COGCC Flowline Rulemaking

Stakeholder Meeting

September 5th 2019



COLORADO Oil & Gas Conservation Commission

Department of Natural Resources

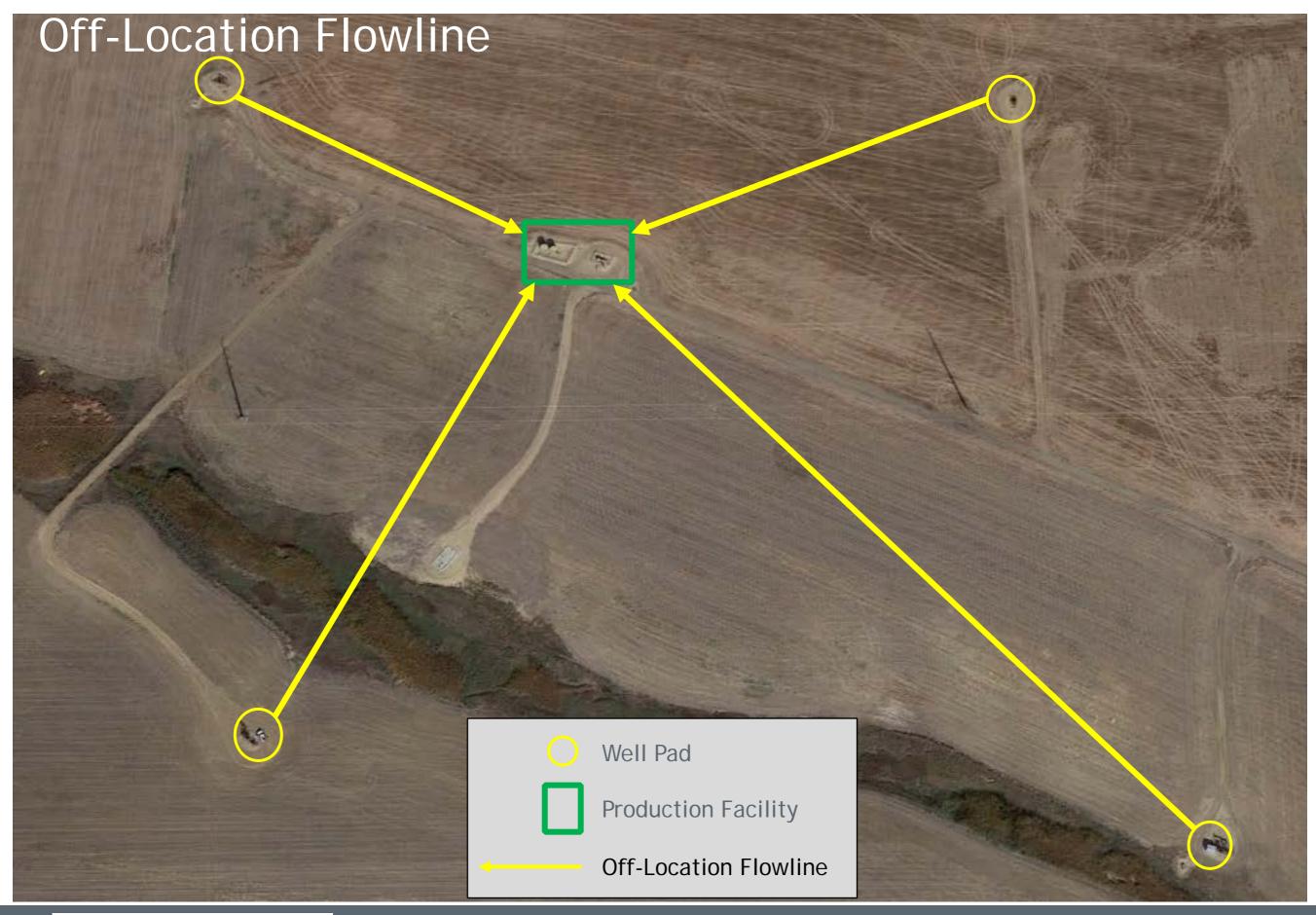


Mapping

- SB 19-181 requires "the public disclosure of flowline information..." §34-60-106(19)(b)
- Applies to off-location flowlines and crude oil transfer lines
- Types of data
 - Geodatabase
 - As-built drawings





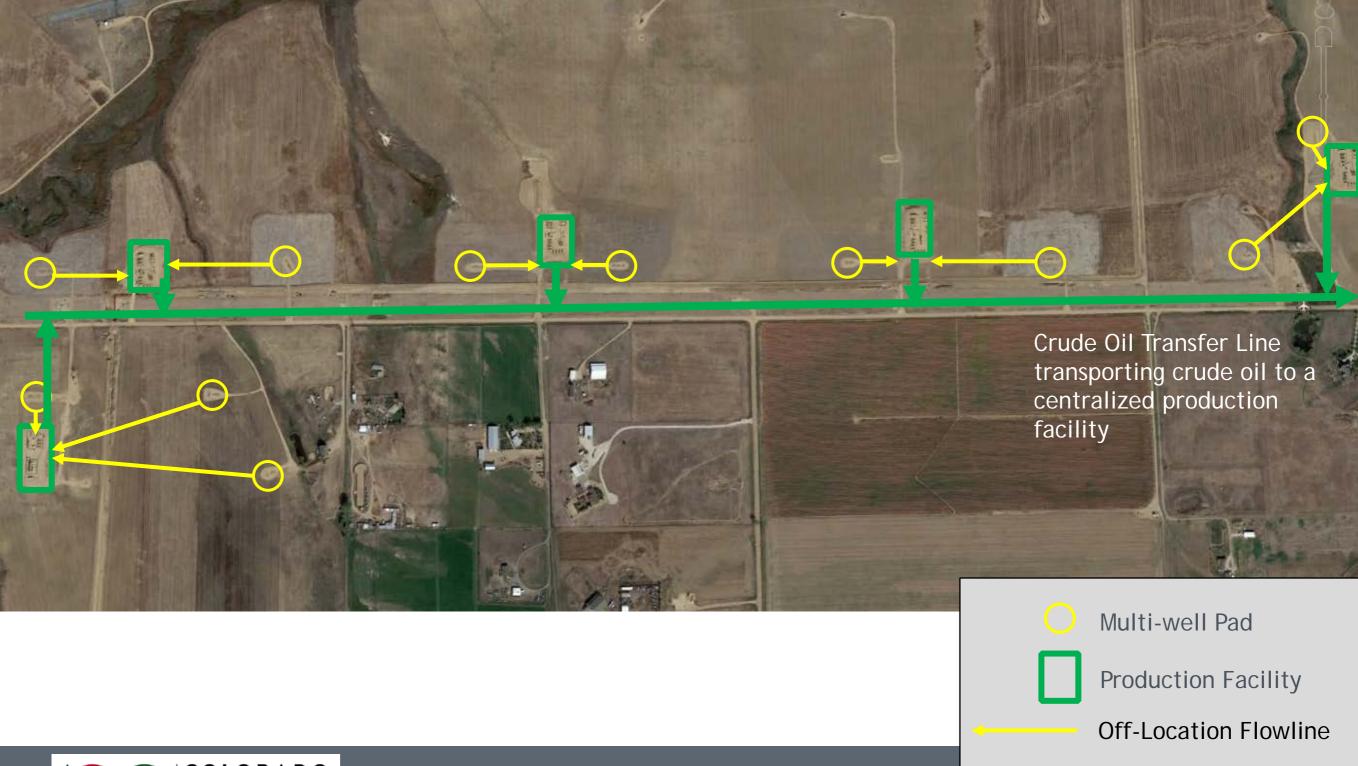






Crude Oil Transfer Line:

Transports crude oil from several multi-well production facility to a centralized production facility



Crude Oil Transfer Line



• Create public layer of COGCC-regulated lines







🔀 Query Tools Map Layers



Zoom Level: 14 of 19 (1:24,000) Closest Zoom for Pipelines

37.228813, -107.903364



Ready

https://pvnpms.phmsa.dot.gov/PublicViewer/

- Incorporate PHMSA setback formula
 - New crude oil transfer lines
 - Some off-location flowlines
 - Separate rules for liquid and gas
 - Liquid-depth of cover and distance
 - Gas-calculated by formula-radius and pressure





1101.a. Off-Location Flowline Registration

Register an off-location flowline by submitting a Flowline Report, Form 44, within 30 days after completing construction of the flowline.

An off-location flowline in existence prior to May 1, 2018, must be registered by October 31, 2019.

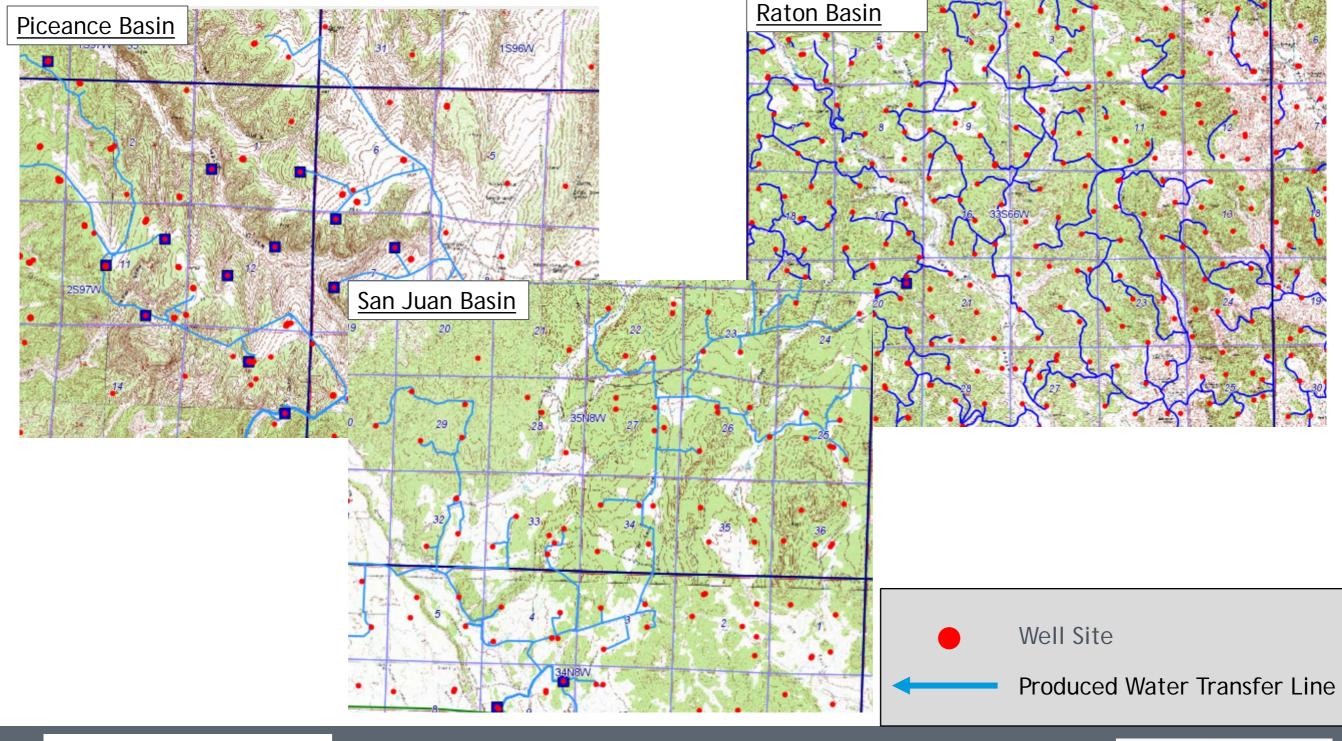
Registration includes:

- Latitude and longitude of the risers;
- Bedding materials used in construction;
- Pipe material;
- Maximum flowline diameter;
- Fluids that will be transferred;
- The maximum anticipated operating pressure, testing pressure, test date and chart;
- A layout drawing of the flowline; and
- Identify and describe the starting and ending oil and gas locations.





<u>Produced Water Transfer System</u>: Transports produced water from several well production facilities



COLORADO



Form 44 Stats as of 9/4/19

- Form 44s Approved = 4136
- Form 44s in Process = 1427
- Forms 44s in Review = 131



Total Miles of Flowlines Registered as of 9/4/19

- Off-Location Flowlines = 4,864 miles
- Crude Oil Transfer Lines= 721 miles
- Produced Water Transfer Systems = 673 miles



Integrity Management

 SB 19-181 requires the COGCC to "evaluat[e] and determin[e] when a deactivated flowline must be inspected before being reactivated." §34-60-106(19)(b)





- Initial Pressure Test for a minimum of 4 hours (ASME and API)
- Integrity test of inactive lines prior to them being reactivated
- Notification of reactivation
- Integrity Testing Frequency





Abandonment - Rule 1105

- Not in active use, out of service lock and tag
- For abandonment, operators must physically separate the line from all sources of fluids and pressure and may choose
 - Abandonment in place
 - Consider revising under what circumstances removal of flowline is necessary





- Submit additional documentation to COGCC
- Inspection priority
- Abandonment report provided to LGD and CO 811





- ASME PCC-2 Repair of Pressure Equipment and Piping
- Require corrosion protection for tracer lines
- RP 15 TL4 "Care and Use of Fiberglass Tubulars"
- Add barrier if above ground and near road
- Add PHMSA 195.410 as an alternative for signage
- Stormwater-open excavation-secure site-excavation
- Excavation tape-1 foot above





- Review CDPHE and CPUC/PHMSA requirements
- Off-location flowline reportable spills common as outside containment, could impact waters of the state, residence, livestock, or public byways
- Consider whether spill investigation and clean up provisions need to be strengthen
- Review root cause and preventative measures Rule 906.d.(2)





About Us Complaints Dashboard Data Government	Library Maps Permits Regulation
Area Reports Local Public Forums Presentations Special Pro	ojects Staff Reports Technical Reports

Flowline Instrument Monitoring Method (IMM) Workgroup

In February, 2018 the Commission directed the COGCC to convene a stakeholder group consisting of representatives from industry, local governments, NGOs and COGCC staff to examine current and developing instrument-based technologies and processes for preventing and detecting leaks and spills from flowlines, and continuing to eliminate risks from flowlines, including the location of flowlines.

In order to facilitate the Workgroup's understanding of various instrument methods, their application and risk, staff have engaged with Colorado State University (CSU) and Colorado School of Mines (CSM) to perform literature reviews on available monitoring methods and risks models, which could be applied towards flowlines.

Literature Reviews (October, 2018)

- Current and Near-term Technology Options to Detect Leakage of Hydrocarbons, Water, and Gas from Flowlines (Colorado State University)
- Flowline Risk Review (Colorado School of Mines)

Final Report & Presentation (March 11, 2019)

- Flowline Instrument Monitoring Method Workgroup Report
- Summary of Instrument Monitoring for Flowline Integrity Rule 1104.j.(2) (Presentation)

Additional Resources

Flowline IMM Vendors (updated February 8, 2019)





- Checkbox for membership instead of code
- Add N/A category for financial, truckers, etc.





- Pre-commissioned
- Active/in-service
- Inactive/Out of Service
- Abandoned

• Make consistent with PHMSA's anticipated rules





Conforming changes

100 Series Definitions

- OOSLAT to distinguish from OSHA Lockout/Tagout
- Flowline System (bulk download)

200 Series General Rules

- Remove PDOP as required measure of accuracy for GPS data
- CDPs to include discussion of crude oil transfer and produced water transfer lines





Conforming changes

600 Series Safety Regulations or 900 Series E&P Waste Management

• Gas leaks to apply to all facilities not just flowlines

700 Series Financial Assurance & Oil and Gas Conservation and Environmental Response Fund

- Separate out gas and produced water transfer line requirements.
- Geodatabase for gas gathering on form 12





Rulemaking Timeline

- September 5, 2019
- October 8, 2019
- October 9, 2019
- October November
- November 20-21, 2019

- Stakeholder Meeting File Notice of Hearing with draft rules Stakeholder Meeting
- Prehearing Process
- Rulemaking Hearing





Questions?



COLORADO Oil & Gas Conservation Commission

Department of Natural Resources

