

JUN 06 2000



Oregon

John A. Kitzhaber, M.D., Governor

June 5, 2000

Department of Environmental Quality

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David C. Beach
U.S. Army Corps of Engineers
ATTN: Operations Division
P.O. Box 2946
Portland, OR 97208-2946

Dear Mr. Beach:

The Department of Environmental Quality (DEQ) has reviewed the U.S. Army Corps of Engineers (USACE, Corps) request for water quality certification, contained in a Corps Public Notice issued February 11, 2000, Reference # NWPOP-CLA-F00-003. The Corps Portland District proposes to maintain the Columbia River Navigation Channel between River Mile (RM) 3.0 and RM 106.5. The Federally authorized channel in this reach is 40 feet deep and 600 feet wide. Maintenance will be accomplished by periodically dredging restricting shoals consisting of naturally occurring sedimentary material. Up to 5 feet of overdepth dredging and 100 feet of overwidth dredging may occur in selected high volume shoal areas.

Revision 1 to the Public Notice was circulated on April 28, 2000, and clarified aspects related to flow lane disposal, ocean disposal, sediment quality, and the Caspian Tern salmonid predation problem.

The location of the Federal navigation channel falls variously within the states of Oregon and Washington. The channel passes through Clatsop, Columbia, and Multnomah Counties, in Oregon, and Pacific, Wahkiakum, Cowlitz and Clark Counties in Washington. Dredging is to be accomplished by hopper, clamshell or pipeline suction dredges. Dredged materials may be disposed of in-water, at shoreline or beach nourishment sites, at upland sites, or possibly at as yet to be designated ocean dredged material disposal sites (ODMDS). Other than the ODMDS, the disposal areas and techniques proposed for this 5-year cycle of dredging and disposal have been evaluated, approved, and used in the past. Flow lane disposal of dredged material will take place only at depths between 45 and 65 feet in locations within or adjacent to the Federal navigation channel with the following exceptions: depths over 65 feet will be used between RM 30 and 33 (OR); between RM 54 and 56.3 (OR); and between RM 72.2 and 73.2 (WA). All dredging activities will be done in accordance with the approved Dredged Material Management Plan for the Columbia and Lower Willamette River Federal Navigation Channel (DMMP).

The material proposed for dredging is classified as recently deposited, poorly graded, medium and fine sands. Sediment samples have been analyzed for physical and chemical properties and the material has been determined under criteria established in the Dredged Material Evaluation Framework, Lower Columbia River Management Area to be suitable for unconfined in-water disposal. The U.S. Environmental Protection Agency (USEPA) reviewed and concurred with this determination in a letter to the USACE dated March 14, 2000. Maintenance dredging is expected to occur on an annual basis for the five-year life of the permit and will generate approximately 4-6 million cubic yards of sediments per year.

The National Marine Fisheries Service (NMFS) issued a Biological Opinion (BO) on the USACE Columbia River Operation and Maintenance Program on September 15, 1999, including specific non-discretionary terms and conditions. All conditions in this Section 401 Water Quality Certificate are consistent with the binding terms and conditions of the BO.

The USACE and the DEQ held a Joint Public Hearing in Astoria, Oregon on April 4, 2000 at the request of environmental groups and the general public. The hearing gave the public an opportunity to voice their concerns and have questions answered by a panel including Washington Department of Ecology, Oregon Department of Environmental Quality and the Channels and Harbors Section of the Corps. Concerns expressed by the public through both the Public Hearing process and the submission of written comments included the following: 1) timing of maintenance dredging to be more sensitive to fish migration; 2) contaminant concentration, redistribution, and migration; 3) lack of mitigation for dredging effects; 4) more beneficial use of dredged materials; 5) salmonid predation from islands or structures associated with dredged material disposal areas; and, 6) disposal options including reducing or entirely eliminating flow lane disposal. The Corps is currently funding or conducting studies to address these concerns. The Statement of Findings prepared by the Corps concluded that "In balance, adverse effects are acceptable, beneficial effects are specifically identifiable, and the project, as conditioned, is in the public interest."

No additional substantive water quality issues resulted from the public hearing, and based on information provided by the applicant, DEQ does not anticipate any long-term violations of the Clean Water Act and State Water Quality standards, particularly 340-41-026 (1)(a), Antidegradation Policy for Surface Waters, from this project, provided the conditions which follow are strictly adhered to.

This reach of the Columbia River is classified as Water Quality Limited under Section 303(d) of the Federal Clean Water Act for the following parameters: Bacteria [Fecal Coliform (Fall/Winter/Spring)]; Dissolved Oxygen (Summer); pH (Summer); Temperature (Summer); Total Dissolved Gas (Year Round); and Toxics [Arsenic (Year Round), Tissue-Pesticides, PCB].

The Lower Columbia River also supports salmonid rearing.

CONDITIONS

- 1) Fish protection/ODFW timing :
 - a) Unless otherwise specified, all in-water work shall occur within the Oregon Department of Fish and Wildlife's (ODFW) preferred time window, described in: *Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources*.
 - b) No obstruction or impediment to fish passage is to occur. No negative impacts to the fishery are allowed to occur.

- 2) **Turbidity:** All dredging and disposal of sediments shall be conducted so as to minimize siltation and turbidity in the Columbia River. Turbidity shall not exceed 10% above natural stream turbidities, except where allowed by OAR 340-41-0205(2)(c). This rule states, in part, that: limited duration activities necessary to accommodate essential dredging, and which cause the turbidity standard to be exceeded may be authorized provided all practical turbidity control techniques have been applied and a Section 401 water quality certificate has been granted.
- 3) Upland disposal sites shall be large enough to accommodate the quantity of material and water to be placed there in order to allow adequate settling. Return water turbidity from any constructed cell or upland site shall not exceed 10% above the background level in the Columbia River. If the disposal cells contain weirs, they shall be maintained at a height that allows no more than three inches of overflow water from the cell.

Turbidity shall be measured (or visually assessed) and recorded at a minimum, every two hours, during periods of active disposal and dewatering. The designated person attending the monitoring equipment shall be responsible for notifying the project foreman of any exceedance of the turbidity standard. Turbidity shall be monitored during in-water work. Monitoring points shall be 100 feet upstream (representative background), 100 feet downstream, and at the discharge point. A turbidimeter is recommended, however, visual gauging of turbidity is acceptable. Visible project-related turbidity at 100 feet below the discharge point is considered to be an exceedance of the standard. If a 10 % exceedance of the background level occurs at 100 feet below the project site, modify the activity causing the problem and continue to monitor every two hours. If exceedances occur with two consecutive measurements (two hours apart) stop the activity causing the turbidity until the problem is resolved.

For information on turbidity monitoring, contact Larry Caton (229-5983). The turbidity standard can be exceeded for a maximum of 2 hours (limited duration) provided all practicable erosion control measures have been implemented as applicable, including, but not limited to:

- a) Adequate settling time in the upland settling basin.
 - b) Use filter bags, sediment fences, silt curtains, leave strips or berms, or other measures sufficient to prevent movement of spoils. These measures shall be inspected and maintained daily to ensure their proper function.
- 4) In order to help control turbidity, hopper and pipeline dredges shall be operated with the intake head at or below the surface of the sediments being removed during all periods of operation. Reverse purging of the intake line shall be kept to an absolute minimum. Should purging be necessary, the intake line shall be raised no more than 3 feet from the bottom. If water is pumped through the dragheads to flush out the hopper dredge bins, the heads shall be at least 20 feet below the water surface.
 - 5) **Dredging-** Dredging operations shall be conducted employing Best Management Practices (BMP's) which minimize disturbance or siltation to adjacent habitat or waters. If a bucket dredge of any type, including but not limited to grab or clamshell, dipper, dragline, or backhoe bucket, is used, all digging passes of the bucket shall be completed without any

material, once in the bucket, being returned to the wetted area. No dumping of partial or full buckets of material back into the project area will be allowed. No dredging of holes or sumps below maximum depth and subsequent redistribution of sediment by dredging, dragging, or other means will be allowed. All large man-made debris shall be removed from dredged sediments prior to flow lane disposal and transported to an appropriate disposal site.

- 6) If the dredging operation causes a water quality problem which results in distressed or dying fish, the operator shall immediately: cease operations; take appropriate corrective measures to prevent further environmental damage; collect fish specimens and water samples; and notify DEQ and the Oregon Department of Fish and Wildlife (ODFW).
- 7) Petroleum products, chemicals, or other deleterious waste materials shall not be allowed to enter waters of the State.
- 8) Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks, and shall be maintained in order to prevent spills into State waters.
- 9) In the event of a discharge of oil, fuel, or other chemicals into State waters, or onto land with a potential to enter State waters, containment and cleanup shall begin immediately and be completed as soon as possible.
- 10) Spills into State waters, or onto land with a potential to enter State waters, shall be reported immediately to the DEQ Spill Response Team [Northwest Region/Portland].
- 11) **Dredging by Others-** Other individuals are allowed, at the discretion of the Portland District, Corps of Engineers, to dredge commercial grade sediments from the navigation channel. In Oregon waters, all such work by others is subject to the conditions contained in this certification and also must comply with leasing and royalty requirements of the Oregon Division of State Lands.
- 12) This water quality certification (WQC) shall remain in effect for five years from the issuance date. DEQ reserves the option to modify, amend or revoke this WQC, as necessary, in the event new information indicates that the dredging/disposal activities are having a significant adverse impact on State water quality or critical fish resources.
- 13) A copy of this WQC letter shall be kept on the job site and readily available for reference by the Corps of Engineers, DEQ personnel, the contractor, and other appropriate state and local government inspectors.
- 14) This WQC is invalid if the project is operated in a manner not consistent with the project description contained in the Public Notice for certification. Failure to comply with the conditions of this certification may subject the applicant to civil penalties or other administrative or judicial actions.
- 15) DEQ requires site access on day of request.
- 16) If you are dissatisfied with the conditions contained in this certification, you may request a hearing before the Environmental Quality Commission. Such request must be made in writing to the Director of DEQ within 20 days of the mailing of this certification. You may

also request written information about alternative dispute resolution services under Oregon Revised Statute 183.502, including mediation or any other collaborative problem-solving process.

The DEQ hereby certifies that this project complies with the Clean Water Act and state water quality standards, if the above conditions are made a part of the Federal permit.

The applicant shall notify the DEQ of any change in the ownership, scope, or construction methods of the project subsequent to certification. If you have any questions, please contact Tom Melville at (503) 229-5845.

Sincerely,



Michael T. Llewellyn
Administrator
Water Quality Division

T:TM.Certbeac.F00-003

cc: John Malek (EPA)
Ben Meyer (NMFS)
Diana Hwang (USFWS)
Eldon Hout (DLCD)
Larry Potter, DSL
Rick Vining (WADOE)