



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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October 14, 2014

Karen Iwasaki
Seattle Public Utilities
PO Box 34018
Seattle, WA 98124

RE: Water Quality Certification Order #10858 for U.S. Army Corps of Engineers
Public Notice #NWS-2014-00247-WRD, Morse Lake Pump Plant Project,
Chester Morse Lake, North Bend, King County, Washington

Dear Ms. Iwasaki:

On March 10, 2014, Seattle Public Utilities submitted a Joint Aquatic Resource Permit Application (JARPA) to the Department of Ecology (Ecology) for a Section 401 Water Quality Certification (401 Certification) under the federal Clean Water Act for the proposed Morse Lake Pump Plant 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, Section Manager
Shorelands and Environmental Assistance Program
Northwest Regional Office

ES:rrp:mrw
Enclosure

By certified mail: 7011 0470 0003 3720 8346



cc: Jacalen Printz, U.S. Army Corps of Engineers
Stewart Reinbold, Washington Department of Fish and Wildlife
Jim Muck, U.S. Fish & Wildlife Service/NOAA Fisheries

e-cc: Misty Blair, Ecology
Laura Inouye, Ecology
Raman Iyer, Ecology
Loree' Randall, Ecology
ecyrefedpermits@ecy.wa.gov

IN THE MATTER OF GRANTING A) ORDER #10858
WATER QUALITY) Corps Reference #NWS-2014-00247-WRD
CERTIFICATION TO) Morse Lake Pump Plant Project; Chester Morse
Seattle Public Utilities) Lake, North Bend, 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: Seattle Public Utilities
Attn: Karen Iwasaki
PO Box 34018
Seattle, WA 98124

On March 10, 2014, Seattle Public Utilities submitted a Joint Aquatic Resources Permit Application (JARPA) to the Department of Ecology (Ecology) for a Section 401 Water Quality Certification. A joint 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 of Chapter 173-225 WAC on July 7, 2014.

The project would involve construction of a replacement floating pump plant and appurtenances on and adjacent to Chester Morse Lake. The purpose of the project is to provide capacity for pumped flows and prevent sloughing of sediment into the outlet channel, as well as improve the capability to transfer water from the lake to the Masonry Pool when lake elevations are below 1,538 feet (Chester Morse Lake datum).

The project includes the following components:

Dredging: Dredging of 6,000 cubic yards of sediment from the outlet channel of Chester Morse Lake and disposal of the dredge material in a 2-acre disposal area located in the lake, about 1,000 feet northeast of the discharge dike. Dredging would be conducted from barges using a mechanical dredge equipped with an environmental bucket. The sediment would be transported to the disposal site on barges. The dredged sediment would be placed into the lake at the disposal site using equipment staged on the barge.

Channel Modification: In order to provide a 29-foot-wide channel a vertical wall, the project includes installation of approximately 535 linear feet of interlocking sheet piles or combi-wall on both sides of the channel and an approximately 745-foot-long trapezoidal channel with a 23-foot-wide flat bottom. The side slopes and toes of the channel would be stabilized with a combination of pre-cast concrete panels and articulating pre-cast concrete block armoring.

Dike: Installation of sheet piling at the existing Discharge Dike to provide connections for the new pump plant pipelines and to reduce the leakage of water from the channel through the Discharge Dike and back into Chester Morse Lake under a pumping condition.

Outfall Structure: Installation of a discharge apron consisting of sheet piling and armoring to stabilize and prevent erosion where replacement pipelines will outfall to the channel at the Discharge Dike. Sheet pile walls would be constructed and articulating pre-cast concrete armoring placed at the bed of the channel in this area.

Float: Replacement floating pump plant would consist of a floating platform constructed from modular platform units and four separate pump units with intake screens. During pumping operations, the floating pump plant and pipelines would be secured to up to 30 hollow pipe anchor piles, permanently installed in Chester Morse Lake.

Staging: Three staging sites are proposed including operational and temporary construction staging sites. Anchor piling would be installed at Youngs Cove to provide moorage for the floating pump plant when not in operation.

Utility Line: The project includes installation of pipelines and electrical cables:

- Four, 48-inch-diameter high-density polyethylene (HDPE) pipelines, each approximately 500 feet long, would be installed in Chester Morse Lake. These pipelines would be submerged and would float up and down with the lake water level. The pipelines would be secured using anchor blocks located on the lake bottom and constrained using anchor piles where floating. During operations, one end of the pipelines would be secured to a floating service platform held in position with anchor piles. The other end of the pipelines would terminate at, and discharge through, the existing Discharge Dike.
- Six submarine power cables would be installed from a vault at the lake shore, along the lake bottom, to the floating pump plant. The cables would be installed on the existing ground surface and surface mounted where they cross Wetland A.

Piling: In addition to the permanent piles to secure the floating pump plant and pipelines, up to 12 steel temporary nearshore piles may be installed to assist in equipment mobilization at Youngs Cove and the two lake access locations.

Land Clearing: Land clearing would be conducted in association with the staging areas and electrical cables.

Mitigation for permanent surface laid cables crossing a wetland along the western shore of Chester Morse Lake and removal of six trees within the shoreline buffer at Youngs Cove includes planting of conifers along the northwest shore of the lake, placement of large woody debris along the western shore of the lake, and placement of willow stakes in a cleared area.

The project is located within the Cedar River Municipal Watershed at 19901 Cedar Falls Road SE, North Bend, King County, Washington, in Chester Morse Lake Section 11, T. 22N, R 8E, Section 12, T. 22N, R 8E, and Section 7, T. 22N, R 9E, 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 Seattle Public Utilities 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 #10858 and Corps Reference #NWS-2014-00247-WRD.

- A3. Work authorized by this Order is limited to the work described in the JARPA received by Ecology on March 10, 2014, and the revised project description and site plans received on May 14, 2014. The Applicant will be out of compliance with this Order and must reapply with an updated application if the information contained in the JARPA and revised project description 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. This Order shall be rescinded if the U.S. Army Corps of Engineers does not issue an individual Section 404 permit.
- A6. 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.
- A7. 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.
- A8. 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.
- A9. 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.
- A10. This Order does not authorize direct, indirect, permanent, or temporary impacts to waters of the state (including wetlands) or related aquatic resources, except as specifically provided for in conditions of this Order.

A11. 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. This Order does not authorize temporary exceedances of water quality standards beyond the limits established in WAC 173-201A-200(1)(e)(i).

B2. The Applicant shall conduct in-water construction water quality sampling and monitoring as described in the *Morse Lake Pump Plant Project Water Quality Protection Plan*, prepared by Herrera Environmental Consultants and URS Corporation, dated August 15, 2014 (hereafter referred to as the Water Quality Plan), or as modified by this Order or revised and approved by Ecology.

B3. Background samples shall be collected at the same frequency as the point of compliance samples.

B4. Detection of exceedances: Water quality standards for turbidity in “Char Spawning and Rearing” 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. 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.

B5. Reporting: If no exceedances are detected, results of water quality sampling, as determined by the Water Quality Plan, shall be forwarded to Ecology on a monthly basis in accordance to Condition A2.

B6. 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 #10858, 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:

- 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 in a manner to prevent it from entering the wetlands and/or wetland buffers.
- 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.

In-Water Conditions:

- C6. The Applicant shall operate the barge(s) and tug in deep water so as to minimize nearshore propeller wash impacts such as suspension of nearshore sediments.
- C7. Barges and other work vessels shall not be allowed to ground-out during construction.
- C8. A turbidity curtain shall be properly deployed and maintained during open-water dredge disposal.
- C9. Grading at the site of the discharge apron shall be conducted in a manner that minimizes the disturbance or siltation of adjacent waters.

Pump Plant Decommissioning Conditions:

- C10. The existing pump plant, including pumps, platforms, pipelines, and electrical cables, shall decommissioned and removed once the new pump plant is constructed and operational.
- C11. Spill containment measures shall be implemented for applicable components of the pump plant removal, with spill containment booms continuously deployed around the platforms during decommissioning.
- C12. To the extent practicable, the pump plant infrastructure shall be relocated upland prior to disassembly.
- C13. The pump plant infrastructure shall be moved immediately from the water into the barge or onto uplands. The components shall not be shaken, hosed-off, left hanging to drip or any other action intended to clean or remove adhering material from the pump plant infrastructure.
- C14. Work surface on the barge deck or on uplands shall include a containment basin for pump plant infrastructure and any sediment removed during removal of the components. Basins may be constructed of durable plastic sheeting with sidewalls supported by hay bales or support structure to contain all sediment.
- C15. The pump plant infrastructure and any sediment removed during removal of components shall be disposed of at an approved upland disposal site.

Pile Driving Conditions:

- C16. The temporary nearshore pilings (up to 12) shall be steel.
- C17. The steel pilings shall be installed using a vibratory hammer whenever possible. An impact hammer may be used to proof pile, if needed.

Piling Removal Conditions:

- C18. Approximately 12 steel temporary nearshore piles shall be removed from fresh waters. Piling shall be removed by vibratory extraction.
- C19. Piles, stubs, debris, and all associated excavated sediments shall be contained and prevented from entering waters of the state.

- C20. Piles removed from substrate: the pile shall be moved immediately from the water into the barge or onto uplands. The pile shall not be shaken, hosed-off, left hanging to drip or any other action intended to clean or remove adhering material from the pile.
- C21. Work surface on the barge deck or on uplands shall include a containment basin for piles and any sediment removed during pulling of the piling. Basins may be constructed of durable plastic sheeting with sidewalls supported by hay bales or support structure to contain all sediment.
- C22. The piles and any sediment removed during pulling of the piling shall be disposed of at an approved upland disposal site.

Sheet Pile Driving:

- C23. The sheet pilings shall be installed using a vibratory hammer whenever possible. An impact hammer may be used to proof pile, if needed.

D. Dredging and Disposal Conditions:

- D1. All dredging shall be completed with a mechanical dredge equipped with an environmental bucket. **Use of any other type of dredge will require preapproval from Ecology.**
- D2. Dredged material shall be placed onto a barge for transport by tugboat. The barges shall have sidewalls or other containment in order to contain the material within the barge. Barges shall not be overfilled to the point where dredge material overtops the sidewalls or other containment.
- D3. Dredged materials shall be disposed of within the proposed open-water Chester Morse Lake disposal location. **Use of any other type of disposal method or location requires pre-approval by Ecology.**
- D4. 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. This debris shall be disposed of upland such that it does not enter waters of the state.
- D5. 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.

- D6. Dredged material shall not be stockpiled on a temporary or permanent basis below the ordinary high water line.
- D7. During dredging, the Applicant shall have a boat available on site at all times to retrieve debris from the water.
- D8. Caution shall be used when placing material from the bucket into the barge to limit splash and prevent spillage.
- D9. The Dredge operator shall pause the bucket at the surface, after its ascent through the water column, to minimize turbidity by allowing free water to drain from the bucket prior to swinging the bucket to the barge.
- D10. A **Dredging and Disposal Plan** is required and the Applicant shall submit the plan to Ecology for review and approval per Condition A2 of this Order at least two (2) weeks prior to the start of dredging. The plan shall identify methods, procedures, and equipment that will be used and describe how water quality impacts will be minimized during dredging and disposal activities. Notification information also shall be included in this plan.
- D11. Prior to each dredging cycle, the Applicant shall contact the Dredged Material Management Program (DMMP) 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 low-moderate in potential for contamination and the recency determination extends until January 2020. Contact the Dredged Material Management Office for a possible extension.
- E. Emergency/Contingency Measures:**
- E1. The Applicant shall develop and implement a Spill Prevention and Containment Plan for all aspects of this project.
- E2. 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.
- E3. 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.

- E4. 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.

F. Timing Requirements

- F1. All in-water work shall be completed by the work window identified in the most current Hydraulic Project Approval (HPA) issued for this project. Any project change that requires a new or revised HPA should also be sent to Ecology for review.
- F2. This Order expires 3 years from the date of issuance of the Corps permit.

G. Reporting and Notification Requirement Conditions

- G1. The Applicant shall provide to Ecology's 401/CZM Federal Permit Manager a copy of the final Corps permit within 2 weeks of receipt of the permit. A copy shall be submitted per condition A2 above.
- G2. Applicant shall provide notice to Ecology's 401/CZM Federal Project Manager at least three (3) days prior to the start of construction and within 14 days after completion of construction at the project site. Notification, referencing Corps Reference #NWS-2014-

00247-WRD, Order #10858 can take place by telephone to (425) 649-7129 or (425) 649-7000, fax to (425) 649-7098, or in writing.

- G3. 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 both of 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 Road 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 and Land Use 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, Section Manager
Shorelands and Environmental Assistance Program
Northwest Regional Office



October 14, 2014

ATTACHMENT A

**SEATTLE PUBLIC UTILITIES
MORSE LAKE PUMP PLANT PROJECT
Water Quality Certification Order #10858**

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

I have read and understand the conditions of Order #10858 Section 401 Water Quality Certification for the Seattle Public Utilities Morse Lake Pump Plant 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