

## **SECTION 2.17 STUDY SCHEDULES**

### **(WAC 463-42-285)**

This section provides an overview of studies that were performed subsequent to the submittal of the February 1996 application by Olympic Pipe Line Company (OPL) to supplement the information or data provided in the application. In addition, this section discusses studies and plans that will be performed or prepared, and submitted to EFSEC for review and approval prior to construction or operation in anticipation of the requirements of the Site Certification Agreement.

#### **2.17.1 BIOLOGICAL ASSESSMENT**

A review of available literature and data indicates the project may potentially impact threatened or endangered animal species. A biological evaluation has been completed, and a biological assessment is being prepared by OPL's consultant Dames & Moore for submittal to the U.S. Forest Service after the Draft Environmental Impact Statement has been published as part of the NEPA compliance process to ensure that no Threatened and Endangered species will be affected by the proposed project. The biological assessment is being prepared in compliance with Section 7(c) of the Endangered Species Act of 1973, as amended.

#### **2.17.2 WETLAND AND NAVIGABLE WATER CROSSINGS**

A permit application has been submitted to the Army Corps of Engineers (ACOE) for approval for crossing wetlands and navigable waters. Wetland field delineation per ACOE regulations were conducted during 1996 and 1997. Meetings and field visits were held with federal, state, and local agency staff to review the proposed crossing locations and methodologies. In the course of agency review, the applicant will develop mitigation and construction monitoring measures acceptable to the ACOE and other federal agencies. Final ACOE permits will not be issued until Section 401 Certification is issued by EFSEC concurrent with approval of the Site Certification Agreement.

#### **2.17.3 SENSITIVE PLANT STUDY**

Rare plant field surveys were conducted during the spring and fall of 1996, spring and summer of 1997, and spring of 1998 to determine the presence of sensitive plant species within the project impact area. The scope of work included field investigations and a report. Plant species of concern which could potentially be found in the proposed project area are identified below.

The Washington Department of Natural Resources Natural Heritage Information System, the U.S. Fish and Wildlife Service, the U.S. Forest Service, and the Yakima Training Center provided lists of species that were included in the survey.

#### **2.17.4 SALAMANDER SURVEYS IN THE CASCADES**

The "Survey and Manage" guidelines developed as part of the Northwest Forest Plan require surveys of Component/Strategy 2 species in potential habitat before ground disturbing activities. Surveys for the Larch Mountain salamander and Van Dyke's salamander were conducted in 1996 and 1997 along streams and in the two forested corridors crossed by the proposed pipeline from approximately MP 47 to 81. None of the habitat surveyed appeared to be prime for these species (eg. limited cover, undercut streams, second growth trees). All amphibian species were recorded, but the target species were not found. The complete survey report is in Appendix B of this Application.

#### **2.17.5 BAT SURVEY OF SNOQUALMIE TUNNEL**

On March 12, 1998, a bat survey of the Snoqualmie Tunnel was performed by Washington Department of Fish and Wildlife Biologists Eric Larsen and Laurie Wunder. The survey was performed by carefully scanning the ceiling, walls, and to the extent possible, cracks and crevices, for the presence of torpid bats. Despite favorable habitat conditions (cold, good airflow, moist, many crevices and textures), no bats were detected at any point during the survey. While it remains uncertain whether or not bats use this tunnel in any fashion, the biologists stated that the tunnel probably does not serve as a hibernaculum for a large bat colony. They also stated that it also seems unlikely that the tunnel is used to a significant degree by bats as a maternity roost. The letter report is included in Appendix B to this Application.

#### **2.17.6 GEOTECHNICAL STUDIES**

Geotechnical engineering investigations have been done for critical elements of the proposed project, including all areas mapped as having a high potential for geologic hazards, the Kittitas Terminal site, and the Columbia River directional drill crossing location. Technical reports prepared for this project include the following:

- C Bridge Assessments (July 24, 1997)
- C Geotechnical Investigation to Assess Horizontal Directional Drilling at the Columbia River Crossing (Dames & Moore, April 29, 1998)
- C Geotechnical Support: River and Stream Crossing Site Investigation (Dames & Moore, November 20, 1996)
- C Screening Level Pipeline Scour Evaluation (West Consultants, Inc., May 1997)
- C Geotechnical Investigation, Kittitas Terminal Project (Dames & Moore, April 29, 1998)

### 2.17.7 EROSION AND SEDIMENT CONTROL PLAN

An Erosion and Sediment Control Plan and Environmental Management Plan will be prepared to address crossings of sensitive areas, and submitted to EFSEC for review and approval prior to construction. The plan will include emergency implementation and response, damage control, and restoration activities for stream and wetland crossings and riparian and habitat areas.

The plan will summarize information from this application and will include more detailed information in the following areas:

- C Project Description - A description of the nature and extent of proposed land disturbing activities (e.g., clearing, trenching, and grading).
- C Existing Site Conditions - A description of the existing topography, bed rock lithology and structure, vegetation and drainage.
- C Adjacent Areas - A description of neighboring streams, lakes, and drainage areas which might be affected by the land disturbance.
- C Soils - A detailed account of the soils within the pipeline construction corridor, including soil names, erodibility, permeability, depth, texture, and soil structure.
- C Critical Areas - A description of areas within the pipeline construction corridor which have potentially serious erosion problems-- for example, areas of past or present soil movement.
- C Erosion and Sediment Control Measures - A description of the control methods to be used, including vegetative and structural controls and management measures (e.g., staging construction so no areas remain exposed for an unnecessarily long period of time). Methods will be specific and include schedules and the duration over which the control measure is expected to be used. An explanation will be included as to why selected methods are appropriate to the situation.
- C Permanent stabilization - A detailed description, including specifications of how the corridor will be stabilized after completion of construction.
- C Maintenance - An inspection schedule for all erosion control measures will be established. A maintenance schedule for erosion and sediment control structures will be set forth.
- C Calculations - Any calculations made for the design of erosion control structures, such as sediment basins, will be included.
- C Contingency Plans - Contingency plans for emergency situations and project abandonment will be outlined.
- C Pipeline Construction Corridor Plan - Detailed maps of the construction corridor will be provided which include: a vicinity map, existing contours, vegetation and soils, critical erosion areas, existing drainage patterns, limits of clearing and grading, location of control measures, and detailed drawings of typical control structures.

### **2.17.8 CULTURAL RESOURCES**

A cultural resources survey has been performed for approximately 97% (approximately 224.75 miles) of the proposed corridor. A Programmatic Agreement will be prepared for the President's Advisory Council on Historic Preservation that stipulates when additional surveys will be conducted, eligibility determination, treatment plans, and a monitoring plan.

### **2.17.9 TRANSPORTATION PLAN**

Prior to commencement of construction, a plan shall be submitted to EFSEC which shall include, but not be limited to the following:

- C A routing plan for delivery of equipment to the pump station, terminal, and pipeline sites.
- C A routing plan showing necessary road closures and detour routes during construction of the pipeline, together with a schedule indicating construction sequencing. The plan shall identify transit routes and school bus routes which may be disrupted by the construction.
- C A traffic control plan indicating the methods to be used to implement necessary traffic rerouting, means of assuring access to impacted properties, and means of providing temporary traffic control for safety.
- C A program which will facilitate the exchange of commuting information among construction workers and encourage ride sharing.
- C A parking plan showing available parking areas for construction workers and a means of shuttling workers from parking to job site, if necessary.

### **2.17.10 ADDITIONAL SUBMITTALS**

Prior to construction, the applicant will submit the following:

- C A detailed map showing right-of-way acquisition and land uses impacted within the right-of-way.
- C A construction management plan that describes pipeline construction techniques and methods.
- C A Stormwater Management Plan as per NPDES requirements.

Prior to commencement of operation, the applicant will submit the following:

- C An emergency response plan including details on training, education, and equipment.
- C A Spill Prevention, Control and Countermeasure Plan where required.
- C A Stormwater Pollution Prevention Plan.

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