

SCUD Procedure # CONST003	Page 1 of 3
O&M Section # 12.4	SCUD Task # 410
Section: Construction/Operations	Revision Date: 09/06/16

Abandoning, Isolating and Deactivating Pipeline Facilities

SCOPE AND PURPOSE

This procedure provides personnel activities for isolating, abandoning, and deactivating pipeline facilities. It describes practices required to comply with §192.727.

RESPONSIBILITY

The Construction Manager, Service Line Supervisor, Underground Maintenance Manager, or other designee, is responsible to ensure that abandoning, isolating and deactivating pipeline is performed as described in this procedure.

PERSONNEL SAFETY (Where Applicable)

- Personnel shall ensure that safety conditions exist. Anytime components are disconnected from the gas distribution system, there is a chance that gas will escape and cause a hazard.
- Ignition and potential ignition sources should be eliminated.
- A fire extinguisher must be present at the site placed at a suitable location.
- Establish a safety perimeter to prevent bystanders and unauthorized personnel from entering the area of activity.
- Welding activities may not be performed on piping containing a natural gas and air mixture.
- Personnel shall consult the manufacturer’s installation and operating instructions for complete information on the uses of different types and styles of isolation and stopper devices, equipment and tools.

EQUIPMENT AND MATERIALS

- Valve key wrench
- Ratchet wrench and socket
- Tapping tee hex wrench
- Stopper and drilling machines with tools and attachments
- Combustible gas indicator (CGI)
- Routine hand tools

OPERATOR QUALIFICATION

This activity is a covered task under the Operator Qualification Plan and may only be performed by or directed and observed by an individual who is currently qualified to perform isolating, abandoning and deactivating pipeline. Refer to the OQ Plan for specific qualification requirements.

INSTRUCTIONS

- a. Whenever a pipeline or pipeline section is to be isolated, abandoned, or deactivated, it shall be identified by Engineering on the GIS Map.
- b. If branch lateral lines are connected to the pipeline section being shut down, either:
 - provide an alternate gas supply line (by pass), or
 - all interconnected piping must be identified and defined as part of the effected shut down piping.
- c. Close appropriate valves, utilize stopper fittings, end caps, blind flanges, or other appropriate devices to isolate the pipeline or facility.
- d. If service lines are connected to the pipeline section being shut down:

SCUD Procedure # CONST003	Page 2 of 3
O&M Section # 12.4	SCUD Task # 410
Section: Construction/Operations	Revision Date: 09/06/16

Abandoning, Isolating and Deactivating Pipeline Facilities

- all service valves should be secured by locking the valve in the closed position until service is reestablished to the customer’s premises, and
 - if possible, all customers should be contacted and advised of the service interruption.
- e. Purge isolated pipeline segment.
- f. If the line is to be disconnected from other activated pipelines (abandoned in place), the piping being shut down must be thoroughly purged. However, the pipeline need not be purged when the volume of gas is so small that there is no potential hazard.
- g. Personnel shall verify that the piping does not contain natural gas. A combustible gas indicator is to be employed for this task.
- h. Gas being expelled into the atmosphere must be vented at a place or area where it will be discharged safely.
- i. Seal the ends of abandoned pipe by capping, using spray foam or by welding closed. Valve boxes shall be removed or the valve lid removed and the stand pipe filled with a suitable compacted material.
- j. For a service line, one of the following must be done to prevent the flow of gas to the customer:
- lock or otherwise secure the valve controlling gas to the service, or
 - install a mechanical device or fitting in the service line or meter set, or
 - disconnect the customer’s piping from the gas supply.
- k. Remove any above ground facilities.
- l. When reactivating a main other than after a leak or broke line, the pipeline must be pressure tested from the point of deactivation in accordance with the O&M Manual and SCUD Procedures. For leaks and broke lines, the repair is made with pretested pipe and the fusion/weld joints soaped after reactivation.
- m. When reactivating a service line, the pipeline must be pressure tested from the point of deactivation to the meter stop in accordance with the O&M Manual and SCUD Procedures.

REPORTING/NOTIFICATION

Complete documentation in accordance with Operations and Maintenance Manual.

ABNORMAL OPERATING CONDITIONS

AOC Main Category (Examples of Specific AOCs)	Reactions to AOC, as appropriate	
<i>Unplanned escape of product from a pipeline</i> <ul style="list-style-type: none"> • Blowing/Escaping gas/Grade I leak 	<ul style="list-style-type: none"> ➤ Protect life & Property ➤ Prevent accidental ignition ➤ Notify appropriate personnel ➤ Notify Fire/Emergency Responders ➤ Initiate Emergency Plan 	<ul style="list-style-type: none"> ➤ Locate source/cause of AOC ➤ Use appropriate PPE ➤ Stop gas flow ➤ Make repairs/eliminate AOC
<i>Fire or Explosion</i> <ul style="list-style-type: none"> • Fire on a pipeline • Explosion 	<ul style="list-style-type: none"> ➤ Protect life & Property ➤ Prevent accidental ignition ➤ Notify appropriate personnel 	<ul style="list-style-type: none"> ➤ Locate source/cause of AOC ➤ Use appropriate PPE ➤ Stop gas flow

SCUD Procedure # CONST003	Page 3 of 3
O&M Section # 12.4	SCUD Task # 410
Section: Construction/Operations	Revision Date: 09/06/16

Abandoning, Isolating and Deactivating Pipeline Facilities

	<ul style="list-style-type: none"> ➤ Notify Fire/Emergency Responders ➤ Initiate Emergency Plan 	<ul style="list-style-type: none"> ➤ Make repairs/eliminate AOC
<p>Unplanned Pressure Deviation</p> <ul style="list-style-type: none"> • Unplanned Decrease in Pressure & or No Press. • Unplanned Increase in Pressure 	<ul style="list-style-type: none"> ➤ Protect life & property ➤ Notify appropriate personnel ➤ Initiate Emergency Plan as Needed 	<ul style="list-style-type: none"> ➤ Locate source/cause of AOC ➤ Make repairs/eliminate AOC
<p>Unplanned Flow Rate Deviation</p> <ul style="list-style-type: none"> • Unplanned Increase in Flow • Unplanned Decrease in Flow & or No Flow 	<ul style="list-style-type: none"> ➤ Protect life & property ➤ Notify appropriate personnel ➤ Initiate Emergency Plan as Needed 	<ul style="list-style-type: none"> ➤ Locate source/cause of AOC ➤ Make repairs/eliminate AOC
<p>Unplanned Status Change</p> <ul style="list-style-type: none"> • Inoperable/Failure of a Pipeline Component • Stray Current on a Pipeline – Elec. Shock (Static) 	<ul style="list-style-type: none"> ➤ Protect life & property ➤ Notify appropriate personnel ➤ Initiate Emergency Plan as Needed 	<ul style="list-style-type: none"> ➤ Locate source/cause of AOC ➤ Make repairs/eliminate AOC
<p>Inadequate Odorization or Reports of Gas Odor</p> <ul style="list-style-type: none"> • Low odorization • Over odorization & or Odor complaint 	<ul style="list-style-type: none"> ➤ Protect life & property ➤ Prevent accidental ignition ➤ Notify appropriate personnel 	<ul style="list-style-type: none"> ➤ Locate source/cause of AOC ➤ Make repairs/eliminate AOC

RELATED PROCEDURES

CONST004 – Purging with Gas, Air, or Inert Gas
CONST005 – Pressure Testing of Facilities