

OQ Task Name

Task XX.X – Operate Pressure Relieving Devices for Launching and Receiving Facilities

1.0 Task Description

This task consists of the activities required to relieve pressure and verify the absence of pressure prior to opening the launching/receiving device. This task begins with the pre-loading inspection and ends when the proper documentation is complete.

The performance of this covered task may require the performance of other covered tasks such as:

- Operate Valves Locally on a Liquid Pipeline System (Reference Task 63.4)
- Monitor Pressures, Flows, Communications, and Line Integrity and Maintain Them Within Allowable Limits on a Liquid Pipeline System (Field) (Reference Task 63.3)
- Monitor Pressures, Flows, Communications, and Line Integrity and Maintain Them Within Allowable Limits on a Liquid Pipeline System (Control Center) (Reference Task 43.3)

2.0 Knowledge Component

Short description of why this task is being performed.

Special messages/precautions on task and/or task steps i.e. bolting sequence

Special message/requirements for tools, equipment to be used during task, i.e. manufacturer's plate, pressure specs, etc.

An individual performing this task must have knowledge of:

- The types of PIGs and their intended uses
- The types of launchers and receivers
- The specific valve arrangement for the station or junction and related site-specific procedures
- System suitability for pigging

Terms applicable to this task:

PIG Stands for Pipeline Inspection Gauge. This can generally refer to cleaning PIGs, in-line inspection tools, internal devices, pipeline tools, or smart pigs and can refer to any tool that travels through the system.

Abnormal operating conditions (AOC) associated with the performance of this task include:

AOC Recognition	AOC Reaction
Signs of a leak around the launcher door	Inspect sealing surface and remediate as needed
Damaged threads on launcher/receiver door	Notify the appropriate personnel or repair if qualified
PIG will not launch	Investigate the cause and resolve
Isolation valve fails	Investigate the cause and resolve

3.0 Skill Component

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Loading and Pressuring Launchers and Receivers

To demonstrate proficiency of this task, an individual must perform the following steps:

Step	Action	Explanation
1	Complete a pre-loading inspection to ensure the launcher is serviceable.	This step assumes that the launcher is permanent or has already been installed in accordance with manufacturer specifications if it is a temporary installation. During the pre-loading inspection, check for any signs of damage, corrosion, or wear that could affect the integrity of the launcher.
2	Inspect the PIG.	This step ensures that the PIG size and design are appropriate for the task. This also verifies that the appropriate tracking devices are installed and operable on the PIG.
3	Verify the launcher is isolated.	Follow the Operator's LOTO procedures.
4	Complete a valve integrity check.	This ensures valves are holding. This step is critical for ensuring safety before opening the launcher door to load the PIG.
5	Depressurize and drain the launcher per Operator's procedures.	This could be completed with a connected drain system or truck. This also includes verifying the system is drained per Operator procedure.
6	Prepare the launcher for loading.	This step includes opening the launcher door, removing any obstructions, checking the door seal for serviceability, and ensuring the launcher is clean of debris.
7	Load and secure the PIG.	Secure the PIG in the nominal portion of the launcher to prevent movement during pressurization and launch. Ensure that all securing mechanisms, such as clamps or brackets, are properly engaged.
8	Close the launcher door.	Close the launcher door in accordance with manufacturer specifications, ensuring that the seals are tight. If applicable, lubricate the threads on the door per Operator procedures.
9	Pressurize the launcher.	Gradually pressurize the launcher to the desired operating pressure. Monitor pressure gauges and control systems to ensure a controlled and gradual pressurization process. NOTE: Monitoring pressure is a separate covered task and must be completed by a qualified individual.
10	Check the pressurized launcher for signs of leaks.	Check for leaks in accordance with Operator policy. This could include visual inspection and soap or bubble tests.

Loading and Pressuring Launchers and Receivers

Step	Action	Explanation
11	Complete pre-launch communications in accordance with procedures.	Notify all affected personnel and downstream monitors prior to launching the PIG. This also verifies that the valve on the receiver side is open to receive the PIG.
12	Launch the PIG.	Once the launcher is pressurized and all systems are verified, initiate the launch sequence to release the PIG into the pipeline. Follow manufacturer guidelines and project specifications for the specific launching mechanism. Confirm that the PIG propels smoothly out of the launcher and into the system.
13	Monitor the PIG's progress through the system.	Monitoring may be completed using PIG signals, timing calculations, and multiple personnel. Document monitoring and progress in accordance with Operator procedures. This step ensures the PIG advances through the system as planned and finishes its travel in the intended receiver.
14	Verify that the PIG enters the receiver.	This can be verified through the tracking devices.
15	Isolate the receiver from the system.	Follow the Operator's LOTO procedures.
16	Complete a valve integrity check.	This ensures valves are holding. This step is critical for ensuring safety before opening the receiver door to unload the PIG.
17	Depressurize the receiver in accordance with manufacturer specifications.	This could be completed with a connected drain system or truck. This also includes verifying the system is drained per Operator procedure.
18	Prepare the receiver for unloading.	This step includes opening the receiver door, removing any obstructions, checking the door seal for serviceability, and ensuring the launcher is clean of debris.
19	Remove the PIG.	
20	Close the receiver door.	Close the receiver door in accordance with manufacturer specifications, ensuring that the seals are tight. If applicable, lubricate the threads on the door per Operator procedures.
21	Repressurize the system.	Gradually pressurize the receiver to the desired operating pressure. Monitor pressure gauges and control systems to ensure a controlled and gradual pressurization process. NOTE: Monitoring pressure is a separate covered task and must be completed by a qualified individual.

Loading and Pressuring Launchers and Receivers

Step	Action	Explanation
22	Check the pressurized receiver for signs of leaks.	Check for leaks in accordance with Operator policy. This could include visual inspection and soap or bubble tests.
23	Document all required information per Operator procedure.	

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