



NEW COLORADO FLOWLINE RULES

By: Jim Martin

On February 13, as the culmination of a six-month process, the Colorado Oil and Gas Conservation Commission (COGCC) unanimously adopted new comprehensive flowline regulations. These rules include requirements for design and installation, maintenance and repair, integrity management, and abandonment of lines.

While many industry recommendations were adopted as part of an intense stakeholder process, these rules include significant changes from past practices. Upstream operators should carefully review these new requirements before constructing new lines or repairing existing lines. There also are new maintenance and integrity management provisions that apply to most flowlines.

These rules apply to on- and off-location flowlines (both buried and above-ground), crude oil transfer lines, and produced water transfer systems. Some of these categories are new and some distinctions (off-location produced water flowline versus produced water transfer systems) are unclear. The COGCC staff intends to develop guidance to assist operators.

Registration and Location Data

Operators of off-location flowlines, crude oil transfer lines and produced water transfer systems constructed after May 1, 2018, must register the lines and provide information on bedding materials, pipe material, maximum anticipated operating pressure, plus a geodatabase of pipeline alignment. Existing lines also must be registered and operators must provide the same information to the extent known (but not a geodatabase). The deadline for doing so is October 31, 2019. (The vehicle for registrations and many other reporting requirements will be a new Form 44, which is in development.)

The scope of the requirement to provide geospatial data for lines, and the public's ability to access those data were controversial issues throughout the rulemaking. Ultimately, the COGCC agreed these data should be protected under several exemptions within the Colorado Open Records Act. Local governments will be able to access those data for emergency response and planning, but must first execute a confidentiality agreement with COGCC.

Design Requirements and Technical Standards

The rules specify design requirements and technical standards (API and ASME) as well as

installation standards for new flowlines and crude oil transfer systems. Two new requirements stand out: the rules now require welder certification and specify when nondestructive testing of welds must occur. They also require that construction of new crude oil transfer systems be inspected by a third-party inspector. In addition, the rules now require that all operators become Tier One members of the state's One Call (811) System.

A new section was adopted that establishes requirements for placement and maintenance of isolation valves and check valves. Operators of existing flowlines, produced water transfer systems, and crude oil transfer lines must retrofit isolation valves by October 31, 2019. The rules provide some operator discretion on valve placement.

Integrity Testing

One of the most complex and technically difficult aspects of the rulemaking focused on integrity testing for different kinds of lines. The table below sets out the types of integrity testing permitted for different kinds of lines, and testing frequency. Local governments also urged the COGCC to require instrument-aided inspections of many lines as a back-up to other forms of integrity testing. The Commission concluded it was premature to require such inspections since not enough was known about feasible and cost-effective technologies. Therefore, the Commission directed COGCC staff to empanel a stakeholder group to examine technologies and processes to prevent and detect leaks from underground flowlines and to assist in identifying the locations of existing flowlines.

Integrity testing by type of line:

- Below-Ground Dump Lines are subject to annual static head test and monthly audio, visual, olfactory detection (AVO)
- Above-Ground On-Location Flowlines are subject to monthly AVO
- Operators of Below-Ground On-Location Flowlines can choose from a menu: triennial pressure test, triennial smart pigging, continuous pressure monitoring, or annual instrument-aided AVO
- Off-Location Flowlines and COTLs: annual pressure testing, continuous pressure monitoring, triennial smart pigging, or annual instrument-aided AVO
- Operators of Below-Ground Produced Water Flowlines can choose from one of the first three options above but cannot do instrument-aided AVO
- Operators of Above-Ground Off-Location Produced Water Flowlines can choose from one of the first three menu options or can do monthly AVO

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