

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

In the Matter of Remedial Action by:

PORT OF BELLINGHAM

SECOND AMENDMENT TO
AGREED ORDER No. 6834

I. INTRODUCTION

Agreed Order No. DE 6834 (2009 Order), entered into by the State of Washington, Department of Ecology (Ecology) and the Port of Bellingham (Port) in 2009, requires the Port to perform a Remedial Investigation/Feasibility Study (RI/FS) at the Georgia-Pacific West Site (Site) generally located on the tidal flats of Bellingham Bay adjacent to the Whatcom Waterway in Bellingham, Washington, between the Whatcom Waterway and Cornwall Avenue with Roeder Avenue and West Chestnut Street to the northeast and the Bellingham Shipping Terminal to the southwest.

The First Amendment to the 2009 Order (First Amendment) required that the Port perform an interim action to remove mercury contaminated soils and mercury contaminated building materials from the Caustic Plume Subarea and remove petroleum contaminated soils from the Bunker C Subarea. The First Amendment also contemplated additional interim actions and set out a process for approval of interim actions proposed by the Port.

This Second Amendment to the 2009 Order (Second Amendment) separates the Site into two remedial action units for the purpose of expediting remedial action and facilitating redevelopment of the Site.

II. JURISDICTION

This amendment to the 2009 Order is issued by Ecology pursuant to RCW 70.105D.050(1).

III. AMENDMENT

This amendment does not attempt to recite all the provisions of the 2009 Order or the First Amendment. Provisions of the 2009 Order and the First Amendment not specifically addressed in this amendment remain in full force and effect.

The 2009 Order is hereby amended as follows:

1. Section IV (Definitions) of the 2009 Order is hereby amended to add the following definitions:

E. Pulp/Tissue Mill Remedial Action Unit: Refers to the portion of the Site identified in the Site Diagram (Amended Exhibit A) as the "Pulp/Tissue Mill Area."

F. Chlor-Alkali Remedial Action Unit: Refers to the portion of the Site identified in the Site Diagram (Amended Exhibit A) as the "Chlor-Alkali Area."

2. Section VI (Ecology Determinations) of the 2009 Order is hereby amended to add the following determinations:

F. For the purpose of expediting remedial action and facilitating redevelopment of the Site, the Site is separated into the Pulp/Tissue Mill Remedial Action Unit and the Chlor-Alkali Remedial Action Unit. Separate Feasibility Studies for the Pulp/Tissue Mill Remedial Action Unit and for the Chlor-Alkali Remedial Action Unit can be performed for these units because all available information indicates that the nature and extent of contamination between the units is distinct and does not commingle.

3. Section VII.A (Work to Be Performed) of the 2009 Order is replaced in its entirety by the following language:

A. The Port shall perform a Remedial Investigation for the entire Site and prepare separate Feasibility Studies for the Pulp/Tissue Mill Area and for the Chlor-Alkali Area in accordance with WAC 173-340-350 and pursuant to the Scope of Work and Schedule (Amended Exhibit B), which details the actions to be taken and deliverables to be submitted pursuant to this Order.

4. Amended Exhibits A and B attached to this Second Amendment shall hereby become Amended Exhibits A and B to the 2009 Order. As such, they are integral and enforceable parts of the 2009 Order.

IV. SIGNATURE AUTHORITY


The undersigned representative of each party hereby certifies that he or she is fully authorized to enter into this Second Amendment and to execute and legally bind such party to the same.

V. EFFECTIVE DATE


This Second Amendment shall be effective upon execution by the Port and Ecology.

Effective date of this Order: 8-2-13

PORT OF BELLINGHAM


Rob Fix
Executive Director
Telephone: (360) 676-2500

STATE OF WASHINGTON,
DEPARTMENT OF ECOLOGY


Robert W. Warren, P. Hg., MBA
Section Manager
Toxics Cleanup Program
Northwest Regional Office
Telephone: (425) 649-7054

AMENDED EXHIBIT A

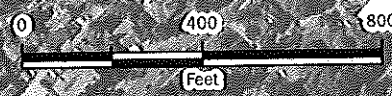
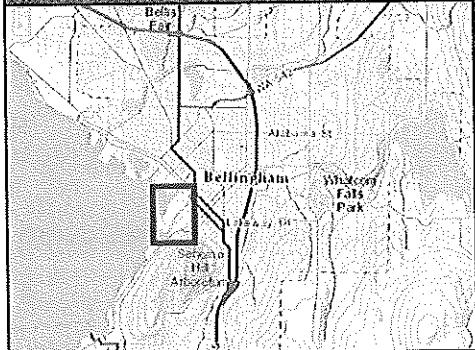
**GEORGIA PACIFIC WEST SITE
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
SITE DIAGRAM**



WHATCOM WATERWAY

PULP AND TISSUE MILL AREA

CHLOR-ALKALI AREA



Georgia-Pacific West Site
Bellingham, Washington

Map Layer Credits | Source: Esri, DeLorme, GeoEye, IGN, NOAA, IGN, IGN, and the GIS User Community
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File Path: C:\projects\GP West of Bellingham\Documents\Map\2013\GP West Site\Map from map | Coordinate System: NAD 1983 StatePlane Washington North FIPS 4801 Feet | Date Stamp: 5/7/2013 | User: pdutton | Print Date: 5/7/2013

AMENDED EXHIBIT B

**GEORGIA PACIFIC WEST SITE
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
SCOPE OF WORK and SCHEDULE**

PURPOSE

The purpose of this Remedial Investigation/Feasibility Study (RI/FS) Scope of Work (SOW) for the GP West Site (the Site) is to implement the Agreed Order (AO) entered into by the Department of Ecology (Ecology) and the Port of Bellingham (Port), to which this SOW is an Exhibit.

The RI/FS is intended to provide sufficient data, analysis, and evaluations to enable Ecology to select a cleanup action for the Site.

The RI/FS Scope of Work (SOW) is divided into four major tasks as follows:

- 1) Progress Reports
- 2) RI/FS Work Plan
- 3) Remedial Investigation
- 4) Feasibility Study

TASK 1 PROGRESS REPORTS

The Port shall submit progress reports quarterly unless a longer reporting period is approved by Ecology in writing. Progress reports shall be submitted to Ecology until satisfaction of the AO. Progress Reports shall be submitted to the Ecology project coordinator by the 10th of every third month following the effective date of the AO. If this day is a weekend or holiday, deliverables shall 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 which have been taken to comply with the AO and SOW during the previous reporting period;
 - An estimate of the percentage of RI/FS work completed to date;
 - 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 government;
 - 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; and
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- A description of work planned for the next reporting period.

TASK 2 RI/FS WORK PLAN

In order to plan and manage the RI/FS, the Port shall document project tasks and management strategies in a RI/FS Work Plan (Work Plan), which shall be developed and submitted to Ecology for review and approval in accordance with this SOW, including the schedule contained below, and in accordance with the SOW described in Tasks 3 and 4 below. The Work Plan shall not be implemented until approved by Ecology. Once approved by Ecology, the Port shall implement the Work Plan according to the schedule contained in this SOW — and according to any subsequent amendments to the Work Plan or schedule made under the AO.

The Work Plan shall specify and describe all tasks to be accomplished to complete an RI/FS that meets the requirements of WAC 173-340-350, in accordance with the AO and this SOW.

The Work Plan shall clearly describe the overall project management strategy for implementing and reporting on RI/FS activities. The responsibility and authority of all organizations and key personnel involved in conducting the RI/FS shall be outlined.

Elements of the Work Plan include, but are not limited to, the following:

- A project management strategy including a description of individual RI/FS subtasks;
 - A review of existing and available data to support the development of RI/FS tasks which may include, as appropriate, the following:
 - a) Physical features, including topography and bathymetry, structure locations, and utilities;
 - b) Natural physical processes;
 - c) Soil, surface water and groundwater data, including contaminant concentrations and conventional parameters, depths and location of samples, which are necessary to determine the nature and extent of the contaminant(s), and comparison to MTCA;
 - d) Hydrogeologic data;
 - e) Current property ownership and zoning;
 - f) Current or planned land and shoreline uses and their location, which may affect investigation and cleanup activities; and
 - g) Historical, archeological, and cultural uses of the site including recent and historical photographs;
 - Data gaps identified for completion of the RI/FS;
 - A draft outline of the final RI and FS Reports including the types of data evaluation, figures, and tables that shall be included;
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- A proposed schedule for completion of all subtasks not currently accounted for in the schedule; and
- Project personnel and responsibilities.

The RI/FS Work Plan shall also include: a Sampling and Analysis Plan (SAP) prepared in accordance with WAC 173-340-350(7)(c)(iv); a Quality Assurance Project Plan (QAPP); and, a Health and Safety Plan (HASP). The HASP is subject to comment by Ecology, but not subject to Ecology approval. Details of these plans are provided below.

Sampling and Analysis Plan - The Port shall prepare a SAP for RI sampling and analysis activities in accordance with WAC 173-340-820. The purpose of the SAP is to provide an overview of the RI sampling program that shall obtain information needed to meet the data needs described in Task 3 of the SOW.

The SAP shall describe the sampling objectives and the rationale for the sampling approach. A detailed description of sampling tasks shall then be provided, including specifications for sample identifiers; the type, number, and location of samples to be collected; the analyses to be performed; descriptions of sampling equipment and collection methods to be used; description of sample documentation; sample containers, collection, preservation and handling. The SAP shall describe sample custody and handling procedures, decontamination procedures, and the handling of investigative-derived wastes.

Quality Assurance Project Plan - The Port shall prepare a QAPP for RI sampling and analysis activities. The QAPP shall identify and describe laboratory methods and the QA/QC measures that shall be taken during the performance of all sampling and analysis tasks to ensure the fulfillment of data quality objectives. Data quality objectives shall reflect the criteria or threshold values used for remedial decisions. Laboratory methodology and QA/QC requirements shall be developed in accordance with Ecology guidance and shall include the following elements:

- A brief project description, referencing the Work Plan and/or SAP for details;
- Project management and QA responsibilities;
- Quality assurance objectives;
- Procedures for analysis of samples and reporting of results, including:
 - Detection or quantitation limits;
 - Analytical techniques and procedures;
 - Quality assurance and quality control procedures; and
 - Data reporting procedures and validation procedures.

The Port shall use an Ecology-accredited laboratory for the specific analyses to be performed under this AO. If an unaccredited lab is proposed to be used, the results of recent performance audits and systems audits shall be provided to Ecology prior to use of the lab.

Health and Safety Plan - The Port shall prepare a HASP for RI activities in accordance with WAC 173-340-810. The HASP must be consistent with the requirements of the Washington Industrial Safety and Health Act of 1973, Chapter 49.17 RCW and implementing regulations, including any updates or amendments. The HASP shall identify specific monitoring and management responsibilities and activities to ensure the protection of human health activities associated with the RI.

TASK 3 REMEDIAL INVESTIGATION (RI)

The Port shall conduct a remedial investigation that meets the requirements of WAC 173-340-350(7), according to the Work Plan as approved by Ecology and the schedule contained below. Key components of the RI for this Site that may be captured in the Work Plan are as follows:

- Nature and extent of contamination;
- Contaminant fate and transport processes;
- Assessment of potential human health and ecological health concerns; and
- All the associated figures, tables, and photos.

TASK 4 FEASIBILITY STUDY (FS)

The Port shall use the information obtained in the RI to conduct a Feasibility Study that meets the requirements of WAC 173-340-350(8). For the purpose of expediting remedial action and facilitating redevelopment of the Site, the FS will be prepared into two separate FS documents: one for the Pulp/Tissue Mill remedial action unit (RAU) and one for the Chlor-Alkali RAU (Volumes 2a and 2b, respectively, of the RI/FS document). The division of the Site into two RAUs recognizes that the two areas have been impacted by different releases, and that remediation of contamination within the Chlor-Alkali RAU is considerably more complex than that in the Pulp/Tissue Mill RAU. The Pulp/Tissue Mill RAU FS can therefore be completed prior to the Chlor-Alkali RAU FS. This will allow remedial action and redevelopment at the Pulp/Tissue Mill RAU to proceed more quickly, than the Chlor-Alkali RAU. Consequently, this approach expedites cleanup of the Site as a whole.

The FS for each RAU shall include:

- Determination of cleanup standards and applicable laws;
 - Identification and screening of cleanup technologies;
 - Basis for assembly of cleanup action alternatives;
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- Description of cleanup alternatives;
- Comparative evaluation of cleanup alternatives;
- Identification of a preferred cleanup alternative; and
- All the associated figures, tables and photos.

DELIVERABLES

The Port shall prepare and submit all plans, reports, and studies listed below (items a and b) as required by the AO.

Specific deliverables described in this SOW include:

- a) RI/FS Work Plan – The Port shall submit for Ecology review and approval an RI/FS Work Plan, including a SAP, QAPP, and HASP, in accordance with the schedule below. The HASP shall be submitted but not approved by Ecology.
- b) RI/FS Report – The Port shall summarize and compile the results of Task 3 into Volume 1 of an RI/FS Report. Volume 1 will include all validated sampling and analysis data collected under this AO. All data collected under this AO shall also be submitted to Ecology in EIM format. The results of Task 4 will be submitted to Ecology in Volume 2 of an RI/FS Report (Volume 2a is the FS for Pulp/Tissue Mill RAU; Volume 2b is the FS for Chlor-Alkali RAU). The RI/FS report shall follow the draft outline contained in the Work Plan under the AO.

For all documents:

- All deliverables shall be submitted to Ecology in electronic (Word and Adobe formats) and hard-copy formats;
- A draft shall be submitted to Ecology for review and approval in accordance with this SOW, including the schedule outlined below, and the Work Plan;
- If Ecology comments on a draft document, the Port shall revise the draft document by incorporating and/or otherwise addressing Ecology's comments. The Port shall resubmit an electronic redlined/strikeout revised draft to Ecology for review and approval; and
- For the Work Plan and RI Data Report, once Ecology approves a draft it shall be considered the final version.

For the RI/FS Report only:

- The Port shall submit the RI/FS Report in two volumes, with Volume 2 further divided into two documents corresponding to the two RAUs within the Site. Volume 1, the RI Report, shall be submitted for Ecology review and approval prior to commencing substantive work on Volume 2, the FS Report. Once Ecology approves a draft of each volume as the final version of the RI/FS Report, it shall be considered the final draft for public review purposes (the public review draft or draft final document). To expedite the Site cleanup action, Volumes 1, 2a, and 2b will be submitted individually for public comment upon each document's completion;
- Following public review of each draft final document, the Port shall prepare and submit a final version of the document for Ecology approval, which addresses public comment as Ecology determines necessary;
- Upon Ecology approval, the final draft RI and FS Reports submitted shall constitute the final RI/FS Report for the Site;
- Ecology, in its discretion, and with assistance with the Port pursuant to the terms of the AO, may prepare a Responsiveness Summary to public comments.

SCHEDULE

The schedule for all tasks described in this SOW is presented below. If, at any time during the RI/FS process, unanticipated conditions or changed circumstances are discovered which may result in a schedule delay, the Port shall bring such information to the attention of Ecology. Pursuant to Section VIII.K of the AO, Ecology shall determine whether a schedule extension is warranted.

Completion times are calendar days. Any deadline which falls on a holiday or weekend shall be extended to next business day.

RI/FS ActionsCompletion Time

Draft RI/FS Work Plan

60 days from effective date of the AO

Final RI/FS Work Plan
incorporating Ecology's
comments60 days from receipt of Ecology's final
comments on Draft RI/FS Work Plan

Draft RI and FS Reports

- Volume 1, draft RI Report
- Volume 2a, draft FS Report for
Pulp/Tissue Mill RAU
- Volume 2b, draft FS Report for Chlor-
Alkali RAU

450 days from Ecology approval of the Final
RI/FS Work Plan90 days from Ecology approval of the draft
final RI Report150 days from Ecology approval of the draft
final RI ReportDraft RI and FS Reports for Public Review
incorporating Ecology's comments

- Volume 1, draft final RI Report
- Volume 2a, draft final FS Report for
Pulp/Tissue Mill RAU
- Volume 2b, draft final FS Report for
Chlor-Alkali RAU

30 days from Ecology approval of the draft RI
Report30 days from Ecology approval of the draft FS
Report for Pulp/Tissue Mill RAU30 days from Ecology approval of the draft FS
Report for Chlor-Alkali RAUFinal RI and FS Reports incorporating
Ecology's comments60 days from the close of public comment or
from receipt of Ecology's comments on each
document, in the event Ecology determines
that changes to that document are necessary
due to public comment.