed on Parcel 3 to provide a buffer for sandhill crane habitat north of the flushing channel.
- Bald eagle (*Haliaeetus leucocephalus*): No eagle nests were observed during the August 2021 bird surveys conducted at the project site.
- Western pond turtle (*Actinemys marmorata*): Western pond turtles (also known as Pacific pond turtles) have not been documented as occurring in the vicinity of the port but have been documented in Clark County and have the potential to occur in the port area.
- Osprey (*Pandion haliaetus*): Osprey were observed during the August 2021 bird surveys conducted at the project site.
- Pacific lamprey (*Entosphenus tridentatus*)
- Other migratory birds

The Eastern DPS of Steller sea lion was delisted from the Endangered Species list on November 4, 2013. Prior to delisting, it was a federally threatened species under the ESA. Steller sea lions are still listed as threatened by the State of Washington.

Sandhill cranes are listed by the state as endangered but are not federally listed under the ESA. Sandhill cranes are known to occur in the vicinity of the port in the Vancouver Lake Lowlands (Lowlands). WDFW has mapped migratory occurrence locations of sandhill cranes on agricultural land west of the site. Fall migration of cranes in the Lowlands typically occurs in late September and early to mid-October. Spring migration through the Lowlands generally occurs from mid-March to mid-April. The Lowlands are used as stopover habitat during migration and for foraging by overwintering birds. Cranes are known to rest and feed on Parcel 3 but more commonly use the land north of the flushing channel known as Cranes' Landing, which is managed to provide wintering food for migrating and staging flocks of sandhill cranes, as well as other geese, ducks, raptors, and mammalian species, by Columbia Land Trust. A berm has been constructed on Parcel 3 to provide a buffer for sandhill crane habitat.

The bald eagle is currently a species of concern (federal) and state-listed sensitive. Bald eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act and are listed by the state as sensitive. The USFWS National Bald Eagle Management Guidelines recommend that potentially disturbing activities occur outside a 660-foot protective buffer around an active nest during the nesting season, which generally occurs January to August. No eagle nests were observed during the August 2021 bird surveys conducted at the project site.

Western pond turtle is a state-listed endangered species. Western pond turtles have not been documented as occurring in the vicinity of the port but have been documented in Clark County and have the potential to occur in the port area. Potentially suitable habitat would include emergent wetland habitats in the vicinity of Vancouver Lake.

Ospreys are not listed in ESA or by the state but are considered a state-monitored species. As described in response to Question B.5.a, ospreys were observed during the August 2021 bird surveys conducted at the project site.

There are numerous other species that are listed and have known occurrences or historic ranges in Washington but are not likely to occur on or near the port. Examples include the northern spotted owl (*Strix occidentalis caurina*), Oregon spotted frog (*Rana pretiosa*), yellow-billed cuckoo (*Coccyzus americanus*), marbled murrelet (*Brachyramphus marmoratus*), gray wolf (*Canis lupus*), and Columbian white-tailed deer (*Odocoileus virginianus leucurus*). USFWS listed the Taylor's checkerspot butterfly (*Euphydryas editha taylori*) as threatened and also designated critical habitat for the species. There is no critical habitat designated for this species on or near the port.

c. Is the site part of a migration route? If so, explain.

The general area of the site is within the Pacific Flyway, a broad migratory corridor that extends from Alaska to Central America and is used by waterfowl, eagles, hawks, falcons, songbirds, sandhill cranes, and shorebirds (WDFW, Management Recommendations for Washington's Priority Species, Volume IV: Birds). The Columbia River serves as a migration corridor for salmonids.

d. Proposed measures to preserve or enhance wildlife, if any:

In addition to the measures described in response to Question B.3.d., the following BMPs will be implemented to avoid or minimize impacts to fish and wildlife.

- In-water work will occur within the approved in-water work, which limits vibratory pile driving to September 15 to February 28 each year, with impact pile driving restricted to October 1 to January 31 annually.
- Vibratory pile driving will be used to the maximum extent feasible to minimize the amount of impact pile driving needed to complete the Project.
- A bubble curtain will be used during impact hammer installation of steel piles associated with the mooring dolphin replacement. An unconfined bubble curtain will be used unless water velocity at any time during installation is greater than 1.6 feet per second, and then a confined bubble curtain will be used. The bubble curtain will surround the piles and distribute air bubbles around 100% of the pile's perimeter for the full depth of the water column.
- Complete removal of existing timber piles is proposed to the extent feasible. Removed piling will not be allowed to enter the Columbia River after extraction. Piles will be cut 1 to 2 feet below the sediment surface if they cannot be fully removed.
- Construction is anticipated to begin at Berth 17 before the standard bird nesting season. This will naturally deter birds from using the crane and gallery for nesting. Deterrent measures, like installation of hardware cloth over common nesting areas, may also be installed to minimize bird use of the site. If removal of an active nest is needed during construction, this removal will be done by a specialist and under the authorization of the Special Purpose-Miscellaneous Permit.

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

Two animal species from Washington's comprehensive list of invasive animals, plants, microorganisms, or pathogens have been observed within the lower Columbia River, although no sightings have occurred within the Project area. These include the bullfrog (*Rana catesbeiana*) and the nutria (*Myocastor coypus*).

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.

As described in response to Question A.11, as part of the completed Project, electricity would be extended to Berth 17 to improve overall utility service, including shore power to vessels and electricity for the newly installed dock and bridge light poles (as described in response to Question B.11). Vessels calling at the dock could connect to the newly established shore power in lieu of burning fossil fuels. Utilities would support charging of electric vehicles.

During construction, the primary energy needs of the Project would be related to construction equipment, and support vessels/vehicles and other equipment (i.e., tugs, skiffs, land-based equipment).

- b. **Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**

The Project would not be anticipated to affect the potential use of solar energy by adjacent properties.

- 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:**

Construction equipment operating upland will be required to follow the port's anti-idling policy, limiting unnecessary idling during port-contracted program activities.

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.**

Please refer to the responses to Questions B.7.a.1 through B.7.a.5 for detail regarding potential environmental health hazards that could occur as a result of the Project, as well as the proposed BMPs to minimize potential occurrences and potential related impacts.

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

The upland parcels adjacent to Berth 17 were historically operated as an aluminum smelter and series of aluminum fabrication plants. The dock was used as an unloading facility for alumina shipped to Vancouver from South America. The crane and conveyor were used to unload vessels and transport the alumina to storage silos that are no longer present. A variety of materials and potential contaminants were handled at the property during historical operations that contributed to soil, groundwater, and sediment contamination. The port was not an owner of Terminal 5 when contamination occurred. In order to fulfill the requirements of a Consent Decree with Ecology to address this contamination, Alcoa performed numerous cleanups at the site in both the uplands and sediments. Between October 2008 and April 2009, a sediment cleanup was performed by Alcoa that involved dredging of 49,990 cubic yards (CY) of polychlorinated biphenyl (PCB)-contaminated sediment along the shoreline and placement of 34,305 CY of enhanced natural recovery (ENR) sand (Anchor QEA 2009). Process residue (i.e., tar), iron slag, asbestos, and miscellaneous debris were also removed from the shoreline to the east and west of the Berth 17 dock. Upon removal of this contamination these areas of the shoreline were covered with revetment riprap supplement.

PCBs were the driver for the sediment cleanup, which included dredging sediment with PCB concentrations greater than the remedial action level (RAL) of 320 micrograms per kilogram ($\mu\text{g}/\text{kg}$) and ENR of sediment with PCB concentrations less than the RAL and greater than the cleanup level (CUL) of 97 $\mu\text{g}/\text{kg}$. Performance sampling of the ENR sand was conducted after placement.

In the uplands, various remedial actions occurred on the upland property between March 2008 and June 2009, including the decontamination of abandoned fuel underground storage tanks (USTs), excavation of contaminated soil, transformer remediation, and removal or capping of fluoride-enriched alumina ore and coal tar pitch.

Existing Sediment Contamination

In 2018 and 2019 the port conducted sediment sampling at Berth 17. In 2019, the Port conducted additional sediment sampling both within and outside of the vessel berth to understand sediment conditions relative to potential future operational use.

The results indicated that shallow subsurface sediments ranging from 0 to 2 feet below mudline (bml) are contaminated with PCBs at concentrations exceeding the Alcoa CUL of 97 µg/kg and/or Alcoa Total PCB RAL of 320 µg/kg in front of and upriver of the Berth 17 dock. One sample exceeded the Alcoa CUL of 97 µg/kg at a location just shoreward of the downriver catwalk. PCBs were not detected from a sample collected adjacent to the downstream replaced mooring dolphin. Two samples also exceeded the Sediment Management Standard (SMS) freshwater screening levels for polycyclic aromatic hydrocarbons (PAHs) off the upriver corner of the dock and waterward of the upriver catwalk.

In June and July 2021, the port collected sediment samples along the pier-face of Berth 17 to document surface and shallow subsurface conditions prior to the proposed fender pile replacement. Because of the history of sediment contamination, Berth 17 is part of a sediment cleanup site currently undergoing a 5-year MTCA review with Ecology's Toxics Cleanup Program (TCP). To obtain sufficient data to support the fender pile replacement at Berth 17, TCP required that sediment sampling be conducted prior to and after fender pile replacement to determine whether pile replacement alters sediment chemistry in the immediate vicinity of pile replacement. Consistent with the 2018 and 2019 data, the results of the baseline sampling indicate that elevated concentrations of PCBs are present in surface sediment and shallow subsurface sediments ranging from approximately 0 to 2.4 feet bml in sediments adjacent to the Berth 17 dock. Similar to the 2018 event, PCBs were identified at the upriver corner of the dock. During this event, PCBs were also identified at the downriver corner of the dock where sampling had not previously been conducted.

Alcoa is also conducting additional sediment sampling within and adjacent to the Berth 17 dock to support Ecology's 5-year review process. The presence of sediment contamination and the 5-year review process is also resulting in additional regulatory coordination with the Ecology's TCP.

Existing Terminal 5 Contamination

Project documentation states that after completion of the 2009 sediment remedial action, PCBs and PAHs remained on the shoreline that exceeded applicable CULs for soil. In 2009, an environmental restrictive covenant was placed on this portion of the shoreline area to restrict future disturbance of the soil and riprap revetment. The shoreline mooring points would be located within the shoreline covenant area.

Additionally, several other environmental covenants exist within the Terminal 5 upland parcel. The project design has avoided ground disturbance in these areas. As design is advanced, the port will confirm that no other ground disturbance occurs within an area encumbered by an environmental covenant.

Existing Crane and Gallery Contamination

In 2012, an asbestos survey and lead paint analysis was conducted on the crane and gallery on the Berth 17 dock. The crane undercarriage was sampled and analyzed for lead paint. The results indicated that lead paint was used on the crane undercarriage. Asbestos was identified in several elements of the gallery, including in the floor tile and roofing material.

In August 2021, a Hazardous Building Material survey was conducted of the crane, gallery, and water tower to further inspect conditions. Initial findings confirm the presence of asbestos-containing materials, lead-based paint, and other hazardous materials such as PCB-containing fixtures and miscellaneous containers (e.g., oil and grease containers and unlabeled containers).

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 known potential hazardous chemicals that affected the development and design of the Project are the sediment concentrations of PCBs and PAHs located in the sediment of Berth 17, and the PCBs and PAHs that remain within the shoreline environmental covenant area, as described in the response to Question B.7.a.1.

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.

Gas, oil, and grease required for standard construction equipment would be used. The Contractor would be required to prepare an SPCC Plan to identify procedures to avoid, minimize, and, if necessary, respond to any such releases. Toxic or hazardous chemicals are not expected to be stored or used on site after project construction.

4) Describe special emergency services that might be required.

Safety protocols would be developed by the Contractor prior to project construction to reduce the need for emergency medical services at the site.

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

The response to Question B.1.h describes the design approach that would significantly reduce potential environmental health hazards as a result of the Project. Additionally, sediment would be sampled at the site after construction to confirm that the proposed pile replacement did not affect existing contamination within the vessel berth. Changes to the extent of contamination as a result of the Project are not anticipated because pile removal and reinstallation would not result in significant sediment disturbance, and turbidity from these activities would be localized given the suite of BMPs that would be implemented. The Contractor will be required to implement the BMPs provided in response to Question B.3.d to reduce or control environmental health hazards.

b. Noise

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

The port is a working waterfront and an active industrial area, with zoning that allows for noise-generating activities. The noise associated with standard operations at the port will not affect the Project.

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.

Noise from the Project will be short-term. Long-term noise will be related to vessel traffic and maritime operations typical in the project area. The construction equipment will operate at a similar volume to other industrial activities that occur on port-owned property, and the work is most likely to occur during standard working hours. Regardless, the noise generated would remain below the maximum permissible noise levels provided in WAC 173-60-040 and will remain in full compliance with the noise levels outlined in these regulations.

3) Proposed measures to reduce or control noise impacts, if any:

As described in response to Question B.5.d, a bubble curtain will be used during installation of the steel piles associated with mooring dolphin replacement. No other measures are proposed to reduce or control noise as noise impacts (other than what is associated with impact pile driving) are anticipated.

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.

Terminal 5 is currently used as a cargo laydown area and rail corridor. NGL Supply Terminal Company leases a portion of Terminal 5 for propane truck loading and unloading off railcar. CalPortland leases a portion of Terminal 5 for sand and gravel laydown. The Berth 17 dock has occasionally been used as a lay berth, but in its current condition, the dock cannot support lay berthing. The fender piles and mooring dolphins are in critical condition and do not have the capacity to support moored vessels. The tidelands associated with the Project are owned by the Washington State Department of Natural Resources (DNR) and are managed under a Port Management Agreement.

The properties directly adjacent to Terminal 5 consist of industrial and commercial businesses. Directly to the east is Clark County Jail Work Center, an 18.3-acre minimum security facility for low-risk inmates. To the west of Terminal 5 is Tidewater Barge Lines. Tidewater Barge Lines handles and transports freight such as grain, wood products, fertilizers, garbage, etc. They moor numerous barges at the facility for transport of goods. Directly adjacent to the north of Terminal 5 is CPU River Road Generation Plant (and their associated outfall and DNR lease).

These properties would not be affected by the Project.

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?

There is no known history of agricultural use at Terminal 5. No agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the Project.

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:

The Project would not affect nor be affected by surrounding working farm or forest land normal business operations.

c. Describe any structures on the site.

Berth 17 consists of an approximately 425-foot dock constructed in 1967 with a concrete superstructure supported on prestressed concrete piling. The dock is in good condition. A fender system, mooring dolphins, pedestrian access catwalks, and vehicular access causeway support the dock and provide access. These ancillary components are in poor to critical condition. A derelict crane and steel framed gallery are bolted to the dock surface.

The upland portion of the site includes the steel water tower.

d. Will any structures be demolished? If so, what?

The crane, gallery, and upland water tower would be removed as part of the proposed project. For completeness in this environmental review, the removal could be considered demolition; however, the method used to remove these structures does not fit the typical definition of demolition. The crane, gallery, and water tower would be disassembled in a systematic fashion and removed incrementally from the site. The crane and gallery are more appropriately characterized as industrial equipment.

e. What is the current zoning classification of the site?

The current zoning classification for the Berth 17 parcel is water. The zoning for the two upland parcels is heavy industrial.

f. What is the current comprehensive plan designation of the site?

The current comprehensive plan designation for Berth 17 is water. The comprehensive plan designation for the upland parcels is industrial.

g. If applicable, what is the current shoreline master program designation of the site?

The areas above the ordinary high water mark on the site are designated as Urban: High Intensity in the City of Vancouver Shoreline Master Program, effective September 24, 2012. Additionally, the Shoreline Master Program designates the Columbia River as a shoreline of statewide significance and it is designated Aquatic.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

The entire City of Vancouver, because of its location above the Troutdale Aquifer, is within a critical aquifer recharge area (CARA) as defined in VMC 14.26.115 and has been designated as a sole source aquifer by the U.S. Environmental Protection Agency. However, Terminal 5 is not within 1,900 feet of a municipal drinking water well supply and is, therefore, not subject to the special protection area provisions of VMC 14.26, Water Resources Protection. Additionally, the Project would not disturb existing critical habitat or riparian buffers in the project area.

i. Approximately how many people would reside or work in the completed project?

Nobody would reside in the completed project area. No employment displacement is anticipated. As of 2018, the last time an economic study was conducted at the port, 3,910 jobs were determined to be directly generated by port marine and industrial activities.

j. Approximately how many people would the completed project displace?

The Project activities would not result in displacement.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Measures to avoid or reduce displacement impacts are not proposed.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The Project would not change the existing and future land use at the site or at the port; rather, it would restore the ability for Berth 17 to function as part of the port facility.

The pile replacement activities that would be conducted as part of the Project have been reviewed by the City of Vancouver as part of the permitting process for the port's Waterfront Maintenance Program. The shoreline mooring points that are needed to restore mooring capacity to the dock would receive shoreline authorization before they are constructed. Shoreline or land use authorization is not required for removal of the crane, gallery, and water tower.

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

The Project would not result in direct or indirect impacts to nearby agricultural and forest lands. Further, there are no agricultural or forest lands of long-term commercial significance in the City of Vancouver.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

No housing units would be provided as part of the Project.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

No housing units would be eliminated as part of the Project.

c. Proposed measures to reduce or control housing impacts, if any:

Because the Project would not provide or eliminate housing, no measures to reduce or control housing impacts are proposed.

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?

The Project would replace existing mooring dolphins and add two new shoreline mooring points along the shoreline. The mooring dolphins would be in the same location and similar configuration as the existing mooring dolphins. The shoreline mooring points would be new features on the shoreline, but the aboveground components would be limited to bollards for vessel lines. Additionally, a prefabricated restroom would be installed next to the new parking lot. The restroom structure would be up to 15 feet tall and constructed of concrete block.

As described in response to Question A.11, 18 16-foot light poles would be installed on the Berth 17 dock, access bridge, and proposed parking lot to support the water-dependent uses at Berth 17.

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

The Project would remove a crane and gallery that have been part of the viewshed since the 1960s and would remove the water tower that was been onsite since the 1940s. Although these features are being removed, Berth 17 would remain visually unified with the industrial waterfront after construction because the dock itself would remain and its ability to moor commercial and deep-draft vessels that call at the berth would be restored. Project components at the shoreline would support this water-dependent use and would be visually consistent with shoreline structures across the port facilities.

c. Proposed measures to reduce or control aesthetic impacts, if any:

No measures to reduce or control aesthetic impacts are proposed.

11. Light and glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

As described in response to Question A.11, light poles would be installed on the Berth 17 dock, access bridge, and proposed parking lot to support the water-dependent uses at Berth 17. All lights would be LED full cutoff fixtures on 16-foot light poles with 3000 K color temperature sources at 1 foot-candle average. The lights could be dimmed or selectively turned off when the berth is not in use.

Light and glare associated with construction would be limited to temporary and short-term impacts and would be generated by construction equipment, support vessels, and trucks during construction. It is anticipated that most work would occur during a 10-hour workday, from 7:00 a.m. to 5:00 p.m.; thus, lighting requirements should be minimal, and typically used during the beginning and ending of the standard daily shifts when natural light levels are lower. However, if work extends into nighttime hours, the light or glare associated with project construction is expected to be within the ambient light levels of an operational industrial facility and would be directed toward work areas to minimize glare.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Light or glare from the Project is designed to not be a safety hazard or interfere with views. The light poles installed on the Berth 17 dock would be placed on the centerline of the dock to keep most of the light on the dock structure and not on adjacent water. All of the light poles installed at the proposed parking lot and on the access bridge would utilize downcast shields to minimize spill onto the adjacent water. All lights would be LED with 3000 K color temperature or lower to limit impacts to birds and other species at night but adequate to provide safety on the structure and surrounding areas.

c. What existing off-site sources of light or glare may affect your proposal?

Offsite sources of light or glare would not affect the Project.

d. Proposed measures to reduce or control light and glare impacts, if any:

Refer to response to Question B.11.b.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

The lower Columbia River is used for waterborne recreation such as boating, kayaking, wind surfing, and fishing. Shoreline access is available at a number of informal and established scenic viewpoints and parks, such as Blurock Landing, which is located at the entrance of the flushing channel approximately 1.7 miles downriver of the project site.

b. Would the proposed project displace any existing recreational uses? If so, describe.

The Project would not displace any existing recreational uses, and construction would occur within the established Berth 17 vessel berth and the upland adjacent parcels, which do not support recreational activities.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Because the Project would not result in recreational impacts, no measures to reduce or control recreational impacts are 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.

In 2021, Archaeological Investigations Northwest, Inc. (AINW) conducted a historical resources survey on the Berth 17 dock, with crane and gallery. The Berth 17 dock was constructed in 1967. AINW concluded that the dock does not meet eligibility requirements for listing in the National Register of Historic Places (NRHP).

The water tower was constructed in 1941. As part of the West Vancouver Freight Access Project, a cultural resources survey was completed for the upland property in 2009. In 2011, the water tower was determined not eligible for listing in the NRHP individually or as a potential historic district.

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.

The banks of the Lower Columbia River are known to have been used by Native Americans for temporary fishing camps prior to European settlement. The project area has been classified by the City of Vancouver as Level A High Probability for archeological resources. Culturally significant sites have been inventoried in the uplands. Since the early 1970s, numerous archaeological investigations have been conducted in the Project vicinity.

In 2010, AINW completed a cultural resources survey for the proposed Terminal 5 Bulk Potash Handling Facility, a 50.4-acre area located in between the Alcoa water tower and dock. The report concluded that no archaeological or historic resources were identified during the investigation of the Area of Potential Effect (APE). This study also included a review of several other archaeological surveys completed within or near the APE between 1993 and 2009, and no archeological resources were identified due to the presence of extensive fill deposits in this area. The proposed project is unlikely to encounter archaeological resources due to the presence of fill and shallow depth of excavation.

- 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.**

As described in response to Questions B.13.a and B.13.b, AINW has conducted a historical resources survey (in 2021) and a cultural resources survey (in 2010) on the project site, reviewing the Berth 17 dock with crane and gallery for historic eligibility and assessing the project site for archaeological resources. AINW also completed a field assessment of the water tower to identify whether any new information would warrant a change in the past determination. Additionally, as part of the evaluation of potential cultural resources in the area, the following databases were queried: the National Register of Historic Places, the Washington Information System for Architectural and Archaeological Records Data, and the Clark County database of Historic Sites.

- 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.**

The port implements standard BMPs and all construction activities will be conducted in accordance with RCW 27.53.060 and RCW 27.44.020 and all applicable Washington State Department of Archaeology and Historic Preservation (DAHP) regulations. In the event any unknown archaeological or historical materials are encountered during project activities, work in the immediate area of the discovery will be halted and the following actions taken: (1) implement reasonable measures to protect the discovery site, including any appropriate stabilization or covering; (2) take reasonable steps to ensure the confidentiality of the discovery site; and (3) take reasonable steps to restrict access to the site of discovery. If human remains are discovered, appropriate law enforcement agencies shall be notified first, then the steps listed herein will be followed. If remains are determined to be Native American, consultation with the affected tribes will take place in order to mitigate the final disposition of said remains.

Should a discovery occur, a professional archaeologist will be called in to assess the significance of the find, and DAHP and concerned tribes will be notified so that a course of action can be implemented.

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.**

The Project would not result in changes to access and use of the existing street system. The primary roadway serving the port is State Route 501. The primary access point for Terminal 5 is off NW Old Lower River Road or NW Gateway Avenue.

- 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?**

The nearest transit stop is approximately 0.5 to 1 mile from the port, on Fruit Valley Road. The stop is served by C-Tran Route 6: Fruit Valley/Grand.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?**

As described in response to Question A.11, up to 20 parking spaces would be added as part of the Project.

- 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).**

As described in response to Question A.11, the existing gravel-packed perimeter road would be resurfaced with asphalt from just west of NW Gateway Avenue to the Berth 17 access bridge.

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

The project area is in the immediate vicinity of water and rail transportation, because the port is located on the lower Columbia River and is served by BNSF Railway Company and Union Pacific Railroad. The completed Project will serve water transportation as a functional marine terminal.

Construction equipment would arrive and leave the project site using the Columbia River or adjacent roadways. Materials from pile replacement and crane and gallery removal would be taken from the site by barge, and as appropriate, offloaded at a local recycling facility. Materials from the water tower would be taken offsite by truck.

- 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?**

A parking lot would be constructed to support the water-dependent uses at Berth 17. Parking within this lot would be temporary and as needed to support dock activities. Long-term parking is not proposed and a consistent increase in vehicular trips to the site is not anticipated. Construction vehicles would access the site during project construction for material delivery and as the water tower is removed. The average amount of vehicular traffic estimated during construction is three round-trips per day. There would be no measurable increase in truck traffic within the port facility, and traffic on adjacent local streets would not noticeably change.

- 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.**

The Project would not affect the movement of agricultural and forest products on roads and streets in the area because the truck traffic generated by project activities would use roads internal to the port and State Route 501.

h. Proposed measures to reduce or control transportation impacts, if any:

Transportation impacts are not anticipated as a result of the Project; therefore, no measures are proposed to reduce or control transportation impacts.

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.

The Project would not result in an increased need for public services.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Because the Project would not affect public services, no measures to reduce or control impacts are proposed.

16. Utilities

a. Circle utilities currently available at the site:

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.

Refer to response to Question A.11 for details on the utility improvements that are proposed as part of the Project and the general construction activities associated with each. Water supply, fire protection, and sanitary sewer service would be provided by the City of Vancouver, and electricity would be serviced from CPU. Fiber would be installed for communications, and the service provider would either be CenturyLink or Comcast but has not been determined.

C. Signature

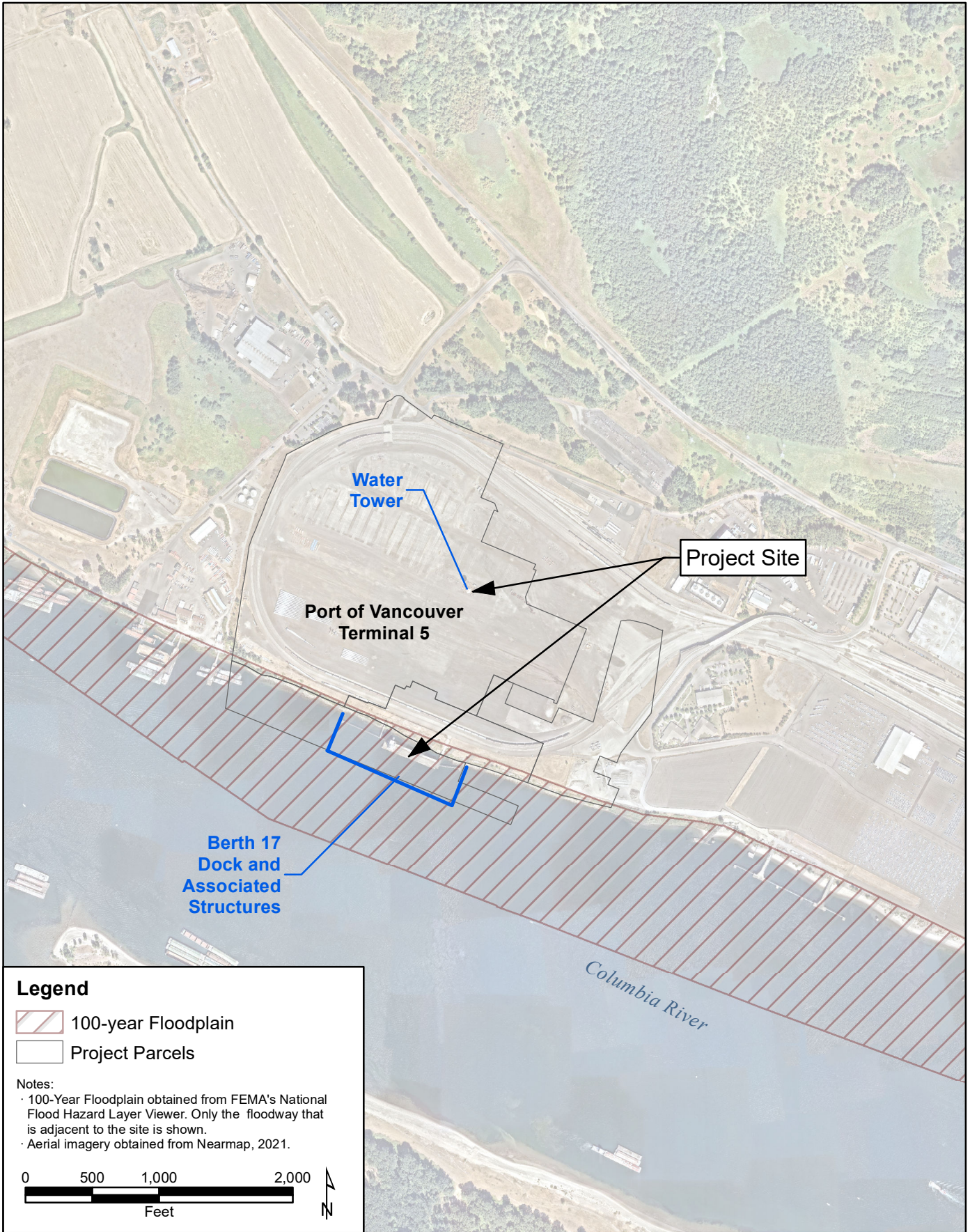
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Monty Edberg



Name of signee Monty Edberg

Position and Agency/Organization Director of Engineering & Project Delivery/Port of Vancouver

Date Submitted: 9/27/21



Legend

-  100-year Floodplain
-  Project Parcels

Notes:

- 100-Year Floodplain obtained from FEMA's National Flood Hazard Layer Viewer. Only the floodway that is adjacent to the site is shown.
- Aerial imagery obtained from Nearmap, 2021.

