



STATE OF WASHINGTON  
**DEPARTMENT OF ECOLOGY**

PO Box 47600, Olympia, WA 98504-7600 • 360-407-6000

October 23, 2024

Port of Vancouver USA  
Attn: Matt Harding  
3103 NW Lower River Road  
Vancouver, WA 98660

Re: Amendment to 401 Water Quality Certification Order No. **9064** for U.S. Army Corps of Engineers Reference No. **NWP-2010-50-1**, Terminal 5 Bulk Potash Handling Facility, Clark County, Washington

Dear Matt Harding:

Enclosed is an amendment to Water Quality Certification Order No. **9064**, issued on April 5, 2012, for the above project. We have also included a strikeout version of the Water Quality Certification that reflects the changes made. All other conditions of the Water Quality Certification Order No. **9064** remain in effect.

The purpose of this amendment is to extend the duration of the 401 Water Quality Certification to the end of the 2030 in-water work window.

If you have any questions, please contact Brook Swensen at 564-999-1749 or [Brook.Swensen@ecy.wa.gov](mailto:Brook.Swensen@ecy.wa.gov). The enclosed Amendment may be appealed by following the procedures described in the Amendment.

Sincerely,

---

Loree' Randall, Section Manager  
Aquatic Permitting and Protection Section  
Shorelands and Environmental Assistance Program

Enclosure (2)

Sixth Amendment to WQC Order No. 9064  
Aquatics No. 126440, Corps No. NWP-2010-50-1  
October 23, 2024  
Page 2 of 2

By certified mail: 9489 0090 0027 6391 8522 62

Sent via e-mail: [mharding@Portvanusa.com](mailto:mharding@Portvanusa.com)

E-cc: Kinsey M Friesen, U.S. Army Corps of Engineers  
Amaia Smith, WDFW  
Brook Swensen, Ecology  
Lydia Albright, Ecology  
Laura Inouye, Ecology  
James DeMay, Ecology  
Andrew Kolosseus, Ecology  
Erin Hanlon Brown, Ecology  
[ECYREFEDPERMITS@ecy.wa.gov](mailto:ECYREFEDPERMITS@ecy.wa.gov)

**In The Matter of Granting a Water Quality  
Certification (WQC) to Port of Vancouver  
pursuant to 33 U.S.C. 1341 (FWPCA § 401), RCW 90.48.120, RCW  
90.48.260 and Chapter 173-201A WAC**

Port of Vancouver USA  
Attn: Matt Harding  
3103 NW Lower River Road  
Vancouver, WA 98660

<b>WQC Order No.</b>	9064, Sixth Amendment
<b>Corps Reference No.</b>	NWP-2010-50-1
<b>Site Location</b>	Terminal 5 Bulk Potash Handling Facility project located within the Columbia River, Clark County, Washington.

On April 5, 2012, the Washington Department of Ecology (Ecology) issued a 401 Water Quality Certification to the Port of Vancouver USA for the above-referenced project pursuant to the provisions of 33 U.S.C. 1341 (FWPCA § 401). Ecology also issued 401 Water Quality Certification amendments on May 25, 2017; June 10, 2019; June 18, 2021; June 23, 2022; and May 23, 2024 for the above-referenced project.

Ecology received a request on September 30, 2024, to extend the duration of the 401 Water Quality Certification to the end of the 2030 in-water work window.

WQC Order No. 9064 dated April 5, 2012 (and amended on May 25, 2017; June 10, 2019; June 18, 2021; June 23, 2022; and May 23, 2024) is hereby amended as follows:

I. Condition number C.1 which reads:

Order No. 9064 will expire on June 30, 2029. Continuing the Order beyond this timeframe will require the Applicant to apply for a one-year extension a minimum of 60 days prior to the expiration of the Order.

Is replaced with:

Order No. 9064 will expire on February 28, 2030. Continuing the Order beyond this timeframe will require the Applicant to apply for a one-year extension a minimum of 60 days prior to the expiration of the Order.

No other conditions or requirements of the above referenced Order are affected by this amendment.

Ecology retains continuing jurisdiction to make modifications hereto through supplemental order, if it appears necessary to further protect the public interest.

Failure to comply with this amended Order may result in the issuance of civil penalties or other actions whether administrative or judicial, to enforce the terms of this amended Order.

## **Your right to appeal**

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal, you must do all of the following within 30 days of the date of receipt of this Order:

- File your notice of appeal and a copy of this Order with the PCHB (see filing options below). "Filing" means actual receipt by the PCHB during regular business hours as defined in WAC 371-08-305 and -335. "Notice of appeal" is defined in WAC 371-08-340.
- Serve a copy of your notice of appeal and this Order on the Department of Ecology mail, in person, or by email (see addresses below).

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

## **Filing an appeal**

### **Filing with the PCHB**

For the most current information regarding filing with the PCHB, visit: <https://eluh0.wa.gov/> or call: 360-664-9160.

### **Service on Ecology**

#### **Street Addresses:**

Department of Ecology  
Attn: Appeals Processing Desk  
300 Desmond Drive SE  
Lacey, WA 98503

#### **Mailing Addresses:**

Department of Ecology

Attn: Appeals Processing Desk  
PO Box 47608  
Olympia, WA 98504-7608

**E-Mail Address:**

[ecologyappeals@ecy.wa.gov](mailto:ecologyappeals@ecy.wa.gov)

## Contact Information

Please direct all questions about this Order to:

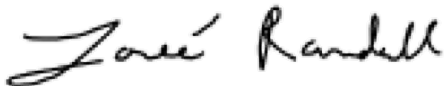
Brook Swensen  
Department of Ecology  
564-999-1749  
[Brook.swensen@ecy.wa.gov](mailto:Brook.swensen@ecy.wa.gov)

## More Information

- **Pollution Control Hearings Board Website**  
<https://elaho.wa.gov>
- **Chapter 43.21B RCW - Environmental and Land Use Hearings Office – Pollution Control Hearings Board**  
<http://app.leg.wa.gov/RCW/default.aspx?cite=43.21B>
- **Chapter 371-08 WAC – Practice and Procedure**  
<http://app.leg.wa.gov/WAC/default.aspx?cite=371-08>
- **Chapter 34.05 RCW – Administrative Procedure Act**  
<http://app.leg.wa.gov/RCW/default.aspx?cite=34.05>

## Signature

Dated this 23rd day of October 2024 at the Department of Ecology, Lacey, Washington.



---

Loree' Randall, Section Manager  
Aquatic Permitting and Protection Section  
Shorelands and Environmental Assistance Program

This document shows the activities and conditions that have been amended since the original Order was issued. Therefore, it is not the official certification and should be used for information purposes only.

First Amendment changes are reflected in RED.

Second Amendment changes are reflected in BLUE.

Third Amendment changes are reflected in GREEN.

Fourth Amendment changes are reflected in ORANGE.

Fifth Amendment changes are reflected in PURPLE.

Sixth Amendment changes are reflected in DARK BLUE

**IN THE MATTER OF GRANTING A ) ORDER #9064 – Sixth Amendment**  
**WATER QUALITY ) Corps Reference No. NWP-2010-50-1**  
**CERTIFICATION TO ) Terminal 5 Bulk Potash Handling Facility**  
The Port of Vancouver ) Columbia River, Clark County, Washington  
in accordance with 33 U.S.C. 1341 )  
(FWPCA § 401), RCW 90.48.120, RCW )  
90.48.260, and Chapter 173-201A WAC )

TO: Port of Vancouver USA  
ATTN: ~~Ms. Patty Boyden~~ Matt Harding  
3101 NW Lower River Road  
Vancouver, WA 98660

On April 14, 2011, Port of Vancouver USA submitted a Joint Aquatic Resource Permit Application (JARPA) to the Department of Ecology (Ecology) requesting a Section 401 Water Quality Certification. A public notice regarding the request was distributed by the U.S. Army Corps of Engineers (Corps) for the above-referenced project pursuant to the provisions Chapter 173-225 WAC on April 7, 2011.

~~BHP Billiton Canada, Inc. (BHP Billiton) or an affiliate within the BHP Billiton group, is proposing to lease part of the Port of Vancouver USA (Port) Terminal 5 for the purpose of establishing a bulk handling export facility to allow the shipping of potash to global markets. The facility will accept potash shipped by rail from Canada. Onsite infrastructure is proposed to enable the unloading of rail cars into an on-site storage facility and then convey the potash to vessels at a new berth to be constructed on the Columbia River, adjacent to the facility. The project includes developing rail infrastructure, material storage and handling, and a berth with shiploaders.~~

The Port of Vancouver USA (Port) is preparing to lease part of the Terminal 5 area to establish a bulk handling export facility that allows the shipping of either potash or soda ash to global markets. Infrastructure is proposed to accept either potash or soda ash by rail car for unloading and storage at an on-site storage facility and conveyance onto vessels at a new berth constructed on the Columbia River adjacent to the facility. The project includes developing rail infrastructure, material storage and handling, and a berth with ship-loaders.

The berth will contain a dual quadrant ship-loader system to receive and service various classes of cargo vessels. The berth will consist of ship-loaders, support beams and pivot supports, maintenance platforms, mooring dolphins, and an access trestle.

The rail infrastructure will consist of a dedicated single-loop rail track for BHP Billiton that is designed to accommodate a single potash unit train of up to 170 railcars. Due to the water-

soluble nature of potash, all materials handling will occur within protective structures designed to protect the potash from the weather.

The existing stormwater outfall pipe will be rehabilitated by removing the pipe and support piles waterward of the existing concrete anchor block at the riverbank, removing a portion of the concrete anchor block, relining the outfall, and, if necessary, constructing a new cast-in-place concrete headwall. An additional 260 square feet of shoreline riprap will be installed at the pipe outlet location. Other utilities may need to be relocated where conflicts occur with proposed construction activities.

Site preparation will include grading, excavation for the railcar dumper pit and stormwater ponds, installation of on-site utilities, and ground improvement with stone columns installation. Approximately 9,800 stone columns will be installed in bands within three areas: the storage building, the rail dumper pit area, and the shiploader area. The stone columns will be installed using a down-hole vibratory probe to create subsurface vertical aggregate columns to reinforce and densify potentially liquefiable soils.

As part of the project, to mitigate for impacts to aquatic resources, the Port will remove existing structures from the Columbia River and plant native vegetation on a portion of Buckmire slough in the Vancouver Lake lowlands.

The project is located at approximately River Mile (RM) 103 on the Columbia River at 5701 NW Lower River Road, Vancouver, Clark County, Washington 98660;WRIA 28, Salmon-Washougal Watershed.

<b>¼ Section</b>	<b>Section</b>	<b>Township</b>	<b>Range</b>
NE 1/4 and NW 1/4	19	2 North	1 East
SE 1/4 and SW 1/4	18	2 North	1 East
NE 1/4	28	2 North	1 East
SE 1/4	13	2 North	1 West
SE 1/4	31	3 North	1 East
SE 1/4 and SW 1/4	12	2 North	1 West

**AUTHORITIES:**

In exercising authority under 33 U.S.C. § 1341, 16 U.S.C. § 1456, RCW 90.48.120, and RCW 90.48.260, Ecology has examined this application pursuant to the following:

1. Conformance with applicable water-quality-based, technology-based, and toxic or pretreatment effluent limitations as provided under 33 U.S.C. §1311, 1312, 1313, 1316, and 1317 (FWPCA § 301, 302, 303, 306 and 307);
2. Conformance with the state water quality standards contained in Chapter 173-201A WAC and authorized by 33 U.S.C. §1313 and by Chapter 90.48 RCW, and with other applicable state laws; and

3. Conformance with the provision of using all known, available, and reasonable methods to prevent and control pollution of state waters as required by RCW 90.48.010.

### **WATER QUALITY CERTIFICATION CONDITIONS:**

Through issuance of this Order, Ecology certifies that it has reasonable assurance that the activity as proposed and conditioned will be conducted in a manner that will not violate applicable water quality standards and other appropriate requirements of state law. In view of the foregoing and in accordance with 33 U.S.C. §1341, RCW 90.48.120, RCW 90.48.260 Chapter 173-200 WAC and Chapter 173-201A WAC, water quality certification is granted to the Applicant subject to the conditions within this Order.

Certification of this proposal does not authorize the Applicant to exceed applicable state water quality standards (Chapter 173-201A WAC), ground water standards (Chapter 173-200 WAC) or sediment quality standards (Chapter 173-204 WAC). Furthermore, nothing in this certification shall absolve the Applicant from liability for contamination and any subsequent cleanup of surface waters, ground waters or sediments occurring as a result of project construction or operations.

#### **A. General Conditions:**

1. For purposes of this Order, the term "Applicant" shall mean the Port of Vancouver and its agents, assignees, and contractors.
2. For purposes of this Order, all submittals required by its conditions shall be sent to Ecology's Southwest Regional Office, Attn: Federal Permit Manager, SEA Program, PO Box 47775, Olympia, WA 98504-7775 or by e-mail to [loch461@ecy.wa.gov](mailto:loch461@ecy.wa.gov). Any submittals shall reference Order No. **9064** and Corps No. **NWP- 2010-50-1**.
3. Work authorized by this Order is limited to the work described in the JARPA received by Ecology on April 14, 2011. The Applicant will be out of compliance with this Order and must reapply with an updated application if the information contained in the JARPA is voided by subsequent changes to the project not authorized by this Order.
4. Within 30 days of receipt of an updated JARPA Ecology will determine whether the revised project requires a new water quality certification and public notice or if a modification to this Order is required.
5. This Order shall be rescinded if the U.S. Army Corps of Engineers does not issue a Section 404 permit.
6. This Order does not exempt, and is provisional upon, compliance with other statutes and codes administered by federal, state, and local agencies.



7. Copies of this Order shall be kept on the job site and readily available for reference by Ecology personnel, the construction superintendent, construction managers and lead workers, and state and local government inspectors.
8. The Applicant shall provide access to the project site and all mitigation sites upon request by Ecology personnel for site inspections, monitoring, necessary data collection, and/or to ensure that conditions of this Order are being met.
9. Nothing in this Order waives Ecology's authority to issue additional orders if Ecology determines that further actions are necessary to implement the water quality laws of the state. Further, Ecology retains continuing jurisdiction to make modifications hereto through supplemental order, if additional impacts due to project construction or operation are identified (e.g., violations of water quality standards, downstream erosion, etc.), or if additional conditions are necessary to further protect water quality.
10. The Applicant shall ensure that all appropriate project engineers and contractors at the project site have read and understand relevant conditions of this Order and all permits, approvals, and documents referenced in this Order. The Applicant shall provide Ecology a signed statement (see Attachment A for an example) from each project engineer and contractor that they have read and understand the conditions of this Order and the above-referenced permits, plans, documents and approvals. These statements shall be provided to Ecology before construction begins at the project.
11. This Order does not authorize direct, indirect, permanent, or temporary impacts to waters of the state or related aquatic resources, except as specifically provided for in conditions of this Order.
12. Failure of any person or entity to comply with this Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce its terms.

**B. Water Quality Conditions:**

1. The Columbia River at River Mile (RM) 103 is classified as "Salmonid Spawning, Rearing, and Migration" and the criteria of that class apply except as specifically modified or otherwise authorized by this Order.
2. This Order authorizes a temporary turbidity mixing zone for the following activity:

Activity	Point of Compliance	Duration
Stone Column Installation	300 ft down current	July 1 to October 31, 2012

3. Water Quality Sampling and Monitoring: The Applicant shall revise the *Water Quality Protection and Monitoring Plan, Port of Vancouver USA, Terminal 5 Bulk Potash Handling Facility* prepared by Anchor QEA, LLC, dated March 2012, in accordance with the conditions of this Order. **A final WQPMP shall be submitted to the Federal**

**Project Manager for review and approval at least 20 days prior to beginning any work covered by this plan at the project site. Work shall not begin until Ecology approves the WQPMP.**

- a. Parameters to be sampled: Turbidity and pH shall be sampled for this project.
- b. Location of Samples: Background samples shall be collected outside of the area of influence of the project work. Background samples shall be collected at the same frequency as the point of compliance samples.
  - i. At a minimum, turbidity sampling and documentation shall occur at 150 feet and 300 feet down-current from the project activity.
  - ii. Sampling for pH shall occur at the location of the project activity.
- c. Sampling Frequency: Water quality samples for turbidity shall be collected every four hours during the in-water activities and stone column installation. Water quality samples for pH shall be collected every four hours during concrete work until the concrete is completely cured.
- d. Equipment: Sampling for turbidity is to be accomplished using a turbidimeter properly calibrated according to the operator's manual. Sampling for pH shall be accomplished through the use of a hydroprobe or equivalent.
- e. Detection of exceedances: Water quality standards for turbidity and pH are as follows:
  - i. Turbidity shall not exceed 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or more than a ten (10) percent increase in turbidity when the background turbidity is more than 50 NTU, at the point of compliance when a turbidimeter is used.
  - ii. pH shall be within the range of 6.5 to 8.5 with a human-caused variation within the above range of less than 0.5 units.

During and immediately after project construction, the Applicant or their contractor shall monitor for turbidity and pH discharges. If exceedances of these standards are detected at the point of compliance as specified in WAC 173-201A-200(1)(e)(i) and WAC 173-201A-200(1)(f) or as otherwise modified by this Order, work shall cease immediately and the Applicant or their contractor shall assess the cause of the water quality problem and take immediate action to stop, contain, and correct the problem and/or prevent further water quality exceedances. After such an event, the Applicant shall assess the efficacy of the site BMPs and update or improve the BMPs used at the work site in an effort to prevent a recurrence of the exceedance. If an exceedance occurs, the Applicant or their contractor shall follow the protocols and notification procedures below.

- f. Notification of exceedances: Notification of exceedances that are detected through water quality sampling shall be made to Ecology **within 24 hours of occurrence**. Notification shall be made with reference to Order #9064, Attn: Federal Permit

- Manager, by telephone at (360) 407-6926 or by e-mail at loch461@ecy.wa.gov. The Applicant shall, at a minimum, provide Ecology with the following information:
- i. A description of the nature, extent, and cause of the exceedance.
  - ii. The period of non-compliance, including exact dates, duration, and times and/or the anticipated time when the project will return to compliance.
  - iii. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the non-compliance.
  - iv. In addition, within five (5) days after notification of an exceedance, the Applicant shall submit a written report to Ecology that describes the nature of the exceedance, water quality monitoring results and location, photographs, and any other pertinent information.
- g. Reporting: Results of the water quality monitoring shall be documented in a report and submitted to Ecology weekly during project construction (in accordance with Condition A.2. above.) (See Attachment B for an example.) The reports must include:
- i. Date and time of sample;
  - ii. Sample location;
  - iii. Sample results;
  - iv. Name of person collecting sample;
  - v. Weather conditions.
4. If, after the first four weeks of instrumented water quality monitoring of the project activities, no turbidity exceedances are detected, the Applicant may submit a request to Ecology to convert from physical to visual monitoring. Ecology will review the data and provide a written response to the request.
  5. Ecology must approve, in writing, any changes to the final WQPMP.
  6. Mitigation and/or additional monitoring may be required if water quality standards are not met.

**C. Timing:**

- ~~1. This Order will expire five (5) years from the date of issuance of the Corps permit. This Order will expire on June 11, 2019. Continuing this Order beyond this timeframe will require the Applicant to apply for a one-year extension prior to the expiration of this Order.~~
- ~~1. This Order will expire on June 30, 2021. Continuing this Order beyond this timeframe will require the Applicant to apply for a one-year extension prior to the expiration of this Order.~~

- ~~1. Order No. 9064 will expire on June 30, 2022. Continuing the Order beyond this timeframe will require the Applicant to apply for a one-year extension a minimum of 30 days prior to the expiration of the Order.~~
- ~~1. Order No. 9064 will expire on June 30, 2024. Continuing the Order beyond this timeframe will require the Applicant to apply for a one-year extension a minimum of 60 days prior to the expiration of the Order.~~
- ~~1. Order No. 9064 will expire on June 30, 2029. Continuing the Order beyond this timeframe will require the Applicant to apply for a one-year extension a minimum of 60 days prior to the expiration of the Order.~~
1. Order No. 9064 will expire on February 28, 2030. Continuing the Order beyond this timeframe will require the Applicant to apply for a one-year extension a minimum of 60 days prior to the expiration of the Order.
2. In-water work shall be subject to the timing limitations imposed by the most current Hydraulic Project Approval (HPA) issued by the Washington Department of Fish and Wildlife's (WDFW) for this project.
3. Removal of the headwall and anchor block and placement of the rip-rap may occur outside the work windows if the activity can be completely isolated from the river.

**D. Notification Conditions:**

1. The Applicant shall provide a copy of the final Corps Permit to Ecology's Southwest Regional Office Federal Permit Manager, in accordance with condition A.2 above, within two (2) weeks of receipt of the permit.
2. Written notification (FAX, e-mail, or mail) shall be made to Ecology's Southwest Regional Office Federal Permit Manager in accordance with condition A.2 above for the following activities:
  - a. At least ten (10) days prior to the onset of in-water work in each construction season.
  - b. Within ten (10) days after the completion of construction for each construction season.
  - c. Immediately following a violation of the state water quality standards or any condition of this Order.
3. If project construction is not completed within thirteen (13) months of issuance of this Order, the Applicant shall submit a written construction status report. Status reports shall be submitted every twelve (12) months thereafter until project construction is complete.

**NOTE:** These notifications shall include the Applicant's name, project name, Order No. **9064**, Corps Reference No. **NWP-2010-50-1**, project location, contact name, and contact's phone number.

**E. Construction Conditions:**

**General Construction**

1. The Applicant shall obtain and comply with the conditions of the current Construction Stormwater General Permit (National Pollutant Discharge Elimination System – NPDES) issued for this project.
2. All work in and near the water shall be done so as to minimize turbidity, erosion, and other water quality impacts. Construction stormwater, sediment, and erosion control Best Management Practices (BMPs) suitable to prevent exceedances of state water quality standards shall be in place before starting clearing, filling, and grading work and shall be maintained throughout construction.
3. The project shall be clearly marked/staked prior to construction. Clearing limits, travel corridors, and stockpile sites shall be clearly marked. Sensitive areas and their buffers that are to be protected from disturbance shall be marked so as to be clearly visible to equipment operators. All project staff shall be trained to recognize construction fencing or flagging that identifies sensitive area boundaries. Equipment shall enter and operate within the marked clearing limits corridors and stockpile areas.
4. Appropriate BMPs shall be implemented to minimize track-out during construction.
5. Clean Fill Criteria: Applicant shall ensure that fill (soil) placed for the proposed project does not contain toxic materials in toxic amounts.
6. Turbid de-watering water associated with in-water work shall not be discharged directly to waters of the state. Turbid de-watering water shall be routed to an upland area for on-site or off-site settling.
7. All construction debris shall be properly disposed of on uplands so that it cannot enter waters of the state.
8. The Applicant will develop and implement a Contaminated Media Management Plan for the project site.

#### **Equipment & Maintenance**

9. All construction equipment shall be clean and inspected daily before use to ensure that the equipment is free from external petroleum products and has no fluid leaks.
10. The Applicant shall establish a separate contained area for washing down vehicles and equipment that does not have any possibility of draining to surface waters and/or wetlands. No wash water containing sediments, oils, grease, or other hazardous materials resulting from wash down of the work area, tools, and equipment, including concrete delivery trucks or other equipment used for concrete work, shall be discharged into state waters or storm drains.
11. All machinery and equipment used during project construction shall be serviced, fueled, and maintained in a confined upland area in order to prevent entry to waters of the state.

Fueling areas shall be located a minimum of 50 feet from waters of the state, including wetlands, and shall be provided with adequate spill containment.

### **Ground Improvement & Stone Columns**

12. The stone columns will be installed a minimum of fifty (50) feet landward of the Ordinary High Water Mark (OHWM) at its closest point to the river. The stone columns will be installed to a depth of approximately 70 feet below ground surface.
13. The stone columns shall be installed by air injection as the primary medium of installation. Water jetting may be briefly used as a method to advance the stone column probe past localized dense layers of earth.
14. Perimeter controls around the stone column installation area shall be in place prior to drilling to contain any ejected soils or water within the installation area.
15. Two rows of wick drains shall be appropriately installed between the stone columns closest to the shoreline and the Columbia River to attenuate the pore water pressure and dissipate subsurface air flow.

### **General In & Over-Water Work**

16. All equipment used in or over water shall utilize vegetable-based biodegradable hydraulic fluid.
17. The Applicant shall operate the barge(s) and tug in deep water so as to minimize the near-shore propeller wash impacts such as suspension of near-shore sediments.
18. The barge(s) shall not be anchored over vegetated shallows and shall not be allowed to ground out.
19. Debris booms shall be placed around the work areas to contain any material that may enter the water.
20. The Applicant shall have a boat available and on site during in-water activities to immediately retrieve any debris entering the water.
21. Whenever possible, work will be conducted in the dry when the Columbia River is at its lowest level to minimize the amount of in-water work required.
22. Application of wood, metal, or concrete preservatives, paints, sealers, glues, epoxies, chemicals, or other substances to structures once they have been placed within or over the OHWM shall be avoided. If it is unavoidable, then full containment shall be provided so that the substances do not enter waters of the state.

### **Demolition**

23. A containment boom shall be employed around the work area during demolition activities. No structural material may enter waters of the state during demolition activities.
24. All material removed from decommissioning the old facility and other construction debris shall be properly disposed of in an upland facility so that it cannot cause water quality degradation.

### **Stormwater Outfall Rehabilitation**

25. Any contact water associated with the installation of the pipe liner shall be captured and disposed of at an approved upland disposal site.

### **Piling Removal**

26. To mitigate for impacts to the aquatic environment, the project will remove an existing 31-pile dolphin and catwalk at Terminal 5 and an additional 177 treated timber piles at Terminal 2. The piles will be removed using vibratory extraction or by pulling them with a crane-mounted on a barge.
27. Piles removed from substrate shall be moved immediately from the water onto a barge or onto uplands. The piles shall not be shaken, hosed off, left hanging to drip, or any other action intended to clean or remove adhering material from the pile. All excavated piles shall be disposed of in an approved upland disposal site.
28. During the removal of creosote piles, containment booms shall be placed around the perimeter of the work area to capture wood debris, oil, and other material from being released into the water. All debris that is collected shall be disposed of in an approved disposal site.
29. If a pile breaks or is otherwise unable to be completely removed using vibratory or pulling methods, the pile will be cut off at or below the mudline or cut off and pushed into the sediment.
30. If a barge is used to remove the treated piles, the work surface on the barge deck shall include containment for piles and any liquid or sediment removed during pulling of the piles.
31. Water left in the containment on the barge deck shall not be discharged into waters of the state.

### **Piling Installation**

32. The Applicant will install approximately 116, 36- to 40-inch diameter steel piles, of which approximately 100 will be located below the OHWM of the Columbia River. In-water piles will be installed via a barge-mounted pile-driving crane. Piles will be open-ended. To achieve structural capacity, the piles will be filled with concrete from the mudline. No removal of sediments from inside the piles will occur. Up to two barges may be used for in-water pile-driving operations.
33. In addition to the permanent piles outlined above, a total of approximately 95 temporary piles will be installed as support pile installation guides at various locations. The temporary piles will be 18- to 24-inch diameter open-ended steel piles and will be driven solely with a vibratory hammer.
34. Piling shall be installed using a vibratory hammer to the extent possible. If proofing the steel piling requires the use of an impact pile driver, a dampening device, such as a block of wood at least six inches thick, shall be placed between the piling and the impact pile driver to attenuate noise.

35. The Applicant shall employ the use of a sound-attenuating bubble curtain during piling installation when using an impact hammer to drive piling. The bubble curtain shall be employed in a manner to ensure that bubbles completely engulf the piles during the impact driving.
36. Open-ended steel piles to be filled with concrete will use the tremie method.

#### **Concrete & Grout Work**

37. Spill protection measures shall be in place prior to any concrete delivery over water.
38. Concrete delivery systems situated over water shall be inspected daily to prevent any discharges of concrete and/or slurry water into waters of the state.
39. All concrete shall be poured in the dry, or within confined waters not being dewatered, and shall be completely cured prior to coming into contact with waters of the state.
40. Uncured concrete and concrete by-products shall be completely sealed off and totally contained using sealed forms or other leak-proof containment systems.
41. Concrete process water shall not enter waters of the state. Any concrete process/contact water discharged from a confined area shall be routed to a contained area to be treated and disposed of appropriately with no possible entry to waters of the state.

#### **F. Mitigation Measures:**

1. To mitigate for impacts to aquatic resources, the Applicant will: remove an existing dolphin and catwalk at the Terminal 5 site; remove 31 treated timber piles from Terminal 5 and remove approximately 177 treated timber piles from Terminal 2; and plant native riparian vegetation at Buckmire Slough, near Lake River, which includes the initial removal of invasive species.
2. The mitigation measures shall be implemented as described in "*The Port of Vancouver, USA Terminal 5 Bulk Potash Handling Facility Habitat Mitigation Plan*" prepared by Berger ABAM, dated February 2011.

#### **G. Emergency/Contingency Measures:**

1. The Applicant shall develop and implement a Spill Prevention and Containment (SPCP) Plan for all aspects of this project and shall have spill cleanup materials and an emergency call list available on site.
2. Any work that is out of compliance with the provisions of this Order, or conditions causing distressed or dying fish, or any discharge of oil, fuel, or chemicals into state waters or onto land with a potential for entry into state waters, is prohibited. If such work, conditions, or discharges occur, the Applicant or operator shall immediately take the following actions:
  - a. Cease operations that are causing the compliance problem.
  - b. Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage.
  - c. In the event of finding distressed or dying fish, the applicant shall collect fish specimens and water samples in the affected area within the first hour of the event.



These samples shall be held in refrigeration or on ice until the applicant is instructed by Ecology on what to do with them. Ecology may require analyses of these samples before allowing the work to resume.

- d. In the event of a discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, containment and cleanup efforts shall begin immediately and be completed as soon as possible, taking precedence over normal work. Cleanup shall include proper disposal of any spilled material and used cleanup materials.
- e. Immediately notify Ecology's Southwest Regional Spill Response Office at (360) 407-6300 and the Washington State Department of Fish and Wildlife of the nature of the problem, any actions taken to correct the problem, and any proposed changes in operations to prevent further problems.
- f. Submit a detailed written report to Ecology's Federal Permit Manager within five (5) days that describes the nature of the event, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of any samples taken, and any other pertinent information.

Compliance with this condition does not relieve the Applicant from responsibility to maintain continuous compliance with the terms and conditions of this Order or the resulting liability from failure to comply.

3. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into state waters, including wetlands.
4. If at any time during work the proponent finds buried chemical containers, such as drums, or any unusual conditions indicating disposal of chemicals, the proponent shall immediately notify Ecology's Southwest Regional Spill Response Office at (360) 407-6300.