2023 Inspections and Findings

Nebraska State Fire Marshal Agency, Fuels Division, Pipeline Safety Section

Most Frequent Findings for 2023

- 192.353
- 192.355
- 192.365
- 192.613
- 192.615(b) and (c)
- 192.707
- 192.727(b) and (d)

§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. However, the upstream regulator in a series may be buried.

(b) Each service regulator installed within a building must be located as near as practical to the point of service line entrance.

(c) Each meter installed within a building must be located in a ventilated place and not less than 3 feet (914 millimeters) from any source of ignition or any source of heat which might damage the meter.

(d) Where feasible, the upstream regulator in a series must be located outside the building, unless it is located in a separate metering or regulating building.

§192.355 Customer meters and regulators: Protection from damage.

- (a) Protection from vacuum or back pressure. If the customer's equipment might create either a vacuum or a back pressure, a device must be installed to protect the system.

- (b) Service regulator vents and relief vents. Service regulator vents and relief vents must terminate outdoors, and the outdoor terminal must:

- (1) Be rain and insect resistant;

- (2) Be located at a place where gas from the vent can escape freely into the atmosphere and away from any opening into the building; and,

- (3) Be protected from damage caused by submergence in areas where flooding may occur.

- (c) Pits and vaults. Each pit or vault that houses a customer meter or regulator at a place where vehicular traffic is anticipated, must be able to support that traffic.

§192.365 Service lines: Location of valves.

- (a) Relation to regulator or meter. Each service-line valve must be installed upstream of the regulator or, if there is no regulator, upstream of the meter.

- (b) Outside valves. Each service line must have a shutoff valve in a readily accessible location that, if feasible, is outside of the building.

- (c) Underground valves. Each underground service-line valve must be located in a covered durable curb box or standpipe that allows ready operation of the valve and is supported independently of the service lines.

192.613 Continuing Surveillance

- (a) Each operator shall have a procedure for continuing surveillance of its facilities to determine and take appropriate action concerning changes in class location, failures, leakage history, corrosion, substantial changes in cathodic protection requirements, and other unusual operating and maintenance conditions.
- (b) If a segment of pipeline is determined to be in unsatisfactory condition but no immediate hazard exists, the operator shall initiate a program to recondition or phase out the segment involved, or, if the segment cannot be reconditioned or phased out, reduce the maximum allowable operating pressure in accordance with §192.619 (a) and (b).
- (c) Following an extreme weather event or natural disaster that has the likelihood of damage to pipeline facilities by the scouring or movement of the soil surrounding the pipeline or movement of the pipeline, such as a named tropical storm or hurricane; a flood that exceeds the river, shoreline, or creek high-water banks in the area of the pipeline; a landslide in the area of the pipeline; or an earthquake in the area of the pipeline, an operator must inspect all potentially affected onshore transmission pipeline facilities to detect conditions that could adversely affect the safe operation of that pipeline.
    - (1) An operator must assess the nature of the event and the physical characteristics, operating conditions, location, and prior history of the affected pipeline in determining the appropriate method for performing the initial inspection to determine the extent of any damage and the need for the additional assessments required under this paragraph (c)(1).
    - (2) An operator must commence the inspection required by paragraph (c) of this section within 72 hours after the point in time when the operator reasonably determines that the affected area can be safely accessed by personnel and equipment, and the personnel and equipment required to perform the inspection as determined by paragraph (c)(1) of this section are available. If an operator is unable to commence the inspection due to the unavailability of personnel or equipment, the operator must notify the appropriate PHMSA Region Director as soon as practicable.
    - (3) An operator must take prompt and appropriate remedial action to ensure the safe operation of a pipeline based on the information obtained as a result of performing the inspection required by paragraph (c) of this section. Such actions might include, but are not limited to:
        - (i) Reducing the operating pressure or shutting down the pipeline;
        - (ii) Modifying, repairing, or replacing any damaged pipeline facilities;
        - (iii) Preventing, mitigating, or eliminating any unsafe conditions in the pipeline right-of-way;
- (iv) Performing additional patrols, surveys, tests, or inspections;
- (v) Implementing emergency response activities with Federal, State, or local personnel; or
- (vi) Notifying affected communities of the steps that can be taken to ensure public safety.

192.615(c) Emergency plans.

- (b) Each operator shall:
  - (1) Furnish its supervisors who are responsible for emergency action a copy of that portion of the latest edition of the emergency procedures established under paragraph (a) of this section as necessary for compliance with those procedures.
  - (2) Train the appropriate operating personnel to assure that they are knowledgeable of the emergency procedures and verify that the training is effective.
  - (3) Review employee activities to determine whether the procedures were effectively followed in each emergency.
- (c) Each operator must establish and maintain liaison with the appropriate public safety answering point (i.e., 9-1-1 emergency call center) where direct access to a 9-1-1 emergency call center is available from the location of the pipeline, as well as fire, police, and other public officials, to:
  - (1) Learn the responsibility and resources of each government organization that may respond to a gas pipeline emergency;
  - (2) Acquaint the officials with the operator's ability in responding to a gas pipeline emergency;
  - (3) Identify the types of gas pipeline emergencies of which the operator notifies the officials; and,
  - (4) Plan how the operator and officials can engage in mutual assistance to minimize hazards to life or property.

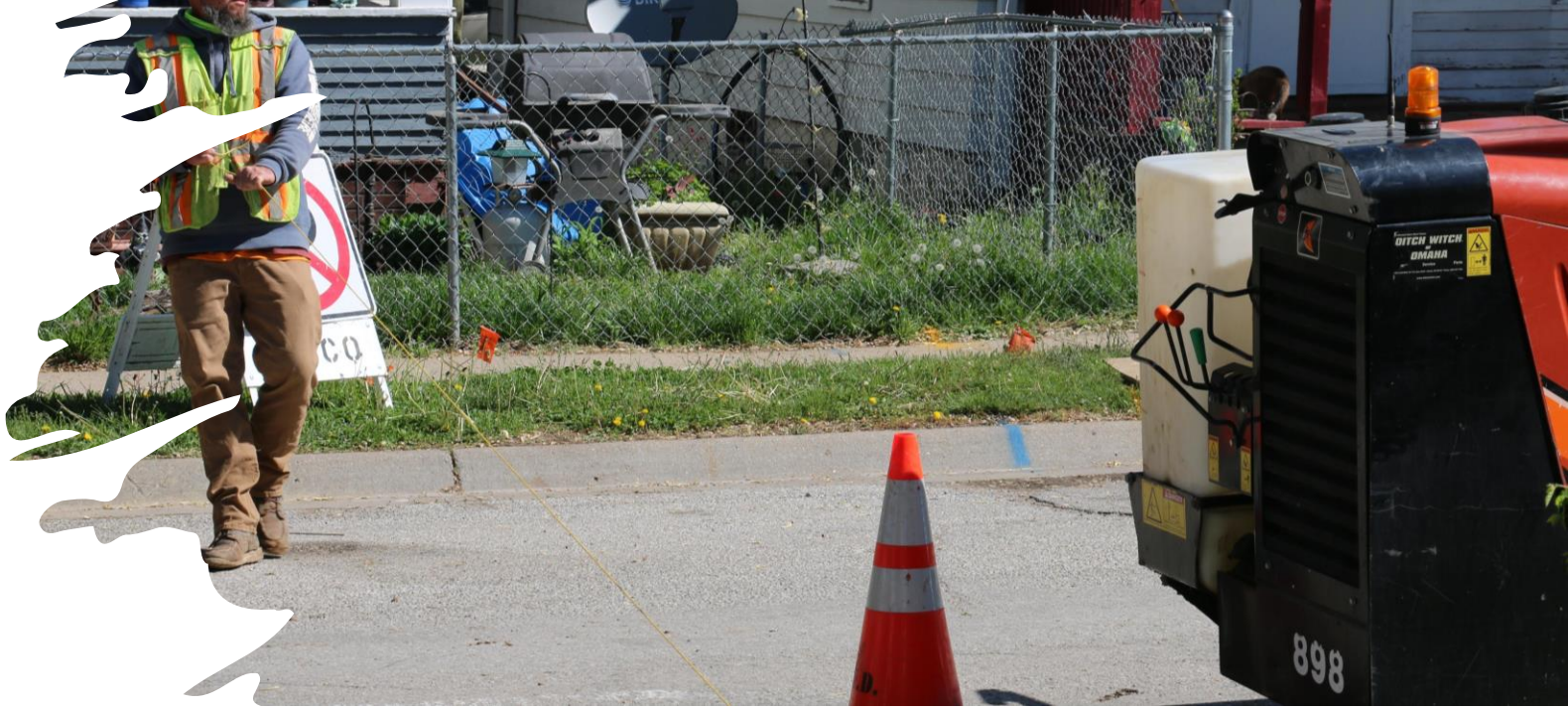
§192.707 Line markers for mains and transmission lines.

- (a) Buried pipelines. Except as provided in paragraph (b) of this section, a line marker must be placed and maintained as close as practical over each buried main and transmission line:
  - (1) At each crossing of a public road and railroad; and
  - (2) Wherever necessary to identify the location of the transmission line or main to reduce the possibility of damage or interference.
- (b) Exceptions for buried pipelines. Line markers are not required for the following pipelines:
  - (1) Mains and transmission lines located offshore, or at crossings of or under waterways and other bodies of water.
  - (2) Mains in Class 3 or Class 4 locations where a damage prevention program is in effect under §192.614.
  - (3) Transmission lines in Class 3 or 4 locations until March 20, 1996.
  - (4) Transmission lines in Class 3 or 4 locations where placement of a line marker is impractical.
- (c) Pipelines above ground. Line markers must be placed and maintained along each section of a main and transmission line that is located above ground in an area accessible to the public.
- (d) Marker warning. The following must be written legibly on a background of sharply contrasting color on each line marker:
  - (1) The word "Warning," "Caution," or "Danger" followed by the words "Gas (or name of gas transported) Pipeline" all of which, except for markers in heavily developed urban areas, must be in letters at least 1 inch (25 millimeters) high with ¼ inch (6.4 millimeters) stroke.
  - (2) The name of the operator and telephone number (including area code) where the operator can be reached at all times.

§192.727(b) and (d) Abandonment or deactivation of facilities.

- (b) Each pipeline abandoned in place must be disconnected from all sources and supplies of gas; purged of gas; in the case of offshore pipelines, filled with water or inert materials; and sealed at the ends. However, the pipeline need not be purged when the volume of gas is so small that there is no potential hazard.
- (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.

Construction Inspection Findings



Procedures

- Failure to Follow Procedures

- Following Improper Procedures

Failure to follow Procedures

- Inadequate OQ
- Lack of communication
- Insufficient inspectors

Following Improper Procedures

CHANGE IN MATERIALS

OUTDATED MANUALS

Weld-in Transition Fitting Procedures

- The length of the steel nipple used for Weld End Transition Fittings is the minimum length required to ensure that the heat generated during the welding process is dissipated and will not migrate to the Polyethylene to Steel Transition zone. Shortening this nipple could cause damage to the fitting. - GFCP Transition Fittings Steel to Poly Specification
- The solid semi-crystalline polyethylene material melts, technically, at about 257°F, and turns into an amorphous mass of variable length molecules, thermally mobilized by the applied heat energy – PPI TN-51
- At 240°F, the polyethylene is malleable, but solid, and does not ‘flow’. PPI – TN-51