



<u>SEPA ENVIRONMENTAL CHECKLIST</u>	<u>WAC 197-11-960</u>
Property Owner: <u>Port of Vancouver</u> <small>(Print or Type Name)</small>	Telephone: <u>360-693-3611</u>
Mailing Address: <u>3103 NW Lower River Road, Vancouver, WA 98660</u> <small>(No., City, State, ZIP)</small>	
Applicant: <u>Port of Vancouver, Greg Westrand</u> <small>(Print or Type Name)</small>	Telephone: <u>360-693-3611</u>
Mailing Address: <u>3103 NW Lower River Road, Vancouver, WA 98660</u> <small>(No., City, State, ZIP)</small>	
Relationship to Owner: <u>Same</u>	
Tax Assessor Serial Number(s): <u>58918000, 58927000</u>	
Legal description: Lot(s) _____ Block(s) _____ Plat name _____ (If a Metes and Bounds description, check here <input type="checkbox"/> , and attach narrative to this application.)	
Site Address (if any): <u>Vicinity of 1955 NW Harborside Drive Vancouver, WA 98660</u>	

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the [SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS \(part D\)](#). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. BACKGROUND

1. Name of proposed project, if applicable:

Port of Vancouver Water System Improvements

2. Name of applicant:

Port of Vancouver (Port)

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

*Greg Westrand, P.E., Project Manager
Port of Vancouver
3103 NW Lower River Road
Vancouver, WA 98660
360-213-1248*

4. Date checklist prepared:

August 2016

5. Agency requesting checklist:

Port of Vancouver

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

The project will replace the Port's existing 75,000 gallon elevated storage tank which is nearing the end of its design life and Wellhouse No. 1 Booster Pump Station (BPS) with a new proposed ground-level tank and BPS that will provide for increased storage and necessary modifications to pumping systems necessary to accommodate the new ground-level tank. Additional improvements will be undertaken, including a proposed antenna pole for communications and security equipment, a chlorination building, and an emergency engine generator, as well as site and yard piping improvements.

The project will be constructed in three phases. In Phase 1, the proposed BPS will be constructed along with modifications to the existing yard piping. The proposed BPS will be tested and put into service at end of this phase. In Phase 2, the existing elevated tank will be demolished and the proposed ground level tank will be constructed in its footprint. Also during Phase 2, the Port's existing production well pumps will be modified to pump to the new ground-level tank. Site access and aesthetics, including landscaping will be constructed in Phase 2 as well. Phase 3 will involve construction of an outdoor emergency generator (EG) and chlorination building. The chlorination building will be constructed as an expansion of the proposed BPS building constructed under Phase 1. Construction of Phase 1 is anticipated to begin in late 2016 and be completed in early 2017. Construction of Phase 2 is anticipated to begin shortly after completion of Phase 1 and completed in 2017. Phase 3 construction is anticipated to occur in 2018.

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

Other improvements connected to the water system and related to the overall Water System Improvements project include:

Installation of flowmeter at the Port's Well No. 3 for source monitoring.

Reconstruction of the Port's Wellhouse No. 1 wood-framed building as a concrete masonry building to match the proposed BPS and chlorination buildings.

Removal and replacement of gas chlorine disinfection systems at Port Wellhouses Nos. 1, 2, and 3 with liquid sodium hypochlorite system, It is anticipated that the proposed disinfection system for Well 1 and 2 will be located at the proposed chlorination building constructed under Phase 3 and described herein, while the a separate hypochlorite disinfection system will be installed at Port Well 3.

Installation of a new Supervisory Control and Data Acquisition (SCADA) system for remote monitoring and operation of the water system facilities.

Other misc. water distribution and transmission main improvements related to improving fire flow and distribution of water within the Port's water system service area.

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

- *Geotechnical Investigation, Project 8 Grain Sub B Water Tank, West Vancouver Freight Access (WVFA), Port of Vancouver – GRI, October 2011*
- *Elevated Tank Replacement & Water System Improvements Project Report, RH2, April 2016*
- *High Water Tank Removal Cultural Resource Assessment, Archaeological Investigations Northwest, May 2016*

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.

No.

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

- *City of Vancouver Building, Grading, Plumbing, and Electrical Permits*
- *Washington Department of Health Project and Construction Document Approval*
- *Southwest Clean Air Agency, Small Unit Notification and Combustion Engine Sources checklist*

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.)

The project will replace the Port's existing 75,000-gallon elevated tank which is nearing the end of its design life and Wellhouse No. 1 Booster Pump Station (BPS) located in the Port's Terminal 2 area with a new 250,000-gallon ground-level tank and BPS that will provide for increased storage and necessary modifications to pumping systems necessary to accommodate the new ground-level tank. To facilitate the conversion of the elevated tank to the ground-level tank, the project will also require modifications to the two existing Port production wells (i.e., Wells No. 1 and No. 2). Additional improvements associated with the project will include modifications to the existing water system distribution and yard piping; improvements to site access and aesthetics, including landscaping; installation of telemetry and control systems to monitor and control the water system facilities; and communications improvements.

The project will be constructed in three phases so the existing elevated tank and booster pump at Port Well Nos. 1 and 3 can remain in service until the proposed BPS is constructed and online. Under Phase 1, an approximate 400 square-foot concrete masonry unit (CMU) BPS building and 80-foot tall steel antenna pole will be constructed. Existing security and communication equipment that is located on the existing 125-foot-tall elevated water tank will

be relocated to the proposed antenna pole so that the elevated tank can be demolished as part of this project.

Under Phase 2, the existing 125-foot tall, 75,000-gallon elevated steel water tank will be removed and an approximate 44-foot diameter, 250,000 gallon bolted steel water tank will be constructed. Site improvements, including additional landscaping and access improvements will also be constructed under this phase.

Finally, under Phase 3, the CMU building constructed under Phase 1 will be expanded to include an approximate 550 square foot chlorination and well pump building that will house chemical storage tanks and pumping equipment to feed 2-percent to 12.5-percent sodium hypochlorite for disinfection of potable water. The proposed chlorination building would replace the existing gaseous chlorine systems located at the existing wellhouses. Also under Phase 3, an approximate 400-kilowatt (kW) diesel engine generator would be installed to provide backup power for emergency conditions. The diesel engine generator would be located outdoors within a sound-attenuating enclosure. The engine generator would be equipped with a sub-base fuel tank sized to hold provide a minimum of 24-hours of backup power.

The Port's project site is approximately 8,300 square feet (sf) and is used for water storage and operation of the Port's water distribution system.

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 proposed project is located on Port property in the vicinity of 1955 NW Harborside Drive, Vancouver, WA 98660 (NE Quarter of Section 28, Township 2N, Range 1E). See attached location figure.

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site
(circle one): **Flat**, rolling, hilly, steep slopes, mountainous, other _____

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

The steepest slope on the site is a ballast rock slope that supports railroad tracks. The slope is approximately 30 percent.

- 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.

According to Clark County (County) Maps Online data, onsite soils are composed of fill land (Fn), which consists of nearly level areas that have been filled artificially with earth, and then

smoothed over. Many of the Port's terminal areas have historically been filled over natural grades primarily with dredged sand and gravels from the adjacent Columbia River. Agricultural soils and agricultural land of long-term commercial significance are not present at the site.

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

There are no surface indications of unstable soils in the project site. According to County data, liquefaction is historically mapped within the project vicinity.

- 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.

Trench excavations will be made for modifications of the site yard piping as well as excavations for BPS and tank foundations. The total area excavated is approximately 4,500 sf. Expected quantity of excavated material is approximately 400 cubic yards (cy). Backfill material for trench excavations is anticipated to be either Class B backfill per WSDOT Standard Specifications or excavated material approved by the engineer. The source of imported fill will be via local providers. All imported fill material will follow the latest version of the Port's Soil Fill Acceptance Guidelines. A minor amount of grading will be done at areas around the proposed ground level tank and BPS perimeters.

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

Erosion could occur during construction of the proposed improvements. However, since the site is relatively flat and has already been disturbed and fully developed, the risk for erosion and sediment transport is low. Best management practices (BMPs) will be implemented to control erosion, sediment transport, prevent runoff, and mitigate dust generation among other site-specific and applicable erosion control measures. Excavations that are planned to occur within the site include utility trenches and structure foundations.

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

Approximately 35 percent of the existing site is covered by buildings and other impervious surfaces. Construction of the proposed improvements will add approximately 2,400 sf of new impervious surface, the majority of which consists of new building and water storage tank roofs, and will increase the amount of impervious surfaces on the project site from 35 to approximately 63 percent.

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

The project will implement a site specific erosion control plan that will employ BMPs and include protection of existing stormwater facilities.

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.

During construction: exhaust from internal combustion engines on vehicles and equipment. During operation and maintenance: Exhaust from diesel engine on emergency electrical generator – normally 15 minutes per week during weekly test of the generator; and for the duration of a commercial power outage.

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

None.

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

The contractor will be required to maintain construction equipment to ensure all are in good working order and emissions are minimized. Further, the contractor will employ good project management to construct the project in an efficient manner.

The proposed generator is expected to meet EPA Tier 2 emissions standards or better, and is intended to operate only under emergency conditions where utility power has failed and backup power is required to maintain water system operation for public health and fire suppression.

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.

The Columbia River is approximately 800 feet southwest of the project site. The Ordinary High Water elevation for the Columbia River in the project area is approximately 17 feet NGVD and the average site elevation is approximately 33 feet NGVD.

- 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.

No.

- 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.

None.

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

No.

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

No.

- 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.

No.

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 includes modifications to pumping equipment at two of the Port's existing three groundwater wells located near the project site to reduce the discharge pressure generated by the pumping equipment. There are no changes to withdrawal rates or water uses. No discharge to groundwater proposed as part of this project.

- 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.

None.

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.

Similar to existing conditions, water runoff will be generated by stormwater from the roofs of the new and existing buildings and the water storage tanks. Roof runoff will be collected with a gutter system and discharged to splash blocks. Paved and graveled areas will be sloped to drain water runoff to existing catch basins connected to the on-site stormwater collection system. The collected stormwater flows to an existing Vortechnic stormwater treatment prior to release into the Columbia River.

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

It is not anticipated that the proposed project will result in the release of waste materials to ground or surface waters.

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

No.

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

BMPs will be implemented as required and/or needed to reduce and control surface, ground and runoff water consistent with the Washington Department of Ecology and City of Vancouver standards. Specific BMPs applicable to this project may include, but are not limited to, inlet protection, silt fencing, and directing stormwater around the disturbed areas.

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

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

No existing trees will be removed as a part of this project. Approximately 480 sf of grass is anticipated to be removed during site utility trench excavation. The contractor will be directed to restore grass removed to existing conditions or better following construction activities. An existing arborvitae hedge may also be modified and/or replaced as part of the proposed landscaping improvements under Phase 2.

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

None.

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

Phase 1 site improvements will involve in-kind replacement of grassed areas on the site following trench excavations. Phase 2 site improvements are anticipated to involve site access and aesthetics improvements, including landscaping with native trees and shrubs.

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

Noxious weeds and invasive species are not located on the project site. Himalayan blackberry and Reed Canary grass are known to grow in the surrounding undeveloped areas.

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.

*birds: hawk, heron, eagle, songbirds, crows, pigeons
mammals: mice, rats, raccoons, opossums*

fish: salmon, trout, herring

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

The project site is located within a developed industrial area of the Port that has no natural habitat. No threatened or endangered species are known to be on the site.

Species known to exist near the project site include the following:

- *Sandhill cranes, a Washington Department of Fish and Wildlife (WDFW)-listed State endangered species, are known to rest and feed seasonally approximately 3.8 miles west of the project site at Parcels 4 and 5.*
- *Osprey (Pandion haliaetus) have been observed on Port property. They are not federally listed, but are considered a State-monitored species and are protected under the federal Migratory Bird Treaty Act.*
- *Streaked Horned lark has been observed approximately 3.6 miles west of the project site at Parcel 3.*
- *Bald eagles have been observed nesting approximately 3.8 miles west of the project site at Parcel 3. The bald eagle is currently a federal Species of Concern and State-listed sensitive. Bald eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.*
- *The Columbia River supports the following threatened or endangered evolutionarily significant units (ESU) and distinct population segments (DPS) of Pacific salmon, steelhead, and bull trout:*
 - *Chinook Salmon (Oncorhynchus tshawytscha)*
 - *Lower Columbia River ESU*
 - *Upper Columbia River spring-run ESU*
 - *Snake River fall-run ESU*
 - *Snake River spring/summer-run ESU*
 - *Upper Willamette River ESU*
 - *Columbia River chum ESU (Oncorhynchus keta)*
 - *Lower Columbia River Coho ESU (Oncorhynchus kisutch)*
 - *Steelhead (Oncorhynchus mykiss)*
 - *Lower Columbia River DPS*
 - *Upper Columbia River DPS*
 - *Snake River Basin DPS*
 - *Middle Columbia River DPS*
 - *Upper Willamette River DPS*
 - *Snake River sockeye ESU (Oncorhynchus nerka)*
 - *Columbia River bull trout DPS (Salvelinus confluentus)*

In addition, the Southern DPS of eulachon/smelt (Thaleichthys pacificus), which occurs in the Columbia River, is listed as threatened. The Southern DPS of green sturgeon (Acipenser medirostris) also occurs in the Columbia River and is listed as threatened. The California sea lion (Zalophus californianus) and Steller sea lion (Eastern DPS) (Eumatopius jubatus) occur in the Columbia River, as the harbor seal (Phoca vitulina) does to a lesser extent. The California sea lion, Steller sea lion and harbor seal are not federally listed, but all marine mammals are protected under the Marine Mammal Protection Act (MMPA).

Critical habitat has been designated for all of the salmonid species listed above (except lower Columbia River coho salmon) and includes the Columbia River channel which bounds the southern edge of the site. Critical habitat for Columbia

River bull trout and proposed critical habitat for southern DPS of eulachon is designated in the Columbia River near the project area.

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

The entire region 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.

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

The site will be landscaped with trees and grass that will act to enhance site aesthetics and provide for appropriate habitat.

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

Pigeons and starlings have been observed near the project 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.

Electricity would be the primary source of energy used to meet the energy needs of the completed project. Electricity would be used to power pumps, SCADA system, lighting, HVAC equipment, and other equipment associated with the operation of the proposed BPS. Also, diesel fuel will power the emergency generator during periods of a commercial power outage.

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

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:

The pumps for the project have been selected to maximize energy efficiency of the BPS.

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.

Construction and operation of the proposed improvements will involve the use of petroleum products (gasoline, diesel, etc.) to fuel equipment. The Port currently uses 125-lb cylinders of gaseous chlorine for disinfection of potable water. The project proposes a liquid chlorine disinfection system to replace the existing gaseous chlorine system, and will utilize 2-percent to 12.5-percent sodium hypochlorite. The existing elevated tank on the site was originally constructed in 1928 and is expected to be coated with lead-based paint. During the project, environmental monitoring will be conducted to confirm that environmental lead levels remain within EPA limits.

Local, state and federal guidelines will be followed to minimize potential environmental health hazard.

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

The existing elevated tank on the site was originally constructed in 1928 and is expected to be coated with lead-based paint. Demolition of the tank will be completed in sections with the upper sections being cut and then lowered to the ground with a crane. Throughout demolition, environmental monitoring will be conducted to confirm that environmental lead levels remain within EPA limits. Once demolished, the steel will be recycled or disposed in accordance with State and Federal laws.

- 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 Port currently uses 125-lb cylinders of gaseous chlorine for disinfection of potable water. Gaseous chlorine is considered a highly toxic and corrosive hazardous material. The cylinders are stored in a Port-secured area within the existing wellhouse buildings.

- 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 existing elevated tank was originally constructed in 1928 and is expected to be coated with lead-based paint. Under Phase 2 of this project, the elevated tank will be demolished and will require removal and disposal of dangerous waste materials in accordance with Washington Department of Ecology guidelines.

Under Phase 3, a proposed liquid chlorine (sodium hypochlorite) disinfection facility will be constructed adjacent to the proposed BPS constructed under Phase 1. The proposed liquid chlorine disinfection system will replace the existing gaseous chlorine system, and will utilize 2-percent to 12.5-percent sodium hypochlorite delivered and stored in tote tanks. Also, under Phase 3, a proposed emergency diesel generator will be installed to provide backup power for operation of the Port's water system facilities under power outage or emergency conditions.

Finally, petroleum products used in construction and maintenance vehicles (diesel, gasoline, etc.) will be present at the site during construction and operation.

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

Conversion of the gaseous chlorine to liquid chlorine system will require coordination with the fire marshall, but is not expected to require new or additional special emergency services.

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

The proposed improvements will include provisions for secondary containment of the hazardous materials and fuel used in the operation of the emergency generator and disinfection facilities. During construction, the contractor will be required to use non-hazardous hydraulic fluids within construction equipment and develop a spill control and containment plan to reduce and control accidental discharges of materials that could pose an environmental health hazard.

b. Noise

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

The project site is located in a heavy industrial use area. Existing noise from industrial activities and Port operations 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.

In the short term, on-site construction-related engine and machine noise is anticipated in association with demolition and construction activities. Some road noise from trucks and machinery is also expected. Demolition and construction activities are anticipated to take place from approximately 7:00 AM-8:00 PM, Monday-Friday. Because the project is an industrial use area located on an IH-zoned property that is surrounded by other IH-zoned properties and existing uses, no off-site noise impacts are anticipated. Operational noise associated with the project improvements will be consistent with existing operational noise from pumping facilities on the site and industrial activities surrounding the site.

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

All equipment will have mufflers consistent with manufacturer's specifications and applicable federal, state, and local requirements. Construction and operational activities shall comply with applicable noise ordinances.

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.

The site is currently used for operation of the Port's water distribution system. The site currently contains a ground-level water storage tank, an elevated water storage tank, and a building that houses a well and BPS. The proposed project will not affect land uses of nearby or adjacent properties.

- 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?

No.

- 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.

The site is occupied by a 28-foot diameter, 22-foot tall ground-level water storage tank, a 30-foot diameter, 125-foot-tall elevated water storage tank, and a 340 square foot wood-framed building that houses a well pump, booster pump, and chlorination equipment.

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

The existing 125-foot-tall elevated water storage tank will be demolished as part of this project.

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

The site is zoned Heavy Industrial (IH) by the City of Vancouver.

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

Industrial.

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

Not designated as a shoreline.

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

According to County data, the project area is located within a designated Geologic Hazard Area due to the potential for soil liquefaction during an earthquake. Project affects to geological resources are addressed in section B.1 of this checklist. In addition, the City of Vancouver is designated as a Critical Aquifer Recharge Area per VMC 14.26

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

There will be no residents in the completed project. Further there will be no permanent workers on the site. The site will be routinely visited by Port operations staff for operational checks and maintenance of the facilities on the site.

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

None.

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

None.

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

The project is being designed to comply with applicable land use, site development, and building codes. The use is consistent with the existing property land use and the zoning and land use designated by the City for this parcel.

- m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

None.

9. Housing

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

None.

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

None.

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

None.

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 proposed ground-level water storage tank will be approximately 25-feet tall and will be constructed of bolted steel panels that generally match the aesthetics of the existing ground-level water storage tank.

The proposed booster pump station will be approximately 12-feet tall and will be constructed of concrete masonry blocks with split face exteriors to closely match the exteriors of existing buildings surrounding the project site.

Finally, an 80-foot-tall galvanized steel antenna pole will also be installed to allow for the mounting of communication and security equipment that will be relocated from the existing 125-foot-tall elevated water tank that is to be demolished as part of this project.

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

The existing elevated tank is a visible from many areas in and around the Port's property, and its removal will alter views. However, due to its proximity to the large concrete grain silos and other industrial structures operated by the Port and its tenants in the vicinity, removal of the elevated tank is not expected to have a significant impact on views. Construction of the proposed water storage tank and booster pump station building will alter the ground-level view of the project site from office windows facing the site.

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

The proposed BPS will be constructed of concrete masonry blocks with split face exteriors to closely match the exteriors of existing buildings surrounding the project site.

11. Light and glare

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

The are no changes proposed to the existing lighting of the site and no additional glare will result from the proposed improvements.

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

No.

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

None.

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

None.

12. Recreation

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

According to the County GIS database, designated recreation facilities in the vicinity of the project site include:

- Vancouver Lake Wildlife Area (337 acres), approximately 2 miles northwest of the project site.*
- Vancouver Lake Regional Park (234 acres), approximately 3 miles northwest of the project site.*
- Frenchman's Bar Park (178 acres), approximately 5 miles northwest of the project site.*
- Shillapoo Wildlife Area (2,371 acres), approximately 5 miles northwest of the project site.*

State Route 501, north of the project site, is used by cyclists.

The Columbia River is accessible to recreational boaters, who use the river south of the site. However, the Columbia River shoreline in this area is inaccessible to the public because of security and the safety issues associated with active industrial areas. As a result, the shoreline near the project area provides no designated or informal recreational opportunities.

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

No.

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

None.

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? If so, specifically describe.

Archaeological Investigations Northwest (AINW) reviewed listings of previously recorded historic resources in the vicinity of the project area in the Washington Information System for Architectural and Archaeological Records Data (WISAARD), the National Register of Historic Places (NRHP) online listings, and the Clark County Historic Sites inventory online. WISAARD lists 15 buildings and structures in the vicinity of the high water tank that were recorded in 2009 for the West Vancouver Freight Access (WVFA) Schedules 2 through 4 project for the Port of Vancouver. The NRHP listings and the Clark County Historic Sites inventory of historic buildings and structures do not list designated historic resources in close proximity to the high water tank (National Register of Historic Places 2016; Clark County 2016). No cemeteries are recorded in the project vicinity (Clark County Genealogical Society 2016) and the closest landmark is the Fort Vancouver National Historic Site, approximately 1.6 kilometer (km) (1 mile [mi]) to the east. The project is within the Vancouver Lakes Archaeological District boundaries.

*The 1928 high water tank was previously recorded and evaluated on a Historic Property Inventory (HPI) form (Hetzel in ICF Jones & Stokes 2009). The high water tank was determined to be **not eligible** for listing in the NRHP by the Federal Highway Administration (FHWA) on October 13, 2011, as part of a compliance review for the WVFA project. Well House #1 (Pump House #1-POV Building #1685), at the base of the high water tank, was recorded on an HPI form and it was also determined by the FHWA to be **not eligible** for listing in the NRHP on October 13, 2011.*

*The Great Western Malting Company Plant and the Great Western Malting Rail Car Loading Building (POV Building #1795) are in close proximity to the high water tank and were documented on HPI forms. Both were determined by FHWA to be **eligible** for listing in the NRHP on October 13, 2011. Ten industrial buildings and warehouses in near proximity to the high water tank were documented on HPI forms for the WVFA project and were determined by the FHWA to be **not eligible** for listing in the NRHP on October 13, 2011. The United Harvest Grain Elevator (POV Building #1745) was recommended to be **not eligible** for listing in the NRHP for the Port of Vancouver Rail Access Project. A determination of eligibility has not been made for the Grain Elevator (which this project will not alter).*

- 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.

AINW conducted a background search and literature review to determine if prehistoric or historic archaeological features or evidence of Native American use is likely in the project area. In addition to information contained in AINW's files, the WISAARD database was reviewed for updated information on archaeological sites. Various overviews for archaeological potential had been previously conducted in the project vicinity, using historical maps, reports, books, and online sources to predict pre-contact and historic archaeological site potential.

The project area is within the Vancouver Lakes Archaeological District (45DT101) (Burd 1982). The bottomlands south of Vancouver Lake are dotted with dozens of prehistoric archaeological sites (Blukis Onat 1997; Spencer and Williams 2004). Many of these lie above the annual high water mark of 4.8 meters (m) (16 feet [ft]) above mean sea level (asl) (Ames 1994). The project area was surveyed for cultural resources as part of the WVFA project (ICF Jones & Stokes 2009). No archaeological sites are recorded within or near the project area. At present, the surface of the project area is graveled, and lies at an elevation

of 10 m (33 ft) asl.

A boring collected by GRI (2011) documents subsurface conditions within 15 m (50 ft) of the high water tank. Prior to filling, the native ground surface lay at an elevation of 5.5 m (18 ft) asl, just above the typical high water mark. Today the native surface is buried beneath a cap of dredge fill, gravel fill, and pavement, at a depth of 4.5 m (15 ft) below the surface. Much of the fill was placed no later than 1928, when the high water tank was built (ICF Jones & Stokes 2009). Historically, the nearby riverbank lay in the same place that it does today. Maps dating to the latter half of the nineteenth century (Covington 1859; GLO 1863; Habersham 1888; USC&GS 1888; USGS 1905) show that no structures were constructed in the 1800s within the project area on land used for farming.

GRI (2011) found that the native sediment beneath the fill consists of 4.5 m (15 ft) of alluvial silt and very fine sand over 7 m (23 ft) of fluvial sand. The silt and sand have accumulated during the past 14,000 years. The basal deposit, at a depth of 16 m (53 ft) below surface, is a layer of Pleistocene-age gravel (Phillips 1987; Trimble 1963), which was observed in other parts of the Port of Vancouver by Hulse and Reese (2015).

Potential archaeological resources will not be impacted if subsurface disturbance within the project area does not exceed the depth of fill. Excavation for construction of the proposed improvements is not expected to exceed the depth of the fill. Based on the research, historic-period archaeological resources are unlikely to be buried beneath the fill, although prehistoric archaeological materials may be within the Quaternary-age alluvial silt and fine sand, if stable dry-land soils are present. This native sediment lies between 4.5 m (15 ft) and 9 m (30 ft) below surface. Below this, the deeper fluvial sand and Pleistocene gravel have little potential to contain artifacts or archaeological sites because they represent times when the Columbia River covered the 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.

A review was conducted of records available online from the WISAARD and materials in the AINW library to determine whether cultural resources had been identified within or near the project APE. Historical maps (Covington 1859; GLO 1863; Habersham 1888; USCG&S 1888; USGS 1905) were reviewed to confirm that no buildings or structures were mapped in the area prior to filling, and that the historical shoreline has not changed significantly.

The high water tank is within an archaeological district that is centered around Vancouver Lake, yet no archaeological sites are recorded within or near the project area. The project area was previously surveyed for cultural resources as part of the WVFA project and no archaeological sites were documented during that survey (ICF Jones & Stokes 2009). Geotechnical data collected by GRI (2011) were examined to determine whether buried native soils are likely to be present within the project area. Subsurface inspection was deemed unnecessary due to its existing graveled surface and history of fill deposition.

The high water tank has been determined to be not eligible for listing in the NRHP. Fifteen previously recorded historic resources over 45 years in age recorded nearby in 2009 are listed in WISAARD in the vicinity of the high water tank. In addition to WISAARD, online listings for NRHP-listed resources, the Clark County Inventory, cemetery listings, and landmarks listings were reviewed to determine if recorded historic resources are in proximity to the high water tank. No other historic resources near the high water tank were listed in these inventories. The literature search included a review of historical maps, older aerial photographs, books, historical photographs and aeriels, and online archival information to determine past uses of the project parcels.

- 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 high water tank is not eligible for listing in the NRHP and its removal will not constitute an adverse effect under cultural resource compliance standards. The two NRHP-eligible resources nearby, the Great Western Malting Company Plant and the Rail Car Loading Building, will not be affected by the project.

Buried cultural resources will not be impacted if subsurface disturbance within the project area does not exceed the depth of fill, which is anticipated to extend 4.5 m (15 ft) below the ground surface. Excavation for construction of the proposed improvements is not expected to exceed the depth of the fill. If archaeological or historical resources are inadvertently encountered during project activities, all ground-disturbing activity near the find should be halted and the Department of Archaeology and Historic Preservation (DAHP) should be promptly notified to ensure compliance with relevant state and federal laws and regulations.

If evidence of a burial or human remains are encountered, all ground-disturbing activity in the vicinity should be halted immediately, and the Clark County Medical Examiner's Office and City of Vancouver law enforcement must be contacted. If the medical examiner determines the remains are non-forensic, then the DAHP will be contacted and will take jurisdiction over the remains. This project will be conducted in accordance with RCW 27.53.060 (Archaeological Sites and Resources) and RCW 27.44.020 (Indian Graves and Records) and all other applicable regulations.

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 site is located within a secured area of the Port and is generally only accessible through the Main Security Gate located at the 26th Ave overpass in the City of Vancouver. The site is accessible from NW Harborside Drive and W Mill Plain Boulevard.

- 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?

Public transit does not serve the site directly. C-TRAN Route #25 is the transit route closest to the Thompson Avenue entrance. The route travels on West Mill Plain Boulevard and Fruit Valley Road, approximately 0.7 miles north of the project site.

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

No spaces are proposed or would be eliminated with 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).

No off-site improvements of roads or streets are proposed or anticipated to be necessary for the project.

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

The proposed project will not use water, rail, or air transportation, but is located near an active railroad spur line.

- 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?

Once completed, the project will generate no additional trips. Temporary construction related trips will occur.

- 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:

The contractor will be required to use BMPs during construction 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.

No.

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

None.

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.

The project consists of modifications to existing water, sewer, storm, and electrical utilities within the project area. These improvements generally consist of extending and/or rerouting existing storm, sewer, and electrical utilities to service the proposed water system facilities, and modifying the existing water utilities to facilitate construction and operation of the proposed water system facilities. No new utilities are proposed for this project.

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: 

Name of signee: GREG WESTRAND

Position and Agency/Organization: PROJECT MANAGER, PORT OF VANCOUVER

Date Submitted: 8/30/16

Water System Improvements

PROJECT VICINITY MAP



PROJECT LOCATION MAP

