STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
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July 13, 2021

J.E. McAmis
ATTN: Scott Vandergrift
621 County Dr.
Chico, CA 95928

RE: Water Quality Certification Order No. **20137** for Corps Reference No. **NWS-2018-00037**, J.E. McAmis Access Channel Dredging, Old Mouth of the Cowlitz, Cowlitz County, Washington.

Dear Scott Vandergrift:

On October 28, 2020, J.E. McAmis submitted a request for a Section 401 Water Quality Certification (WQC) under the federal Clean Water Act for J.E. McAmis Access Channel Dredging, Cowlitz County, Washington. The Department of Ecology considered the request valid on November 3, 2020.

On behalf of the state of Washington, the Department of Ecology certifies that the work described in the Section 401 Request and supporting documents complies with applicable provisions of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, as amended, and applicable state laws. This WQC is subject to the conditions contained in the enclosed Order.

Please ensure that anyone doing work under this Order has read, is familiar with, and is able to follow all of the provisions within the attached Order.

If you have any questions about this decision, please contact Laura Inouye at (360) 515-8213. The enclosed Order may be appealed by following the procedures described within the Order.

Sincerely,

Loree' Randall on behalf of Brenden McFarland

Loree' Randall

Brenden McFarland, Section Manager
Environmental Review and Transportation Section
Shorelands and Environmental Assistance Program

Enclosure

e-cc: Danette Guy, Corps of Engineers
Ryan Crotty, Maul Foster and Alongi, Inc
Loree' Randall, Ecology, HQ SEA
ecyrefedpermits@ecy.wa.gov

IN THE MATTER OF GRANTING A WATER QUALITY CERTIFICATION TO J.E. McAmis pursuant to 33 U.S.C. 1341 (FWPCA § 401), RCW 90.48.120, RCW 90.48.260 and Chapter 173-201A WAC	))))))	**ORDER # 20137** **Corps Reference No. NWS-2018-00037** J.E. McAmis Access Channel Dredging, located in Cowlitz County, Washington.

J.E. McAmis
ATTN: Scott Vandergrift
621 County Dr.
Chico, CA 95928

On September 29, 2020, J.E. McAmis submitted a pre-filing meeting request to the Department of Ecology (Ecology). J.E. McAmis then on October 28, 2020, submitted a request for a Section 401 Water Quality Certification (WQC) under the federal Clean Water Act for the J.E. McAmis Access Channel Dredging, Cowlitz County, Washington. Ecology considered the request valid on November 3, 2020. Ecology issued a public notice for the project on November 16, 2020.

The proposed work consists of dredging of up to 42,000 cubic yards (cy) initially within the Old Mouth of the Cowlitz River (OMCR) to maintain access to J.E. McAmis' existing facility by barge and tug. Sediment will be removed within the limits shown to a depth of -8 ft. Columbia River Datum (CRD) with a 2 ft. overdredge allowance (-10 ft. CRD). The proposed work also includes an annual maintenance dredging allowance of up to 7,500 cy per year over the 10 year permit period. Sediment will be dredged using a clamshell; dredged sediment will be placed on a materials barge with sidewalls and transported to a U.S. Army Corps of Engineers (USACE)-approved in-water disposal site. The proposed work also includes pile removal and removal of a significant amount of debris (sunken barge, detritus) in the OMCR in the vicinity of the dredge activities.

The project is located within the Old Mouth of the Cowlitz River, Cowlitz River and Columbia River in Section 10/11, Township 7N, Range 2W, in WRIA No. 25 (Grays-Elochoman).

AUTHORITIES

In exercising authority under 33 U.S.C. § 1341, RCW 90.48.120, and RCW 90.48.260, Ecology has reviewed this WQC request 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;

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;

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; and,

4. Conformance with Washington's prohibition on discharges that cause or tend to cause pollution of waters of the state of Washington. RCW 90.48.080.

With this Water Quality Certification (WQC) Order, Ecology is granting with conditions, J.E. McAmis' request for a Section 401 Water Quality Certification for the J.E. McAmis Access Channel Dredging project. Ecology has determined that the proposed discharges will comply with all applicable state water quality requirements, provided the project is conducted in accordance with the Section 401 Water Quality Certification Request Ecology received on October 28, 2020, and the supporting documentation referenced in the Table 1 below, **and the conditions of this Order**.

Table #1 – Supporting Documentation Received

Date Received	Document Type	Title & Date	Author
October 28, 2020	Suitability Determination	*Suitability Determination Memorandum for the J.E. McAmis, Inc. Project in the Old Mouth of the Cowlitz River (OMCR) in Longview, Washington (NWS-2018-0037), dated October 22, 2020*	DMMP
November 3, 2020	SEPA	*SEPA Determination of Nonsignificance, signed November 7, 2017*	Cowlitz County
November 3, 2020	Biological Evaluation	*Biological Evaluation, J.E. McAmis Entrance Channel Dredging Project, Longview, Washington, dated July 26, 2018*	Maul Foster and Alongi, Inc.
November 3, 2020	Mitigation Plan	*Mitigation Plan, J.E. McAmis Entrance Channel Dredging Project, Longview, Washington, dated June 19, 2020*	Maul Foster and Alongi, Inc.
November 3, 2020	Water Quality Monitoring Plan	*Water Quality Monitoring Plan, JE McAmis Access Channel Dredging, dated April 28, 2020*	Maul Foster and Alongi, Inc.

Issuance of this Section 401 Water Quality Certification for this proposal does not authorize the J.E. McAmis to exceed applicable state water quality standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200 WAC) or sediment quality standards (Chapter 173-204 WAC). Furthermore, nothing in this Section 401 Water Quality Certification absolves the J.E. McAmis from liability for contamination and any subsequent cleanup of surface waters, ground waters, or sediments resulting from project construction or operations.

A. General Conditions

Clean Water Act (CWA) Section 401 certification is granted with conditions to J.E. McAmis. Ecology has determined that any discharge from the proposed project will comply with water quality requirements, as defined by 40 CFR 121.1(n), subject to the following conditions pursuant to Section 33 USC §1341(d). Additionally, the following conditions shall be incorporated into the Corps permit and strictly adhered to by J.E. McAmis. This WQC 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 WQC Order.

Specific condition justifications and citations required by 40 CFR 121.7(d)(1) are provided below each condition in *italic text.*

1. In this WQC Order, the term "Project Proponent" shall mean J.E. McAmis and its agents, assignees, and contractors.
   - *Justification – Ecology needs to identify that conditions of this WQC Order apply to anyone conducting work on behalf of the Project Proponent to ensure compliance with the water quality standards and other applicable state laws.*
   - *Citation – 40 CFR 121.1(j), Chapter 90.48 RCW, Chapter 90.48.080 RCW, Chapter 90.48.120 RCW, Chapter 90.48.260 RCW, Chapter 173-200 WAC, Chapter 173-201A WAC, and Chapter 173-225-010 WAC.*

2. All submittals required by this WQC Order shall be sent to Ecology Headquarters Office, Attn: Federal Permit Manager, via e-mail to fednotification@ecy.wa.gov and cc to laura.inouye@ecy.wa.gov. The submittals shall be identified with Order #20137 and include the Project Proponent's name, Corps reference number, project name, project contact, and the contact phone number.
   - *Justification – Ecology needs to identify where information and submittals are to be submitted to be in compliance with the requirements of this WQC Order.*
   - *Citation – 40 CFR 121, Chapter 90.48 RCW, Chapter 90.48.120 RCW, Chapter 90.48.260 RCW, Chapter 173-201A WAC, and Chapter 173-225-010 WAC.*

3. Work authorized by this WQC Order is limited to the work described in the WQC Request package received by Ecology on November 3, 2020, and the supporting documentation identified in Table 1 above.
   - *Justification – Ecology has the authority to prevent and control pollution of state waters. By authorizing a discharge into a water of the state, through a WQC,*

Ecology is certifying the project as proposed will not negatively impact our state's water quality. Therefore, it is imperative the project is conducted as it was presented during the review process. Any deviations from information within the WQC Request package and this WQC Order must be disclosed prior to the initiation of the planned work.

- *Citation –40 CFR 121, Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.120 RCW, Chapter 90.48.260 RCW, Chapter 173-200 WAC, Chapter 173-201A WAC, Chapter 173-204 WAC, and Chapter 173-225-010 WAC.*

4. The Project Proponent shall send (per condition A.2 above) a copy of the final Corps permit to Ecology's Federal Permit Manager within two weeks of receiving it.
   - *Justification - This condition is needed to verify that the Corps completed the permit process and an authorization has been issued. Additionally, it allows Ecology to ensure that all of the conditions of this WQC Order have be incorporated into the Corps Permit to protect water quality.*
   - *Citation – 40 CFR 121.10, Chapter 90.48 RCW, Chapter 90.48.260 and Chapter 173-201A.*

5. The Project Proponent shall keep copies of this WQC Order 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.
   - *Justification – All parties (including on-site contractors) must be aware of and comply with the WQC Order for the protection of water quality.*
   - *Citation – 40 CFR 121.3, Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 173-201A WAC, and Chapter 173-225-010 WAC.*

6. The Project Proponent shall provide access to the project site and all mitigation sites upon request by Ecology personnel for site inspections, monitoring, and/or necessary data collection, to ensure that conditions of this Order are being met.
   - *Justification - Ecology must be able to investigate and inspect construction sites and facilities for compliance with all state rules and laws.*
   - *Citation - Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.090 RCW, Chapter 173-201A WAC, and Chapter 173-225-010 WAC.48*

7. The Project Proponent shall ensure that all project engineers, contractors, and other workers at the project site with authority to direct work have read and understand relevant conditions of this Order and all permits, approvals, and documents referenced in this Order. The Project Proponent shall provide Ecology a signed statement (see Attachment A for an example) from each signatory that s/he has read and understands the conditions of this Order and the above-referenced permits, plans, documents and approvals. These statements shall be provided to Ecology before construction begins.
   - *Justification - Ecology needs to ensure that anyone conducting work at the project, on behalf of the Project Proponent, are aware of and understand the required conditions*

of this WQC Order to ensure compliance with the water quality standards and other applicable state laws.

- *Citation – 40 CFR 121.1(j), Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 173-201A WAC, and Chapter 173-225-010 WAC.*

8. 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.
   - *Justification - Ecology has the authority to prevent and control pollution of state waters, and to protect designated uses. By authorizing a discharge into a water of the state, through a water quality certification, we are certifying the project as proposed will not negatively impact our state's water quality and will comply with the state's water quality requirements. Therefore, it is imperative the project is conducted as it was presented during the review process, and as conditioned herein.*
   - *Citation - Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 173-201A WAC, Chapter 173-201A-300(2)(e)(i) WAC, Chapter 173-201A-310 WAC, Chapter 173-204-120 WAC, and Chapter 173-225-010 WAC.*

9. Failure of any person or entity to comply with the WQC Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the terms of this Order.
   - *Justification - Ecology must protect waters of the state from all discharges and potential discharges of pollution that can affect water quality to protect aquatic life and beneficial uses; civil penalties and other enforcement actions are the primary means of securing compliance with water quality requirements.*
   - *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.037 RCW, Chapter 90.48.080 RCW, Chapter 90.48.120 RCW, Chapter 90.48.142 RCW, Chapter 90.48.144 RCW, and Chapter 173-225-010 WAC.*

B. Notification Requirements

1. The following notification shall be made via phone or e-mail (e-mail is preferred) to Ecology's Federal Permit Manager via e-mail to fednotification@ecy.wa.gov and cc to Laura.Inouye@ecy.wa.gov. Notifications shall be identified with Order No. 20137 and include the Project Proponent's name, Corps reference #, project name, project location, project contact and the contact's phone number.

   a. Immediately following a violation of state water quality standards or when the project is out of compliance with any of this Orders conditions.
   b. At least ten (10) days prior to all pre-construction meetings
   c. At least ten (10) days prior to conducting initial in-water work activities for each in-water work window.
   d. At least seven (7) days within each in-water work window.

- *Justification - Ecology must be aware of when a project starts and ends and whether there are any issues. This allows Ecology to evaluate compliance with the state water quality requirements.*
- *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 173-201A WAC, Chapter 173-201A-300–330 WAC, Chapter 173-204 WAC, and Chapter 173-225-010 WAC.*

2. In addition to the phone or e-mail notification required under B.1.a. above, the Project Proponent shall 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.
   - *Justification - Ensure the Project Proponent remains in full compliance with state water quality requirements for the duration of the project.*
   - *Citation – Chapter 90.48 RCW, Chapter 90.48.120 RCW, Chapter 173-201A WAC, and Chapter 173-225-010 WAC.*

C. Timing

1. This Order will expire on July 13, 2031.
   - *Justification – Certifications are required for any license or permit that authorizes an activity that may result in a discharge. Ecology needs to be able to specify how long the WQC Order will be in effect.*
   - *Citation – 40 CFR 121 and Chapter 173-225-010 WAC.*

2. In-water work shall be conducted between October 1 and December 15 of any year.
   - *Justification – This condition is reaffirming the project will take place during a time period that will not harm fish or other aquatic species.*
   - *Citation – Chapter 77.55 RCW, Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 173-201A WAC, Chapter 173-201A-300 WAC, Chapter 173-201A-330 WAC, Chapter 173-225-010 WAC, and Chapter 220-660 WAC.*

3. Any project change that requires a new or revised Hydraulic Project Approval (HPA) from the Department of Fish and Wildlife should be sent to Ecology for review.
   - *Justification - This condition is requiring notification of any project changes to ensure the project meet's the state's Water Quality Standards. Additionally, an HPA may include additional BMPs that Ecology needs to be aware of.*
   - *Citation – Chapter 77.55 RCW, Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 173-201A WAC, Chapter 173-201A-300 WAC, Chapter 173-201A-330 WAC, Chapter 173-225-010 WAC, and Chapter 220-660 WAC.*

D. Water Quality Monitoring & Criteria

1. This Order does not authorize the Project Proponent to exceed applicable turbidity standards beyond the limits established in WAC 173-201A-200(1)(e)(i).
   - *Justification – This condition provides citation to the appropriate water quality standard criteria to protect surface waters of the state. Ecology must protect waters of the state from all discharges and potential discharges of pollution that can affect water quality to protect aquatic life and beneficial uses.*
   - *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 173-201A WAC, Chapter 173-201A-300–330 WAC, Chapter 173-204-120 WAC, and Chapter 173-225-010 WAC.*

2. The Project Proponent shall conduct water quality monitoring as described in the approved *Final Water Quality and Protection Plan, JE McAmis Access Channel Dredging* (hereafter referred to as the WQMP) prepared by J.E. McAmis dated April 28, 2020.
   - *Justification – This condition is necessary to ensure that the monitoring as proposed by the Project Proponent and authorized by Ecology is conducted to protect water quality. Ecology must protect waters of the state from all discharges and potential discharges of pollution that can affect water quality to protect aquatic life and beneficial uses.*
   - *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 173-201A WAC, Chapter 173-201A-300–330 WAC, Chapter 173-204-120 WAC, and Chapter 173-225-010 WAC.*

3. Monitoring results shall be submitted weekly to the Ecology Federal Permit Manager, per condition A.2.
   - *Justification – This information is necessary for Ecology to determine if the project was implemented as approved by the WQC Order and that no adverse impacts to water quality or beneficial uses occurred.*
   - *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 173-201A WAC, Chapter 173-201A-300–330 WAC, Chapter 173-204-120 WAC, and Chapter 173-225-010 WAC.*

4. Visible turbidity anywhere beyond the temporary area of mixing (point of compliance) from the activity shall be considered an exceedance of the standard.

- *Justification – This condition specifically informs the Project Proponent of when they would be out of compliance with the water quality standards and an obvious sign of water quality degradation. Ecology must protect waters of the state from all discharges and potential discharges of pollution that can affect water quality to protect aquatic life and beneficial uses.*
- *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 173-201A WAC, Chapter 173-201A-300–330 WAC, Chapter 173-204-120 WAC, and Chapter 173-225-010 WAC.*

5. If water quality exceedances for turbidity are observed outside the point of compliance, the Project Proponent or the contractor shall assess the cause of the water quality problem and take immediate action to modify or stop, contain, and correct the problem and prevent further water quality turbidity exceedances.
   - *Justification – Ecology must protect waters of the state from all discharges and potential discharges of pollution and know if there are exceedances of the water quality standards that protect aquatic life and beneficial uses.*
   - *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 173-201A WAC, Chapter 173-201A-300–330 WAC, Chapter 173-204-120 WAC, and Chapter 173-225-010 WAC.*

E. Dredging and Disposal

1. All dredging is to be done using a mechanical (clamshell) dredge.
   - *Justification – Ecology has reviewed the project and the BMPs for a specific type of dredging. Changes to the dredging method would require different BMPs. If new dredging methods are proposed, a new WQC pre-filing meeting request, followed by a new WQC request (after requisite 30-days) is required.*
   - *Citation – 40 CFR 121, Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 90.52-040 RCW, Chapter 90.54.020(2)(b) RCW, Chapter 173-201A WAC, Chapter 173-201A-240(5)(b) WAC, and Chapter 173-204-400(2).*

2. All suitable dredged material will be disposed of by bottom dump barge at a Corps approved Columbia River flow lane disposal location.
   - *Justification – Ecology has reviewed the project and the BMPs for a specific type of disposal technique and disposal location. If different in-water disposal sites are proposed, a new WQC pre-filing meeting request, followed by a new WQC request (after requisite 30-days) is required.*
   - *Citation – 40 CFR 121, Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 90.52-040 RCW, Chapter 90.54.020(2)(b) RCW, Chapter 173-201A WAC, Chapter 173-201A-240(5)(b) WAC, and Chapter 173-204-400(2).*

3. Dredging operations shall be conducted in a manner that minimizes the disturbance and siltation of adjacent waters and prevents the accidental discharge of petroleum products, chemicals or other toxic or deleterious substances into state waters.

- *Justification – Ecology must protect waters of the state from all discharges and potential discharges of pollution that can affect water quality to protect aquatic life and beneficial uses.*
- *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 90.56 RCW, Chapter 173-201A WAC, Chapter 173-201A-300–330 WAC, Chapter 173-204-120 WAC, Chapter 173-225-010 WAC.*

4. Dredged material shall not be temporarily or permanently stockpiled below the OHWM.
   - *Justification – Stockpiles below the OHWM can discharge excess sediment to waters of the state and degrade water quality. Ecology must protect waters of the state from all discharges and potential discharges of pollution that can affect water quality to protect aquatic life and beneficial uses.*
   - *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 173-201A WAC, Chapter 173-201A-300–330 WAC, Chapter 173-204-120 WAC, and Chapter 173-225-010 WAC.*

5. All debris larger than two (2) feet in any dimension shall be removed from the dredged sediment using a 1 foot by 1 foot grizzly prior to disposal at the open water site. Similar-sized debris floating in the dredging or disposal area shall be removed.
   - *Justification – Ecology must be assured that the Project Proponent is managing and disposing of material to protect waters of the state from all discharges and potential discharges of pollution that can affect water quality to protect aquatic life and beneficial uses.*
   - *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 173-201A WAC, Chapter 173-201A-300–330 WAC, Chapter 173-204-120 WAC, and Chapter 173-225-010 WAC.*

6. The *Dredging and Disposal Workplan* (Workplan) shall include the following:
   a. General information including schedule, primary contact, and hours of operation
   b. Dredged quantities and disposal location, including any upland locations.
   c. Dredging procedures and sequence
   d. Equipment list
   e. A description of the BMPs to be used for dredging, dewatering, transloading, and disposal.
   - *Justification - Ecology has reviewed the project and the BMP prior to the contractor being brought on board, therefore we need to obtain specific information regarding dredging and disposal plan to ensure that the specific type of dredging, disposal technique and disposal location within the Workplan. This information will allow Ecology to ensure the project will comply with water quality standards. Also if there have been major changes to the original proposed dredging and disposal, work must not proceed and a new WQC pre-filing meeting request, followed by a new WQC request (after requisite 30-days) is required.*
   - *Citation – CFR 121, Chapter 70A-200 RCW, Chapter 77.55 RCW, Chapter 79.02.30040 RCW, Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080*

RCW, Chapter 90.52-040 RCW, Chapter 90.54.020(2)(b) RCW, Chapter 173-201A WAC, Chapter 173-201A-240(5)(b)WAC, Chapter 173-201A-300 WAC, Chapter 173-201A-330 WAC, Chapter 173-204-400(2) WAC, Chapter 173-225-010 WAC, and Chapter 220-660 WAC.

7. A pre-dredge meeting is required to be convened prior to the start of dredging. A **Dredging and Disposal Workplan** (Workplan) shall be submitted to Ecology to the address shown in Condition A2 two weeks prior to the pre-dredge meeting.
   - *Justification – Ecology would like to meet with the Project Proponent and contractor to go over the Workplan prior start of work to ensure that the plan reflects the project that has been authorized by this WQC Order. If there has been major changes work must not proceed and a new WQC pre-filing meeting request, followed by a new WQC request (after requisite 30-days) is required.*
   - *Citation – CFR 121, Chapter 70A-200 RCW, Chapter 77.55 RCW, Chapter 79.02.30040 RCW, Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 90.52-040 RCW, Chapter 90.54.020(2)(b) RCW, Chapter 173-201A WAC, Chapter 173-201A-240(5)(b) WAC, Chapter 173-201A-300 WAC, Chapter 173-201A-330 WAC, Chapter 173-204-400(2) WAC, Chapter 173-225-010 WAC, and Chapter 220-660 WAC.*

8. All dredging and disposal shall have a valid suitability determination prior to in-water work. This area ranks low-moderate in potential for contamination and the recency determination extends through May 2026. Contact the DMMO for a possible extension on this suitability determination.
   - *Justification – The DMMP process confirms that material is suitable for in-water disposal and that the project meets state antidegradation regulations.*
   - *Citation – Chapter 173-201A WAC, Chapter 173-201A-230 WAC, Chapter 173-201A-240(1) WAC, Chapter 173-201A-240(2) WAC, Chapter 173-204 WAC, Chapter 173-204-110–120 WAC, Chapter 173-204-400(2) WAC, Chapter 173-204-410(7) WAC, Chapter 173-204-350(d), and Chapter 173-225 WAC.*

9. Only approximately 48,000 cubic yards of dredged material is allowed under the October 22, 2020 DMMP suitability determination. Note: If additional material needs to dredging and dispose of, a new WQC pre-filing meeting request, followed by a new WQC request (after requisite 30-days) is required.
   - *Justification – The volume of material is limited to what was is characterized under the DMMP process.*
   - *Citation – Chapter 173-201A WAC, Chapter 173-201A-230 WAC, Chapter 173-201A-240(1) WAC, Chapter 173-201A-240(2) WAC, Chapter 173-204 WAC, Chapter 173-204-110–120 WAC, Chapter 173-204-400(2) WAC, Chapter 173-204-410(7) WAC, Chapter 173-204-350(d), and Chapter 173-225 WAC.*

10. Barges shall not be allowed to ground-out during in-water construction.

- *Justification – This condition protects shallow water habitat from damage.*
- *Citation – Chapter 173-201A-300(2)(e)(i) WAC, Chapter 173-201A-310 WAC, and Chapter 173-204-120 WAC.*

11. Barges shall be kept free of material that could be blown into the water.
    - *Justification – Release of debris or garbage is considered polluting matter and prohibited from being discharged into waters of the state.*
    - *Citation – Chapter 90.48 RCW, Chapter 70A-200 RCW, and Chapter 79.02-300 RCW.*

F. Project Mitigation Conditions

1. The Project Proponent shall implement the 2020 Mitigation Plan, J.E. McAmis Entrance Channel Dredging Project, Longview, Washington, prepared by Maul Foster and Alongi, Inc., dated June 19, 2020 [hereafter referred to as "Mitigation Plan"], or as modified by this Order.
    - *Justification – This condition is necessary to ensure that unavoidable physical alterations are properly mitigated for the protection of water quality and beneficial uses*
    - *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.74 RCW, Chapter 90.74.005-040 RCW, Chapter 173-201A WAC, Chapter 173-201A-300 WAC, Chapter 173-201A-310 WAC, Chapter 173-204-120 WAC, Chapter 173-225-010 WAC, and Chapter 220-660 WAC.*

2. The Project Proponent shall submit any changes to the Mitigation Plan in writing to Ecology see A2 prior to implementing the change. (Please note that substantial changes could require a new WQC).
    - *Justification – Ecology must be able to understand the scope of changes to the Mitigation Plan to ensure that unavoidable physical alterations are properly mitigated for the protection of water quality and beneficial uses.*
    - *Citation – Chapter 90.48 RCW, Chapter 90.74 RCW, Chapter 90.74.005-040 RCW, Chapter 173-201A WAC, Chapter 173-201A-300(2)(e)(i) WAC, Chapter 173-201A-310 WAC, Chapter 173-204-120 WAC, and Chapter 173-225-010 WAC.*

3. Pile removal, handling, and disposal shall follow the EPA Region 10 Best Management Practices for Piling Removal and Placement in Washington State, dated February 18, 2016.
    - *Justification- The EPA BMPs were developed to protect water, sediment, and habitat quality by minimizing turbidity, sediment disturbance and debris re-entry to the water column and benthic zone during pile removal/placement activities.*
    - *Citations- Chapter 77.55 RCW, Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 173-201A WAC, Chapter 173-201A-300 WAC, Chapter 173-201A-330 WAC, Chapter 173-225-010 WAC, and Chapter 220-660 WAC.*

4. If pile removal fails, the pile stub must be cut at least 2 ft below mudline, and the location (latitude and longitude) of all cut piling shall be reported to Ecology within 2 months of removal of all piles.
   - *Justification- Pile stubs can release associated creosote if exposed, and stubs at the surface can result in localized erosion that leads to further exposure of the stubs.*
   - *Citations- Chapter 77.55 RCW, Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 173-201A WAC, Chapter 173-201A-300 WAC, Chapter 173-201A-330 WAC, Chapter 173-225-010 WAC, and Chapter 220-660 WAC.*

5. The Project Proponent shall submit an As-Built Report per Condition A2 within 90 days of completion of debris removal, including locations of any pilings that broke during removal and were left in place.
   - *Justification – To ensure the mitigation was implemented as reviewed and authorized to provide commensurate water quality functions and beneficial uses lost as a result of the project.*
   - *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.74 RCW, Chapter 90.74.005-040 RCW, Chapter 173-201A WAC, Chapter173-201A-300(2)(e)(i) WAC, Chapter 173-201A-310 WAC, Chapter 173-204-120 WAC, and Chapter 173-225-010 WAC.*

G. Emergency/Contingency Measures

1. The Project Proponent shall develop and implement a spill prevention and containment plan for this project.
   - *Justification – Ecology must ensure that the Project Proponent has a plan to prevent pollution from entering waterways. Ecology must protect waters of the state from all discharges and potential discharges of pollution that can affect water quality to protect aquatic life and beneficial uses.*
   - *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 90.56 RCW, Chapter 90.56.280 RCW, Chapter 173-201A WAC, Chapter 173-201A-300–330 WAC, Chapter 173-204-120 WAC, Chapter 173-225-010 WAC, and Chapter 173-303-145 WAC.*

2. The Project Proponent shall have adequate and appropriate spill response and cleanup materials available on site to respond to any release of petroleum products or any other material into waters of the state.
   - *Justification – Ecology must have assurance that the Project Proponent has the material readily available in order to address any spills that might occur to protect waters of the state. Ecology must protect waters of the state from all discharges and potential discharges of pollution that can affect water quality to protect aquatic life and beneficial uses.*
   - *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 90.56 RCW, Chapter 90.56.280 RCW, Chapter 173-201A WAC, Chapter*

173-201A-300–330 WAC, Chapter 173-204-120 WAC, Chapter 173-225-010 WAC, and Chapter 173-303-145 WAC.

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.
   - *Justification – Ecology must protect waters of the state from all discharges and potential discharges of pollution that can affect water quality to protect aquatic life and beneficial uses.*
   - *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 90.56 RCW, Chapter 90.56.280 RCW, Chapter 173-201A WAC, Chapter 173-201A-300–330 WAC, Chapter 173-204-120 WAC, Chapter 173-225-010 WAC, and Chapter 173-303-145 WAC.*

4. Work causing distressed or dying fish and discharges 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 Project Proponent shall notify Ecology's Federal Permit Manager per condition A2 and immediately take the following actions:
   a. Cease operations at the location of the non-compliance.
   b. Assess the cause of the water quality problem and take appropriate measures to correct the problem and prevent further environmental damage.
   c. 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.
   d. Immediately notify Ecology's Regional Spill Response Office and the Washington State Department of Fish & Wildlife with the nature and details of the problem, any actions taken to correct the problem, and any proposed changes in operation to prevent further problems.
   e. Immediately notify the National Response Center at 1-800-424-8802, for actual spills to water only.
   - *Justification – This condition is necessary to prevent oil and hazardous materials spills from causing environmental damage and to ensure compliance with water quality requirements. The sooner a spill is reported, the quicker it can be addressed, resulting in less harm. Ecology must protect waters of the state from all discharges and potential discharges of pollution that can affect water quality to protect aquatic life and beneficial uses.*
   - *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 90.56 RCW, Chapter 90.56.280 RCW, Chapter 173-201A WAC, Chapter 173-201A-300–330 WAC, Chapter 173-204-120 WAC, Chapter 173-225-010 WAC, and Chapter 173-303-145 WAC.*

5. Notify Ecology's Regional Spill Response Office immediately if chemical containers (e.g. drums) are discovered on-site or any conditions present indicating disposal or burial of chemicals on-site that may impact surface water or ground water.
   - *Justification – Oil and hazardous materials spills cause environmental damage. The sooner a spill is reported, the quicker it can be addressed, resulting in less harm. Ecology must protect waters of the state from all discharges and potential discharges of pollution that can affect water quality to protect aquatic life and beneficial uses.*
   - *Citation – Chapter 90.48 RCW, Chapter 90.48.030 RCW, Chapter 90.48.080 RCW, Chapter 90.56 RCW, Chapter 90.56.280 RCW, Chapter 173-201A WAC, Chapter 173-201A-300–330 WAC, Chapter 173-204-120 WAC, Chapter 173-225-010 WAC, and Chapter 173-303-145 WAC.*

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
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 **Pollution Control Hearings Board** 1111 Israel Road SW STE 301 Tumwater, WA 98501	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 **Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

CONTACT INFORMATION

Please direct all questions about this Order to:

Laura Inouye
Department of Ecology
Headquarters Office
PO Box 67600
Olympia, WA 98504-7600
(360) 407-6165
laura.inouye@ecy.wa.gov

MORE INFORMATION

- **Pollution Control Hearings Board Website**
  http://www.eluho.wa.gov/Board/PCHB
- **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
- **Chapter 90.48 RCW – Water Pollution Control**
  http://app.leg.wa.gov/RCW/default.aspx?cite=90.48
- **Chapter 173.204 WAC – Sediment Management Standards**
  http://apps.leg.wa.gov/WAC/default.aspx?cite=173-204
- **Chapter 173-200 WAC – Water Quality Standards for Ground Waters of the State of Washington**
  http://apps.leg.wa.gov/WAC/default.aspx?cite=173-200
- **Chapter 173-201A WAC – Water Quality Standards for Surface Waters of the State of Washington**
  http://apps.leg.wa.gov/WAC/default.aspx?cite=173-201A

SIGNATURE

Dated this 13th day of July, 2021 at the Department of Ecology, Olympia, Washington

Loree' Randall on behalf of Brenden McFarland

Brenden McFarland, Section Manager
Environmental Review and Transportation Section
Shorelands and Environmental Assistance Program

Attachment A
Statement of Understanding
Water Quality Certification Conditions

J. E. McAmis Access Channel Dredging
Scott Vandergrift, J.E. McAmis
Water Quality Certification Order No. **20137**
and
Corps Reference No. **NWS-2018-00037**

I, _____, state that I will be involved as an agent or contractor for J.E. McAmis in the site preparation and/or construction of the J.E. McAmis Access Channel Dredging located at the Old Mouth of the Cowlitz, Cowlitz County, Washington. I further state that I have read and understand the relevant conditions of Washington Department of Ecology Water Quality Certification Order No. 20137 and the applicable permits and approvals referenced therein which pertain to the project-related work for which I am responsible.

Signature	Date
Title	Phone
Company	

Attachment B

EPA Region 10
Best Management Practices
For Piling Removal and Placement in Washington State

February 18, 2016

The following Best Management Practices (BMPs) developed by the Environmental Protection Agency (EPA) are listed by each activity associated with piling removal and placement and are applicable to projects conducted in marine and freshwater environments of Washington State as well as piling "repair" which includes aspects of both pile removal and placement. A project may include multiple methods of removal or placement. Furthermore, these BMPs may be used for projects in other states as long as they are consistent with any relevant requirements of the appropriate state and federal agencies.

The purpose of these BMPs is to protect water, sediment and habitat quality by minimizing turbidity, sediment disturbance and debris re-entry to the water column and benthic zone during pile removal/placement activities. These BMPs are applicable, regardless of the degree of sediment contamination that may be present, to all types of piling (wood, steel, concrete, plastic) or piling combinations (e.g., dolphins), and for any location (freshwater or saltwater) regardless of tide or sediment makeup (silt, sand, etc.). Additional BMPs that may be particularly applicable for permitted projects co-located with contaminated sediments, or within the boundaries of a regulated sediment clean-up site, are called out in text boxes.

Several agencies have published BMPs related to minimizing the introduction and spread of contaminants associated with pile placement and/or removal (e.g., WDNR[1], WDFW[2], NOAA[3]). Additionally, there are BMPs focused on impacts beyond those covered in this document that are applicable to all in-water construction involving piling. An example is adherence to site specific work windows. One overriding BMP, applicable to all in-water piling removal/placement, is adherence to the approved work windows for Endangered Species Act (ESA) fish protection as described in the US Army Corps of Engineers (USACE) Permit Guidebook:

http://www.nws.usace.army.mil/Missions/CivilWorks/Regulatory/PermitGuidebook.aspx

Furthermore, National Marine Fisheries Service (NMFS) and the US Fish and Wildlife Service (USFWS) have specific conservation measures that must be followed in order to avoid and/or minimize the effects of underwater noise generated during pile driving and removal operations on ESA-listed fish, marbled murrelets, and marine mammals. It is recommended that the

[1] WA Department of Natural Resources Derelict Creosote Piling Removal BMPs see http://wa-dnr.s3.amazonaws.com/publications/aqr_rest_pilingremoval_bmp.pdf

[2] WA Department of Fish and Wildlife Hydraulic Code rules (WAC 220-660-140 and 380) for residential and public recreational docks, pier, ramps, floats, watercraft lifts, and buoys in freshwater and saltwater areas. http://apps.leg.wa.gov/wac/default.aspx?cite=220-660

[3] National Oceanic and Atmospheric Administration, 2009. The Use of Treated Wood Products in Aquatic Environments: Guidelines to West Coast NOAA Fisheries Staff for Endangered Species Act and Essential Fish Habitat Consultations in the Alaska, Northwest and Southwest Regions. Prepared by NOAA Fisheries –Southwest Region, October 12, 2009.

applicant contact NMFS and USFWS to determine if there are ESA-listed species in the project area, and to request technical assistance on conservation measures that could be incorporated into the project to minimize noise-related impacts to listed species.

PILING REMOVAL – General BMPs

The following general BMPs (see also Debris Control BMPs) apply to all piling removal activities regardless of the extraction or cutting technique:

1. Prior to commencement of the work the project engineer or contractor should assess the condition of the piling, and identify whether piling will be removed using a barge or upland equipment. The contractor's work plan must include procedures for extracting and handling piling that break off during removal. In general, complete extraction of piling is always preferable to partial removal.

2. When possible, removal of treated wood piling should occur in the dry or during low water conditions. Doing so increases the chances that the piling won't be broken (greater visibility by the operator) and increases the chances of retrieval in the event that piling are broken.

3. The crane operator shall remove piling slowly. This will minimize turbidity in the water column as well as sediment disturbance.

4. The operator shall minimize overall damage to treated wood piling during removal. In particular, treated wood piling must not be broken off intentionally by twisting, bending or other deformation. This will help reduce the release of wood-treating compounds (e.g., creosote) and wood debris to the water column and sediments.

5. Upon removal from the substrate and water column, the piling shall be moved expeditiously into the containment area for processing, and disposal at an approved off-site, upland facility (see #24 and #25 below).

6. The piling shall not be shaken, hosed-off, stripped or scraped off, left hanging to drip or any other action intended to clean or remove adhering material from the piling. Any sediment associated with removed piling must not be returned to the waterway. Adhered sediments associated with treated piling are likely contaminated and may, along with piling, require special handling and disposal.

7. The operator shall make multiple attempts to remove a pile before resorting to cutting (See Piling Removal BMPs).

PILING REMOVAL - Vibratory Extraction Specific BMPs
Vibratory extraction is the preferred method of piling removal because it causes the least disturbance to the seabed, river or lake bed and it typically results in the complete removal of the piling from the aquatic environment.

8. The operator should "wake up" piling by vibrating to break the skin friction bond between piling and sediment. This bond breaking avoids pulling out a large block of sediment and possibly breaking off the piling in the process.

PILING REMOVAL - Direct Pull Extraction Specific BMPs
Direct pull extraction refers to the removal of piling by grabbing or wrapping the piling and then directly pulling the piling from the sediment – using a crane or other large machinery. For example, piling are wrapped with a choker cable or chain and then removed by crane with a direct upward pull. Another method could involve an excavator with a pincer attachment that can grasp a pile and remove it with a direct upward pull. The use of direct pull can be combined with initial vibratory extraction.

9. Excavation of sediment from around the base of a pile may be required to gain access to portions of the pile that are sound, and to allow for extraction using direct pull methods. Excavation may be performed in-the-dry at low tide or in the water using divers. Hydraulic jetting devices should <u>not</u> be used to move sediment away from piling, in order to minimize turbidity and releases to the water column and surrounding sediments.

PILING REMOVAL - Clamshell Bucket Extraction Specific BMPs
Clamshell removal of piling uses a barge-based or upland excavator-mounted clamshell bucket. The clamshell is lowered from a crane and the jaws grasp the piling stub as the crane pulls up. Clamshell bucket extraction has the potential to disturb sediments if deployed close to the sediment surface and increases the likelihood of damaging piling which can result in incomplete removal of a pile. However, a clamshell bucket may be needed when broken or damaged piling cannot be removed using vibratory or direct pull extraction methods. Extraction with a clamshell might be the best way to remove piling that were cut at or below the mudline previously and have little or no stub accessible above the mudline.

10. To the extent possible, clamshell extraction should be performed in the dry during low tide, low river flows, or reservoir draw-down. Under these conditions, the operator can see the removal site and piling, improving the chance for full removal of piling.

11. Since sediment management is potentially a larger concern when using a bucket, every effort should be made to properly size the bucket to the job and operate it in ways that minimize sediment disturbance.

12. Excavation of sediment from around the base of a pile may be needed to gain access to portions of the pile that are sound, and to allow for extraction using a clam shell. Excavation may be performed in-the-dry at low tide or in the water using divers. Hydraulic jetting devices should not be used to move sediment away from piling, in order to minimize turbidity and releases to the water column and surrounding sediments.

13. Because clamshell extraction has a higher potential to generate debris, it is particularly important that an offshore boom be in place with this removal technique. If treated wood piling are being removed, extracted piles shall be transferred to the containment basin without leaving the boomed area to prevent loss of treated wood chemicals (e.g., creosote) and debris to the water column and sediments.

14. The operator must minimize pinching of treated wood and overall damage to treated wood piling during removal. This will help reduce the potential for releasing treated wood chemicals (e.g., creosote) and debris to the water column and sediments.

15. No grubbing for broken piling is allowed.

Additional Pile Removal BMPs for Locations with Contaminated Sediments

- During project planning, consider that the best tidal condition for piling removal will be dictated by the specifics of the removal. For example, in some circumstances water access for removal equipment at high tide may be less disturbing to the sediment than access in the dry at low tide. In others, removal in the dry is the best option.

- During project planning, consider the pros/cons of each method and its potential to disturb contaminated sediments. For example, while a clamshell bucket may be more feasible for removal of buried or broken piling, it is also more likely to disturb sediments. It may be preferable to manually excavate and remove by direct pull.

- Based on EPA's experience at numerous Superfund cleanup sites (e.g., Pacific Sound Resources, Olympic View, Ketchikan Pulp Mill and Lockheed), extraction of piling is not expected to result in exposure to subsurface contaminated sediments via an exposed "hole". Therefore EPA does not require placement of sand prior to or after pile pulling, unless it is part of an overall project design, such as a cap. Undocumented placement of clean sand may complicate future characterization efforts at cleanup sites.

- If piling removal results in exceedance of turbidity or other water quality standards at the compliance boundary, reconsider the timing of removal to a more restricted time frame, for example, the lowest practical tide condition or around slack water.

PILING REMOVAL - Pile Cutting Specific BMPs

Pile cutting shall be considered a last resort following multiple attempts to fully extract piling using vibratory, direct pull, and/or clamshell bucket extraction. On a project-specific basis, pile cutting may be appropriate to maintain slope stability or if a pile is broken and cannot be removed by other methods. A pneumatic underwater chainsaw, shearing equipment, or other equipment should be used to cut a pile.

16. Piling shall be cut below the mudline, with consideration given to the mudline elevation, slope and stability of the site.

17. In intertidal and shallow subtidal areas (shallower than -10 ft MLLW) seasonal accretion and erosion of the nearshore and/or beach can expose cutoff piling. In these locations, piling should be cut off at least 2-feet below the mudline. In deeper subtidal areas (deeper than -10 ft MLLW), piling should be cut off at least 1-foot below the mudline.

18. Hand excavation of sediment (with divers in subtidal areas) is needed to gain access for cutting equipment. To minimize turbidity and releases to the water column and surrounding sediments, hydraulic jetting devices shall <u>not</u> be used to move sediment away from piling.

19. As a condition of their permit, the permittee will be required to provide a post-construction drawing/map to the Corps of Engineers for the Administrative Record, which shows the location and number of piling left in place (above and below mudline) with the GPS location(s) in NAD 83. The permittee will also be required to provide this information to the property owner(s).

Additional Pile Cutting BMPs for Locations with Contaminated Sediments:

- Complete removal of piling from the environment is preferred. When necessary, project-specific requirements (including equipment selection) for cutting shall be set by the project engineer, and coordinated with EPA and any other appropriate resource agencies, considering the mudline elevation, slope and stability of the site and the condition of the piling.

- If cutting is required, the appropriate depth below mudline for cutting should be made on a project-specific basis, with the goal of minimizing both the resuspension of contaminated sediments and release of wood treatment chemicals.

- For projects with derelict treated pile stubs which can't be removed, consideration should be given to either leaving these in place or, if possible, cutting them below the mudline. Cutting the pile at the mudline may release PAHs into the water column. If a sand cover is placed over the cut pile this may help contain the PAHs, however the new sediment may move over time and the pile may be exposed again. WDNR is currently testing other methods to fully extract piling stubs.

- The decision to leave piling in place that were originally slated for removal must be coordinated with EPA and any other appropriate resource agencies. For example, if the work is being performed as part of a State or Federal cleanup, the decision to leave piling in place, as well as documentation, must be coordinated with the agency with cleanup oversight.

- Any piling left in place (including those below mudline) must be mapped with GPS coordinates (in NAD 83) and characterized by the project engineer. This information must be provided to the Federal or State agency with cleanup oversight, or in the case of a Corps permit, the permittee will be required to provide a post-construction map to the Corps of Engineers for the Administrative Record, which shows the location and number of piling left in place (above and below mudline) with the GPS location(s) in NAD 83. This information will also be provided to the property owner(s).

PILING REMOVAL - Debris Control BMPs

The following BMPs apply to all piling removal activities regardless of the extraction/cutting technique:

20. All work should be confined to within a floating containment boom. The need for, type and size of the boom should be determined on a project-specific basis considering project size, habitat, water flow conditions, sediment quality, etc. A description of boom placement and management must be included in the permit application. A small boat should be available at all times during active construction to manage the boom and captured debris. If used, anchors must be removed once the project is complete.

21. For projects removing treated wood piling or a pier with wood components (like decking), a floating boom with absorbent pads must be installed to capture floating surface debris and any creosote sheen.

a) The boom shall be located at a sufficient distance from all sides of the structure or piling that are being removed to ensure that contaminated materials are captured.
b) Extracted piles shall be transferred to the containment basin without leaving the boomed area to prevent loss of treated wood chemicals (e.g., creosote) and debris to the water column and sediments.
c) The boom shall stay in its original location until any sheen present from removed piling has been absorbed by the boom or removed utilizing absorbent material.

22. Any shavings, sawdust, woody debris (splintered wood, fragments, loose piling) on the water or sediment surface must be retrieved and placed in the containment area. Likewise any pile-associated sediment and adhered organisms must be collected daily, contained on site, and ultimately disposed at an approved upland disposal site along with the extracted piling and decking.

23. When asphalt or other decking is removed, the contractor shall prevent asphalt grit or other debris on the pier from entering the water. Prior to demolition, the contractor shall remove as much of the surface asphalt grit and debris as possible. Floating platforms, suspended tarps, or other means should be deployed under and around the structure to capture grit and debris.

PILING REMOVAL - Piling Storage, Handling and Disposal BMPs
The following BMPs apply to all piling and associated piling-derived debris.

24. Upon removal from the substrate, the piling and associated sediments shall be moved expeditiously from the water into a containment area on the barge deck, adjacent pier, or upland area.

25. The containment area shall be constructed in such a fashion as to restrict any release of contaminants or debris to the aquatic environment. Containment areas on barges, piers and upland areas shall have continuous sidewalls and controls as necessary (e.g., straw bales, oil absorbent boom, ecology blocks, durable plastic sheeting or lining, covers, etc.) to contain all sediment, wood-treating compounds, organisms and debris, and to prevent re-entry of these materials into the aquatic environment.

26. Any floating debris, splintered wood, or sediment removed during pile pulling must be placed in a containment area.

27. Creosote-treated wood piling/sections shall be disposed of in a manner that precludes their further use. Piling will be cut into manageable lengths (4-foot or less) for transport and disposal at an approved upland location that meets the liner and leachate standards of the

Minimum Functional Standards, Chapter 173-304 WAC. In all cases, the permittee must be prepared to provide documentation of disposal.

28. Any sediments, construction debris/residue and plastic sheeting from the containment basin shall be removed and disposed in accordance with applicable federal and state regulations. For disposal, this will require shipment to an approved Subtitle D Landfill.

Additional Pile Storage, Handling and Disposal BMPs for Locations with Contaminated Sediments:

- Pre-project planning shall include measures to minimize water contact with piling and associated contaminated sediments. For example, the containment area can be designed to be covered during precipitation and when not in use, and/or piling and associated sediment can be quickly moved to a final disposal location and not retained at the project site.

- Water collected in a containment area may require special management or treatment depending on project specifics. In some cases, water may be stored in Baker tanks and treated off site. In others, a treatment system may be constructed on site. Discharge water must meet the requirements of the Clean Water Act, including the requirements of a National Pollution Discharge and Elimination System permit (or substantive requirements) in order to discharge to surface water.

PILING PLACEMENT - Piling Material BMPs

29. Piling may be made of steel, concrete, plastic, treated or untreated wood. For large structural replacements, EPA encourages installation of piling made of concrete, steel, or plastic.

30. If treated wood is used, piling must be treated with wood preservatives in compliance with the Registration Documents issued by EPA under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), and following the Western Wood Preservers Institute (WWPI) guidelines and BMPs to minimize the preservative migrating from treated wood into aquatic environments (see http://www.wwpinstitute.org/documents/BMP_Revise_4.3.12.pdf). Rub strips are required if treated wood is to be used for fender piling.

31. Note that WDFW Hydraulic Code rules prohibit use of wood treated with oil-type preservatives (creosote, pentachlorophenol) in both marine (WAC 220-660-400 6b) and freshwater environments (WAC 220-660-120 6f). Wood treated with waterborne-type preservatives (e.g., ACZA, ACQ) may be used if these are manufactured and installed according to WWPI guidelines and BMPs. WDNR does not allow use of creosote or

otherwise treated (ACZA and CCA) wood for new construction on state-owned aquatic land in both marine and freshwater environments.

PILING PLACEMENT – General BMPs

32. Wood, concrete, steel or plastic piling may be installed using vibratory methods and/or an impact hammer. Vibratory methods are typically preferred as they reduce impacts to fish listed under the Endangered Species Act (ESA), though this method may be combined with impact hammer for proofing. At the design phase, it is recommended that the applicant contact the U.S. Fish and Wildlife Service and National Marine Fisheries Service to determine if there are ESA-listed species in the project area, and to request technical assistance on conservation measures that could be incorporated into the project to minimize impacts to listed species.

33. Hydraulic jetting devices shall not be used to place piling.

34. When a pile is being repaired using splicing or other methods, the permittee shall prevent the introduction of construction-related materials into the aquatic environment. For example, wet concrete must be prevented from entering waters of the state, and forms/sleeves made of impervious materials must remain in place until concrete is cured. Additionally, when a maintenance or repair method requires cleaning of piling, e.g. removal of encrusting organisms, any removed material must be captured and disposed upland.

35. When steel or plastic piling are being reused in the aquatic environment, any sediment adhered to piling or remaining inside of hollow piling must first be removed and disposed of upland at an appropriate location. Creosote-treated piling may not be reused.

36. When proposing to reuse piling, the applicant must evaluate whether there is the potential to transport invasive species from the source area, and must ensure their complete removal such that there is no opportunity for transport/transfer of invasive species. For more information on areas of concern for the spread of invasive species and procedures for minimizing the spread of invasive species through de-contamination see:

http://www.ecy.wa.gov/programs/eap/InvasiveSpecies/AIS-PublicVersion.html.