



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

August 18, 2011

Amanda Ogden
U.S. Army Corps of Engineers Seattle District
PO Box 3755
Seattle, WA 98124

RE: Water Quality Certification Order #8647 for U.S. Army Corps of Engineers
Reference #PM-ER-11-2, Lake Washington Ship Canal Monolith Erosion and
Scour Repair Project, Seattle, King County, Washington

Dear Ms. Ogden:

On June 24, 2011, the U.S. Army Corps of Engineers Seattle District submitted a request to the Department of Ecology (Ecology) for a Section 401 Water Quality Certification (401 Certification) under the federal Clean Water Act for the proposed Lake Washington Ship Canal Monolith Erosion and Scour Repair project.

On behalf of the State of Washington, Ecology certifies that the work described in the JARPA and the public notice complies with applicable provisions of Sections 301, 302, 303, 306 and 307 of the Clean Water Act, as amended and applicable state laws. This certification is subject to the conditions contained in the enclosed Order.

If you have any questions, please contact Rebekah Padgett at (425) 649-7129. The enclosed Order may be appealed by following the procedures described in the Order.

Sincerely,


Erik Stockdale
Northwest Regional Office
Shorelands and Environmental Assistance Program

ES:rrp:cja

Enclosure

By certified mail: 7011 0470 0003 3720 8933



cc: Laura Arber, Washington Department of Fish and Wildlife
Cindy Rathbone, Washington Department of Natural Resources
Ben Perkowski, City of Seattle
William Vogel, US Fish and Wildlife Service
Sean Callahan, NOAA Fisheries

e-cc: Joe Burcar – NWRO
Loree' Randall – HQ
Raman Iyer – NWRO
ecyrefedpermits@ecy.wa.gov

IN THE MATTER OF GRANTING A) ORDER #8647
WATER QUALITY) Corps Reference #PM-ER-11-2
CERTIFICATION TO) Lake Washington Ship Canal Monolith Erosion
U.S. Army Corps of Engineers) and Scour Repair Project; Salmon Bay, Seattle,
Seattle District) King 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: U.S. Army Corps of Engineers Seattle District
Attn: Amanda Ogden
PO Box 3755
Seattle, WA 98124

On June 24, 2011, the U.S. Army Corps of Engineers, Seattle District submitted a request to the Department of Ecology (Ecology) for a Section 401 Water Quality Certification. A joint public notice regarding the request was distributed for the above-referenced project pursuant to the provisions of Chapter 173-225 WAC on June 22, 2011.

The repair proposal includes:

- Repair foundation of the small lock wall (monolith): 110 feet of sheet pile will be installed along the length of the monolith and the void between the sheet pile and monolith will be filled with approximately 100 cubic yards of concrete.
- Repair scour adjacent to the monolith: Rip rap will be placed in the scoured areas of the channel below the spillway apron to restore depth and stability to pre-scour conditions. Approximately 1,406 cubic yards of quarry spalls, 2,830 cubic yards of class IV rip rap, and 1,665 cubic yards of class II rip rap will be utilized in the repairs. Approximately 27,000 square feet of channel bottom will be converted from clay to rip rap.

The project is located downstream of the Hiram M. Chittenden Locks, on the spillway side of the small lock, 3015 NW 54th Street, Seattle, King County, Washington, Lake Washington Ship Canal, Salmon Bay, Section 11, T. 25N, R. 3E, WRIA 8.

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, 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:

- A1. For purposes of this Order, the term "Applicant" shall mean U.S. Army Corps of Engineers Seattle District and its agents, assignees and contractors.
- A2. For purposes of this Order, all submittals required by its conditions shall be sent to Ecology's Northwest Regional Office, Attn: 401/CZM Federal Project Manager, 3190 160th Avenue SE, Bellevue, WA 98008-5452. Any submittals shall reference Order #8647 and Corps Reference #PM-ER-11-2.
- A3. Work authorized by this Order is limited to the work described in the JARPA received by Ecology on June 24, 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.

- A4. 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.
- A5. 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.
- A6. 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.
- A7. 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.
- A8. 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 or mitigation sites.
- A9. 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.
- A10. 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:**
- B1. Salmon Bay is classified as "Extraordinary Quality" and the criteria of that class apply except as specifically modified by this Order. This Order does not authorize temporary exceedances of water quality standards beyond the limits established in WAC 173-201A-210(1)(e)(i).

B2. Water quality shall be sampled and monitored during “in-water construction” below the ordinary high water mark of Salmon Bay per the *USACE Water Quality Monitoring Plan for the LWSC Monolith Erosion Repair* (hereafter referred to as Plan) prepared by the Corps, received by Ecology July 12, 2011, or as modified by this Order or revised and approved by Ecology.

B3. Detection of exceedances: Water quality standards for turbidity in “Extraordinary” waters are as follows:

- Turbidity shall not exceed 5 NTU over background conditions when the background is 50 NTU or less, or a 10 percent increase in turbidity when the background turbidity is more than 50 NTU.
- pH must be within the range of 7.0 to 8.5 with a human-caused variation within the above range of less than 0.2 units.

If exceedances of this standard at the point of compliance specified in WAC 173-201A-200(1)(e)(i) is detected through water quality sampling and monitoring, the Applicant shall immediately take action to stop, contain, and prevent unauthorized discharges or otherwise stop the violation and correct the problem. 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 reduce or prevent recurrence of the turbidity exceedance.

B4. Reporting: If no exceedances are detected, results of water quality sampling, as determined by the Plan, shall be forwarded to Ecology on a monthly basis in accordance to Condition A2.

B5. 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 #8647, Attn: 401/CZM Federal Project Manager, by telephone at (425) 649-7129 or (425) 649-7000, or by fax to (425) 649-7098. The Applicant shall, at a minimum, provide Ecology with the following information:

- i. A description of the nature and cause of exceedance.
- ii. The period of non-compliance, including exact dates, duration, and times and/or the anticipated time when the Applicant 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, turbidity results and location, photographs, and any other pertinent information.

C. Conditions for Construction Activities:

General Conditions:

- C1. Construction stormwater, sediment, and erosion control best management practices (BMPs; e.g., filter fences, etc.) suitable to prevent exceedances of state water quality standards shall be in place before starting construction at the site.
- C2. Sediment and erosion control measures shall be inspected and maintained prior to and during project implementation.
- C3. All construction debris shall be properly disposed of on land so that it cannot enter a waterway or cause water quality degradation to state waters.
- C4. Machinery and equipment used during construction shall be serviced, fueled, and maintained upland, unless otherwise approved by Ecology, in order to prevent contamination to any surface water.
- C5. Wash water containing oils, grease, or other hazardous materials resulting from wash down of equipment or working areas shall be contained for proper disposal, and shall not be discharged into state waters or storm drains.
- C6. Work in or near the water that may affect fish migration, spawning, or rearing shall cease immediately upon a determination by Ecology that fisheries resources may be adversely affected.
- C7. All trash and unauthorized fill, including concrete blocks or pieces, bricks, asphalt, metal, treated wood, glass, floating debris, and paper, below the Ordinary High Water Line (OHWL) in and around the Applicant's project area shall be removed and deposited at an approved upland disposal site.
- C8. Project activities shall be conducted to minimize siltation of the bed.
- C9. The Applicant shall operate the barge(s) and tug in deep water so as to minimize nearshore propeller wash impacts such as suspension of sediments.
- C10. Barges shall not be allowed to ground-out during construction.
- C11. If cast in place, wet concrete/grout shall be prevented from entering waters of the state. Forms for any concrete/grout structure shall be constructed to prevent leaching of wet concrete/grout. Impervious materials shall be placed over any exposed concrete/grout not lined with the forms that will come in contact with state waters. Forms and impervious materials shall remain in place until the concrete/grout is cured.

- C12. The sheet pile shall be installed using a vibratory hammer whenever possible.
- C13. Sound attenuation methods shall be utilized for the driving or proofing of steel piles with an impact hammer below the OHWL. For impact driving of steel piles that exceed the following criteria, a bubble curtain or other Ecology-approved sound attenuation device shall be used. The specific criteria include sound pressure levels of:
- Greater than or equal to 206 dB (one microPascal squared per second) peak,
 - Greater than or equal to 187 dB (one microPascal squared per second) accumulated sound exposure level (SEL) for fish greater than or equal to 2 grams, and
 - Greater than or equal to 183dB (one microPascal squared per second) (SEL) for fish less than 2 grams.

The bubble curtain shall be installed and properly functioning around the pile during all driving operations. The bubble curtain shall distribute air bubbles around 100 percent of the perimeter of the piling over the full length of the pile in the water column.

- C14. The sheet pile wall shall be located as close to the monolith as practicable.
- C15. Rock for the structure shall be composed of clean, angular material of a sufficient durability and size to prevent its being broken up or washed away by high water or wave action.
- C16. The erosion and scour repair shall use the minimum amount of substrate necessary to stabilize the structure and restore the depth.
- C17. Riprap shall be confined to the footprint illustrated in the project plans.
- C18. The bottom profile shall be constructed to the contours illustrated in the project plans.
- C19. Rip rap and quarry spalls shall be placed with a crane in order to reduce turbidity.
- C20. Wood treated with preservatives, trash, waste, or other deleterious materials shall not be burned below the OHWL. Limited burning of untreated wood or similar material may be allowed at or above the mean higher high water line.

D. Emergency/Contingency Measures:

- D1. The Applicant shall develop and implement a Spill Prevention and Containment Plan for all aspects of this project.

- D2. The Applicant shall have adequate and appropriate spill response materials on hand to respond to emergency release of petroleum products or any other material into waters of the state.
- D3. 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.
- D4. 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 shall immediately take the following actions:
- a. Cease operations at the location of the violation or spill.
 - b. Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage.
 - c. Notify Ecology of the failure to comply. All oil spills shall be reported immediately to Ecology's 24-Hour Spill Response Team at 1-800-258-5990, **and** within 24 hours of spills or other events to Ecology's 401/CZM Federal Project Manager at (425) 649-7129 or (425) 649-7000.
 - d. 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.

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.

E. Timing Requirements

- E1. This Order expires two (2) years from the date of issuance.
- E2. No in-water work shall occur between February 16 and July 31 of any year in which work is being conducted.

F. Reporting and Notification Requirement Conditions

- F1. Applicant shall provide notice to Ecology's 401/CZM Federal Project Manager:
- At least three (3) days prior to the start of each construction season.
 - Within 14 days after completion of construction for each season at the project site.

Notification, referencing Corps Reference #PM-ER-11-2, Order #8647 can take place by telephone to (425) 649-7129 or (425) 649-7000, fax to (425) 649-7098, or in writing.

- F2. If the project construction is not completed within 13 months of issuance of this Order, the Applicant shall submit per Condition A2 a written construction status report and submit status reports every 12 months until construction is complete.

YOUR RIGHT TO APPEAL

You have a right to appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Order. 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 the following within 30 days of the date of receipt of this Order:

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

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

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
<p>Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503</p> <p>Pollution Control Hearings Board 1111 Israel Rd SW STE 301 Tumwater, WA 98501</p>	<p>Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608</p> <p>Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903</p>

CONTACT INFORMATION

Please direct all questions about this Order to:

Rebekah Padgett
Department of Ecology
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008
(425) 649-7129
Rebekah.Padgett@ecy.wa.gov

MORE INFORMATION

- Pollution Control Hearings Board Website
www.eho.wa.gov/Boards_PCHB.aspx
- Chapter 43.21B RCW - Environmental Hearings Office – Pollution Control Hearings Board
<http://apps.leg.wa.gov/RCW/default.aspx?cite=43.21B>
- Chapter 371-08 WAC – Practice And Procedure
<http://apps.leg.wa.gov/WAC/default.aspx?cite=371-08>
- Chapter 90.48 RCW – Water Pollution Control
<http://apps.leg.wa.gov/RCW/default.aspx?cite=90.48>
- Chapter 173-204 WAC – Sediment Management Standards
www.ecy.wa.gov/biblio/wac173204.html
- Chapter 173-200 WAC – Water Quality Standards for Ground Waters of the State of Washington
www.ecy.wa.gov/biblio/wac173200.html
- Chapter 173-201A WAC – Water Quality Standards for Surface Waters of the State of Washington
www.ecy.wa.gov/biblio/wac173201A.html

SIGNATURE



Erik Stockdale, Unit Supervisor
Wetlands/401 Unit
Shorelands and Environmental Assistance Program
Northwest Regional Office

August 18, 2011

ATTACHMENT A

**U.S. ARMY CORPS OF ENGINEERS SEATTLE DISTRICT
LAKE WASHINGTON SHIP CANAL MONOLITH
EROSION AND SCOUR REPAIR PROJECT
Water Quality Certification Order #8647**

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

I have read and understand the conditions of Order #8647 Section 401 Water Quality Certification for the U.S. Army Corps of Engineers Seattle District Lake Washington Ship Canal Monolith Erosion and Scour Repair Project. I have also read and understand all permits, plans, documents, and approvals associated with the project referenced in this Order.

Signature

Date

Title

Company