

## Appendix A

### East 11<sup>th</sup> Street Tideflats Restoration Project Description

This Appendix A to the consent decree captioned *United States of America, et al. v. Occidental Chemical Corporation, et al.* (the “Consent Decree”) describes the requirements and the anticipated schedule for the habitat restoration project to be constructed and monitored by Occidental Chemical Corporation (the “Project”) on real property owned by the Port of Tacoma (the “Project Site”). Defined terms within quotation marks or with capitalized letters in this Appendix A shall have the meanings defined in the Consent Decree and in this Appendix A.

**1. Project Description.** The Project shall consist of Occidental’s implementation of the following activities within the Project Site as generally depicted in Figure 1 of this Appendix A:

- (a) Eliminate log rafting within the Project Site through removal of the logs currently stored at the Project Site within the existing “Log Rafting Area” (as generally depicted in Figure 1) and through recording with the Office of the Pierce County Auditor of the real property use restrictions on the Project Site title of record in the form of Appendix C to the Consent Decree;
- (b) To ensure the long-term effectiveness of the sand/silt layer described in Paragraph 1(e) below, remove wood debris deposits as may be present within the existing “Log Rafting Area” (as generally depicted in Figure 1) that exceed fifty-percent (50%) wood debris by volume over at least a two-foot (2-foot) thickness below mudline;<sup>1</sup>
- (c) Remove exposed portions of the three (3) existing grounded barges in the Project Site that project above the existing mudline by cutting them down to the mudline and backfilling as needed (remaining portions of the barges shall remain in place and shall be covered by the silt and sand sediments described in Paragraph 1(f) below);
- (d) Remove tires, trash, pipes, chains, cable and other debris and discarded materials that visibly project above the existing mudline, as practicable (i.e., if readily accessible with conventional construction equipment)(such removal shall not include any structures, including but not limited to ramps, docks, or pilings);
- (e) Demonstrate through the conduct of a Pilot Sand Placement test that clean sand and silt materials (see Paragraph 1(f) below) can be placed accurately and evenly

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<sup>1</sup> Note that no wood debris deposits meeting this definition have been identified. The presence and location of such deposits, if any, will be confirmed during implementation of the Project.

to achieve a minimum six-inch (6-inch) cover thickness, as verified through piston core sampling within the Pilot Sand Placement areas;

- (f) Following successful verification of placement methods and quality control procedures during the Pilot Sand Placement test, place a minimum six-inch (6-inch) layer of clean silt and sand sediments (verified by accurately tracking the volume of silt and sand sediments delivered to individual placement grids) (with chemical concentrations below the Trustees' sediment goals as articulated in Trustee Resolution 99-02, entitled "Sediment Cleanup Goals for Active Natural Resource Restoration Projects" and grain size distributions generally conforming to naturally occurring sediments in the Hylebos Waterway) throughout the entire Project Site; and
- (g) Implement physical measures to permanently prevent access to the Project Site for attempted future log rafting or vessel abandonment (e.g., placing of pilings and/or booms near the offshore property boundary of the Project Site adjacent to the Hylebos Waterway, as generally depicted in Figure 1). Such physical measures shall be subject to applicable local (including Port of Tacoma), state and/or federal permitting, constraints, requirements, and approvals. The Trustees shall provide reasonable assistance to Occidental in obtaining necessary permits and/or approvals, to the extent consistent with applicable agency and/or tribal regulations and policy.

**2. Required Permits and/or Approvals.** Occidental shall prepare a Joint Aquatic Resources Permit Application ("JARPA") to obtain the required permits and/or approvals for the Project. The Trustees shall use reasonable assistance to Occidental in obtaining necessary permits and approvals, to the extent consistent with agency and/or tribal regulations and policy. The following permits and/or approvals are required for the Project:

- (a) State Environmental Policy Act (SEPA Checklist and Determination of Non-Significance)
- (b) Section 404 - U.S. Corps of Engineers Permit
- (c) Endangered Species Act Consultation - US Fish & Wildlife Service and National Marine Fisheries Service
- (d) Section 401 Water Quality Certification - Washington Department of Ecology
- (e) Hydraulic Project Approval - Washington Department of Fish and Wildlife
- (f) Shoreline Substantial Development Permit - Pierce County
- (g) Specific permits and/or approvals required for the Project will be determined by the permitting agencies, and thus different or additional permits and/or approvals may also be required.

**3. Project Construction and Development Schedule.** The timing of the activities required to implement the Project shall take into account practical and legal constraints, including, without limitation, the following: obtaining required permits and approvals, coordinating with the Port of Tacoma, terminating the applicable log rafting lease agreement(s), availability of appropriate clean silt and sand sediments, engaging appropriate consultants and contractors, etc. Subject to the foregoing, the Project shall be developed pursuant to following schedule but such schedule may be modified by agreement between Occidental and the Trustees in order to address the practical and legal constraints described above:

- (a) Permit applications filed, within six (6) months of entry of the Consent Decree.
- (b) Remove the logs currently stored at the Project Site as described in Paragraph 1(a) above, within six (6) months of entry of the Consent Decree.
- (c) Remove wood debris deposits (if any) as described in Paragraph 1(b) above, within twelve (12) months of receipt of all required permits and approvals for the Project.
- (d) Address abandoned barges, as described in Paragraph 1(c) above, within twelve (12) months of receipt of all required permits and approvals for the Project.
- (e) Remove tires, trash, pipes, chains, cable, and other debris and discarded materials, as described in Paragraph 1(d) above, within twelve (12) months of receipt of all required permits and approvals for the Project.
- (f) Place clean silt and sand sediments, as described in Paragraph 1(f) above, within twelve (12) months of receipt of all required permits and approvals for the Project.
- (g) Implement preventative measures, as described in Paragraph 1(g) above, within twelve (12) months of receipt of all required permits and approvals for the Project.
- (h) Submission of Notice of Completion to the Trustees, after completion of the activities set forth in Paragraph 3(a) through Paragraph 3(g) above.

Items (a), (b), and (g) above shall constitute “major milestones” for purposes of Paragraph 35(a) of the Consent Decree.

**4. Project Monitoring and Monitoring Schedule.** The following monitoring activities shall be accomplished by Occidental:

- (a) Trustee representatives will review the course and results of project development during the implementation of the elements described in Paragraph 1, above. Occidental shall provide Trustee representatives an opportunity for visual inspection of the Pilot Sand Placement described in Paragraph 1(e). Prior to the demobilization of contractors carrying out the elements described in Subparagraphs 1(b) through 1(g), above, Occidental shall provide Trustee representatives an opportunity for a Project Site visit and visual inspection of the Project Site to permit the Trustees to verify that the relevant project elements have been implemented per the terms of Paragraph 1.
- (b) Benthic invertebrate prey resource monitoring will be performed once prior to construction (baseline sampling), and during years Two and Five following the date of the Trustees' issuance of the Notice of Approval of Completion, to assess benthic colonization, consistent with Biological Success Criterion 8 described in Appendix B to the Trustees' *Commencement Bay Natural Resource Natural Resource Damage Assessment Restoration Monitoring Program* (2001). Such monitoring will include three (3) representative benthic invertebrate sampling stations within the existing Log Rafting Area depicted in Figure 1 (six (6) replicates each), along with an appropriate reference site located in Commencement Bay. Major juvenile salmonid prey will be identified and enumerated to the genus level; all other species will be identified and enumerated to the order level. Data reduction and interpretation will follow current Washington State Sediment Management Standards protocols.
- (c) A data report will be provided to the Trustees within six (6) months of each benthic invertebrate prey resource monitoring event described in Paragraph 4(a) above.
- (d) A Draft Sampling and Analysis Plan (SAP) detailing collection and analysis of surface sediment samples from the Project Site will be submitted for Trustee review within six (6) months of entry of the Consent Decree. The Draft SAP will describe baseline data collection to document initial site conditions, and will also describe sampling to be performed approximately one year following the date of the Trustees' issuance of the Notice of Approval of Completion. The baseline and Year 1 sampling will be used to evaluate subsequent releases of hazardous substances in the Hylebos Waterway. During baseline and Year 1 sampling, surface sediment composites will be collected at two stations within the Project area and submitted for analysis of grain size, total organic carbon, and SMS chemical parameters including DDT and TBT. Total PCBs will be analyzed as congeners. Each station will represent a composite of surface sediment taken from three (3) separate locations. Such locations will be determined by Occidental in consultation with the Trustees. An archival sample of the pre-composited sediment will be retained in case further, more detailed

investigation is warranted. Trustee comments on the Draft SAP received within one (1) month of submittal will be incorporated into the Final SAP.

- (e) Data reports (two total) for all results at each station, and summary report discussing and mapping results of the testing will be provided to the Trustees within six (6) months after completion of the baseline and Year 1 surface sediment sampling events described in Paragraph 4(d) above, respectively.

**5. Project Adaptive Management and Maintenance.** The Project involves no adaptive management or maintenance. All elements of the Project utilize proven habitat restoration methods.

