

PORTLAND HARBOR SEDIMENT MANAGEMENT PLAN

APPENDIX I

DETAILED DREDGING COORDINATION PLAN



Prepared by

Oregon Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390

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Table of Contents

1.0 INTRODUCTION.....	I-1
1.1 Goal of Coordination.....	I-1
1.2 Dredged Material Regulation	I-1
1.2.1 Overview.....	I-1
1.2.2 Federal Regulations.....	I-1
1.2.2.1 Rivers and Harbors Act Section 10	I-2
1.2.2.2 Clean Water Act Section 404	I-2
1.2.2.3 Endangered Species Act of 1973.....	I-3
1.2.2.4 National Environmental Policy Act (NEPA).....	I-3
1.2.3 State Regulations	I-4
1.2.3.1 Section 401 Certification Program	I-4
1.2.3.2 Removal/Fill Permit	I-4
1.2.3.3 State Beaches.....	I-4
1.3 Overview of Contaminated Sediment Management for Dredge Projects	I-4
1.4 Dredged Material Evaluation Framework.....	I-5
1.5 Coordination with Portland Harbor Sediment Management Plan	I-6
1.6 Anticipated Dredging Activities	I-6



Appendix I

Detailed Dredging Coordination Plan

1.0 INTRODUCTION

Dredging is necessary to maintain waterways and harbors used for waterborne commerce and water-related industry, shipping, and for new port and marina construction in the Pacific Northwest. In addition to federal navigation project related dredging (which is performed by the U.S. Army Corps of Engineers), a number of ports, maritime industries, and private interests perform dredging and dredged material disposal. Consequently, dredging in the lower Willamette River has been a commonplace activity historically and will be an ongoing necessity for the foreseeable future.

This section will discuss the regulatory framework for dredged material management. A summary of the applicable laws and jurisdictions governing dredged material management is provided. Contaminated sediment management and the coordination between programs is discussed.

1.1 Goal of Coordination

The goal for coordination between the Portland Harbor Sediment Management Plan (PSHMP) and navigation and maintenance dredging is to provide environmental protection, reduce uncertainties in regulatory activities, ensure continued operation and maintenance of navigation facilities, minimize delays in scheduled maintenance dredging, and assure state and federal cross-program consistency.

1.2 Dredged Material Regulation

1.2.1 Overview

There are five basic dredged material disposal options available for navigation and maintenance dredging. These include: unconfined aquatic (including near shore); unconfined upland; confined aquatic; confined near shore; and confined upland. Current rules and regulations governing dredging and disposal are administered by federal and state agencies.

Federal and state agencies have regulatory authority governing dredged material management. At the federal level the U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) share the responsibility for regulating the discharge of dredged material. Within Oregon, state authority is carried out by the Department of Environmental Quality (DEQ) and Division of State Lands (DSL). This section gives a brief overview of agency laws, regulations and authorities as they relate to the dredging and disposal of sediments.

1.2.2 Federal Regulations

1.2.2.1 Rivers and Harbors Act Section 10

The Corps administers a regulatory program under Section 10 of the Rivers and Harbors Act of 1899 which requires approval by the Secretary of the Army of any work in navigable waters.

A Section 10 permit is required for any dredging activity in navigable waters, regardless of the location of the disposal site. For purposes of Section 10, navigable waters generally are those U.S. waters below the mean high water mark, and those used or useable for interstate or foreign commerce. A dredging project with no return flow to the waters of the U.S. would require only a Section 10 permit.

1.2.2.2 Clean Water Act Section 404

The Corps also has the primary responsibility for the CWA Section 404 regulatory permit program. Section 404 of the Clean Water Act requires a permit for the discharge of dredged or fill material into the waters of the United States. These permits, known as Section 10/404, may be processed concurrently when both dredging and disposal/filling are necessary, as is often the case with in-water or nearshore disposal.

The Clean Water Act applies to "waters of the United States." The Corps' administrative definition of "waters of the United States" extends to all waters, including lakes, streams, mudflats, wetlands and sloughs, "the use, degradation or destruction of which" could affect interstate or foreign commerce. This definition includes wetlands adjacent to these waters. Section 404, therefore, covers more than Section 10 (CWA Section 502(7), and Section 230.3 of the Guidelines).

All parties, including federal agencies, are subject to regulation under Section 10 and Section 404. Though the Corps does not issue itself a permit, these same regulations govern the Corps' own dredging and disposal activities.

A Section 404 permit is required only for discharges of dredged or fill material into waters of the United States. A Section 404 permit is required when dredged material is disposed in either an aquatic or nearshore environment. It is also required when dredged material will be hydraulically placed in an upland environment and effluent from the disposal will be returned to waters of the U.S. This can occur where dredged material that is not de-watered is placed in nearshore or upland disposal sites.

Under Section 404(b)(1), the Administrator of the Environmental Protection Agency (EPA) has developed, in conjunction with the Secretary of the Army, Guidelines for evaluating specific proposed aquatic or nearshore disposal sites.

The guidelines evaluate potential disposal sites based on potential impacts on the physical, chemical, and biological characteristics of the aquatic environment. The guidelines specify four

conditions for the selection of any aquatic site for the disposal of dredged or fill material (Section 404 (b)(1) Final Rule 40 CFR 230). They are:

1. There must be no other practicable alternatives available that would have less adverse effects on the aquatic environment.
2. The disposal must not result in violations of applicable state water quality standards, toxic effluent standards, marine sanctuary requirements, or requirements of the Endangered Species Act.
3. The disposal must not cause or contribute to significant degradation of the waters of the United States.
4. The permit applicant must show that all appropriate and practicable steps have been taken to minimize potential adverse effects of the discharge on the aquatic environment.

While considering the guidelines, the Corps conducts a public interest review and considers comments from agencies and the public. The final permit decision is based on whether the activity is in compliance with the guidelines (including sediment quality) and a determination that the proposed activity is not contrary to the public interest. The public interest review includes a broad range of factors, from environmental concerns to public health issues to property ownership as well as compliance with other federal laws. The Corps has substantial authority to require mitigation to avoid, minimize, rectify, reduce, or compensate for resource losses. In cases where no aquatic site is proposed for disposal, the Corps' decision to issue a permit is based solely on the public interest review and not the guidelines.

EPA retains oversight authority regarding the Corps' decision to issue a permit and may veto permit approval if it concludes that the discharge of dredged or fill materials would have an "unacceptable adverse effect" on municipal water supplies, shellfish beds and fisheries, wildlife, or recreational areas.

1.2.2.3 Endangered Species Act of 1973

Section 7 of the Endangered Species Act of 1973, as amended, requires federal agencies to ensure their actions do not jeopardize endangered or threatened species or their critical habitats. If a project could affect an endangered species, coordination with the U.S. Fish and Wildlife Service or National Marine Fisheries Service is required.

1.2.2.4 National Environmental Policy Act (NEPA)

Dredging programs are operated in accordance with NEPA, which requires documentation of potential primary and secondary impacts, including those associated with dredging and disposal.

1.2.3 State Regulations

1.2.3.1 Section 401 Certification Program

Section 401 of the Clean Water Act requires state certification that any federally permitted project discharging into U.S. waters will not violate state water quality standards, which are based on federal water quality criteria. For non-federal dredging, Section 401 certification is a precondition to compliance with Section 404 guidelines and is required before receiving a Section 404 permit for disposal of dredged or fill material. The Section 401 certification is required when dredged material is to be placed in an aquatic or nearshore environment, or when dredged material is to be hydraulically placed in an upland environment where return flows may affect waters of the United States.

DEQ is the agency responsible for certifying under Section 401 that a proposed discharge will comply with state water quality standards. Under the Section 401 certification Program, DEQ certifies and may use any requirement or policy of state law that protects aquatic habitat to condition the Section 401 certification. In situations where the state has no jurisdiction (for example, tribal lands and military installations), EPA provides Section 401 certification.

1.2.3.2 Removal/Fill Permit

The DSL issues a permit for any activity that proposes removal, fill or alterations equal to or exceeding 50 cubic yards of material within the beds or banks of the waters of the State of Oregon. In addition, any amount of removal, filling or alteration in state scenic waterways and essential indigenous salmonid streams requires approval from the division. Typical examples of projects requiring a permit include gravel mining, dredging, gold mining, placement of riprap, bulkheads, land reclamation, channel alteration or relocation, and stream crossings.

1.2.3.3 State Beaches

Oregon State Parks issues permits for any activity, including placement of dredged material, on state beaches.

1.3 Overview of Contaminated Sediment Management for Dredge Projects

Federal and state laws and regulation will determine the type of management required for contaminated sediments dredged during navigation or maintenance dredging projects. Determination of which laws and regulations apply will depend on the location of the dredge project, the location of dredged material disposal, and the severity of contamination. These factors will determine whether Section 10 of the Rivers and Harbors Act, Clean Water Act, or hazardous and solid waste rules apply in determining the sediment management strategy. The goal is to provide environmental protection, and consistent cross-program evaluation for reliable and timely reviews and regulatory decisions on dredge projects.

Projects that place dredge material in-water or upland with return water flow will be evaluated under the CWA. Navigation or maintenance dredging projects that would place dredge material using in-water unconfined disposal will be evaluated for suitability using the Dredge Material Evaluation Framework (DMEF). Sediments that are unsuitable for in-water unconfined disposal will be evaluated for suitability of disposal in upland or in-water confined disposal locations. These projects will be coordinated with the Corps, EPA, DSL, federal and state natural resource agencies and DEQ water quality, waste management cleanup, hazardous, and solid waste divisions. Projects that place dredge material upland with no return water flow will be evaluated under Section 10 of the Rivers and Harbors Act and the applicable solid waste and hazardous waste rules.

1.4 Dredged Material Evaluation Framework

The Dredged Material Evaluation Framework (DMEF) was prepared by the Corps, EPA, Washington Department of Ecology, Washington Department of Natural Resources, and DEQ. The DMEF was developed to determine the suitability for unconfined in-water disposal of navigation or maintenance dredged sediments. A tiered approach is used in the DMEF for evaluating sediments. The tiered approach consists of evaluating historical sediment data, information on proximity of sources and a methodology for determining if additional sampling and testing is required. Depending on the particular project, physical, chemical, or biological testing may be required before a decision is made on the suitability of the material for unconfined in-water disposal. For more information on the DMEF and evaluation methodology see the *Dredged Material Evaluation Framework - Lower Columbia River Management Area*.

Historic physical and chemical sediment data and location of sources of pollution were reviewed in the DMEF. These data was used to determine the potential for sediments in specific location to contain chemicals in concentrations that would be above levels of concern or have adverse effects. This information was used to rank the areas within the Willamette and Columbia Rivers as exclusionary, low, low-moderate, moderate, or high. A rank of low indicates that chemicals of concern occurred at low concentrations, no significant response in biological test(s), and few sources of pollution nearby. A high ranking would indicate high concentrations of chemicals of concern or significant response to biological test(s), or numerous pollutant sources nearby. Rankings are used in conjunction with dredge material management units (DMMU) to determine the amount of sampling and analysis required for a given volume of sediment.

A DMMU is a volume of sediment that can be characterized and dredged separately from other sediment in the project. A DMMU also represents a volume of sediment that can be characterized by a single sediment analysis. The area rankings are used to determine the amount of sediment that can be considered part of a DMMU. Greater volumes of sediment can be included in a DMMU for sediments that are ranked low whereas sediments that are ranked high have smaller DMMU volumes. In heterogeneous low-ranked sediments, 50,000 cubic yards (cy) can comprise a DMMU, whereas only 5,000 cy can comprise a DMMU in a high-ranked area. Dredge sediment projects can be separated into individual DMMU's which allow sediment management strategies for each DMMU. This is important for dredge projects when sediment characteristics are variable within the proposed dredge area. The DMMU approach allows for environmental protection in a cost effective manner.

1.5 Coordination with Portland Harbor Sediment Management Plan

Proposed projects for navigation or maintenance dredging will be reviewed for consistency with the PHSMP. Information on sources and sediment contamination will be used in the tier 1 evaluation of dredging projects for determining the need or extent of additional sediment sampling and analysis. Dredge projects will be evaluated on the basis of information that can be provided by the PHSMP for evaluation of the project and what effect the project could have on sites covered under the PHSMP. The ultimate goal should be to remove contaminated sediments from contact with humans and aquatic resources to reduce to an acceptable level the risks to human health and the environment.

Permit applicants for navigation and maintenance dredging projects that would occur within the area covered by the PHSMP should contact:

Dredged Material Quality Manager
Department of Army, Corps of Engineers
Portland District, CENWP-PE-HR
P.O. Box 2946
Portland, OR 97208-2946
Telephone: (503) 808-4885
Fax: (503)808-4875

The dredged material quality manager will coordinate these projects with the dredged material management team and the applicable regulatory and resource agencies involved in the PHSMP.

1.6 Anticipated Dredging Activities

Dredging projects may be proposed for the area affected by the PHSMP. Predicting the types of projects and quantities and quality of sediments that would be dredged is not possible without having the information from the permit applicant. These projects will be evaluated when the information becomes available in the manner described above. One project is in the evaluation process. This is the channel deepening project. A draft environmental impact statement has been prepared by the Corps and agency comments have been provided. The schedule for the channel deepening project is as follows:

June 1999	Final EIS Public Review
Aug. 1999	Chief of Engineers Report to Congress
October 1999	Record of Decision
2000	Congressional Authorization
1999-2001	Preconstruction Engineering and Design
2002+	Construction Start