Pipeline Safety Rules Most Misunderstood

§192.605 Procedural manual for operations, maintenance, and emergencies

- (a) General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response

§192.605 Violations

- Over the last 3 years the SCC has noted 200 violations relative to 192.605
  - 152 Counts of failure to follow written procedures
  - 48 Counts of failure to have adequate procedures

The Definition of a Procedure

- U.S. Department of Transportation, Pipeline and Hazardous Material Safety Administration's definition of a **procedure** is; "A fixed, step-by-step sequence of activities or course of action (with definite start and end points) that must be followed in the same order to correctly perform a task."

Misconceptions of O&M Procedures

- Training does not negate the need for a complete and descriptive O&M Procedure.
- Watering down a procedure because of past violations or to make it less enforceable only creates a different set of violations.

The consequences of not having good procedures

- Poor and inconsistent quality of task performed
- Added expense to the Company by having to repeat task and make more frequent repairs
- Possible decrease in the life of the pipeline
- Penalties
- Increased safety risk to the public and Company personnel

§192.725 Test requirements For Reinstating Service Lines

- (a) Except as provided in paragraph (b) of this section, each disconnected service line must be tested in the same manner as a new service line, before being reinstated.
- (b) Each service line temporarily disconnected from the main must be tested from the point of disconnection to the service line valve in the same manner as a new service line, before reconnecting.

5.10.2.1 General

All services installed or reinstated on the system shall be pressure tested for leak-test and strength-test requirements. The test procedure and duration must ensure discovery of all potentially hazardous leaks in the segment being tested. If the test indicates that a leak is present, the leak(s) shall be located and repaired.

The test medium shall be air.

The temperature of the plastic pipe shall remain below 100°F during the test. All joints in PE service piping system should be set, cured, or hardened before the test is initiated.

5.10.2.2 Test Requirements

The following guidelines shall be required of the testing of mains.

All services shall be tested to a minimum of 90 psig and a maximum of 110 psig for a minimum period of fifteen (15) minutes. When pipe used for service line installations has been pre-tested and no additional testing is to be performed, the original test date, test duration and test pressure shall be included in the service line installation records.

§192.727(d) Abandonment or Deactivation of Facilities

Code States:

(d) Whenever service to a customer is discontinued, one of the following must be complied with:

(1) The valve that is closed to prevent the flow of gas to the customer must be provided with a locking device or other means designed to prevent the opening of the valve by persons other than those authorized by the operator.

(2) A mechanical device or fitting that will prevent the flow of gas must be installed in the service line or in the meter assembly.

(3) The customer's piping must be physically disconnected from the gas supply and the open pipe ends sealed.

§192.727(d) Abandonment or Deactivation of Facilities

Valves without a locking devise or other means designed to prevent the opening of the valve by persons other than those authorized by the operator.

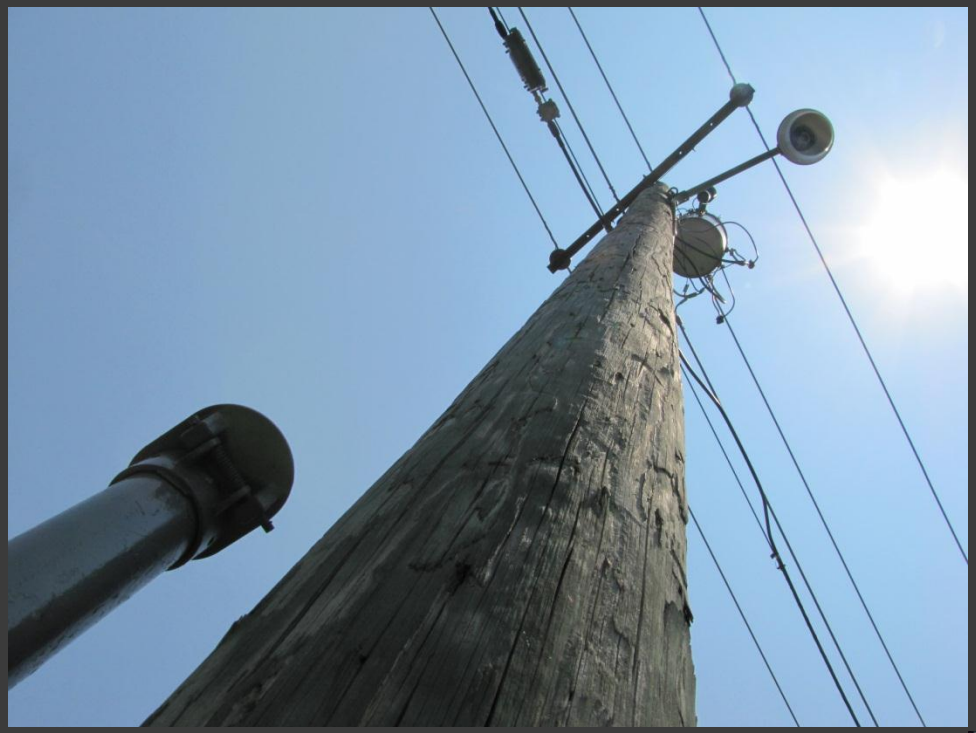
§192.727(d) Abandonment or Deactivation of Facilities

Meter inlet not sealed.

Outlet of meter and beginning of customer piping not sealed.

§192.199 Requirements for Design of Pressure Relief and Limiting Devices

- (e) Have discharge stacks, vents, or outlet ports designed to prevent accumulation of water, ice, or snow, located where gas can be discharged into the atmosphere without undue hazard;



Undue Hazards

This relief vents under a light and a transformer.

Relief stack venting down on a sidewalk

§192.319 Installation of Pipe in a Ditch

- (b) When a ditch for a transmission line or main is backfilled, it must be backfilled in a manner that:

  (1) Provides firm support under the pipe; and

  (2) Prevents damage to the pipe and pipe coating from equipment or from the backfill material.

GPTC Guidelines For §192.319

- 3.2 Backfill material.
- (a) General. If there are large rocks in the material to be used for backfill, care should be used to prevent damage to the coating. This may be accomplished by the use of rock shield material or by making an initial fill with enough rock-free material to prevent damage.
- 3.3 Rock shielding.
- Where rock shielding is used to prevent coating damage, it must be installed properly. One method of installing a wrap-type rock shielding material is to secure the rock shielding entirely around the pipe using fiberglass tape or other suitable banding material. Rock shielding should not be draped over the pipe unless suitable backfill and padding is placed in the ditch to provide continuous and adequate support of the pipe in the trench.

Bad Backfill

§192.353 Customer Meters and Regulators: Location

- (a) Each meter and service regulator, whether inside or outside a building, must be installed in a readily accessible location and be protected from corrosion and other damage, including, if installed outside a building, vehicular damage that may be anticipated.

GPTC Guidelines For §192.353

- GENERAL RECOMMENDATIONS
- (d) When selecting a meter or service regulator location, consideration should be given to the potential damage by outside forces, such as those from vehicles, construction equipment, tools, materials that might be placed on the meter, and falling objects (e.g., packed snow or ice from a roof). Where such potential is evident, the meter or service regulator should be protected or an alternate location selected.

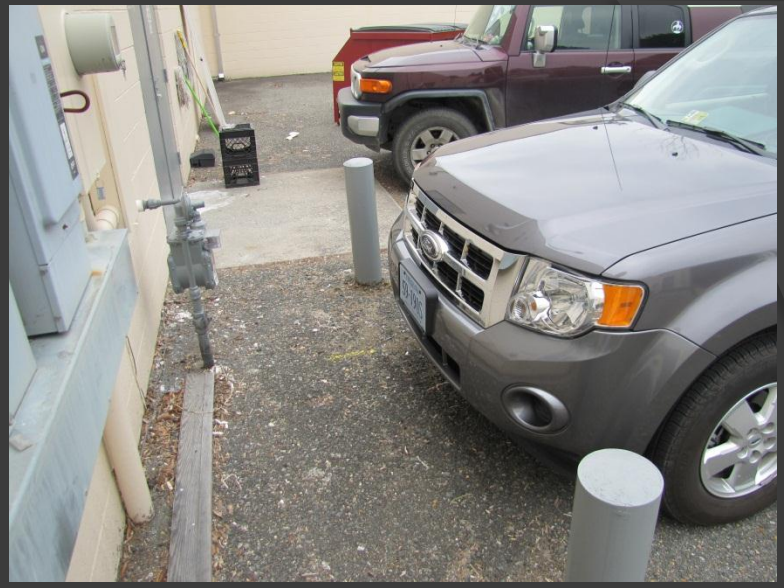
GPTC Guidelines For §192.353

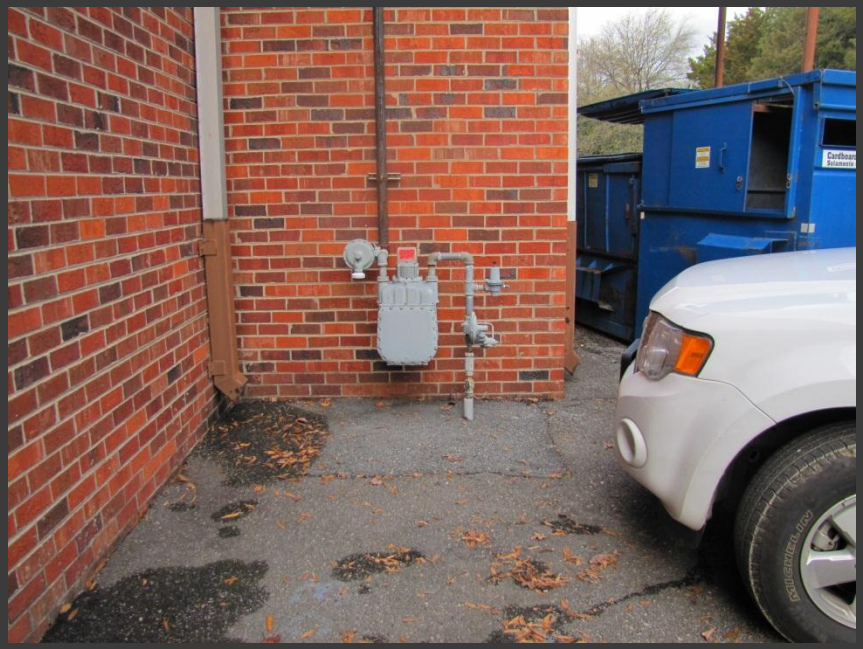
- (b) At locations where vehicular damage is reasonably anticipated, some means of providing protection to the meter set assembly include the following.
  - Distance from roadways or driveways.
  - Installation of posts, parking bumpers, or barricades.
  - Location behind existing protective structures.
  - Installation in a buried vault or meter box.

Adopted Virginia Fire Prevention Code

- For all installations other than a detached single family home or duplex, the following standards for guard posts found in the State of Virginia Fire Prevention Code, Section 312 apply:
  - (i) Constructed of steel not less than 4” in diameter and concrete filled.
  - (ii) Spaced not more than 4 feet between posts on center.
  - (iii) Set not less than 3 feet deep in a concrete footing of not less than 15-inch diameter.
  - (iv) Set with the top of the post not less than 3 feet above ground.
  - (v) Located not less than 3 feet from the protected object.
  - (vi) Other physical barriers may be used if they are a minimum of 36” in height and shall resist a force of 12,000 pounds applied 36 inches above the adjacent ground.
- (b) For a detached single family residence or duplex where it is determined the meter and/or regulator must be protected from damage and the preceding standards are not practical, the actual protection method may be approved by an appropriate company official.

Unprotected Meters





§192.805 Qualification Program

- Evaluation methods do not confirm individuals performing the covered task are qualified and have mastered the required training material.
- Not all covered task are identified
- An identified cover task may not cover all the different aspects of the task. Example: Regulator station inspections may cover Self operated regulators but not Controllers

§192.305 Inspection: General

- Each transmission line or main must be inspected to ensure that it is constructed in accordance with this part.

GPTC Guidelines For §192.305

- Guide material 192.305 Inspection

  (a) Each operator should provide inspection by personnel who are knowledgeable by training or experience. Inspection should ensure that all work conforms to the operator's specifications and to applicable federal, state, and local requirements. The inspector should have the authority to order the repair or the removal and replacement of any component that fails to meet the above requirements.

§192.617 Investigation of Failures

- Each operator shall establish procedures for analyzing accidents and failures, including the selection of samples of the failed facility or equipment for laboratory examination, where appropriate, for the purpose of determining the causes of the failure and minimizing the possibility of a recurrence.

GPTC Guidelines For §192.617

- (a) Failure investigation and subsequent analysis should determine the root cause(s) of the failure. The investigation may be as simple as assembling an internal review group or as complex as conducting a full-scale failure investigation with laboratory analysis of a failed component. The information for completing a 30-day incident report form contained in Part 191 may constitute an adequate analysis of a reportable failure or leak.

GPTC Guidelines For §192.617

- The general process for performing root-cause analysis is as follows.
  - (1) Assemble the review team.
  - (2) Define the problem and gather data and documentation.
  - (3) Identify factors that contributed to the problem (i.e., causal factors).
  - (4) Find the root cause for each causal factor, such as people, equipment, material, process, or outside influence.
  - (5) Develop and assign recommendations.
  - (6) Distribute recommendations and review the operator's procedures.
  - (7) Implement the recommendations.

§192.181 Distribution Line Valves

- (b) Each regulator station controlling the flow or pressure of gas in a distribution system must have a valve installed on the inlet piping at a distance from the regulator station sufficient to permit the operation of the valve during an emergency that might preclude access to the station

Inlet valves in the regulator station building.

§192.747

- (a) Each valve, the use of which may be necessary for the safe operation of a distribution system, must be checked and serviced at intervals not exceeding 15 months, but at least once each calendar year.

§ 192.739

- (a) Each pressure limiting station, relief device (except rupture discs), and Pressure regulating station and its equipment must be subjected at intervals not exceeding 15 months, but at least once each calendar year,

- If the inlet valve and or pressure control and overpressure protection equipment is owned by the Supplier, than it is the Distribution Company’s responsibility to verify that the equipment is inspected with-in the required time period by properly OQed personnel who are under an approved Drug and Alcohol Program. The LDC is responsible for verifying the equipment is maintained the same as any of their own equipment.

Questions