

1 PROJECT DESCRIPTION

1.1 SITE DESCRIPTION AND BACKGROUND

The project site is a former pulp mill facility located in the city of Port Angeles, Clallam County, Washington along the north coast of the Olympic Peninsula. Its physical setting includes the southern shore of Port Angeles Harbor adjacent to the Strait of Juan de Fuca. The site occupies approximately 80 acres, bounded by a high bluff and the harbor shoreline.

The area experienced historical tribal activity until the late 1800s. A sawmill was constructed at the site and briefly operated around 1917. The mill then remained idle until 1929, when Olympic Forest Products (predecessor to Rayonier) purchased the site and began construction of a pulp mill. The pulp mill operated an ammonia-based acid sulfite process to produce dissolving-grade pulps at the site. The mill closed in 1997, and over the past 3 years it was subsequently dismantled and demolished. In 1997 to 1998, the U.S. Environmental Protection Agency (EPA) conducted an Expanded Site Inspection (ESI) (E&E, 1998) as part of an evaluation for a possible listing as a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site. Further information on site details, potential chemical releases, and contamination associated with the site are found in Sections 2 and 3 of Volume I: Remedial Investigation (RI) Work Plan, and in the ESI.

1.2 HISTORICAL INFORMATION

1.2.1 HISTORY AND PREVIOUS INVESTIGATIONS

The history of the site, including potential sources and contamination, is described in Sections 2 and 3 of Volume I: RI Work Plan and other key project documents including the Current Situation/Site Conceptual Model Report (Foster Wheeler, 1997) and the EPA ESI. The site conceptual model report summarizes the current situation by addressing the physical features, site boundaries, land usage, waste-related history, and the nature and extent of potential contamination, as it is currently understood. The site conceptual model identifies the contaminants of potential concern (COPCs), contaminant migration pathways, and the human and ecological receptors. The ESI provides a detailed account of the site history, potential contaminant sources, and a summary of historical data. The historical data may be used to augment the site conceptual model, and further characterize the site conditions.

1.2.2 RECENT DEVELOPMENTS

In May 2000 EPA, Washington State Department of Ecology (Ecology), U.S. Environmental Protection Agency (EPA), and the Lower Elwha Klallam Tribe (Tribe)

completed a deferral agreement. Rayonier had previously agreed to conduct an RI of their former pulp mill site as part of an Ecology-led cleanup under the Model Toxics Control Act (MTCA) and to support both tribal and Ecology participation. Through the Site Remediation Project Manager (SRPM), Ecology will be the lead agency for this project. With the assistance of the Site Management Team¹ (SMT), they will determine the scope and manner of the investigations and the extent and type of remediation at the site. When the necessary response actions at the site are successfully completed, EPA will have no further interest in considering the site for listing on the National Priorities List (NPL), assuming no further significant contaminant releases occur and there is not a significant potential for release that would pose a threat to human health or the environment.

Integral Consulting, Inc. (Integral) and Foster Wheeler Environmental Corporation (Foster Wheeler) have been retained by Rayonier to prepare Site Management Plans to support remedial investigation/feasibility study (RI/FS) of the upland environment at the former Rayonier Mill site consisting of a Work Plan (Volume I), a Sampling and Analysis Plan (Volume II), and a Quality Assurance Project Plan (Volume III).

1.3 PROJECT OBJECTIVES

The main objectives of this RI/FS, as defined by the field sampling program, are:

- To determine potential sources and the nature and extent of contamination in the surface and subsurface soil, groundwater, and Ennis Creek sediment.
- To provide data to support site-specific risk assessment and evaluation of remaining risk drivers and exposure pathways.
- To provide data that will be used to help develop feasible, constructible remedial alternatives to achieve risk-based cleanup levels consistent with the applicable, relevant, and appropriate requirements (ARARs) and action levels developed for the site.
- To provide data to aid in the correction of problems identified during the remediation process.

These objectives will be accomplished using a judgment-based sampling program. The statutory provisions under MTCA, together with the deferral agreement, will provide the regulatory basis. The specific purpose of this Quality Assurance Project Plan (QAPP) is to ensure that all data collected are of sufficient quality to support these project objectives.

¹ Ecology, Rayonier, and the Lower Elwha Klallam Tribe

1.4 OBJECTIVES OF THE QUALITY ASSURANCE PROGRAM

Quality Assurance (QA) is defined as the total integrated program for ensuring reliability of monitoring and measuring data. Quality Control (QC) is defined as the routine application of procedures for obtaining prescribed standards of performance in the monitoring and measuring process.

The objectives of the QA program are to ensure: (1) the procedures used will not detract from the quality of the results; and (2) all activities, findings, and results follow the terms and conditions of this QAPP and are documented. The QAPP is based generally on Ecology and EPA guidance provided by:

- Ecology 91-16, Guidelines and Specifications for Preparing Quality Assurance Project Plans (Ecology, 1991a)
- EPA/330/9-78/001R, NEIC Policies and Procedures (EPA, 1978)
- EPA/540/6-89/004, OSWER Directive 9355.3-01, October 1988, Guidance on Conducting Remedial Investigations and Feasibility Studies Under CERCLA (EPA, 1989)
- EPA/QAMS/005/80, Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans (EPA, 1980)
- EPA/540-R-93-071, Data Quality Objectives Process for Superfund, Interim Final Guidance (EPA, 1993a)

All project activities, findings, and results will follow the terms and conditions of this QAPP and will be documented accordingly. The QAPP will provide guidance for all personnel involved in plan preparation and review as well as actual project site activities. The QAPP will ensure that the project proceeds in an orderly and well-documented manner. Project-specific procedures and protocols for the experimental design, sample collection, chain-of-custody, preservation and shipment, laboratory and data analysis, and report preparation are included in this QAPP or by reference to the Sampling and Analysis Plan (SAP) that is included as part of the project submittals (Volume II: Sampling and Analysis Plan). The structure of this QAPP follows Ecology specifications (Ecology, 1991) as developed from basic EPA guidance for preparation of QAPPs—QAMS-005-80 (EPA, 1980).

Specific project activities of concern to the QA program include, but are not limited to, the following:

- Project-specific procedures and protocols described in Volumes I, II, and III, including project QC, are reviewed and approved by the Integral Project Manager and Foster Wheeler QA Manager, Rayonier, Ecology, and the Tribe prior to initiation of project activities.
- Project personnel receive adequate training on all project plans prior to initiation of project activities. This activity includes a requirement to read and understand

all project plans prior to their implementation, and sign a statement to that effect. The QA Manager will maintain these records. Also, pre-activity briefings will be part of the daily health and safety briefing, and the Field Operations Lead (FOL) will provide oversight.

The project proceeds in an orderly manner according to established procedures and protocols presented in Volume I: RI Work Plan for experimental design, sample collection, chain-of-custody process, sample shipment, vendor processing, laboratory and data analysis, review, and final reporting.

Significant changes to the QAPP will be provided to Ecology's Cleanup Project Manager with the opportunity to comment on and approve revisions.

This QAPP will be used for the RI/FS specifically and for calculations for other areas. It is Integral's and Foster Wheeler's management policy to maintain the highest standards of quality throughout all activities and operations in accordance with all applicable regulations and standards. The Foster Wheeler Corporate Quality Assurance Program Manual represents this policy. The requirements for ensuring the highest standards of quality, as contained in the Corporate Quality Assurance Program Manual, are to be used as a standard in conjunction with this project-specific QAPP.

1.5 SAMPLING DESIGN

The overall approach for sampling design is contained in the SAP (Volumes II). The SAP is consistent with MTCA guidance. The RI work will be accomplished using a judgment-based sampling program design that will obtain data to evaluate potential contaminant pathways to receptors, complete the risk assessment, and support an evaluation of potential remedial action and no-further-action outcomes. The design relies in part upon data from the ESI (E&E, 1998), and is intended to augment and confirm rather than reproduce all the information from that investigation. Specific details of the design, including location and frequency of sampling, are presented in the associated SAP (Volume II).

1.6 SCHEDULE

A preliminary project schedule is included as Table 1-1, and will be revised, as appropriate, as details of the program are developed. Details for sampling activities are contained in the SAP (Volume II).

Table 1-1 Preliminary Project Schedule

Task	Initiation (Days after Agreed Order Signed)	Estimated Duration (Days)
Field Mobilization	14	3
Soil Investigations:		
Coring	17	21
Sampling	17	14
Groundwater Investigations:		
Tidal Influence Study	31	10
Slug Testing	41	10
Sampling	51	10
Sediment Investigations:		
Equip. Prep.	17	1
Sampling	18	1

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