2013 Terminal 4 Maintenance Dredging Project

Like many moorages and commercial vessel berths in the Portland area, the Port of Portland removes excess sediment that accumulates on the riverbed at our marine terminals. By dredging this material from the river, the Port maintains a safe depth for docking ships at our terminals.

Berth 410 is scheduled for maintenance dredging in September 2013. The berth is located at Terminal 4, a 261-acre multipurpose facility. All in-water work will occur within the Willamette River in-water work window to be protective of native salmon, steelhead and other aquatic species.

An underwater survey of the berth determines how much sediment has accumulated. The Port plans to dredge between approximately 5,000 and 7,500 cubic yards of sediment from Berth 410. During the dredging work, a contractor picks up sediment from the riverbed using a clamshell bucket. The bucket deposits the material onto a barge. The material is pumped off the barge through a hydraulic pump and piped to the placement location or taken on a barge up the Columbia River to a disposal facility.

West Hayden Island Placement Site
The West Hayden Island dredge material placement facility is the designated placement site for all dredged material from Port maintenance dredging activities that meet regulatory requirements. Approval for placement of T-4 sediments that meet regulatory requirements is pending Oregon Department of Environmental Quality (DEQ) review of the Port’s Beneficial Use Determination (BUD) application. Dredge material that exceeds regulatory thresholds will be sent to a landfill.
Environmental permitting and authorization

When the Port dredges its berths, all plans, work activities and environmental data are reviewed and permitted by several natural resource agencies to ensure that the projects are protective of human health and the environment.

Many agencies help determine how our dredging operations are conducted to meet their environmental protection standards. Before maintenance dredging projects begin, the Port samples and tests the material designated for removal. Sampling plans must be approved by the regulatory agencies, and sampling and testing work is completed by professional contractors and laboratories. The process involves analysis of over 60 chemicals of concern.

DEQ compares the sampling results to environmentally protective scenarios for residential and occupational use, using the information during the BUD process to make decisions on how sediment is handled after it is removed from the river. For more information about DEQ’s comprehensive process, please visit: www.deq.state.or.us/lq/sw/disposal/beneficialuse.htm.

Screening of chemical data against ecological and human health screening levels indicates that the dredged material, after placement, will be in compliance with acceptable risk levels and not pose an unacceptable risk to human health or the environment. A few locations contain elevated levels of chemicals of concern, which make those sediments unsuitable for placement on West Hayden Island. Sediments from those locations will be sent to a landfill after they are dredged.

What is the current status?

The Port has received some permits to conduct the in-water dredging work. The Port has submitted an application to DEQ for a BUD and a decision is expected this summer. As the BUD is a DEQ process, any public involvement process for the BUD application would be conducted by DEQ.

Port staff is available upon request to present information about this project to neighborhood, community, and environmental groups. To learn more about the Port’s T-4 dredging project or to schedule a presentation, please contact Lisa Timmerman at lisa.timmerman@portofportland.com or 503.415.6047.

If DEQ authorizes the BUD, dredging at T-4 and dredge material placement at the West Hayden Island dredge material placement site are expected to occur in September 2013.

This project is independent of the City of Portland process of annexing approximately 825 acres of Hayden Island into the City of Portland (with around 500 acres as open space, and 300 acres for marine and industrial development). For more information on that project, please visit www.portlandonline.com.

Natural resources agencies that review the Port’s dredging activities include:

- Oregon Department of Environmental Quality
- Oregon Department of State Lands
- Oregon Department of Fish & Wildlife
- National Marine Fisheries Service
- U.S. Fish & Wildlife Service
- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency

How can dredging occur within the boundaries of the Portland Harbor Superfund site?

Maintenance dredging at Port terminals and private facilities on the Willamette River has continued to occur almost every year since the Superfund listing in 2000.

Regulatory agencies that oversee maintenance dredging are well versed in issues related to the Superfund process. Sediment data has been reviewed by EPA Superfund project managers. A thorough characterization of the berth is completed prior to the start of any dredging work.

The Port completed an Early Action Sediment Removal project at Terminal 4 in 2008. However, Berth 410 was not part of the project.