

**PORT OF SEATTLE**  
**MEMORANDUM**

**COMMISSION AGENDA**  
**ACTION ITEM**

**Item No.** 4g  
**Date of Meeting** December 8, 2015

**DATE:** December 1, 2015  
**TO:** Ted Fick, Chief Executive Officer  
**FROM:** Kathy Bahnick, Manager, Seaport Environmental Programs  
Catherine Chu, Capital Project Manager  
**SUBJECT:** Terminal 91 Agreed Order Amendment

<b>Amount of This Request:</b>	\$0	<b>Source of Funds:</b>	General Fund (Ops) and Tax Levy
<b>Estimated Total Project Cost:</b>	\$		(Environmental Remediation Liability [ERL] Non Ops)

**ACTION REQUESTED**

Request Commission authorization for the Chief Executive Officer to execute (1) an amendment to Agreed Order No. DE 8938 with Washington State Department of Ecology (Ecology); and (2) a three year contract for consulting services to perform sediment investigation at T-91 for an estimated value of \$900,000.

**SYNOPSIS**

Terminal 91 (T-91) is located in an industrial area in the Interbay neighborhood of Seattle. The two piers located at Terminal 91 were built by the Port soon after its establishment in 1911. In 1941 the U.S. Navy took ownership, consolidating multiple parcels into T-91 as it exists today. The Port reacquired the facility in the 1970s. A former tank farm located at the terminal was used as a dangerous waste treatment and storage facility under a Resource Conservation and Recovery Act (RCRA) permit from the 1970s until 1995. The above-ground portion of the tank farm was demolished by the Port in 2005.

Releases associated with the tank farm operations resulted in contaminated soils and groundwater at T-91. Since 1991, the Port has been working with the Ecology on the investigation, assessment and development of corrective/cleanup action to address the tank farm contamination. On April 10, 2012, Ecology and the Port entered into an Agreed Order (No. DE 8938) which obligated the Port to implement the tank farm affected area cleanup. The tank farm cleanup has been completed except for the long term compliance monitoring. The Order also applies to the Port-owned submerged lands adjacent to T-91 (Submerged Lands), but it defers action with respect to any contamination identified in the Submerged Lands for up to ten years (that is, no later than 2022). The Order states that Ecology would re-evaluate the necessity and practicability of remediation in

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the Submerged lands meanwhile. During sediment sampling for the Commission-approved Terminal 91 Maintenance Dredging project located on the east side of Pier 91, sediments exceeding the Washington state sediment standards were encountered. This led Ecology to request additional investigation and that both the sediment investigation and the maintenance dredging work be performed under an Order amendment.

### **BACKGROUND**

The T-91 site is regulated under both a RCRA permit and a Model Toxics Control Act (MTCA) Agreed Order. The RCRA permit remains in place because a portion of the site (the tank farm) was formerly permitted to operate as an RCRA-regulated dangerous waste treatment and storage facility. Both the former RCRA facility, and the surrounding piers and terminal, are now being cleaned up under the MTCA program. The Port, as the property owner, is required to hold the RCRA permit until cleanup (“corrective action”) is completed. The permit imposes corrective action by incorporating a separate agreed order issued under the MTCA.

Environmental investigations at the T-91 site have been ongoing since the early 1980s. The primary area of contamination at the site is the tank farm and associated operations.

The Ecology-selected cleanup approach was identified in the December 15, 2010, final Clean up Action Plan, which consisted of measures designed to prevent migration of contaminants to Elliott Bay and to prevent direct contact with contaminants. In addition, long-term operation and monitoring of the installed systems and compliance monitoring were included.

On April 10, 2012, the Port and Ecology entered into an Agreed Order, under which the Port agreed to implement the work identified in the Cleanup Action Plan. The 2012 Agreed Order also requires investigation and cleanup of discrete units in the upland area separate from the Tank Farm area, and placement of a restrictive covenant on the property. Most of the work outlined in the Cleanup Action Plan was completed earlier this year. As noted above, the Agreed Order deferred action on any contamination identified in the Submerged Lands for up to ten years.

In addition to chemical contamination, discarded military munitions (DMMs) have been identified in the Submerged Lands by the U.S. Army Corps of Engineers (USACE). These DMMs are a result of former Naval operations at T-91. The USACE has performed a Remedial Investigation under the Formerly Used Defense Site (FUDS) Military Munitions Response Program to determine the nature and extent of DMMs and is currently working on a Feasibility Study to identify cleanup options related to DMMs. In 2010 and 2011, FUDS performed a time critical removal action, removing 25 DMMs that were at or near the surface of the seabed.

In 2013, the Port determined that the cruise ship berth area on the southeast side of Pier 91 required maintenance dredging to re-establish consistent water depth needed throughout the berth area to accommodate calling cruise ships. Pre-dredging sediment sampling was performed in September 2013. This sampling effort identified an area of elevated PCBs as well as exceedances of metals and PAHs. In light of these sample results, Ecology has notified the Port that the time has come to address the contaminants in the Submerged Lands under an amendment to the current order. As noted above, DMMs could be buried in the sediments. This possibility triggers

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regulatory requirements that render conventional dredging (and disposal of dredged material) infeasible. As discussed above, the USACE is now developing a Feasibility Study (FS) to evaluate options for addressing any remaining DMMs. Those options will likely include dredging (which would remove any remaining DMMs) of submerged lands adjacent to piers 90 and 91. Such dredging, if it were to occur, would probably also be sufficient to achieve required navigation depths in the long-term. In the meantime, the Port must pursue interim measures to maintain consistent water depth in the area for cruise ship operations.

Because conventional dredging methods would risk bringing DMMs to the surface, staff evaluated other methods to address the shoal. Underwater regrading was determined to be the most cost-effective and environmentally protective approach. Underwater regrading involves excavating the shoal material with a digging bucket and moving it to adjacent deeper areas, entirely underwater. The bucket would not break the water surface, thereby ensuring that DMMs potentially mixed-in with the dredged sediment material would be relocated safely underwater away from construction personnel. Similar regrading techniques, as alternatives to conventional dredging methods, have been permitted and performed successfully at other Ports and USACE districts in California and Oregon.

Subsequent to pre-project sediment sampling, project boundaries for the regrading were revised to exclude the area of elevated PCBs (to be addressed later). The total amount of material to be regraded is very small, estimated at 280 cubic yards. Because the project is not using conventional dredging methods, staff has been working with regulatory agencies and subject matter experts to ensure that adverse environmental impacts will be mitigated. Ecology is requiring the work to be performed under the Agreed Order and is included in the scope of this Order amendment. They also require the amendment to include steps to investigate sediment quality on and around the project area. The funding for the regrading portion of this project has been approved in a previous Commission action and the regrading action will be performed using an existing on-call construction contract. The sediment investigation will require a new service agreement.

### **PROJECT JUSTIFICATION AND DETAILS**

The T91 Site is under a RCRA permit and an Agreed Order which includes the Submerged Lands. The current order states that “the Submerged Lands Area will be reevaluated by the agency as it continues to monitor the site”. Ecology has reevaluated the Submerged Lands Area based on the recent sediment sample results and believes it is time to amend the Order to further investigate the sediments. The sediment regrading is needed in order to remove an estimated 280 cubic yards of shoaled material to ensure the -35’ MLLW required minimum depth for cruise ships calling in the east berth of Pier 91. Shoal material will be relocated to adjacent deeper areas using underwater regrading methods. Following regrading, sediments in the project site will be sampled and analyzed.

#### ***Project Objectives***

- Perform the sediment regrading project to maintain required berthing depths for the Cruise operations in a manner that will not adversely affect any future DMMs removal actions that the USACE’s FUDs would carry out in the future.

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- Investigate the site history and identify locations that warrant additional investigation/sampling to inform future sediment work
- Implement investigation of the sediment using a new service contract.
- Deliver project in a quality, cost-efficient manner and within schedule.
- Maximize cost recovery opportunities.
- Identify and consider community values and concerns and minimize construction impacts to the community.

### ***Scope of Work***

The scope of work in the Order amendment would include:

- Implementation of the sediment regrading project, including relocation of approximately 280 CY of shoaled material located near the pier to deeper water.
- Preliminary research regarding sources of contamination to the T-91 sediments, identification of available information on sediment quality, and development of a work plan to investigate identified sediment contamination and performance of the work plan.

### ***Schedule***

1. This Action: Obtain authorization to execute the Order amendment and to execute a project specific services contract to perform the sediment investigation.
2. Perform the regrading project 1Q – 2Q 2016
3. Implement the sampling once a contract is executed and the work plan is approved by Ecology, expected by Q4 2016

## **FINANCIAL IMPLICATIONS**

### **Terminal 91 Sediments Cleanup-up Lifecycle Project Estimate and Sources of Funding**

Previous Amounts Spent on Cleanup	\$102,000
Cost Estimated Associated with work under the Agreed Order amendment One	\$1,400,000
Estimated Project Costs for ERL regrading and investigation	<u>\$1,502,000</u>

Estimated/Actual Sources of Funding:	
Past Amount Recovered (Settlement, Insurance, Grant) <sup>1</sup>	\$0
Committed Future Grant Funding <sup>2</sup>	\$0
Port of Seattle <sup>3</sup>	<u>\$1,502,000</u>
Total Sources of Funding <sup>4</sup>	<u>\$1,502,000</u>

*Note 1: Amount already received. Staff will continue to seek additional recovery from insurance companies and other responsible parties.*

*Note 2: Staff is seeking Grant money related to this project*

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*Note 3: Remaining Port obligations if no other grants are received or funds obtained from insurance or other responsible parties.*

*Note 4: Cost estimate for the Agreed Order Amendment One includes the major construction contract for regrading, soft costs and the investigation. Staff is actively seeking additional grant funding and additional recovery to help offset these costs. This cost estimate does not include costs for the marine sediment portion of the site for a full remedial investigation, feasibility study and cleanup.*

### **Cost Estimate Associated with the investigation work**

The actual cost for the investigation is expected to vary, depending on actual site conditions, and any changed conditions or requirements established by the oversight agency (Ecology). However, the current estimated cost range for the sediment investigation is approximately \$900,000.

The estimated cost for the regrading work, including tax and contingency is to be under \$500,000, which was approved by the Commission on September 10, 2013, under the T-5 and T-91 Maintenance Dredging project.

### **Source of Funds**

The costs to implement the investigation were included in the Commission's 2016 Environmental Remediation Liability (ERL) spending authorization and five-year plan. The ERL cost estimates were also included in the 2015 plan of finance. Additional costs may be incurred if the historical review identifies multiple areas requiring investigation or DMMs have to be addressed in the sampling effort. Any additional investigation costs that may be required as the project moves forward will be recorded as a liability and a non-operating expense in accordance with Port Policy AC-9, Environmental Remediation Liability. These amounts will be reported annually to the Commission via routine environmental remediation liability reports and spending authorization requests.

The Port's tax levy will pay the costs for the environmental investigation project that are not ultimately covered by cost-sharing agreements, settlements, insurance, or other cost recovery sources. In addition, Port staff is pursuing additional grant funding from Ecology for the investigation work.

The source of funding for the regrading work is General Funds, and is included in the 2015 and 2016 Maritime Division Operating Budget.

### ***Potential Net Costs to the Port***

The cost summary table above presents a breakdown of all the paid, committed, and/or anticipated total known costs and recoveries associated with the T-91 sediment investigation. As shown, the Port cost is expected to be approximately \$1,502,000. Staff is actively seeking grant funding and additional recoveries to help offset this cost. This estimated cost does not include additional investigation (Remedial Investigation, Feasibility Study) or cleanup if required for the marine sediments.

## **STRATEGIES AND OBJECTIVES**

In support of the Century Agenda strategy to be the greenest port in North America, this project will accomplish environmental investigation of the Port's property, while assuring that other responsible parties are paying their fair share. The sediment regrading project supports the asset preservation objective and ensures the Port can maintain and grow the cruise business.

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### **TRIPLE BOTTOM LINE**

State and federal laws require elimination of unacceptable environmental risks caused by the presence of contaminants in soil, groundwater, and sediment. From the perspective of the surrounding communities and the customers that we serve, the Port's participation in site remediation is the hallmark of responsible environmental stewardship. Cleanup also returns contaminated land to a more productive use. Regarding small business participation, the Office of Social Responsibility (OSR) will provide analysis and recommend small business goals to be included in the consulting contract.

### **ALTERNATIVES AND IMPLICATIONS CONSIDERED**

**Alternative 1) – Do not enter into a new amendment to the Order to perform a historical review and sampling of the T-91 sediments and to perform the sediment regrading project.**

#### **Pros:**

- Not entering into the Order amendment will delay spending.

#### **Cons:**

- This alternative would result in the Port not being able to maintain the required water depth at the cruise ship berth.
- This alternative could result in Ecology imposing the requirement for the sediment investigation through a unilateral enforcement order issued under the MTCA (and incorporated into the RCRA permit). This is not the recommended alternative.
- Would not comply with Port's obligation to investigate the sediment portion of the site.

**Alternative 2) – Enter into an Agreed Order amendment for the sediment regrading portion only.**

#### **Pros**

- This would allow the Port to maintain the required water depth at the cruise ship berth.
- This approach would delay spending on sediment investigation

#### **Cons**

- Ecology and the other agencies have indicated that they would not be willing to approve the sediment regrading project unless the Port commits to the sediment investigation.

**Alternative 3) – Enter into the Agreed Order amendment to perform a historical review and sampling of the T-91 sediments, to perform the sediment regrading project; and to execute a project specific contract for the sediment investigation.**

#### **Pros**

- Proceeding with this work ensures compliance and continued cooperation with Ecology
- Proceeding with this work would allow the Port to maintain adequate water depth at the cruise terminal.

#### **Cons**

- The investigation may lead to additional investigation and possible cleanup actions under new order amendments.

**This is the recommended alternative.**

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## **ATTACHMENTS TO THIS REQUEST**

Agreed Order No. DE 8938 amendment 1 with the Washington State Department of Ecology  
Map of Site

## **PREVIOUS COMMISSION ACTIONS OR BRIEFINGS**

- December 1, 2014 – Commission authorized a five-year spending plan of \$64,088,000 for Environmental Remediation Liabilities and environmental remediation liability funds for 2015 in the amount of \$36,804,000, of which (a) \$16,804,000 is forecast to be spent in 2015 and (b) an amount estimated not to exceed \$20,000,000 of the remaining funds approved in the five-year plan will be obligated during 2015 to be spent in future years.
- September 10, 2013 – Commission authorized maintenance dredging at Terminal 5 and Terminal 91 for the combined total of \$4,800,000.
- March 27, 2012 – Commission authorized the Chief Executive Officer to execute Agreed Order No. DE 8938 with the Washington State Department of Ecology on the implementation of a Cleanup Action Plan and to address contamination in the Upland area of Terminal 91.
- May 4, 2010 – Commission authorized the Chief Executive Officer to execute the 2010 agreed order with the Washington State Department of Ecology.