



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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October 1, 2010

Mr. Jon Sloan
Sr Environmental Program Manager
Seaport Environmental Programs
Port of Seattle
PO Box 1209
Seattle, WA 98111

RE: Water Quality Certification - Order #7975/Corps Public Notice NWS-2009-1559-WRD – Port of Seattle, Terminal 5 maintenance dredging phased project, King County, Washington

Dear Mr. Sloan:

The above-referenced public notice for proposed work in waters of the state has been reviewed in accordance with all pertinent rules and regulations. On behalf of the State of Washington, we certify that the work proposed in the public notice complies with applicable provisions of Sections 301, 302, 303, 306 and 307 of the Clean Water Act, as amended, and other appropriate requirements of State law. This certification is subject to the conditions contained in the enclosed Order and may be appealed by following the procedures described in the Order.

If you have any questions concerning the content of this letter, please contact Laura Inouye at (360) 407-6165.

Sincerely,

A handwritten signature in black ink, appearing to read "Brenden McFarland".

Brenden McFarland, Section Manager
Shorelands & Environmental Assistance Program
Headquarters Office - Ecology
State of Washington

Enclosures

by Certified Mail 7009 1410 0002 4001 1378



Mr. Jon Sloan
October 1, 2010
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cc: Olivia Romano, Seattle Corps
David Kendall, Seattle Corps
Laura Arber, WDFW
Erika Hoffman, EPA

ecc: Loree' Randall, Ecology
Helen Pressley, Ecology
Laura Inouye, Ecology
Brad Helland, NWRO, Ecology
Joe Burcar, NWRO, Ecology
ecyrefedpermits@ecy.wa.gov

<p>IN THE MATTER OF GRANTING A WATER QUALITY CERTIFICATION TO Port of Seattle in accordance with 33 U.S.C. 1341 (FWPCA § 401), RCW 90.48.120, RCW 90.48.260 and Chapter 173-201A WAC</p>	<p>) ORDER #7975) Corps Reference No. NWS-2009-1559-WRD) Terminal 5 in Seattle, King County, Washington.) Phase I includes up to 6400 CY of material from) Berths 1,2, and 3; Phase II includes additional) dredging of up to 4,000 CY from Berth 3, and) Phase III is maintenance over 10 years, up to) 40,000 CY.</p>
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TO: Jon Sloan
Port of Seattle
PO Box 1209
Seattle, WA 98111

On July 6, 2010 the Port of Seattle submitted a revised Joint Aquatic Resources Permit Application (JARPA) to the Department of Ecology (Ecology) requesting a Section 401 Water Quality Certification. A joint public notice regarding the request was distributed by the Army Corps of Engineers (Corps) for the above-referenced project pursuant to the provisions of Chapter 173-225 WAC on July 7, 2010.

This project is a ten year maintenance dredging, removal and replacement of damaged fender piles and backfilling of areas as required for slope stability after dredging. Maintenance dredging would occur in three phases over the ten year period. Phase I would occur during years of 2010 through 2011 and would remove up to 6410 cubic yards of material from Berths 1, 2, and 3. Phase II would occur during years 2011 through 2012 or later and would remove up to 4,000 cubic yards of material from Berth 3. A total of up to 10,410 cubic yards of accumulated sediment would be removed during Phase I and II. Phase III would occur during years of 2012 through 2020 and would periodically remove "high spots" that develop from sedimentation, bank sloughing, and raveling of the underpier slope in Berth 1,2, and 3. Up to 40,000 cubic yards of material may be removed during Phase III periodic maintenance dredging events. These periodic maintenance dredging events are anticipated to be necessary every 1 to 3 years.

The dredge area includes the berth areas from pier face to the federal channel and covers about 200,000 square feet. The sediments would be removed via clamshell dredging. Authorized berth depths are -45 feet Mean Lower Low Water (MLLW) line for Berth 1 and -50 feet MLLW for Berths 2 and 3. All dredging would occur between -45 and -55 feet MLLW line, including a 1 foot advance maintenance depth, a 2 foot allowable over dredge and provisions for about 10 percent limited incidental dredging of an additional 2 feet (for a total over dredge of 4 feet in some locations). Advance maintenance dredging allows certain areas (fast shoaling and slope sloughing areas and/or for placement of sand) to be dredged below the authorized depths and ensures the reliability of project depths between dredging cycles in these areas. The "overdepth" provisions are not intended to increase the overall depth of the berths, but to account for unanticipated variations in substrate from the incidental removal of submerged obstructions, wind, wave, and other environmental conditions that may reduce the ability to precisely control

the excavation head of the dredging equipment resulting in an uneven post-dredge surface below the authorized depths. Dredge materials determined to be suitable for open water disposal would be placed by the dredge equipment operator into a hopper barge and transported to Elliott Bay non-dispersive open water disposal site, or an upland site along with material unsuited for in-water disposal. Dredge material determined unsuitable for open water disposal would be placed into a haul barge for transport to an upland off-loading facility (Terminals 5, 18 or 30, or a site on the Lower Duwamish Waterway). The dredge material would be transported from off-loading facility to an approved upland Subtitle D landfill by truck or rail containers.

A clean sand layer may be placed within the dredge prism footprint after each dredging event either to meet Washington State Anti-Degradation Policies or Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) related Environmental Protection Agency (EPA) requirements, or to ensure slope stability adjacent to the existing submarine retaining walls or pinch piles. Up to 15,000 cubic yards of clean sand may be placed during the 10 year period at thickness of 0.5 feet to 1.5 feet. Final surface elevations within the dredge prism after the placement of the sand layer would be -46.5 and -51.5 feet MLLW. Sand fill would be placed with the same equipment used for dredging. Sand fill would be picked up from haul barge with dredge bucket, lowered to within 10 feet of the bottom and placed.

This project also includes repair or replacement of up to five fender piles following each dredging event for up to 30 piles over the 10 year period. Replacement piles would be 18-inch diameter ACZA treated timber or steel piles. Piles would be removed and installed by vibratory method. Piles that break at or below the mudline during removal will be extracted with a chain or cut off at least 2 feet below the mudline. Each replacement pile would be fitted with vertically oriented ultra-high molecular weight (UHMW) plastic friction strips.

AUTHORITIES:

In exercising authority under 33 U.S.C. § 1341, 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, 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 meet the 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 Seattle and its agents, assignees and contractors.
2. For purposes of this Order, all submittals required by its conditions shall be sent to Ecology's Headquarters Office, Attn: 401/CZM Federal permit coordinator, P.O. Box 47600 Olympia, WA 98504-7600 and/or lino461@ecy.wa.gov. Any submittals shall reference **Order #7975** and Corps Reference # **NWS-2009-1559-WRD**.
3. Work authorized by this Order is limited to the work described in the Joint Aquatic Resources Permit Application (JARPA) received by Ecology on July 6, 2010. The Applicant will be out of compliance with this Order and must submit an updated JARPA 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 if 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 an individual 404 and/or Section 10 permit for the project.
6. 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.

7. The Applicant shall provide access to the project site upon request by Ecology personnel for site inspections, monitoring, necessary data collection, and/or to ensure that conditions of this Order are being met.
8. 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. Furthermore, Ecology retains continuing jurisdiction to make modifications hereto through supplemental order, if additional impacts due to project construction or operation are identified or if additional conditions are necessary to further protect water quality.
9. 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.
10. 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.
11. 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. This Order does not authorize temporary exceedences of water quality standards beyond the limits established in WAC 173-201A-210, except as otherwise authorized by this Order.

C. Turbidity Mixing Zone:

1. Consistent with WAC 173-201A-400, this Order authorizes a mixing zone for turbidity as follows:
 - i. The distance granted for the temporary turbidity mixing zone is a 300 foot radius from the in-water activity.
 - ii. Visible turbidity anywhere at the 300 ft point of compliance from the activity and/or the disposal location shall be considered to be an exceedance of the standard.
 - iii. The mixing zone is only authorized during the work window identified in the most current HPA issued for this project.

D. Water Quality Monitoring

1. The Applicant shall conduct all environmental monitoring as described in "Terminal 5 Water Quality Monitoring Plan" prepared by Windward Environmental, LCC, dated August 10, 2010, except as modified in this Order or revised and approved by Ecology.
2. The Applicant shall submit a final Water Quality Monitoring Plan which will include any changes and/or additions to water quality monitoring required by this Order to Ecology's Federal permit coordinator for review and approval to Ecology at least 2 weeks prior to the preconstruction meeting (see condition E.8).
3. Turbidity monitoring reports shall be sent weekly to the 401/CZM Federal permit coordinator per Condition A2. If an exceedance is observed the Applicant shall notify the permit coordinator within 24 hours of the exceedance.

E. Dredging and Disposal:

1. All dredging is to be done using a clamshell or environmental bucket dredge. Use of any other type of dredge will require prior approval from Ecology.
2. The Applicant shall dispose of the dredged material as follows:
 - a) Material from 1+50 to 16+00 (Berth 1 and part of Berth 2) will be transported to the Elliot Bay open water non-dispersive disposal site or to an approved upland disposal site. If the open water disposal option is selected, Berth 1 material should be dredged first, and must be accompanied by material from Berth 2 in order to meet the Elliot Bay open water non-dispersive disposal site objectives for dioxin.
 - b) Material from 16+00 to 29+00 (part of berth 2, and berth 3, the material described in the JARPA as Phase I) will be transported to an approved upland disposal site.
 - c) Material from Phase II and Phase III have not been characterized for purposes of disposal options and antidegradation evaluation do not have proposed disposal options at this time, and therefore will require an amendment to this certification once the material has been characterized and the disposal method has been proposed.
3. For material going to the open water non-dispersive disposal site, all debris (larger than 2 feet in any dimension) shall be removed from the dredged sediment prior to disposal. Similar sized debris found floating in the dredging or disposal area shall also be removed.
4. For material going to an upland site, dewatering water shall not be discharged into waters of the state unless it is adequately treated. Information on the location of the disposal site shall be provided to Ecology at the address shown in Condition A2 above, prior to the start of dredging.
5. Dredging operations shall be conducted in a manner that minimizes the disturbance or

- siltation of adjacent waters and prevents the accidental discharge of petroleum products, chemicals or other toxic or deleterious substances into waters of the State.
6. Dredged material shall not be stockpiled on a temporary or permanent basis below the ordinary high water line.
 7. During dredging, the Applicant shall have a boat available on site at all times to retrieve debris from the water.
 8. A pre-dredge meeting is required to be convened prior to the start of dredging. A **Dredging Plan** is required and shall be submitted to Ecology to the 401/CZM Federal permit coordinator at the address shown in Condition A2 for review and approval 2 weeks prior to the pre-construction meeting.
 9. The Dredging plan shall include the post-dredging sampling plan for the evaluation of the post-dredge surface for antidegradation evaluation, as well as the plans for the clean sand layer placement in case the post-dredge surface does not meet Washington State Anti-Degradation Policy, if post-dredge surface evaluation has not been completed and coordinated with Ecology prior to dredging.
 10. Prior to each dredging cycle, the Applicant shall contact the PSDDA agencies to determine whether additional sediment testing is required. If additional testing is required, no dredging or disposal shall be conducted until the material has been tested and a suitability determination has been issued. This area ranks high in potential for contamination and the recency determination extends until September 2011. Contact the DMMO for a possible extension of up to 2 years.
 11. Phase II and Phase III material is not covered under the existing suitability determination, and shall require testing prior to dredging. If characterization indicates that material is sufficiently different than material covered in the existing suitability determination, an amendment to this certification will be required.

F. Sand Cover

1. A post-dredge sediment survey shall be conducted prior to placement of any sand cover as part of coordination with CERCLA and the Ecology Cleanup Program. As mentioned in D.8, the plan for this survey must be submitted to Ecology at least 2 weeks prior to dredging and approved by Ecology prior to dredging for each dredging season where the surface exposed by dredging was not previously characterized.
2. As indicated in the application, if necessary, the dredged area shall be backfilled with a 6-inch thick layer of clean sand and gravel cover placed as an environmental protection measure. Sand and gravel specifications shall include 2-inch minus rounded material with less than 5% of the sand passing the 200 sieve.

G. Fender Repair and Replacement

1. During treated timber pile removal, containment booms and absorbent sausage booms (or other oil absorbent fabric) shall be placed around the perimeter of the work area to capture wood debris, oil, and other materials released into marine waters as a result of construction activities. All accumulated debris shall be collected and disposed upland at an approved disposal site.
2. The existing piles shall be removed and disposed of upland such that they do not enter waters of the state. In the event that the piles cannot be completely removed then the remainder of the pile shall be removed with a clamshell bucket, chain, or similar means, or cut off 2 feet below the mudline.
3. As specified in the application, replacement piles may be ACZA treated timber or steel.
4. Replacement piling(s) shall be installed in the position as the replaced piling(s). New piling shall be the same diameter or smaller than the removed pilings.
5. The new pilings shall be installed using a vibratory hammer.
6. Rubbing strips shall be fitted to the replacement fender system with ultra high molecular weight (UHMW) type plastic, or high-density polyethylene (HDPE) type plastic.
7. Extracted piles shall be cut to size as required by container and disposal contractors.
8. All treated wood, piling, and lumber to be used for the project shall meet or exceed the standards established in 'Best Management Practices For the Use of Treated Wood in Aquatic and Other Sensitive Environments' developed by the Western Wood Preservers Institute (<http://www.wwpinstitute.org/>), revised August 2006, and any current amendments or addenda to it.
9. Sawdust, drillings, and trimmings from treated wood shall be contained with tarps or other impervious materials and prevented from contact with the beach, bed or waters of the state.
10. Under no circumstances shall creosote treated piling or lumber be used for project construction.
11. All piling, lumber, and other materials treated with preservatives shall be sufficiently cured to minimize leaching into the water or bed.

H. Timing Requirements:

1. All in-water work shall be completed by the work window identified in the most current HPA issued for this project. Any project change that requires a new or revised HPA should also be sent to Ecology for review.
2. This Order shall remain in effect for a period of 10 years from date of issuance. Continuing this project beyond the 10 year term of this Order will require separate certifications every 10 years.

I. Notification Requirements:

1. The Applicant shall provide notice to Ecology's 401/CZM Federal permit coordinator at least 7 days prior to the start of dredging each dredging season and within 14 days after completion of dredging each season. Notification should be made using all the information required in Condition A2.

J. Emergency/Contingency Measures:

1. The Applicant shall develop a spill prevention and containment plan for 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 these 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 24-Hour Spill Response Team at 1-800-258-5990, **and** within 24 hours of spills or other events Ecology's 401/CZM Federal permit coordinator at (360) 407-6165.
 - f. Submit a detailed written report to Ecology 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.
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. Proper security shall be maintained to prevent vandalism.
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 using the above phone numbers.

K. Appeal Process:

You have a right to appeal this Order. To appeal this you must:

- File your appeal with the Pollution Control Hearings Board within 30 days of the “date of receipt” of this document. Filing means actual receipt by the Board during regular office hours.
- Serve your appeal on the Department of Ecology within 30 days of the “date of receipt” of this document. Service may be accomplished by any of the procedures identified in WAC 371-08-305(10). “Date of receipt” is defined at RCW 43.21B.001 (2).

Be sure to do the following:

- Include a copy of this document that you are appealing with your Notice of Appeal.
- Serve and file your appeal in paper form; electronic copies are not accepted.

1. To file your appeal with the Pollution Control Hearings Board

Mail appeal to:

The Pollution Control Hearings Board
PO Box 40903
Olympia, WA 98504-0903

OR

Deliver your appeal in person to:

The Pollution Control Hearings Board
4224 – 6th Ave SE Rowe Six, Bldg 2
Lacey, WA 98503.

2. To serve your appeal on the Department of Ecology

Mail appeal to:

The Department of Ecology
Appeals Coordinator
P.O. Box 47608
Olympia, WA 98504-7608

OR

Deliver your appeal in person to:

The Department of Ecology
Appeals Coordinator
300 Desmond Dr SE
Lacey, WA 98503

3. And send a copy of your appeal to:

Department of Ecology
Shorelands and Environmental Assistance Program
Attn: Laura Inouye
P.O. Box 47600
Olympia WA 98504-7600

For additional information visit the Environmental Hearings Office Website:
<http://www.eho.wa.gov>

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To find laws and agency rules visit the Washington State Legislature Website:
<http://www1.leg.wa.gov/CodeReviser>

Your appeal alone will not stay the effectiveness of this Order. Stay requests must be submitted in accordance with RCW 43.21B.320. These procedures are consistent with Ch. 43.21B RCW.

DATED OCT 01 2010
at Olympia, Washington.



Brenden McFarland, Section Manager
Shorelands & Environmental Assistance Program
Headquarters Office – Ecology
State of Washington

ATTACHMENT A

**Port of Seattle
Terminal 5, maintenance dredging program
Water Quality Certification Order #7975**

**Statement of Understanding of
Water Quality Certification Conditions**

I have read and understand the conditions of Order #7975 Section 401 Water Quality Certification for the Port of Seattle Terminal 5 maintenance dredging program. I have also read and understand all permits, plans, documents, and approvals associated with the project referenced in this order.

Signature

Date

Title