STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

In the Matter of Remedial Action By:

FIRST AMENDMENT TO AGREED ORDER NO. DE 6083

Port of Olympia

TO: Ed Galligan, Executive Director Port of Olympia 915 Washington Street Northeast Olympia, WA 98501

I. INTRODUCTION

Agreed Order No. DE 6083 (the "Agreed Order"), entered into by the State of Washington, Department of Ecology (Ecology) and the Port of Olympia (the "Port") on December 5, 2008, requires the Port to perform remedial actions in response to releases of hazardous substances at the Budd Inlet Sediments Site (Site). In compliance with the Agreed Order, the Port has completed two remedial actions: (a) an Interim Action to remove elevated concentrations of dioxin in sediment from portions of the berth area adjacent to its docking facility in West Bay of Budd Inlet, and (b) a pilot study assessment of the characteristics of the in-place sediments and analysis of the benefits of proposed dredging technologies for future cleanup of Budd Inlet.

By this Amendment to the Agreed Order, Ecology requires the Port to conduct additional remedial actions at a portion of a facility where there has been a release or threatened release of hazardous substances. The Site boundaries have not yet been defined. The remedial actions required by this Amendment include investigations into the nature and extent of contamination in a Study Area, investigation into potential sources of contamination to sediments in the vicinity of the Port's peninsula in Budd Inlet, preparation of an Investigation Report, identification and analysis of remedial action alternatives to address sediments containing contaminants above applicable cleanup levels in the Study Area, and preparation of an Interim Action Plan to address sediment contamination at the Study Area within the Site.

This Amendment does not attempt to recite all provisions of the Agreed Order. Provisions of the Agreed Order not specifically addressed in this Amendment remain in full force and effect. Format and section numbering of the Agreed Order have been maintained to the extent possible.

II. JURISDICTION

This Amendment to the Agreed Order is issued pursuant to the authority of RCW 70.105D.050(1) and WAC 173-340-530(8)(b).

V. FINDINGS OF FACT

The Agreed Order, Section V. (Findings of Fact), is hereby amended to add the following Findings of Fact. Ecology makes the following findings of fact, without any express or implied admissions of such facts by the PLP:

- H. For the Berths 2 and 3 Interim Cleanup Action Pilot Study (Interim Action) required by the Agreed Order, the Port performed chemical sampling and bathymetric data collection in Berths 2 and 3 in 2008, and in 2009 removed sediments containing elevated levels of a dioxin/furan mixture from portions of Berths 2 and 3, and dredged to a minimum of -39 feet below mean lower low water (MLLW). The Port completed the Interim Action on March 3, 2009, with the placement of clean sand cover in the dredge area, and the Port submitted a Completion Report to Ecology in June of 2009.
- I. As required by the Agreed Order, the Port completed 21 months of monitoring, consisting of sampling three, nine, fifteen, and twenty-one months following completion of the Interim Action. The Port submitted monitoring reports following each sampling event in September 2009, March 2010, September 2010, and March 2011, respectively. The Port's March, 2011 submittal to Ecology included the Port's final monitoring results, a summary and evaluation of the sediment data gathered in the Interim Action, and an evaluation of the effectiveness of the dredging approach used for material adjacent to the Port's pierface.

IV. DEFINITIONS

The Agreed Order, Section IV. (Definitions), is hereby amended to add the following definition:

E. Study Area: For purposes of this Amendment, the Study Area refers to the Port's berthing areas, in-water log storage area and under the pier in West Bay of Budd Inlet, and areas adjacent to Port property in East Bay of Budd Inlet as detailed in Exhibit F. Based on factors currently known to Ecology, the Study Area is only a portion of the Site and its boundaries do not reflect the boundaries of the Site as defined by MTCA.

VI. ECOLOGY DETERMINATIONS

The Agreed Order, Section VI. (Ecology Determinations), is hereby amended to add the following determinations:

- F. Ecology has determined that further investigation is warranted into the nature and extent of sediment contamination in the Study Area; and that remedial action alternatives should be identified and analyzed for actions that will address sediments contaminated above applicable cleanup levels in the Study Area.
- G. Ecology believes the additional work to be performed as required by this Amendment is in the public interest.
- H. This Amendment focuses on remedial actions to be taken within the Study Area which is only a portion of the Site. This Amendment is developing an Interim Action Plan for the Study Area in part because this is an area where the Parties could mutually agree to expedite work without waiting for the full nature and extent of contamination to be defined. This Amendment does not relieve the Port of responsibility to conduct future remedial action at the Site if and to the extent required under the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.
- I. Under WAC 173-340-430, an interim action is a remedial action that is technically necessary to reduce a threat to human health or the environment by eliminating or

substantially reducing one or more pathways for exposure to a hazardous substance, that corrects a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed, or that is needed to provide for completion of a site hazard assessment, remedial investigation/feasibility study or design of a cleanup action. Preparation of an Interim Action Plan will result in a faster and more cost effective cleanup and is consistent with WAC 173-340-430. The schedules for deliverables related to this Interim Action are set forth in the attached Scope of Work, Exhibit H.

VII. WORK TO BE PERFORMED

The Agreed Order, Section VII. (Work to be Performed), is hereby amended to add the following requirements:

E. Remedial Activities

Based on the Findings of Fact and Ecology Determinations, it is hereby ordered that the PLP take the following remedial actions at the Site and that these actions be conducted in accordance with Chapter 70.105D RCW, WAC 173-340, and WAC 173-204 unless otherwise specifically provided for herein:

1. Under this Amendment, the Port shall fully define the nature and extent of contamination in the Study Area, investigate potential sources of contamination to sediments in East and West Bays of Budd Inlet, draft an Investigation Report (as described in WAC 173-340-430(7)) in a manner that meets with Ecology's approval and that meets the applicable requirements of MTCA and Chapters 173-340 and 173-204 WAC, identify and analyze interim action alternatives to address sediment contaminants above applicable levels in the Study Area, and draft an Interim Action Plan to address sediment contamination at the Study Area. In fully defining the nature and extent of contamination in the Study Area and in evaluating interim action alternatives, the Port shall follow the requirements of WAC 173-340-350 through 370 and WAC 173-204-560 through 580. Each deliverable, once approved by Ecology, becomes incorporated by reference and shall be an integral and enforceable part of the Order. The work

under this Amendment is focused on the Study Area, which is only a portion of the Site. Any and all Ecology approvals for the work performed pursuant to this Amendment do not constitute Ecology's agreement that the work performed is sufficient to meet MTCA requirements for the Site as a whole.

- 2. A scope of work and schedule for the remedial activities is more particularly described in Exhibit G, "Scope of Work" and is incorporated by reference as an enforceable part of this Order. The schedule of work performance and list of deliverables is described in Exhibit H, "Schedule of Deliverables" and is incorporated by reference as an enforceable part of this Order.
- 3. Approval of a Final Interim Action Work Plan and implementation of the interim action is not a part of this Order. Ecology and the Port intend to negotiate an amendment to this Agreed Order or a subsequent agreed order for approval and implementation of an interim action.
- 4. The Port shall submit Monthly Progress Reports as specified in Task 6 of Exhibit G, Scope of Work. Progress reports shall be submitted to Ecology until satisfaction of the Agreed Order in accordance with Section IX of the Agreed Order. Progress Reports shall be submitted to the Ecology project coordinator by the 15th of the month following the reporting month. If this day is a weekend or holiday, deliverables will be submitted to Ecology on the next business day.

VIII. TERMS AND CONDITIONS OF ORDER

The Order, Section VIII.D. (Designated Project Coordinators), is hereby amended to change the following requirement: "James DeMay, P.E." shall replace "Lisa Pearson, P.E.;" and "Alexandra K. Smith shall replace "Joanne Snarski."

Effective Date of this Amendment to the Agreed Order: February 15,2012

PORT OF OLYMPIA

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

E.B. Galligan

Executive Director

Port of Olympia (360) 528-8000

Rebecca S. Lawson, PE, LHG Regional Section Manager Toxics Cleanup Program

Southwest Regional Office

Washington Department of Ecology

(360) 4007-6241



SOURCE: Aerial photograph dated March 14, 2011. HORIZONTAL DATUM: Washington State Plane South, NAD83. VERTICAL DATUM: Mean Lower Low Water (MLLW).

LEGEND:

Conceptual Study Area Boundary



Underpier Area

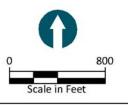




EXHIBIT G SCOPE OF WORK (SOW)

I. PURPOSE

The work under this Amendment to Agreed Order No DE 6083 (the AO) involves fully defining the nature and extent of contamination in the Study Area, investigate potential sources of contamination to sediments in East and West Bays of Budd Inlet, preparation of an Investigation Report, identifying and analyzing interim action alternatives for the Study Area, and preparation of an Interim Action Plan for contaminated sediments in the Study Area. The purpose of these remedial activities is to provide sufficient data, analysis, and evaluations into the nature and extent of contamination in the Port of Olympia's berthing areas, in-water log storage area and under the pier in West Bay of Budd Inlet, as well as in-water areas adjacent to the Port's properties in East Bay of Budd Inlet (the "Study Area"), to enable Ecology to evaluate interim action alternatives for contamination above applicable cleanup levels in the Study Area and to provide additional information to Ecology on potential sources of contamination to sediments in Budd Inlet.

The Port shall coordinate with Ecology throughout the work conducted pursuant to the AO Amendment and shall keep Ecology informed of changes to the work plan and other project plans, and of issues and problems as they develop. Changes to the work plan will be addressed in accordance with Section VIII.L of the AO.

The SOW is divided into five major tasks as follows:

- Task 1. Investigation Work Plan
- Task 2. Implement Investigation Work Plan
- Task 3: Investigation Report
- Task 4: Identification and Evaluation of Interim Action Alternatives Memorandum
- Task 5: Draft Interim Action Plan
- Task 6: Progress Reports

TASK 1: INVESTIGATION WORK PLAN

The Port shall prepare a draft Investigation Work Plan (Work Plan). The Work Plan shall include an overall description of the activities to define the nature and extent of contamination in the Study Area as well as activities to investigate outfalls that discharge into the West and East Bays of Budd Inlet in the vicinity of the Port's peninsula. The Work Plan shall clearly describe the project management strategy for implementing and reporting on remedial activities. The responsibility and authority of all organizations and key personnel involved in conducting the study will be outlined.

The Work Plan shall include as deliverables an Existing Information Summary Memorandum that describes general facility information, history, and conditions, past sediment and habitat investigations including data collection and results, past remedial actions, conceptual contaminant migration pathways, ecological receptors, hazardous substances sources etc., in compliance with WAC 173-340-350 and WAC 173-204-560. It will also describe the location of potential contaminant discharge sources that affect or potentially affect the Study Area, including, to the extent

available, historical information about the potential discharge sources and the source control actions for permitted and unpermitted sources, in compliance with WAC 173-204-560(4)(d). The Existing Information Summary Memorandum should include data obtained regarding the former Cascade Pole-Olympia site under Consent Decree 90-2-01183-3, Agreed Order DE97TC-S417, and Agreed Order 00TCPSR-753.

The Existing Information Summary will be used in the evaluation of data gaps. The Work Plan deliverables will include a Data Gaps Memorandum that will be reviewed by Ecology and used as the basis for conducting additional investigations and developing cleanup alternatives for the Study Area. Ecology does not intend for the Work Plan to duplicate investigations that the Port has conducted under other Consent Decrees or Agreed Orders.

The draft Work Plan will also require the identification of specific data collection procedures in a Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP) in compliance with WAC 173-340-820 and WAC 173-204-600 for defining the nature and extent of contamination.

The SAP will identify the proposed number, locations, and approximate depths of all samples, and include a quality assurance project plan. The SAP will describe the sampling objectives, the rationale for the sampling approach (based upon the identified data gaps), and plans for data use, and shall provide a detailed description of sampling tasks.

The Quality Assurance Project Plan (QAPP) will be prepared in accordance with the Guidance for Preparation of Quality Assurance Project Plans, EPA Region 10, Quality Data Management Program, QA/R-5 and requirements of the EPA Contract Laboratory Program. The QAPP will also follow Ecology's Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies (July 2004) and Sediment Sampling and Analysis Plan Appendix (February 2008).

The Port or its contractors shall submit all new sampling data generated under this SAP and any other recently collected data to be entered in Ecology's Environmental Information Management System (EIM) in accordance with WAC 173-340-840(5) and Ecology's Toxics Cleanup Program Policy 840: Data Submittal Requirements. Only validated data will be entered into the EIM database.

The Investigation Work Plan shall include, but is not limited to:

- Sampling and analysis of sediments as necessary to define the nature and extent of contamination in the Study Area;
- Integration of existing sampling and analysis data from the Port's stormwater system, as necessary, to determine whether the Port's stormwater system is a source of contamination to the Study Area. Additional sampling and analysis may be conducted, depending on available existing information.
- Sampling and analysis of end of pipe discharge from selected outfalls that empty into the East and West Bays of Budd Inlet in the vicinity of Port property.
- Procedures for identification and evaluation of potential sources of contamination (historical
 and on-going) into the West and East Bays of Budd Inlet in the vicinity of the Port's property
 on the peninsula.

The Work Plan shall not be implemented until approved by Ecology. Once approved by Ecology, the Port will implement the Work Plan according to the schedule contained therein.

The Port shall prepare two (2) copies of the Draft Investigation of Study Area Work Plan and any addendum documents, and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and comment. After addressing Ecology's comments on the draft Work Plan and any addendum documents, after Ecology approval, the Port shall prepare five (5) copies of the final Work Plan and any addendum documents, and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for distribution.

TASK 2. IMPLEMENT INVESTIGATION WORK PLAN

The Port shall conduct the Investigation so that it meets the requirements of WAC 173-340-350(7) and 173-204-560(4)(c) according to the Work Plan as approved by Ecology and the schedule contained therein. The Investigation will determine the nature and extent of contamination exceeding MTCA cleanup levels in sediments in the Study Area, determine maximum contaminant levels and other regulatory requirements, as well as identification of outfalls and potential contaminant sources (historical and on-going) that discharge into the West and East Bays of Budd Inlet in the vicinity of the Port's property on the peninsula.

Field sampling and analysis will be completed in accordance with the SAP and QAPP. Deviation(s) from the approved SAP and QAPP must be communicated to Ecology immediately and documented as required by Ecology.

The Port shall provide interim data reports and updates to Ecology as new data and information becomes available. Laboratory analysis data shall also be provided in electronic format as it becomes available and has been validated.

During the Investigation, remedial actions might be identified that if taken will reduce or eliminate contamination or sources of contamination to the Study Area. Ecology may determine that the remedial actions identified can be implemented prior to completion of the Investigation. Remedial actions implemented prior to completion of the Study Area Investigation will be considered interim actions and will be implemented pursuant to WAC 173-340-430 and an amendment to this Agreed Order.

TASK 3. INVESTIGATION REPORT

The Port shall compile the results of the Investigation into a Draft Investigation report. The Port shall prepare two (2) copies of the a Investigation report and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and comment. After addressing Ecology's comments on the draft report, the Port shall prepare five (5) copies of a Final Investigation report and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for distribution and public comment. Electronic survey data for monitoring locations, electronic lab data, and GIS maps of contaminant distribution shall also be provided for both the draft and final reports.

If the data collected during this investigation is insufficient to define the full nature and extent of contamination in the Study Area, an additional phase of investigation shall be conducted to further delineate the nature and extent of contamination in the Study Area.

TASK 4. IDENTIFICATION AND EVALUATION OF INTERIM ACTION ALTERNATIVES MEMORANDUM

The Port shall use the information obtained in the Investigation to identify and analyze potential cleanup alternatives to address contaminated sediments in the Study Area according to the Work Plan and schedule therein. If the Investigation reveals contaminant discharge sources into the West and East Bays of Budd Inlet in the vicinity of the Port's property on the peninsula, the Port will identify source control options and cleanup alternatives for these sources. The source control options identified by the Port shall include, as appropriate, both upland and in-water options.

The Port will evaluate and recommend cleanup alternatives consistent with MTCA requirements to ensure protection of human health and the environment by eliminating, reducing, or otherwise controlling risk posed by sediments exceeding applicable cleanup levels and by reducing risks associated with exposure pathways, and consistent with WAC 173-204-560(f). The Port shall compile the results into an Identification and Evaluation of Interim Action Alternatives Memorandum. The Port shall prepare two (2) copies of the Memorandum and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and comment.

TASK 5. DRAFT INTERIM ACTION PLAN

The Port will prepare and submit a draft Interim Action Plan with detail commensurate with the work to be performed. The draft Interim Action Plan shall meet the requirements of WAC 173-340-430(7) and include, as appropriate:

- Description of the interim action including its purpose, general requirements, and relationship to the (final) cleanup action (to the extent known);
- Summary of relevant Investigation information, including at a minimum existing conditions and alternative interim actions considered;
- Information regarding design and construction requirements, including a proposed schedule and personnel roles and responsibilities;
- Compliance Monitoring Plan;
- SAP/QAPP (if needed).

The Port will also submit a copy of the Health and Safety Plan for the project.

The Port shall prepare two (2) copies of the draft Interim Action Plan and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology.

Approval of a Final Interim Action Work Plan and implementation of the interim action is not a part of this task. Ecology and the Port intend to negotiate an amendment to this Agreed Order or a subsequent agreed order for approval and implementation of an interim action.

TASK 6. PROGRESS REPORTS

The Port shall submit progress reports monthly. Progress reports shall be submitted to Ecology until satisfaction of the AO in accordance with Section IX of the AO. Progress Reports shall be submitted to the Ecology project coordinator by the 15th of the month following the reporting month. If this day

is a weekend or holiday, deliverables will be submitted to Ecology on the next business day. At a minimum, progress reports shall contain the following information regarding the preceding reporting period:

- A description of the actions that have been taken to comply with the AO, as amended.
- Summaries of sampling and testing reports and other data reports received by the Port
- Summaries of deviations from approved work plans
- Summaries of contacts with representatives of the local community, public interest groups, press, and federal, state, or tribal governments
- Summaries of problems or anticipated problems in meeting the schedule or objectives set forth in the SOW and Work Plan
- Summaries of solutions developed and implemented or planned to address any actual or anticipated problems or delays
- Changes in key personnel
- A description of work planned for the next reporting period

EXHIBIT H SCHEDULE OF DELIVERABLES

The schedule for all tasks described in this SOW is presented below. If unanticipated conditions or changed circumstances are discovered that could result in a schedule delay, the Port will notify Ecology. Ecology will determine if a schedule extension is warranted in accordance with the provisions of the Agreed Order, Section VIII.K. (Extension of Schedule).

Completion times listed below are calendar days. Any deadline that falls on a holiday or weekend shall be extended to the next business day. Ecology shall endeavor to provide comments within 60 days of receipt of a formal deliverable for review.

Actions	Anticipated Completion Time Frame
Draft Investigation Work Plan, Existing Information Summary and Data Gaps Memorandum	120 days from the effective date of the AO Amendment
Draft SAP, QAPP, and HASP	75 days from Ecology's comments on the Draft Investigation Work Plan, Existing Information Summary and Data Gaps Memorandum
Final Investigation Work Plan and Final SAP, QAPP, and HASP	60 days from receipt of Ecology's final comments on the Draft SAP, QAPP, and HASP
Implement Investigation Work Plan	According to the schedule in the Final Investigation Work Plan
Draft the Investigation Report	According to the schedule in the Final Investigation Work Plan
Final Investigation Report	90 days after receipt of Ecology's final comments on the Draft Investigation Report
Draft Identification and Evaluation of Interim Action Alternatives Memorandum	90 days from Ecology approval of the Final Investigation Report
Final Identification and Evaluation of Interim Action Alternatives Memorandum	90 days from receipt of Ecology's final comments on the Draft Identification and Evaluation of Interim Action Alternatives Memorandum
Draft Interim Action Plan	75 days from receipt of Ecology's approval of the Final Identification and Evaluation of Interim Action Alternatives Memorandum
Progress Reports	15th of every month beginning after the completion of the first full month after the effective date of the AO Amendment