

## SEPA ENVIRONMENTAL CHECKLIST

### A. BACKGROUND

1. Name of proposed project, if applicable:

*3009 Taylor Way MTCA Interim Action-Ecology Agreed Order DE 6129*

2. Name of applicant:

*Port of Tacoma*

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

*Applicant: Scott Hooton  
1 Sitcum Way  
Tacoma, WA 98421  
(253) 383-9428*

4. Date checklist prepared:

*December 27, 2012,*

5. Agency requesting checklist:

*Department of Ecology*

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

*The Project will begin as soon as possible after permits are received, anticipated to begin in the spring of 2013.*

*For work within waterbodies (i.e., the Hylebos Waterway), the U.S. Fish and Wildlife Service (USFWS), NOAA Fisheries, and Washington Department of Fish and Wildlife (WDFW) set closure periods during which in-water work cannot be conducted. Based on similar Port projects in the vicinity, the expected in-water work window is July 16 through February 14.*

*The Port requests that construction occurring below MHHW but completely in the dry (when tides are lower in elevation than the work area – i.e., work that is not “in-water”) be authorized to take place in May-July, prior to the ordinary in-water work window. This schedule modification will allow the Port to take advantage of low daylight spring and summer tides to complete shoreline work out of the water.*

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

*It is anticipated that the site will be developed by a new tenant of the Port after remediation activities have been completed. No potential tenant has approached the Port as of submission of this SEPA checklist.*

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

- *Grette Associates<sup>LLC</sup> 2012. Port of Tacoma 3009 Taylor Way MTCA Interim Action-Ecology Agreed Order DE 6129 Biological Evaluation.*
- *Grette Associates<sup>LLC</sup> 2012. 3009 Taylor Way MTCA Interim Action-Ecology Agreed Order DE 6129 JARPA form.*
- *Dalton, Olmsted & Fuglevand, Inc. 2011. Ecology Review Draft. Remedial Investigation Report Post Removal of Woodwaste/Slag Containment Cell. Tacoma Washington. May 3, 2011.*

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.

*None.*

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

*WDFW Hydraulic Project Approval – for ramp work  
City of Tacoma Shoreline Exemption – for ramp work  
US Army Corps of Engineers:*

- *NW 38 for shoreline remediation,*
- *NW 7 for new outfall, and*
- *NW 3 for ramp maintenance*

*Because the majority of the Project is part of a MTCA-Ecology Cleanup effort, most of the Project is exempt from state and local jurisdiction. However, maintenance of the ramp, which is not part of the Cleanup, is anticipated to require local and state permits/exemptions.*

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 proposed Project is located along the west shoreline of Hylebos Waterway at 3009 Taylor Way, parcel number 0321351053 (Sheet 1). The Port is proposing to complete the remediation of arsenic impacted soil from the 15-acre Arkema Mound property. This remedial activity is an interim action to be completed in accordance with Washington State Department of Ecology (Ecology) Agreed Order Number DE 6129. The contamination on this site is the result of former utilization as a log sort yard that used ASARCO slag as ballast material. Initial remediation of the site, which occurred in the early 1990s and in 2009, removed approximately 90,000 tons of arsenic-impacted soil from the site for disposal in a RCRA Subtitle D landfill. However, subsequent site investigations conducted in summer

2011 identified small areas of arsenic contaminated soil to be removed in order to fully remediate the site in a manner consistent with future industrial land use.

### **Project Goals**

1. Remove contaminated soil exceeding Ecology criteria, and place a protective gravel cover to prevent exposure to remnant<sup>1</sup> contamination.
2. Stabilize shoreline so that remnant contamination is not subject to erosion and deposition into the Hylebos Waterway (Photograph 1).
3. Place underground utilities and conduit to avoid disturbance of the protective gravel cover when the site is redeveloped for future industrial use.
4. Compliance with Ecology requirements and allowance for the future development of the property.
5. Protect an existing ramp so that so that it can be put into productive use (Photograph 2).

### **Description of the Project**

The Project has four remediation elements, including: removal of soil with elevated arsenic concentrations, stabilization of the Hylebos shoreline, installation of stormwater controls and buried utilities, and placement of a protective gravel cover above remnant arsenic contamination. In addition, the Port proposes to perform necessary maintenance on and around an existing shoreline concrete ramp that was part of a previous cleanup action. Each element is described below.

#### **Remediation: Removal of Isolated Areas of Soil with Elevated Arsenic Concentrations**

Contaminated soil removal will occur over four areas on site: North Area, Shoreline Area, P10 Area and SB7 Area (Sheet 4).

##### North Area

The defined removal area with elevated arsenic concentrations extends approximately 200 ft along the Hylebos Waterway and 200 ft along the East West ditch in the northwest corner of the site (Sheets 4 and 5). Total cubic yards of impacted material to be removed: 3,300 CY. No excavated material will be used for backfill.

2,700 CY of clean fill, 80 CY of Fish Mix, 220 CY of Shoreline Protection material, 80 CY of filter rock, and 470 CY of filter fabric will be placed in this area to return it to usable grade.

##### Shoreline Area

The defined removal area for shoreline stabilization extends approximately 800 ft along the Hylebos Waterway from the east end of the North Area to the east end of the property (Photograph 2, Sheets 4-6). Approximately 2,500 CY will be excavated and used for backfill in stabilization measures.

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<sup>1</sup> Remnant contamination will be addressed in the Cleanup Action Plan required under Agreed Order DE 6129.

In addition, 360 CY of fish mix, 970 CY of Shoreline Protection Material, 330 CY of filter rock and 2,150 sq yds of filter fabric will be required to create the final grade.

#### P10 Area

The defined removal area is approximately 1,750 sq ft (35 ft x 50 ft) in the central portion of the site (Sheets 4, 9, and 10). Total cubic yards of impacted material to be removed: 300 CY.

300 CY of clean fill will return the P10 area to its original grade and configuration.

#### SB7 Area

The defined removal will occur within an irregular shoreline area near the bank of Kaiser Ditch (Sheets 4, 9, and 10); the area extends over a width of approximately 50 ft and down the slope approximately 15 ft. Total cubic yards of impacted material to be removed: 100 CY.

100 CY of clean fill will return the SB7 area to its original grade and configuration.

### **Remediation: Hylebos Shoreline Stabilization**

#### Shoreline Area (Photograph 1)

The Hylebos shoreline slope along the entire site (approx. 1000 lineal ft) above + 10 ft MLLW will be stabilized so that remnant contamination is not subject to erosion and deposition into the Hylebos Waterway (Sheets 4-6). The slope from +10 ft to +14 ft MLLW will be flattened to approximately 4H:1V, and to 2H:1V above elevation +14 ft MLLW to a top of slope at +18 ft to +21 ft MLLW (Sheet 6). The shoreline stabilization will be consistent with the methods approved by Ecology and EPA for the Hylebos Waterway Sediment Remediation, which involves placing filter fabric on the exposed shoreline subgrade (at and above +10 ft MLLW), placing filter rock over the fabric, placing a layer of 1 Shoreline Protection Material (quarry spalls and riprap) on the filter rock, and Fish Mix over the shoreline protection material from +10 ft up to elevation +14 ft MLLW. (Please see section above for amounts of fill placed in the Shoreline Area.)

### **Remediation: Installation of Buried Utilities and Stormwater Conveyance System**

The interim action includes the installation of a stormwater conveyance system and utility conduits to avoid exposure to remnant contamination when the site is redeveloped in the future. Installation of stormwater management system and buried conduits/pipes (electrical, water, sanitary sewer) will occur prior to placement of the protective gravel cover. Stormwater management will include site grading, catch basins and piping (not shown in Sheet set). Trenching and installation of underground piping between catch basins will involve excavation of existing upland soils. The stormwater treatment design will use natural vegetation systems to the degree reasonably possible.

#### Biofiltration Swales

In order to treat stormwater prior to outflow into the East West ditch, two biofiltration swales (Sheets 11 and 12) separate from and parallel to the ditch will be constructed. Neither swale will expand or add conveyance capacity to the East West ditch. The swales are designed to discharge into the East

West conveyance ditch from the Arkema site; larger storm events will bypass the swales and discharge directly into the conveyance ditch.

The existing East West Ditch will be excavated below final grade (Sheet 12) in order to place soil appropriate for the biofiltration swales and conveyance ditch. Up to 2,000 CY of soil will be excavated and backfilled, with an additional 2,000 CY of clean fill to create the final grade. The capacity and footprint of the ditch will remain unchanged after remediation. Additional stormwater treatment upgrades will include perimeter vegetated filter strips, catch basin sock inserts, and rip rap pads prior to discharging into the East West conveyance ditch.

### Stormwater Conveyance Pipe, Berm, and Outfall Structure

The interim action in the East West ditch involves placement of an underground, 36-inch diameter pipeline that will connect the East West Ditch to a Hylebos shoreline outfall structure (Sheets 13-15). The invert elevation of the pipe will be located at +8 ft MLLW. A berm will be created after placement of the stormwater conveyance pipeline; the purpose of the berm is to provide a freshwater/saltwater barrier for the stormwater facilities and to provide a replacement crossing location from one site to another site. (Sheet 11). A roadway will be constructed at the top of the berm connecting the 3009 Taylor Way site (Arkema Mound site) to the 2901 Taylor Way site (Arkema Manufacturing site) (Sheets 11 and 13-15). The proposed road will replace an existing road (Sheet 4) that will be removed during construction of the proposed biofiltration swales. The berm will be 35 ft wide at the top, and approximately 80 ft wide at the base (Sheet 11), with a total berm footprint of 16,000 sq ft. Approximately 1700 CY of clean backfill, 50 CY of Fish mix, 370 CY of Shoreline Protection Material, 100 CY of filter rock, 1000 CY of gravel cap layer, 2,800 sq yd of geo grid and 610 sq yd of filter fabric will be used in construction of the conveyance system berm and outfall structure to maintain shoreline grade.

The stormwater outfall structure at the end of the pipe will be pile-supported and shaped to conform with the existing shoreline slope (Sheets 14 and 15). The stormwater outfall structure will require insertion of two 16-inch diameter or smaller structural pile (either steel pipe or ACZA-treated timber). These pile will be inserted as low as +4 ft MLLW or as high as + 9 ft MLLW, depending on the construction sequence. A duckbill check valve will be placed at the outlet of the stormwater pipe with an invert elevation of +8 ft MLLW. A scour apron of up to 230 CY of riprap will be placed between +6 ft and 0 ft MLLW on the Hylebos side to prevent erosion.

### **Remediation: Protective Gravel Cover**

The 27-inch thick (nominal) protective gravel cover will be constructed across the upland portion of the site and will consist of imported crushed gravel/rock fill, reinforced with two layers of Geogrid material, to prevent exposure to the underlying residual arsenic-impacted soil when the site is redeveloped in future. Protective gravel cover will be placed after the buried utilities are installed. The protective gravel cover will have a final upland elevation equal to adjacent parcels, providing a surface consistent with surrounding land uses. Approximately 58,500 CY of gravel in two layers, plus 143,700 sq yd of geogrid material will comprise the final cap.

### **Maintenance: Protection of Existing Ramp (Photograph 2)**

The existing shoreline concrete ramp was previously used as a log ramp from Hylebos Waterway (Photograph 2). The existing ramp is 140 ft long, and extends from +4 ft to +13 ft MLLW (Sheets 4 and

7). Prior remediation (for the Head of Hylebos Waterway Problem Area remediation as part of the Commencement Bay Nearshore/Tideflats EPA Superfund Site) removed arsenic-impacted soil from the ramp's perimeter; contaminated sediment was excavated 2 to 3 feet along the sides and 5 to 7 feet at the offshore edge. Transition zone grading material and spalls were backfilled in these areas. As part of the current Project, the Port proposes to replace this material with a more robust composite to decrease erosion and increase stability of the structure. The footprint of the ramp will not increase in size.

Ramp Area (Sheets 7 and 8)

Concurrent with the interim action, maintenance of the ramp will remove 800 CY of material to create a drainage area 2 ft wide with 2:1 side slopes (Sheets 7 and 8). To stabilize the ramp and its perimeter, approximately 300 CY of large riprap (below elevation +6 ft MLLW), 330 CY of Shoreline Protection Material (above elevation +6 ft MLLW) and 170 CY of filter rock will be placed over nonwoven geotextile fabric. Additionally, approximately 250 CY of fish mix will be placed in the voids of the riprap at the downslope end of the ramp and on the sides. The stabilization materials will extend 5 to 30 ft out past the existing perimeter of the concrete ramp, with an outboard toe near elevation -2 ft MLLW.

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 street address of the parcel is: 3009 Taylor Way, Tacoma WA, 98421.*

*Section, Township, Range: NW36, T21N, R03E*

*Parcel number: 0321351053*

*Legal Description: Section 35 Township 21 Range 03 Quarter 11 BEG AT INTER OF NLY R/W LI OF TAYLOR WAY & E LI OF W 800 FT OF NE OF SW OF SEC 36-21-03E TH N 47 DEG 57 MIN 51 SEC W 1030.60 FT TH N 02 DEG 56 MIN 47 SEC E 212.43 FT TH N 87 DEG 44 MIN 20 SEC W 257.72 FT TO NLY R/W LI OF TAYLOR WAY TH N 47 DEG 57 MIN 51 SEC W 2237.89 FT TH N 43 DE 04 MIN 59 SEC E 907.78 FT TH S46 DEG 55 MIN 01 SEC E 2888.32 FT TH S 02 DEG 37 MIN 17 SEC W 228.81 FT TH S 02 DEG 56 MIN 47 SEC TO POB OUT OF 1-041 SEG 2005-0842 11/29/04JK*

B. ENVIRONMENTAL ELEMENTS

1. Earth

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

*The upland parcel is flat industrial area fronting the Hylebos Waterway. After removal of contaminated soils and sediment, the Hylebos shoreline slope along the entire site (approx. 1000 lineal ft) above + 10 ft MLLW will be stabilized so that remnant contamination is not subject to erosion and deposition into the Hylebos Waterway (Photograph 1, Sheets 4-6).*

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

*There is an approximate 2:1 slope at the top of the bank of the Hylebos Shoreline.*

- 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 prime farmland.

*The upland soils are sandy silts with a limited amount of structural fill (light gravel) as a top layer. The high intertidal zone is characterized by rock and cobble (Photograph 1) which transitions to mud at lower elevations (Photograph 2).*

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

*Shoreline stabilization measures are required to prevent further erosion of the shoreline after remediation efforts remove contaminated soils and sediments. Other than as a result of remediation efforts, there is no history of unstable soils in the vicinity of the Project.*

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

*This Project has been designed in accordance with the aforementioned Agreed Order, and will result in removal of contamination from the site and creation of a clean, usable property with adequate stormwater treatment and drainage. For fill and grading quantities, please see text in **A11** of this SEPA checklist and Appendix A.*

*The source of fill has not yet been determined. The structural rock will come from a licensed commercial source. The fish mix may come from a City of Tacoma surplus of clean stream bed-type rock that would make an excellent fish mix.*

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

*Use of Best Management Practices will ensure that no erosion occurs during or after remediation and construction.*

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

*No additional impervious surface is proposed.*

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

*See Section Appendix B for a full list of Project BMPs.*

## **2. Air**

- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

*Equipment required on-site for cleanup and maintenance work on the ramp will include shore-based excavators and loaders. A barge-based crane may be used for outfall construction. All machinery/equipment will have factory installed emission controls designed for compliance with federal standards. Regardless, use of this construction equipment will result in some exhaust emissions. Please see Appendix C Emissions Calculator Output for projected emissions resulting from this project.*

*Notably, such equipment is common in the industrial waterfront and would not result in an increase in air emissions relative to the baseline condition in the Port of Tacoma. There are no long-term emissions associated with the action since repairs will maintain function and stability of the existing ramp.*

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

*No.*

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

*The Port requires the use of ultra-low sulfur diesel in construction equipment and has an enforced anti-idling policy for both operational and construction equipment.*



### 3. Water

#### a. Surface:

- 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 Property is bordered by two stormwater features: Kaiser Ditch to the east and East West Ditch to the west. Both ditches drain into the Hylebos Waterway which is connected to Commencement Bay and greater Puget Sound.*

- 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.

*Shoreline remediation, ramp maintenance, and culvert construction will occur within 200 feet of the Hylebos Waterway. Please see the attached plan set (Sheets 1-15) and refer to other responses within this checklist.*

- 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.

*Fill will be placed below the MHHW mark in the Hylebos Waterway in the following locations:*

#### Ramp Area

*To stabilize the ramp and its perimeter, approximately 300 CY of large riprap (below elevation +6 ft MLLW), 400 CY of Shoreline Protection Material (above elevation +6 ft MLLW) and 150 CY of filter rock will be placed over nonwoven geotextile fabric. Additionally, approximately 250 CY of fish mix will be placed in the voids of the riprap at the downslope end of the ramp and on the sides. The stabilization materials will extend 5 to 30 ft out past the existing perimeter of the concrete ramp, with an outboard toe near elevation -2 ft MLLW.*

#### Shoreline Area

*The shoreline stabilization will be consistent with the methods approved by Ecology and EPA for the Hylebos Waterway Sediment Remediation, which involves placing filter fabric on the exposed shoreline subgrade (at and above +10 ft MLLW), placing 450 CY of filter rock over the fabric, placing a layer of 1,350 CY of Shoreline Protection Material (quarry spalls and riprap) on the filter rock, and 950 CY Fish Mix over the shoreline protection material from +10 ft up*

*to elevation +14 ft MLLW. The total amount of material (filter rock, Shoreline Protection Material, and Fish Mix) to be placed below MHHW is 550 CY.*

*The source of the materials to be placed has not yet been determined, but will come from a licensed commercial source, with the possible exception of the fish mix which may come from City of Tacoma surplus.*

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

*No, there will be no surface water withdrawals or diversions.*

- 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.

*The proposed project will not result in any discharges of waste materials to surface waters.*

b. Ground:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

*No groundwater will be withdrawn; no water will be discharged to groundwater.*

- 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.

*This proposal does not involve discharge of waste materials into the ground.*

## 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.

*In order to treat stormwater prior to outflow from the upland into the East West ditch, two biofiltration swales (Sheets 11 and 12) separate from and parallel to the ditch will be constructed. Larger storm events will bypass the swales and discharge directly into the conveyance ditch. Additional stormwater treatment upgrades will include perimeter vegetated filter strips, catch basin sock inserts, and rip rap pads prior to discharging into the East West conveyance ditch. The East West ditch outlets into the Hylebos Waterway.*

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

*No waste materials will enter ground or surface waters. See 3.a.6.*

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

*See Section Appendix A for a full list of Project BMPs.*

**4. Plants**

- a. Check or circle 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

wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

water plants: water lily, eelgrass, milfoil, other

other types of vegetation

*The project site currently supports a minimal amount of saltmarsh and wetland vegetation parallel to the Hylebos Waterway shoreline to the north, along the extreme eastern portion of the East-West ditch to the west, and along the Kaiser ditch to the east. The upland vegetation is characterized by grasses and blackberry.*

*Vegetation along the Hylebos shoreline includes macroalgae below OHWM (Fucus, Ulva and Urospora spp.) and scotchbroom, blackberry, and bentgrass above MHHW.*

*Portions of the Kaiser ditch below the MHHW are vegetated with a salt marsh*

community consisting primarily of pickleweed, seaside arrow grass and salt grass. Above MHHW the vegetation consists of scotch broom, blackberry, bentgrass, and madrone. The East-West ditch is dominated by narrow-leaf cattail, common reed, duckweed and blackberry, but also includes a small depressional area dominated by bentgrass and Nootka rose.

Habitat conditions on the property are limited as a result of previous site use, limited habitat, and ongoing site remediation actions.

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

Upland vegetation in P10, SB7, and the North Area will be removed during remediation actions. Vegetation along the East West ditch will be removed during creation of the bioswales and other proposed stormwater improvement work. All areas of displaced vegetation will be re-seeded or allowed to regenerate from adjacent undisturbed plants.

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

There are no Threatened or Endangered plant species in the area.

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

None proposed.

## 5. Animals

a. Circle any birds and 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, other:  
mammals: deer, bear, elk, beaver, other:  
fish: bass, salmon, trout, herring, shellfish, other:

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

A Biological Evaluation has been submitted to the Corps (Grette Associates<sup>LLC</sup> 2012) which addresses: Puget Sound chinook salmon and critical habitat, Coastal Puget Sound bull trout and critical habitat, Puget Sound steelhead trout, bocaccio rockfish, yelloweye rockfish, canary rockfish, leatherback sea turtles, humpback whales, Southern Resident killer whales, stellar sea lion, and marbled murrelet. The salmonid species and associated critical habitats are **not likely to be adversely affected** by this project. The Project was also determined to have **no effect** on all rockfish species and leatherback sea turtles, humpback whale, Stellar sea lion and Southern Resident killer whale.

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

*Hylebos Creek is used by coho, fall chum, pink, and fall Chinook salmon species and steelhead trout for migration. Washington is within the Pacific Flyway for migratory birds, but industrialized areas of the lower Hylebos River do not provide quality habitat for migratory bird species.*

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

*Potential temporary impacts in the Hylebos include physical disturbance, turbidity, and noise from shore-based machinery. All in-water work (i.e., work below the waterline) will occur within US Army Corps and WDFW approved work windows in order to limit disturbance to ESA-listed species. Any work below MHHW performed outside of the work window will be completed entirely above the water line and in the dry to prevent disturbance to the water column or aquatic species.*

*For this project, terrestrial sound could also affect sensitive species. Within the industrialized area of the Hylebos Waterway, sound associated with maintenance construction is not expected to exceed ambient levels. Sound levels generated from the project would be comparable to regular operations along the industrial waterfront.*

## 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.

*The project involves the remediation of a property previously used for log sorting. No development of the site will occur except for placement of utilities (stormwater conveyance and treatment and conduit for other buried utilities (electrical, power etc.)) that will be installed beneath the cap so as to prevent future ground disturbance on site. Upon completion of this Project, the site will have no additional energy requirements.*

- 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:

*This proposal does not include any energy conservation features.*

## 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.

*Upland:*

Incidental exposure to contaminated soils during remediation work is possible. All workers will have approved hazardous material training and personal protective equipment. Work will be conducted following a Site Safety Plan prepared by a trained professional with experience in Ecology-approved remediation projects.

*In-Water:*

*This reach of the Hylebos Waterway is on the Washington Department of Ecology 303(d) list for PCBs, DDT, HPAHs, and chlorinated pesticides according to a 2011 Water Quality Assessment web query. The project area is adjacent to a Superfund sediment cleanup site. Arkema Chemical and Schnitzer Steel performed a cleanup of this portion of the Waterway under a 2003 Unilateral Administrative Order converted to a Consent Decree in 2004.*

*Sediment within the project area was previously remediated as part of the Superfund cleanup.*

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

*No special emergency services would be required. Spill containment kits are maintained on site as part of standard operating procedures.*

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

*See Section Appendix A for a full list of Project BMPs.*

**b. Noise**

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

*The Hylebos Waterway is heavily industrialized and experiences a high level of ambient noise associated with traffic (vehicle, vessel, and rail) and commercial and industrial operations. This noise 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 associated with the Project is not expected to be in excess of the industrial background condition. There will be no additional noise associated with the completed project.*

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

*None proposed.*

## 8. Land and shoreline use

a. What is the current use of the site and adjacent properties?

*The Arkema Mound property is an industrial site previously used as a log yard. The site to the south, tax parcel number 0321362046, is utilized for lumber and wood manufacturing. Directly to the west is Taylor Way. West of Taylor Way are three properties, tax parcel numbers 0321363033, 0321363034 and 5000350090. All three of these properties are utilized for industrial port activities and general warehousing which currently includes storage of vehicles. The site to the north, tax parcel number 0321321006, known as the Arkema Manufacturing site (2901 Taylor Way), is currently undergoing remediation in accordance with Ecology Order Number DE 5668.*

b. Has the site been used for agriculture? If so, describe.

*No.*

c. Describe any structures on the site.

*The following structures have been identified on the site:*

- *Concrete Ramp, associated with the historic use, perpendicular to the Hylebos shoreline (Photograph 2).*
- *A four-foot wide subsurface anchor trench which ran along the perimeter of the containment cell. The cell was deconstructed in 2009 and the anchor trench remains in place though it is no longer actively serving its intended purpose.*
- *A buried pipeline transporting surface water from the former Kaiser property located across Taylor Way. The buried pipeline runs along the northern edge of the Kaiser Ditch and empties into the Hylebos Waterway through a duckbill check valve discharge.*

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

*No structures will be demolished.*

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

*PMI Port Maritime and Industrial  
S10 Shoreline Port Industrial*

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

*S10 Shoreline Port Industrial*

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

*S10 Shoreline Port Industrial*

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

*The Hylebos Waterway is listed on the State of Washington 303(d) list for impaired waterbodies. The Hylebos Waterway and its shoreline have a 50' buffer regulated under the City of Tacoma's Critical Area Protection Ordinance.*

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

*Not applicable.*

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

*Not applicable.*

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

*Not applicable.*



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

*Not applicable.*

## 9. **Housing**

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

*Not applicable.*

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

*Not applicable.*

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

*Not applicable.*

## 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?

*No structures are proposed at this time.*

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

*Not applicable.*

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

*None proposed.*

## 11. **Light and glare**

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

*All actions associated with the Project would be conducted during the day and would not result in glare or require any artificial lighting.*

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

*There will be no light or glare associated with the finished project.*

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 proposed.*

TO BE COMPLETED BY APPLICANT

EVALUATION FOR  
AGENCY USE ONLY

## 12. Recreation

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

*Recreational boaters use the Hylebos Waterway.*

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

*No – recreational boaters will have sufficient room to avoid active construction without being displaced.*

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

*None proposed.*

## 13. Historic and cultural preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

*There are no places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site.*

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

*There are no landmarks. This area has a history of considerable modification, including tideflat fill during the early development of the tideflats. A Cultural Resource Report was conducted for the entire Blair-Hylebos Peninsula as part of the Blair Hylebos Peninsula Terminal Redevelopment Project.*

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

*None proposed.*

#### 14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

*The site is served by Taylor Way, which is easily accessible from Highway 509 and Interstate 5. The project will not require any modifications to existing site access, and will not affect traffic or transit along Taylor Way.*

- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

*There is no public transit stop on Taylor Way.*

- c. How many parking spaces would the completed project have? How many would the project eliminate?

*Not applicable.*

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

*No.*

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

*Water and rail transportation are both present in the immediate vicinity and will not be affected by, or affect, the project.*

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

*None.*

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

*None proposed.*

**15. Public services**

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

*No.*

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

*None proposed.*

**16. Utilities**

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

*No utilities are currently available on site, but all utilities are available off Taylor Way.*

- 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.

*Stormwater conveyance and treatment, and conduit to support future power installation, communications, water and sewer are proposed, as outlined in the JARPA form.*

## Photographs



**Photograph 1. Typical bank section of the Shoreline Area (facing upland from shoreline).**



**Photograph 2. The existing concrete ramp, facing north. Tidal elevation is approximately +3 ft MLLW.**

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:

Date Submitted: .....

## Appendix A

### ESTIMATED 60% PLAN SET QUANTITIES

Estimated 60% Plan Set Quantities*													
	Export Material		Import Material								Other Import Material		
	Excavation for Offsite Disposal (cubic yards)	Excavation Used for Backfill (cubic yards)	General Backfill (cubic yards)	Fish Mix (cubic yards)	Shoreline Protection Material (cubic yards)	Filter Rock (cubic yards)	Gravel Cap Layer 1 (cubic yards)	Gravel Cap Layer 2 (cubic yards)	Riprap and Spall Scour Apron Pad	Large Riprap with Fish Mix (cubic yards)	Geo Grid (square yards)	Filter Fabric (square yards)	Non-woven Geotextile (square yards)
<b>North Area</b>	3,300	0	2,700	80	220	80	0	0	0	0	0	470	0
<b>Shoreline Area</b>	0	2,500	0	360	970	330	0	0	0	0	0	2,150	0
<b>Ramp Area</b>	0	800	0	0	330	170	0	0	0	250	0	0	800
<b>P10 Area</b>	300	0	300	0	0	0	0	0	0	0	0	0	0
<b>SB7 Area</b>	100	0	100	0	0	0	0	0	0	0	0	0	0
<b>Upland Area</b>	0	9,600	10,600	0	0	0	35,000	23,500	0	0	143,70	0	0
<b>Berm Area</b>	0	n/a	1,700	50	370	100	600	400	230	0	2,800	610	0
<b>BioSwale</b>	0	2,000	2,000	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	3,700	14,900	17,400	490	1,890	680	35,600	23,900	230	250	146,50	3,230	800

\*Quantities are based off of 60% plans dated 10/22/2012 and are subject to change. All quantities are adjusted up by 15%.

## Appendix B

### MINIMIZATION MEASURES AND BEST MANAGEMENT PRACTICES

Site excavation and grading will be accomplished using standard construction stormwater BMPs. As noted in the SEPA checklist, a site safety plan will be developed and implemented for worker safety. Specific BMPs for in-water work are discussed below.

#### General Measures (in-water construction)

- Care will be taken to prevent any petroleum products, chemicals, or other toxic or deleterious materials from entering the water. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., will be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into State waters. Proper security shall also be maintained to prevent vandalism.
- The contractor will have a spill containment kit, including oil-absorbent materials, on site to be used in the event of a spill or if any petroleum product is observed in the water.
- If a spill were to occur, work would be stopped immediately, steps would be taken to contain the material, and appropriate agency notifications would be made. The contractor is responsible for the preparation of spill response and hazardous material control plans to be used for the duration of Project construction.
- Spills and/or conditions resulting in distressed or dying fish shall be reported immediately to Ecology's Southwest Regional Spill Response Office at (360) 407-6300 (a 24-hour phone number).
- If fish are observed in distress or a fish kill occurs, work would be stopped immediately. WDFW, Ecology and other necessary agencies would be contacted and work would not resume until further approval is given.

#### Project Specific Measures (in-water construction)

- Most of the work below MHHW will be conducted in the dry when tides are lower in elevation than the work area, as detailed below and in Section 2.5. It is anticipated that work completed when tides are lower than the work area would not be subject to the July 16 through February 14 in-water work window.
- All work occurring when work areas are tidally inundated (in-water) will occur during the typical Corps work window to protect migrating salmonids: July 16 through February 28.
- All shore-based equipment will be kept out of the Hylebos to the extent practical.
- Work associated with the Hylebos Waterway shoreline stabilization (+10 ft MLLW and above) will be performed in the dry when tides are lower in elevation than the work area.
- Land-based equipment (i.e. excavators, loaders, etc.) will be used for excavation and material placement during bank stabilization.
- A floating boom with a two-foot skirt will be placed outboard of the active shoreline stabilization work areas that are located below MHHW to capture any debris that might be released during the work.
- Properly sized equipment will be used for all operations.



- Soil disturbed below MHHW while working above the tidal waters (in the dry) will be back-bladed smooth before inundation by incoming tides to reduce surface area and limit the potential for generation of suspended sediment during tidal inundation.
- Erosion control practices: a silt fence will be installed along the edge of the property adjacent to the Kaiser Ditch, the East West Ditch, and Hylebos Waterway, between the stockpiled soil and the waterbodies. Disturbed soil, not to be reworked within two days, will be temporarily covered in accordance with the Stormwater Management Manual for Western Washington. As part of final erosion control, the site will be covered with crushed rock in accordance with BMP C107, or by seeding in accordance with BMP C120 of the Stormwater Management Manual for Western Washington.
- Addition of stabilization materials along the ramp (from -2 to +12 ft MLLW) will occur in the dry when tides are lower in elevation than the work area whenever possible; a portion of the stabilization materials will be placed in-water during the approved in-water work window.
- Work in the East West ditch including soil excavation, berm construction, and conveyance pipe installation will be performed in the dry when tides are lower in elevation than the work area.
- Construction of the outfall structure will occur in the dry when tides are lower in elevation than the work area. Placement of the scour apron from 0 ft to +6 ft will occur in the dry when tides are lower in elevation than the work area whenever possible; a portion of the scour apron will be placed in-water during the approved in-water work window.
- Pile driving associated with the outfall will occur in the dry when tides are lower in elevation than the work area.
- Pile will be driven using a vibratory hammer.

# Appendix C

## EMISSIONS WORKSHEET OUTPUT

Calculator derived from: "EPA 2001. Procedures Document for National Emissions Inventory, Criteria Air Pollutants, 1985-1999. EPA-454/R-01-006. Office of Air Quality Planning and ... EPA-454/R-01-006. Office of Air Quality Planning and Standards, United States" - Appendix D

<b>Assumptions for Combustible Emissions</b>					
<b>Type of Construction Equipment</b>	Num. of Units	HP Rated	Hrs/day	Days/yr	Total hp-hrs
Water Truck	1	306	8	32	78336
Diesel Road Compactors	1	100	8	0	0
Diesel Dump Truck	1	460	8	167	614560
Diesel Excavator	1	300	8	0	0
Diesel Hole Trenchers	1	175	8	0	0
Diesel Bore/Drill Rigs	1	300	8	0	0
Diesel Cement & Mortar Mixers	1	300	8	0	0
Diesel Cranes	1	175	8	0	0
Diesel Excavator (small)	1	148	8	36	42624
Diesel Tractors/Loaders/Backhoes	2	100	8	0	0
Diesel Bull Dozers	1	300	8	0	0
Diesel Front End Loaders	2	162	8	13	33696
Diesel Fork Lifts	2	100	8	0	0
Diesel Generator Set	1		8		0

  

<b>Emission Calculations</b>							
<b>Type of Construction Equipment</b>	VOC tons/yr	CO tons/yr	NOx tons/yr	PM-10 tons/yr	PM-2.5 tons/yr	SO2 tons/yr	CO2 tons/yr
Water Truck	0.0380	0.1787	0.4739	0.0354	0.0345	0.0639	46.2709
Diesel Road Paver	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Diesel Dump Truck	0.2980	1.4019	3.7181	0.2777	0.2709	0.5012	363.0034
Diesel Excavator	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Diesel Hole Cleaners/Trenchers	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Diesel Bore/Drill Rigs	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Diesel Cement & Mortar Mixers	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Diesel Cranes	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Diesel Graders	0.0164	0.0639	0.2222	0.0155	0.0150	0.0348	25.1909
Diesel Tractors/Loaders/Backhoes	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Diesel Bull Dozers	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Diesel Front End Loaders	0.0141	0.0576	0.1857	0.0130	0.0126	0.0275	19.9107
Diesel Aerial Lifts	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Diesel Generator Set	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total Emissions</b>	<b>0.367</b>	<b>1.702</b>	<b>4.600</b>	<b>0.342</b>	<b>0.333</b>	<b>0.627</b>	<b>454.376</b>

Emission factors (EF) were generated from the NONROAD2005 model for the 2006 calendar year. The VOC EFs includes exhaust and evaporative emissions. The components included in the NONROAD2005 model are diurnal, hotsoak, running loss, tank permeation, hose permeation, displacement, and spillage. The construction distribution in the NONROAD2005 model is based on the population in U.S. for the 2006 calendar year.