CONSTRUCTION PROCEDURES

Reference: 192.59 **OSHA Link:** N/A

Chapter 2: General Requirements



III. Operator Qualifications and Certifications

2.3.1 All work and construction or maintenance activities performed on company facilities will be performed by individuals qualified under the Atmos Energy Operator Qualification Plan. Welders must meet current company welding certification and qualification standards. Pipe joiners must meet current company fusion, mechanical fitting, and other applicable certification and qualification standards.

2.3.2 State Specific Requirement - Virginia

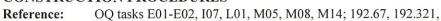
Atmos Energy adheres to the Virginia Enhanced Operator Qualification requirements.

- Before project begins, and each subsequent month for the duration of long term projects, Atmos Energy will verify Contractor personnel Operator Qualifications.
- Contractor personnel Operator Qualifications will be verified if a new inspector is added to a job site.
- Operator Qualifications must be presented and verified anytime new Contractor personnel are added to a job site.
- Document all Operator Qualification validations on the QUALIFIED PERSONNEL JOB SITE REPORT.

IV. Safety Guidelines

2.4.1 Employees are to use appropriate personal protective equipment (PPE) and follow all safety guidelines when performing tasks outlined in this manual or any other manuals referred to in this document. Give special consideration to the control of static electricity. Refer to the Atmos Energy Safety Manual, Gas Safety, 20.5.4, for general guidelines on eliminating sources of ignition. Hazard Analysis, 1.1.3, for guidelines for recognizing potential hazards, and Levels of Protection, 11.5.1, for use of appropriate protective clothing when performing operational jobs or tasks. Refer to the Atmos Energy Safety Manual, Requirements for Working in Hazardous Atmospheres, 20.5, if the excavation site is deemed potentially hazardous. Employees will dispose of all waste materials properly or waste materials will be returned to company facility for disposal. When dealing with potentially hazardous chemicals refer to the Atmos Energy Safety Manual, Hazardous Communication.

CONSTRUCTION PROCEDURES



192.627

OSHA Link: N/A

Chapter 4: Main and Transmission Pipeline Installation



Squeeze Method: Steel

Do not squeeze spiral-welded pipe. If pipe material or longitudinal seam type is unknown / cannot be determined, contact Technical Services before proceeding.

Using system valves and gas control fittings are the preferred means of controlling gas flow and should be used whenever practical. Squeeze steel pipe only as a last resort to control the flow of gas.

Take precautions, including measures to prevent sparking during steel squeeze operations. Refer to Atmos Energy Safety Manual, Section 21.3.3.

Equipment used for squeezing pipe must be designed and manufactured for the application in which it will be used. The use of homemade squeeze tools is not allowed.

Expose pipe and remove all coatings, wrap, corrosion, etc. Squeeze only straight sections of pipe.

Squeeze pipe no closer than 5 pipe diameters from girth welds, significant corrosion, visual defects, or fittings of any kind (e.g. 10 inches away on 2-inch diameter pipe, etc.). Locate and mark any longitudinal seam on the pipe.

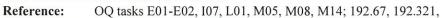
Set up squeezers adjacent to the proposed squeeze point. Support particularly heavy squeezing equipment to prevent overstressing of the pipe.

Preheat steel pipe to a temperature of 200° F $- 250^{\circ}$ F, when possible, in order to reduce the chance of splitting. Preheat uniformly around the pipe circumference. The preheated area should extend at least 1 pipe diameter to each side of the proposed squeeze-off point.

Extinguish all flames and remove all sources of ignition prior to the start of the squeezing process.

When ready to squeeze the pipe, slide the squeezing equipment quickly over the proposed squeeze point and position so that the axis of the squeeze-off is oriented approximately 45 degrees relative to any longitudinal seam.

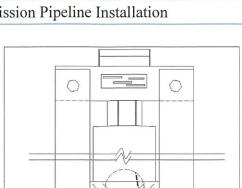




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OSHA Link: N/A

Chapter 4: Main and Transmission Pipeline Installation



Arrows indicate acceptable seam locations relative to the squeezers

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Perform the squeezing operation as specified in the equipment manufacturer's instructions. This operation should typically begin as soon as possible after the heating process is complete (if heated) but should be performed slowly – it should take 2 minutes or more from start to finish.

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Watch closely for splitting of the pipe during the process. Abort the squeezing process at any sign of splitting.

Squeezed steel pipe will not be left in an active system. Once completed, cut out the squeezed section of pipe and replace per standard operating procedures before putting back into service.

