Most Common Probable Violations in Iowa

Iowa Utilities Board

Outline

- 49 CFR 192.147(a) - Short Flange Bolts
- 49 CFR 192.353(a) - Meter/Regulator/Riser Protection
- 49 CFR 192.355(b)(2) - Regulator Venting
- 49 CFR 192.481(b) - Soil to Air Interface
- 49 CFR 192.605(a) - Not Following O&M Procedures
- Additional Topics
- Questions

Iowa Utilities Board

Iowa Utilities Board Inspectors

- Dan O'Connor
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49 CFR 192.147(a) - Flanges and Flange accessories

Each flange or flange accessory (other than *cast iron*) must meet the minimum requirements of SME/ANSI B 16.5 and MSS SP-44 (incorporated by reference, *see* 49 CFR § 192.7), or the equivalent.

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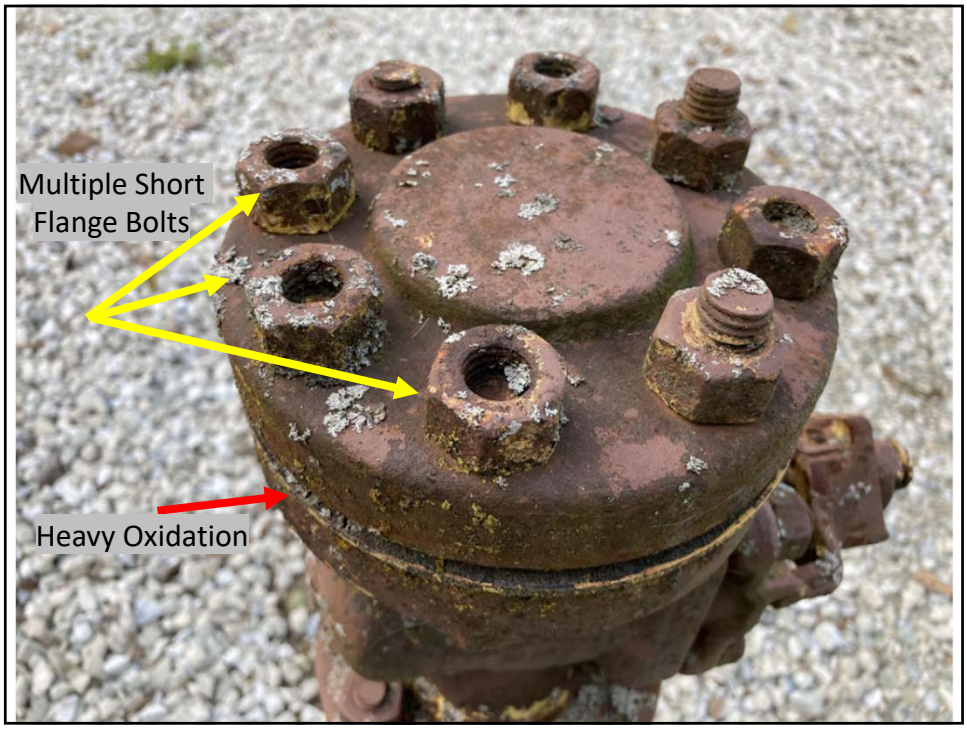
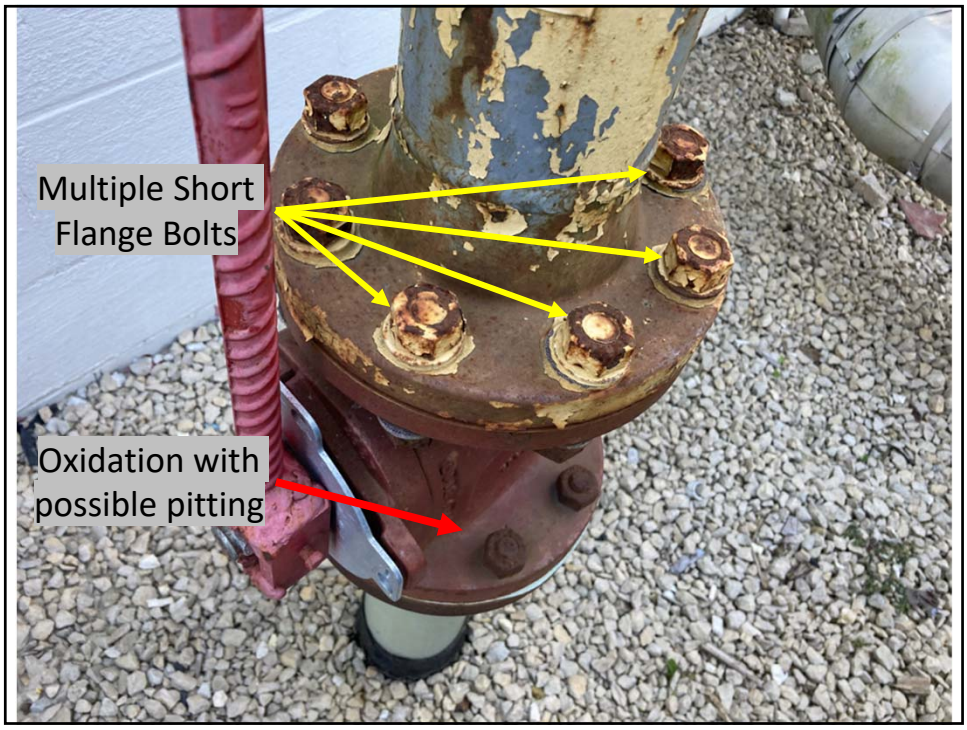
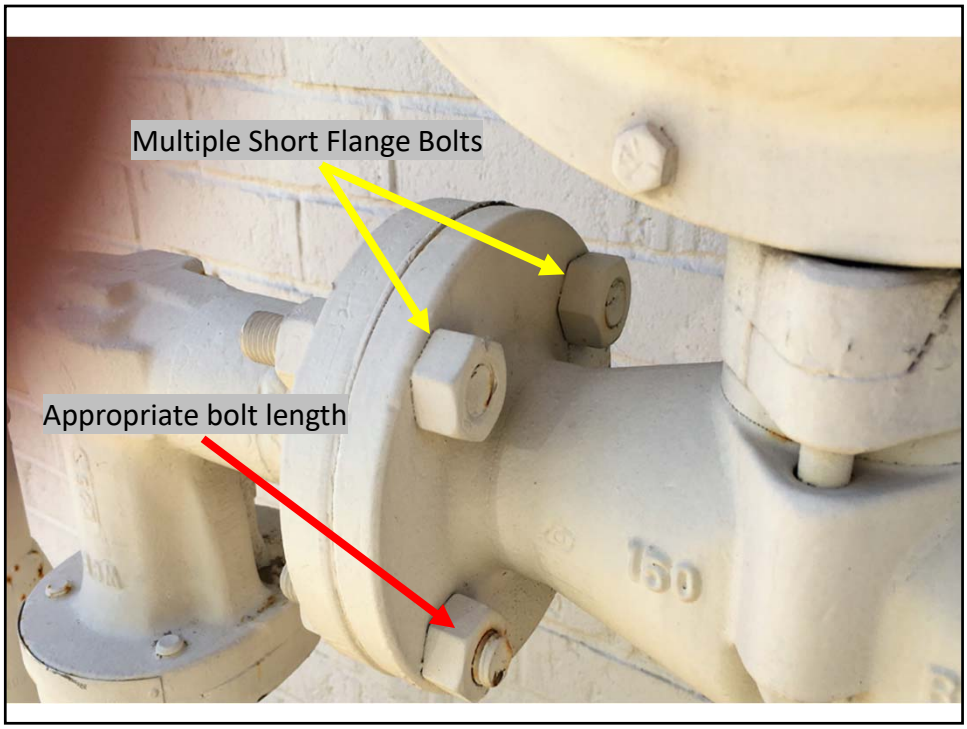
What are we looking for during field inspections?

- We're looking for the same thing you should be looking for!
- Are the stud bolts long enough? Typically two threads showing passed the hex nut for tapered threads.
- This includes all flanges in any application.
- Your O&M should cover stud bolt lengths.


Multiple Short
Flange Bolts
Heavy Oxidation


Multiple Short
Flange Bolts
Oxidation with
possible pitting



49 CFR 192.353(a) - Customer Meters and Regulators

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.

49 CFR 192.353(a) - Customer Meters and Regulators

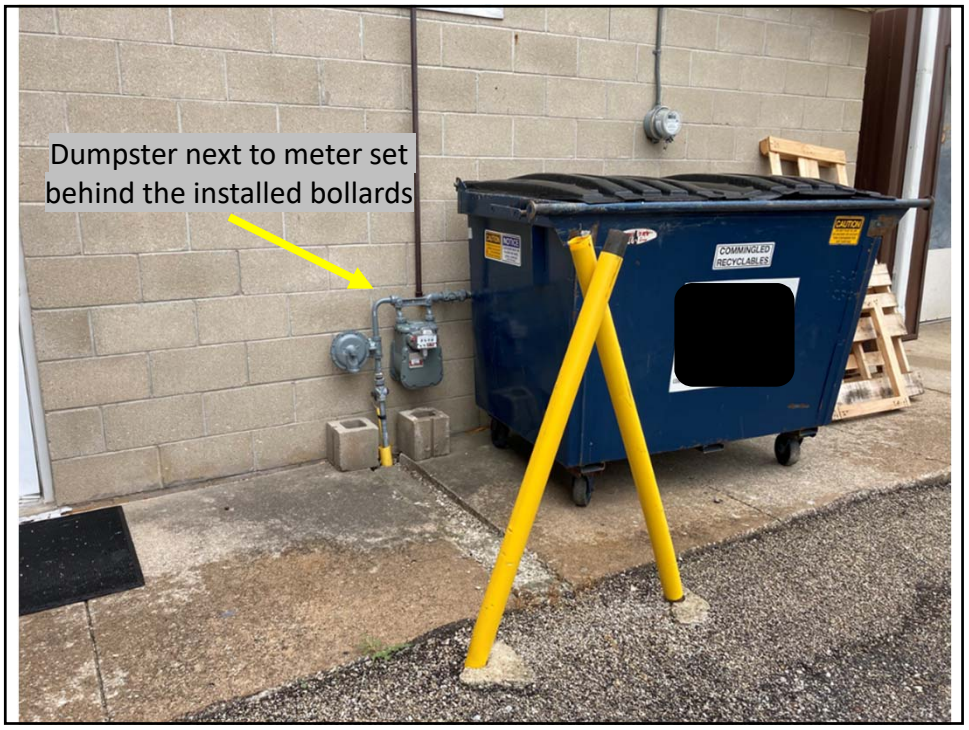
Is the meter set / riser / regulator protected from damage?

- Vehicular – cars, snow plows, recreational vehicles
- Trailers
- Dumpsters
- Doors
- Corrosion - Buried Meters

What are we looking for during field inspections?

- We're looking for the same thing you should be looking for!
- Meter sets that are inaccessible.
- Meters and Risers that are unprotected from possible damage.
- We're looking in alleys, trailer courts, residential neighborhoods, in business districts and in rural areas.
- Your O&M should cover what to look for and the steps required to remediate the issue.


Trailer pulled in next to meter set


Dumpster next to meter set behind the installed bollards
COMMINGLED RECYCLABLES
CAUTION


Dumpster next to service regulator beside the installed bollard – Scary close

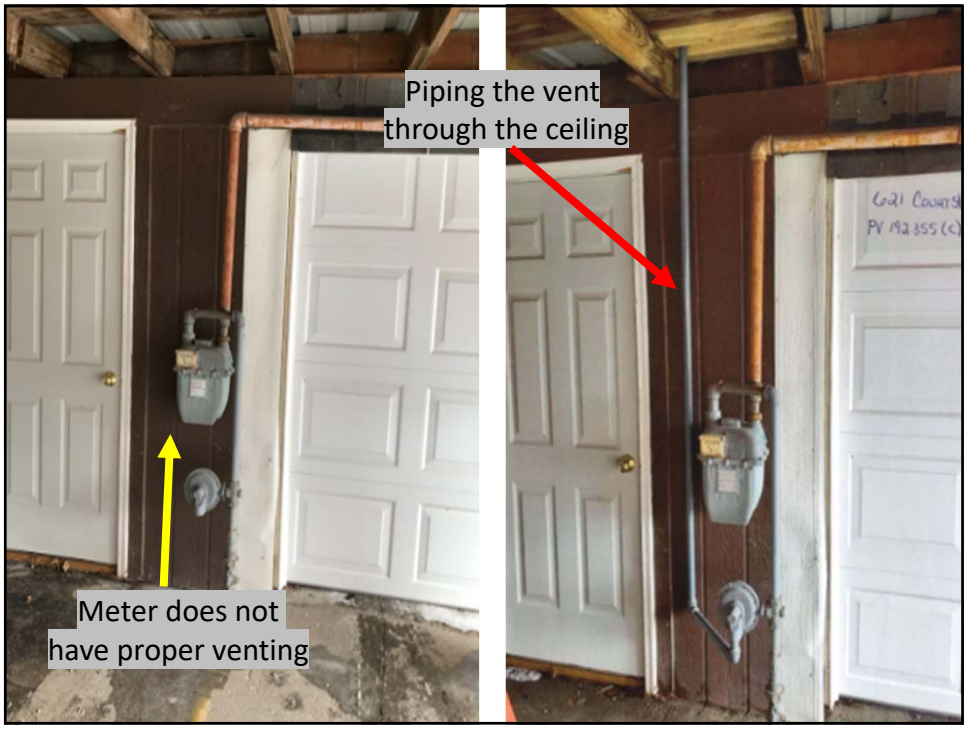

Meter set protected, but you cannot count on the customer's help
Service valve not readily accessible. It's in here somewhere!

49 CFR 192.355(b)(2) - Customer Meters and Regulators

***Service regulator* vents and relief vents.** Service regulator vents and relief vents must terminate outdoors, and the outdoor terminal must: Be located at a place where *gas* from the vent can escape freely into the atmosphere and away from any opening into the building.

What do inspectors look for?

- Inspectors are looking for the same things as your field technicians and you should be.
- Do the vents terminate more than three feet from openings (windows, doors, air intakes…) into the building?
- Is there an ignition source within three feet?
- Can the gas vent into the atmosphere?



49 CFR 192.481(b) - Atmospheric Corrosion Control: Monitoring

During inspections the operator must give particular attention to pipe at soil-to-air interfaces, under thermal insulation, under disbonded coatings, at pipe supports, in splash zones, at deck penetrations, and in spans over water.

What do Inspectors look for?

- Inspectors are looking for the same things that your field technicians and you should be looking for!!
- Does the riser have old coating that is disbonded or damaged? Is the coating bubbled so that it will catch moisture and start the corrosion process?
- Is the riser bare and never had a coating applied?
- Extrude coat and coal tar wrapped risers that are positioned so that they will be exposed to sunlight are extremely susceptible to breaking down with exposure to UV light.

49 CFR 192.605(a) - Procedural Manual for Operations, Maintenance, and Emergencies

Each *operator [a person who engages in the transportation of gas]* *shall prepare and follow* for each *pipeline*, a manual of written procedures for conducting operations and maintenance activities and for emergency response.

For transmission lines, the manual must also include procedures for handling abnormal operations.

49 CFR 192.605(a) - Procedural Manual for Operations, Maintenance, and Emergencies

This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least once each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.

What do Inspectors look for?

- Documentation of an annual review of the Operations & Maintenance (O&M) Manual by an operations supervisor, a group or a committee.
- O&M, Emergency Plan, Work Practices, Engineering Standards etc.
- Does the review include the Emergency Plan or is that a separate review? (This should be documented as such and made clear for inspection.)
- Adherence to procedures as written in the O&M Manual.

Examples

- Documentation should clearly demonstrate adherence to procedures.
- Who? What? When? Where? Issues could result in multiple violations.
- Observation in the field: Construction, Installation, Maintenance & Repair.
- Pipe Welding and Fusion, Locating, Pipe Installation, Tracer Wire, Cathodic Protection, Electrical Isolation, Pressure Testing and Backfilling etc.

Related Topic

49 CFR 192.605(b)(8)

Periodically reviewing the work done by operator personnel to determine the effectiveness, and adequacy of the procedures used in normal operation and maintenance and modifying the procedures when deficiencies are found.

Related Topic

- Each operator is responsible for reviewing procedures during normal operations as prescribed in code.
- The O&M procedure should define a timeframe and a general number of procedures to review.
- Documentation needs to demonstrate which procedure/s were reviewed and marked as adequate or insufficient. Maybe overburdensome and requires some further review.

Additional Topics

Points of emphasis

- 49 CFR 192.615(b)(2) & (b)(3) - Emergency Plan Training
  - Verify Training Effectiveness
- 49 CFR 192.751(a) - Mitigation of Accidental Ignition
  - Documentation Signs or Fire Extinguisher on Site
- 49 CFR 192.756 - Fusion Equipment Inspection
  - Documentation of Periodic Inspections
- 49 CFR 199.107(a) & 40.213 - Drug and Alcohol Records
  - Service Agents – Certifications – MRO, STT, BAT, Site & Lab

Questions?

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