

SECTION 2.13 CONSTRUCTION MANAGEMENT

(WAC 463-42-245)

2.13.1 CONSTRUCTION MANAGEMENT - ORGANIZATION

Texaco Pipeline, Inc. (TPLI) will provide engineering, procurement, and construction management under its existing contract with Olympic Pipe Line (OPL). Construction will be performed by independent contractor(s) on a fixed cost basis through a competitive bid. TPLI will provide Quality Assurance/Quality Control (QA/QC) activities throughout the term of construction. TPLI will assemble and maintain a QA/QC staff made up of professional engineering and construction personnel to monitor the construction contractor's performance and adherence to all contract specifications and requirements throughout the execution of work.

The project is organized into three phases: (1) engineering; (2) construction; and (3) operation. Organization charts depicting OPL's anticipated engineering phase and construction phase organizations are shown in Figures 2.13-1 and 2.13-2. Personnel will be assigned to the project as their specific functions are required.

FIGURE 2.13-21 - CONSTRUCTION ORGANIZATION CHART, ENGINEERING PHASE

2.13.2 QUALITY ASSURANCE/QUALITY CONTROL

A Quality Assurance (QA) and Quality Control (QC) Program will be in place during all phases of the project to ensure that the engineering, procurement, construction, and startup of the facility is completed as specified. The Quality and Environmental Coordinator will report directly to the Project Manager (see Figure 2.13-2). The Quality and Environmental Coordinator will have authority for immediate response, work stoppage, and/or job shutdown in the event of non-compliance with engineering and environmental specifications.

The construction contract will require the contractor to prepare, for OPL's review and approval, a Project Procedures Manual. The manual will describe how the contractor will implement and maintain Quality Assurance/Control and Environmental Compliance Programs during all phases of the work. In this QA/QC Program, the contractor will describe the activities and responsibilities within its organization and the measures to be taken to assure quality work in the project.

TPLI will also have inspectors at the pipe mill and the coating mill. Pumps will be performance tested, with tests witnessed by TPLI.

Design by TPLI is being reviewed and approved by OPL. TPLI's engineering, construction, and QA/QC personnel will review all documentation (design, engineering, procurement, etc.) and witness field activities as a parallel organization to that of the construction contractor to ensure compliance with the project specifications. In all phases of the installation TPLI's field inspectors' acceptance will be required.

Independent inspection and approval will occur at each phase of construction, including right-of-way clearing and grading; pipe unloading, hauling, and stringing; pipe bending; pipe welding (including independent x-raying of welds); lowering in; backfilling; and clean-up/completion.

An Environmental Compliance program will ensure that construction activities meet the conditions, limits, and specifications set for all environmental standards established in OPL's EFSEC Site Certification Agreement and all other environmental regulations. The environmental compliance program will include a qualified individual assigned to each spread to ensure that environmental features of the project are met or exceeded. This includes stormwater and erosion control, waste management, spill prevention, and agency coordination. The designated environmental inspector for each spread will work directly for the Quality and Environmental Coordinator, who reports directly to the Project Manager.

2.13.3 EQUIPMENT INSPECTION

The inspection of the major equipment listed below will typically include, but not be limited to, the following operations, checks and review:

Pumps

- C Drawing review and verification and weld procedure specification (WPS) review/accepted status.
- C Verify materials.
- C Review all applicable NDE records.
- C Verify dimensions.
- C Witness or review hydrostatic, alignment, balance, performance, net positive suction head (NPSH) test results.
- C Overall visual (including welding).
- C Flange finish/protection.

Water Treating/Supply System

- C Drawing review and verification and WPS review/accepted status.
- C Verify materials.
- C Review all applicable non-destructive examination (NDE) records.
- C Verify dimensions.
- C Witness hydrostatic (piping) and operational testing.
- C Visual (including welding coatings).
- C Flange finish/protection.

Note: Associated subordered equipment (e.g., pumps, vessels, vessel lining installations) will be inspected.

Piping and Piping Specialties

- C Verify materials.
- C Verify dimensions.
- C Mill tests to include hydrostatic tests, metallurgical tests, and API certification.
- C Coating tests to be performed by independent inspectors.
- C Witness, or review results of, pressure testing and NDE.
- C Flange finish/protection.
- C Visual (including welding).
- C Ultrasonic seam examination.

Tanks

- C Verify drawings and WPS review/accepted status.
- C Verify materials.

- C Review all applicable NDE records.
- C Review hardness test records.
- C Review records.
- C Verify dimensions.
- C Witness hydrostatic and nozzle reinforcing pad air/soap testing.
- C Overall visual (including welding).
- C Flange finish/protection.

Control Valves 6" and Larger, Displacer Level Instruments, and Special Relief Valves

- C Verify compliance to engineering specifications.
- C Verify materials.
- C Witness pressures and operational test.
- C Flange finish/protection.

2.13.4 SAFETY COMPLIANCE

The duties assigned to the Project Safety Engineer shall include the following:

Safety

- C Review safety procedures.
- C Observe safety training for supervisors and laborers.
- C Review construction safety techniques and implementation.
- C Verify safety incident reports and statistical data.

2.13.5 QUALITY AND ENVIRONMENTAL COMPLIANCE

The duties assigned to the Quality and Environmental Coordinator shall include the following:

Environmental Compliance

- C Prepare erosion control plan.
- C Prepare spill prevention plan.
- C Ensure construction implementation.
- C Ensure erosion control performance.
- C Ensure right-of-way compliance.
- C Observe spills and cleanup.

C Review spill reports.

As noted above, the Quality and Environmental Coordinator shall have the authority for immediate response, work stoppage, and/or job shutdown in the event of non-compliance with engineering and environmental specifications.

TABLE OF CONTENTS

	Page
SECTION 2.13 CONSTRUCTION MANAGEMENT	2.13-1
2.13.1 CONSTRUCTION MANAGEMENT - ORGANIZATION	2.13-1
2.13.2 QUALITY ASSURANCE/QUALITY CONTROL	2.13-1
2.13.3 EQUIPMENT INSPECTION	2.13-4
2.13.4 SAFETY COMPLIANCE	2.13-5
2.13.5 QUALITY AND ENVIRONMENTAL COMPLIANCE	2.13-6
FIGURE 2.13-1 - OLYMPIC PIPE LINE COMPANY, ORGANIZATION CHART, ENGINEERING PHASE	2.13-2
FIGURE 2.13-2 - CONSTRUCTION ORGANIZATION CHART	2.13-3