

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

FLOWLINE RULEMAKING

STAFF'S FINAL DRAFT OF PROPOSED RULES

(Please note that the redline below may in some instances show current rule language as newly proposed language because it has been moved between sections.)

DEFINITIONS (100 Series)

BREAKOUT TANK means a tank used to either relieve surges in a liquid hydrocarbon pipeline system or receive and store liquid hydrocarbons transported by a pipeline for reinjection or continued transportation by pipeline.

CRUDE OIL TRANSFER LINE means a piping system that is not regulated or subject to regulation by the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to 49 C.F.R. § 195 Subpart A, and that transfers crude oil, crude oil emulsion or condensate from more than one well site or production facility to a production facility with permanent storage capacity greater than 25,000 barrels or a PHMSA gathering system. 49 C.F.R. § 195 Subpart A, in existence as of the date of this regulation and not including later amendments, is available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. Additionally, 49 C.F.R. § 195 Subpart A may be found at <https://www.phmsa.dot.gov>.

DOMESTIC TAP means an individual gas service line directly connected to a flowline.

FLOWLINE means a segment of pipe transferring oil, gas, or condensate between a wellhead and processing equipment to the load point or point of delivery to a U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration or Colorado Public Utilities Commission regulated gathering line or a segment of pipe transferring produced water between a wellhead and the point of disposal, discharge, or loading. This definition of flowline does not include a gathering line. The different types of flowlines are:

Wellhead Line means a flowline that transfers well production fluids from an oil or gas well to process equipment (e.g., separator, production separator, tank, heater treater), not including pre-conditioning equipment such as sand traps and line heaters, which do not materially reduce line pressure.

Production Piping means a segment of pipe that transfers well production fluids from a wellhead line or production equipment to a gathering line or storage vessel and includes the following:

Production Line means a flowline connecting a separator to a meter, LACT, or gathering line;

Dump Line means a flowline that transfers produced water, crude oil, or condensate to a storage tank, pit, or process vessel and operates at or near atmospheric pressure at the flowline's outlet;

Manifold Piping means a flowline that transfers fluids into a piece of production facility equipment from lines that have been joined together to comeingle fluids; and

Process Piping means all other piping that is integral to oil and gas exploration and production related to an individual piece or a set of production facility equipment pieces.

Off-Location Flowline means a flowline transferring produced fluids (crude oil, natural gas, condensate, or produced water) from a well to a production facility, injection facility, pit, or discharge

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

point that is not on the same oil and gas location as the well. This definition also includes flowlines connecting to gas compressors or gas plants.

Peripheral Piping means a flowline that transfers fluids such as fuel gas, lift gas, instrument gas, or power fluids between oil and gas facilities for lease use.

Produced Water Flowline means a flowline on the oil and gas location used to transfer produced water for treatment, storage, discharge, injection or reuse for oil and gas operations. A segment of pipe transferring only freshwater is not a flowline.

Flowline Exclusion. A line that would otherwise meet any of the foregoing descriptions will not be considered a flowline if all of the following are satisfied:

- the operator prospectively marks and tags the line as a support line;
- the line is not integral to production;
- the line is used infrequently to service or maintain production equipment;
- the line does not hold a constant pressure; and
- the line is isolated from a pressure source when not in use.

GATHERING LINE means a gathering pipeline or system as defined by the Colorado Public Utilities Commission, Regulation No. 4, 4 C.C.R. 723-4901, Part 4, (4 C.C.R. 723-4901) or a pipeline regulated by the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration pursuant to 49 C.F.R. §§ 195.2 or 192.8. 49 C.F.R. §§ 195.2 or 192.8 and 4 C.C.R. 723-4901 in existence as of the date of this regulation and does not include later amendments. 49 C.F.R. §§ 195.2 or 192.8 and 4 C.C.R. 723-4901 are available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. Additionally, 49 C.F.R. §§ 195.2 or 192.8 may be found at <https://www.phmsa.dot.gov>, and 4 C.C.R. 723-4901 may be found at <https://www.sos.state.co.us>.

GRADE 1 GAS LEAK means a gas leak that represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until the conditions are no longer hazardous.

ISOLATION VALVE means a valve closed to the atmosphere that stops fluid flow and isolates a pipe segment in a flowline or crude oil transfer line.

LOCKOUT means installing a device, such as a blind plug, blank flange, or bolted slip blind that prevents operation of an energy-isolating device, such as a valve, and ensures the equipment cannot be operated until the lockout device is removed.

MAXIMUM ANTICIPATED OPERATING PRESSURE means the highest operational pressure the operator expects to apply to a flowline when in service.

PIPELINE means a flowline, crude oil transfer line or gathering line as defined in these Rules.

PRODUCED WATER TRANSFER SYSTEM means a system of off-location flowlines that transports produced water generated at more than one well site or production facility.

RISER means the component of a flowline transitioning from below grade to above grade.

TAGOUT means securely fastening a tagout device to an energy-isolating device, such as a valve, to indicate that the energy-isolating device and the equipment being controlled may not be operated until the tagout device is removed.

TAGOUT DEVICE means a prominent warning device, such as a tag, that will not deteriorate or become illegible with exposure to weather conditions or wet and damp locations. The tagout device must: include

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

an instruction to not operate the equipment; the date of the last successful integrity test; the reason for tagging out the equipment; and be color coded per. ASME Scheme for the Identification of Piping Systems, 2015 Edition (A13.1- 2015), and no later editions of the standard. ASME A13.1- 2015 is available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. Additionally, ASME A13.1- 2015 may be examined at any state publications depository library and is available to purchase from the ASME. The ASME can be contacted at Two Park Avenue, New York, NY 10016-5990, 1-800-843-2763.

FLOWLINE REGULATIONS (1100 Series)

1101. REGISTRATION REQUIREMENTS

1101.a. Off-Location Flowline Registration.

- (1) An operator must register a newly constructed off-location flowline by submitting a Flowline Report, Form 44, to the Director within 30 days after the flowline is placed into service. An off-location flowline in existence prior to May 1, 2018, must be registered by October 31, 2019. An off-location flowline registered as part of a produced water transfer system is not subject to this requirement.
- (2) Registration Requirements.
 - A. For off-location flowlines constructed after May 1, 2018, operators must include the following information:
 - i. A geodatabase containing the pipeline alignment in the North American Datum of 1983 (NAD 83) with the following attributes: fluid type, material type and pipe size in a format approved by the Director;
 - ii. Bedding materials used in construction;
 - iii. Pipe material;
 - iv. Maximum flowline diameter;
 - v. Fluids that will be transferred;
 - vi. The maximum anticipated operating pressure, testing pressure, test date and chart of successful pressure test;
 - vii. A layout drawing sufficient to identify the alignment of the flowline, associated oil and gas locations, and existing and proposed pipelines related to the oil and gas locations; and
 - viii. Identify and describe the starting and ending oil and gas locations.
 - B. For off-location flowlines in existence prior to May 1, 2018, operators must, to the extent such information is known by the operator or can be acquired from such relevant records in the possession of the operator or its immediate predecessor in interest include in their

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

registration:

- i. the information set forth in 2.(A)ii-viii above, and
 - ii. the latitude and longitude of the risers.
- (3) Within 30 days of modifying the alignment of a registered off-location flowline, the operator must report the change to the Director by submitting a Flowline Report, Form 44.
- (4) All documents executed after May 1, 2018, that grant a right of access or easement to locate an off-location flowline on lands, must be recorded by the operator in the office of the county clerk and recorder of the county where the lands are located.

1101.b. Domestic Tap Registration.

- (1) Within 30-days of installation or discovery of a domestic tap connected to the operator's flowline, an operator must submit a Flowline Report, Form 44, to the Director to register the tap. Operators must register known domestic taps that were installed prior to May 1, 2018, by submitting a Flowline Report, Form 44, to the Director on or before October 31, 2019. The registration must include the latitude and longitude of the flowline or wellhead connection for the domestic tap and the street address of the point of delivery.
- (2) For domestic taps installed after May 1, 2018, an operator must register the domestic tap pursuant to subpart (1) and notify the domestic tap owner in writing that the domestic tap must:
 - A. Be locatable by a tracer line or location device placed adjacent to or in the trench of the domestic tap to facilitate locating it;
 - B. Be installed by a licensed plumber;
 - C. Have properly-sized regulators at the point the tap connects to the operator's flowline and at the point the tap delivers gas to the dwelling or structure where the gas is utilized;
 - D. Include all necessary piping to accommodate appropriate odorization, and gas utilization metering equipment;
 - E. Be installed using materials designed for gas service and appropriate cover and bedding material in accordance with industry standards; and
 - F. Have markers that are installed and maintained at the point the domestic tap connects to the operator's flowline and at the point it delivers gas to the dwelling or structure where the gas is utilized consistent with 1102.g.
- (3) An operator must supply odorant to the domestic tap owner at the time of installation until abandonment of the domestic tap.
- (4) Within 30 days of realigning, abandoning, or discovering or receiving notification that a registered domestic tap has been re-aligned or abandoned, the operator must report the change to the Director by submitting a Flowline Report, Form 44.

1101.c. Crude Oil Transfer Line and Produced Water Transfer System Registration.

- (1) **Registration.** At least 10 days before beginning construction of a crude oil transfer line or produced water transfer system, an operator must register it by submitting a Flowline Report,

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

Form 44, to the Director. The submittal must include a layout drawing sufficient to show its route, its crossings of public by-ways, road crossings, sensitive wildlife habitats, sensitive areas and natural and manmade watercourses and the surrounding topography.

For a crude oil transfer line or produced water transfer system constructed before May 1, 2018, the operator must register it by submitting a Flowline Report, Form 44, to the Director by October 31, 2019. The submittal must include the information specified in section (2) below, to the extent such information is known by the operator or can be acquired from such relevant records in the possession of the operator or its immediate predecessor in interest.

- (2) **As-built Specifications.** For a crude oil transfer line or produced water transfer system placed into service after May 1, 2018, the operator must submit a Flowline Report, Form 44, within 30 days of placing it into service to include the following information:
- A. A layout drawing of the facility that sufficiently shows the surrounding topography, location of all associated above-ground equipment and the pipeline centerline from the point of origin to the termination point;
 - B. A geodatabase containing the pipeline alignment and isolation valves in the North American Datum of 1983 (NAD 83) with the following attributes: fluid type, material type and pipe size in a format approved by the Director;
 - C. Specifications:
 - i. Bedding materials used in construction;
 - ii. Fluids that will be transferred;
 - iii. The maximum anticipated operating pressure, testing pressure, test date, and chart of successful pressure test;
 - iv. The pipe description (i.e., maximum size, grade, wall thickness, coating, standard dimension ratio, and material);
 - v. The burial depth of the crude oil transfer line or produced water transfer system;
 - vi. Description of corrosion protection;
 - vii. Description of the integrity management system utilized in accordance with 1104.f.;
 - viii. Description of the construction method used for public by-ways, road crossings, sensitive wildlife habitats, sensitive areas and natural and manmade watercourses (i.e., open trench, bored and cased, or bored only); and
 - ix. Copy of the operator's crude oil leak protection and monitoring plan prepared in accordance with 1104.g.
 - D. An affidavit of completion stating the operator designed and installed the crude oil transfer line or produced water transfer system in compliance with the 1100 Series rules.
- (3) Within 30 days of modifying the alignment of a registered crude oil transfer line, the operator must report the change to the Director by submitting a Flowline Report, Form 44.

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

- (4) For produced water transfer systems that have had system alignment changes during the preceding year, an operator must submit a Flowline Report, Form 44, by May 1st of each year to report the new alignment.
- (5) All instruments or other documents executed after May 1, 2018 that grant a right of access or easement to locate a crude oil transfer line or produced water system on lands must be recorded by the operator in the office of the county clerk and recorder of the county where the lands are located.

1101.d. **Disclosure of Confidential Form 44 Data to Local Governments.** Upon request from a local government, and subject to executing a confidentiality agreement, the Commission will provide to the local government the geodatabase information submitted with a Form 44, and any periodic updates received, for all off-location flowlines, crude oil transfer lines and produced water transfer systems within that local government's jurisdiction. The sole purpose for providing the geodatabase information is to assist local governments with their emergency management and planning. The Commission will keep all such geodatabase information confidential to the extent allowed by the Colorado Open Records Act.

1102. FLOWLINE AND CRUDE OIL TRANSFER LINE REQUIREMENTS

1102.a. **Material.** Materials for pipe and pipe components must be:

- (1) Able to maintain the structural integrity of the flowline or crude oil transfer line under anticipated operating temperature, pressure, and other operating conditions; and
- (2) Compatible with the substances to be transported.

1102.b. **Applicable Technical Standards.** Each component of a flowline or crude oil transfer line installed or repaired after May 1, 2018, must meet one of the following standards appropriate for the component:

- (1) American Society of Mechanical Engineers, Pipeline Transportation Systems for Liquids and Slurries, 2016 Edition (ASME B31.4-2016), and no later editions of the standard. ASME B31.4-2016 is available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. Additionally, ASME B31.4-2016 may be examined at any state publications depository library and is available to purchase from the ASME. The ASME can be contacted at Two Park Avenue, New York, NY 10016-5990, 1-800-843-2763;
- (2) ASME Gas Transmission and Distribution Piping Systems, 2016 Edition (ASME B31.8-2016), and no later editions of the standard. ASME B31.8-2016 is available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. Additionally, ASME B31.8-2016 may be examined at any state publications depository library and is available to purchase from the ASME. The ASME can be contacted at Two Park Avenue, New York, NY 10016-5990, 1-800-843-2763;
- (3) ASME Process Piping, 2016 Edition (ASME 31.3-2016), and no later editions of the standard. ASME 31.3-2016 is available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. Additionally, ASME 31.3-2016 may be examined at any state publications depository library and is available to purchase from the ASME. The ASME can be contacted at Two Park Avenue, New York, NY 10016-5990, 1-800-843-2763;
- (4) API Specification 15S, Spoolable Reinforced Plastic Line Pipe, Second Edition, March 2016

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

- (API Specification 15S), and no later editions of the standard. API Specification 15S is available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. In addition, API Specification 15S may be examined at any state publications depository library and is available from API at 1220 L Street, NW Washington, DC 20005-4070, 1-202-682-8000;
- (5) API Specification 15HR, High-pressure Fiberglass Line Pipe, Fourth Edition, February 2016 (API Specification 15HR), and no later editions of the standard. API Specification 15HR is available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. In addition, API Specification 15HR may be examined at any state publications depository library and is available from API at 1220 L Street, NW Washington, DC 20005-4070, 1-202-682-8000; or
- (6) API Specification 15LR (R2013), Low Pressure Fiberglass Line Pipe and Fittings, Seventh Edition, August 2001(API Specification 15LR), and no later editions of the standard. API Specification 15LR is available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. In addition, API Specification 15LR may be examined at any state publications depository library and is available from API at 1220 L Street, NW Washington, DC 20005-4070, 1-202-682-8000.

1102.c. **Design.** Each component of a flowline or crude oil transfer line must be designed to:

- (1) Prevent failure by minimizing internal or external corrosion and the effects of transported fluids;
- (2) Withstand maximum anticipated operating pressures and other internal loadings without impairment;
- (3) Withstand anticipated external pressures and loads that will be imposed on the pipe after installation;
- (4) Allow for line maintenance, periodic line cleaning, and integrity testing; and
- (5) Have adequate controls and protective equipment to prevent it from operating above the maximum operating pressure.

1102.d. **Installation.**

- (1) Installation crews must be trained in flowline or crude oil transfer line installation practices for which they are tasked to perform.
- (2) All workers performing welding on crude oil transfer lines, must be certified in accordance with:
 - A. API Standard 1104, Welding of Pipelines and Related Facilities, Twenty First Edition, September 2013 and no later editions of the standard. API Standard 1104 is available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. In addition, API Standard 1104 15S may be examined at any state publications depository library and is available from API at 1220 L Street, NW Washington, DC 20005-4070, 1-202-682-8000.
 - B. ASME BPV Code 2017 Section IX - Welding, Brazing and Fusing Qualification and no later editions of the code. The Section is available for public inspection during normal business

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. In addition, API Standard 1104 15S may be examined at any state publications depository library The ASME BPV Code is available to purchase from the ASME at Two Park Avenue, New York, NY 10016-5990, 1-800-843-2763.

- (3) Non-destructive testing of welds for newly constructed steel off-location flowlines or steel crude oil transfer lines must be done in accordance with one of the following:
 - A. Those standards established by the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration pursuant to 49 C.F.R. § 192.243 and 49 C.F.R. § 195.234, in existence as of the date of this regulation, and no later amendments. 49 C.F.R. § 192.243 and 49 C.F.R. § 195.234 are available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. Additionally, 49 C.F.R. § 192.243 and 49 C.F.R. § 195.234 may be found at <https://www.phmsa.dot.gov>.
 - B. One of the standards set forth in Section 1102.b. or 1102.d (2)A. and B. above.
- (4) Non-destructive testing is not required for repairs of existing steel off-location flowlines or steel crude oil transfer lines.
- (5) No pipe or other component may be installed unless it has been visually inspected at the site of installation to ensure that it is not damaged.
- (6) Pipes must be locatable by a tracer line or location device placed adjacent to or in the trench of a buried nonmetallic flowline or crude oil transfer line.
- (7) Flowlines or crude oil transfer lines must be installed in a manner that minimizes interference with agriculture, road and utility construction, the introduction of secondary stresses, and the possibility of damage to the pipe.
- (8) The pipe must be handled in a manner that minimizes stress and avoids physical damage to the pipe during stringing, joining, or lowering in. During the lowering in process the pipe string must be properly supported so as not to induce excess stresses on the pipe or the pipe joints or cause weakening or damage to the outer surface of the pipe.
- (9) Flowlines or crude oil transfer lines that cross a municipality, county, or state graded road must be bored unless the responsible governing agency specifically permits the operator to open cut the road.
- (10) Flowlines and crude oil transfer lines must be installed pursuant to the manufacturer's procedures and practices. In the absence of applicable manufacturer's procedures, the following requirements apply:
 - A. Pipeline trenches must be constructed to allow the pipeline to rest on undisturbed native soil and provide continuous support along the length of the pipe;
 - B. Trench bottoms must be free of rocks greater than two inches in diameter, debris, trash, and other foreign material not required for pipeline installation; and
 - C. Over excavated trench bottoms must be backfilled with appropriate material and compacted prior to installation of the pipe to provide continuous support along the length of the pipe.

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

- (11) The width of the trench must provide adequate clearance on each side of the pipe. Trench walls must be excavated to ensure minimal sluffing of sidewall material into the trench. Subsoil from the excavated trench must be stockpiled separately from previously stripped topsoil.
- (12) A flowline or crude oil transfer line trench must be backfilled in a manner that provides firm support under the pipe and prevents damage to the pipe and pipe coating from equipment or from the backfill material. Sufficient backfill material must be placed in the pipe springline to provide long-term support for the pipe. Backfill material that will be within two feet of the pipe must be free of rocks greater than two inches in diameter and foreign debris. Backfilling material must be compacted as appropriate during placement in a manner that provides support for the pipe and reduces the potential for damage to the pipe and pipe joints.
- (13) Flowlines and crude oil transfer lines that traverse sensitive wildlife habitats or sensitive areas, such as wetlands, streams, or other surface waterbodies, must be installed in a manner that minimizes impacts to these areas.

1102.e. **Cover for Subsurface Flowlines and Crude Oil Transfer Lines.**

- (1) All installed flowlines and crude oil transfer lines must have cover sufficient to protect them from damage. On cropland, all flowlines must have a minimum cover of three (3) feet.
- (2) Where an underground structure, geologic, or other uncontrollable condition prevents a flowline or crude oil transfer line from being installed with minimum cover, or when there is a written agreement between the surface owner and the operator specifying flowline cover depth, it may be installed with less than minimum cover or above-ground.

1102.f. **Top Soil Management and Reclamation.**

- (1) When flowlines or crude oil transfer lines cross croplands, unless waived by the surface owner, the operator must segregate topsoil while trenching, and backfill trenches so that the soils must be returned to their original relative positions and contour. This requirement to segregate and backfill topsoil does not apply to trenches which are twelve (12) inches or less in width. Operator must make reasonable efforts to install flowlines or crude oil transfer lines parallel to crop irrigation rows on flood irrigated land.
- (2) All trenches must be maintained in order to correct subsidence and reasonably minimize erosion.
- (3) Interim and final reclamation, including revegetation, must be performed in accordance with the applicable 1000 Series rules.

1102.g. **Marking.**

- (1) In Designated Setback Locations, and where crossing public rights-of-way or utility easement crossings, an operator must install and maintain markers that identify the location of flowlines or crude oil transfer lines. These markers must be placed in a manner to reduce the possibility of damage or interference with surface use but need not be placed where impracticable or if the landowner does not grant permission.
- (2) The marker must include the following language:

"Warning", "Caution" or "Danger" followed by the words "gas or petroleum (or name of gas or fluid transported) in the flowline (or crude oil transfer line)" along with the name of the operator and the telephone number where the operator can be reached at all times. The letters must be

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

legible, written on a background of sharply contrasting color and on each side with at least one (1) inch high with one-quarter ($\frac{1}{4}$) inch stroke.

1102.h. **Inspection.** A crude oil transfer line constructed after May 1, 2018, must be inspected by a third-party inspector before being placed into service. The third-party inspector must be trained in the installation of crude oil transfer lines. The operator must maintain inspection records, including at a minimum:

- (1) The third-party inspector's certification that the crude oil transfer line was installed as prescribed by the manufacturer's specifications and in accordance with the requirements of the 1100 Series rules; and
- (2) The third-party inspector's training qualifications.

1102.i. **Maintenance.**

- (1) Each operator must take reasonable precautions to prevent failures and leakage, and minimize corrosion of flowlines and crude oil transfer lines.
- (2) Whenever an operator discovers any condition that could adversely affect the safe and proper operation of a flowline or crude oil transfer line, the operator must correct the condition as soon as possible. However, if the condition presents an immediate hazard to persons or property, the operator may not operate the affected segment until the operator has corrected the condition.
- (3) If the flowline or crude oil transfer line lacks integrity, the operator must immediately investigate, report, and remediate any Spills or Releases in accordance with the 900 Series rules.
- (4) Any flowline or crude oil transfer line not actively in use must have isolation valves locked and tagged out.

1102.j. **Repair.**

- (1) Each operator must make repairs in a safe manner that prevents injury to persons and damage to equipment and property.
- (2) An operator may not use any pipe, valve, or fitting to repair a flowline or crude oil transfer line unless the component meets the installation requirements of the 1100 Series rules for the repaired segment. For a flowline or crude oil transfer line installed prior to May 1, 2018 that undergoes a major modification or change in service after May 1, 2018, the segment repaired must satisfy all applicable requirements of the 1100 Series rules before an operator can return the flowline or crude oil transfer line to service.
- (3) An operator may not use any pipe, valve, or fitting for replacement or repair of a flowline or crude oil transfer line unless it is designed to the maximum anticipated operating pressure.
- (4) An operator must verify the integrity of any repaired segment of flowline or crude oil transfer line before returning it to service.

1102.k. **Operating requirements.**

- (1) No flowline or crude oil transfer line may be operated until it has demonstrated compliance with Rule 1104, Integrity Management.

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

- (2) The maximum operating pressure for a flowline or crude oil transfer line may not exceed the manufacturer's specifications of the pipe or the manufacturer's specifications of any other component of it, whichever is less.

1102.l. **Corrosion control.**

- (1) All coated pipe for underground service must be electronically inspected prior to installation using coating deficiency (i.e. scratch, bubble, and "holiday") detectors to check for any faults not observable by visual examination. The detector must operate in accordance with manufacturer's instructions and at a voltage level appropriate for the electrical characteristics of the pipeline being tested. During installation all joints, fittings, and tie-ins must be coated with materials compatible with the coatings on the pipe. Coating materials must:
 - A. Be designed to mitigate corrosion of the buried pipe;
 - B. Have sufficient adhesion to the metal surface to prevent under film migration of moisture;
 - C. Be sufficiently ductile to resist cracking;
 - D. Have enough strength to resist damage due to handling and soil stress;
 - E. Support any supplemental cathodic protection; and
 - F. If the coating is an insulating type, have low moisture absorption and provide high electrical resistance.
- (2) Cathodic protection systems must meet or exceed the minimum criteria set forth in the National Association of Corrosion Engineers (NACE) standard practice SP0169-2007 (formerly RP0169), Control of External Corrosion on Underground or Submerged Metallic Piping Systems, 2007 Edition (NACE SP0169-2007), and no later editions of the standard. NACE SP0169-2007 is available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. Additionally, NACE SP0169-2007 may be examined at any state publications depository library and is available to purchase from the NACE. The NACE can be contacted at 15835 Park Ten Place, Houston, Texas 77084, 1-281-228-6200.
- (3) An operator must take prompt remedial action to correct any abnormal internal corrosion. Remedial action may include increased pigging, using corrosion inhibitors, coating the internal pipeline (e.g. an epoxy paint or other plastic liner), or a combination of these actions.

1102.m. **Record Keeping.** An operator must maintain records of flowline or crude oil transfer line size, route, materials, maximum anticipated operating pressure, pressure or other integrity test results, inspections, repairs, and integrity management documentation for the life of the flowline. These records are to be transferred with a change of operator.

1102.n. **One Call participation.** Every operator must become a Tier One member of the Utility Notification Center of Colorado (UNCC) and participate in Colorado's One Call notification system, the requirements of which are established by §9-1.5-101., C.R.S. et seq.

- (1) An operator must include its UNCC member code when submitting an Operator Registration, Form 1, Change of Operator, Form 10, Gas Facility Registration, Form 12, or Flowline Report, Form 44.
- (2) Within 30 days of completing an asset purchase, a transfer, construction or relocation of a

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

flowline or crude oil transfer line, an operator must update the operator's location information with the UNCC.

- (3) An operator's registration with the Commission grants the Director permission to access information the operator submits to UNCC about its oil and gas facilities.

1102.o. **Notification of off-location flowline or crude oil transfer line not in service.** The operator of an off-location flowline or crude oil transfer line must submit a Flowline Report, Form 44, to the Director identifying the off-location flowline or crude oil transfer line or segment thereof that has been removed from service for more than one year. The Form 44 must be submitted within 30 days after the one-year anniversary of the operator removing the line from service.

1103. FLOWLINE AND CRUDE OIL TRANSFER LINE VALVES

1103.a. Operators must annually conduct one of the following maintenance operations on all isolation valves:

- (1) Perform a function test, or
- (2) Maintain the isolation valve in accordance with its manufacturer's specifications.

Operators must repair or replace isolation valves that are not fully operable.

On-location manifold piping and process piping flowlines are exempt from the annual maintenance operations set forth in this section 1103.a.

1103.b. Any valve, flange, fitting or other component installed after May 1, 2018 that is connected to a flowline or crude oil transfer line must have a manufacturer's rating that is equal to or greater than the maximum anticipated operating pressure.

1103.c. For all flowlines or crude oil transfer lines constructed after May 1, 2018, an isolation valve must be installed at each of the following locations before operation:

- (1) On the suction end and the discharge end of a pump station in a manner that permits isolation of the pump station equipment in the event of an emergency;
- (2) On each flowline or crude oil transfer line entering or leaving a breakout tank in a manner that permits isolation of the breakout tank from other facilities;
- (3) At locations along a flowline or crude oil transfer line that will minimize damage or pollution from accidental discharge of hydrocarbons or E&P Waste, as appropriate for the terrain in open country or for populated areas;
- (4) On each side of a flowline or crude oil transfer line crossing a Rule 317B Public Water System defined water supply or a waterbody that is more than 100 feet (30 meters) wide from high-water mark to high-water mark; and
- (5) On each side of a flowline or crude oil transfer line crossing a reservoir storing water for human consumption.

1103.d. Flowlines and crude oil transfer lines constructed before May 1, 2018, must be retrofitted with isolation valves at each of the locations identified in c.(1)-(5) by October 31, 2019. On-location manifold piping and process piping flowlines are exempt from the retrofit provisions set forth in this section 1103.d.

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

1103.e. Check Valve Installation Requirements.

- (1) Where an operator produces two or more wells through a common flowline, separator, or manifold, the operator must equip each flowline leading from a well to the common flowline, crude oil transfer line, separator, or manifold with a check valve or other comparable reverse flow prevention mechanism.
- (2) The check valve or other comparable reverse flow prevention mechanism must be installed to permit fluids to move from the well to the common flowline, crude oil transfer line, separator, or manifold and to prevent any fluid from entering the well through the flowline.
- (3) The operator must keep all check valves or other comparable reverse flow mechanisms in good working order.
- (4) Upon the Director's request, operators must test the operation of the check valve or other comparable reverse flow mechanism.
- (5) The requirements set forth in subsection (1) and (2) above, apply only to those check valves or comparable reverse flow mechanisms installed after May 1, 2018. Existing check valves or comparable reverse flow mechanisms must comply with subsection (3) and (4) above.

1104. INTEGRITY MANAGEMENT

1104.a. **Initial Pressure Testing Requirements.** Prior to operating any newly installed segment of flowline or crude oil transfer line, an operator must test the line to at least maximum anticipated operating pressure and demonstrate integrity. In conducting tests, each operator must ensure that reasonable precautions are taken to protect its employees and the general public. The operator may use a hydrostatic test or conduct the test using wellhead pressure sources and well bore fluids, including gas, in accordance with one of the applicable standards set forth in Section 1104.h.(1) below.

1104.b. **Testing upon request.** An operator will conduct an integrity test of any segment of flowline or crude oil transfer line at any time upon request of the Director.

1104.c. **Integrity Management for Below-ground Dump Lines.** An operator must verify integrity of below-ground dump lines by performing an annual static-head test and a monthly audio, visual, olfactory (AVO) inspection of the entire line. The use of an optical gas imaging instrument is not required with an AVO test conducted on below-ground dump lines.

1104.d. **Integrity Management for Above-ground On-location Flowlines.** An operator must verify the integrity of above-ground on-location flowlines by performing a monthly audio, visual, olfactory (AVO) inspection of the entire line. The use of an optical gas imaging instrument is not required with an AVO test conducted on above-ground on-location flowlines.

1104.e. Integrity Management for Below-Ground On-location Flowlines.

(1) Any flowlines not subject to c. or d. above must conduct an annual AVO inspection using an optical gas imaging instrument in accordance with 1104.j. and adhere to one of the following integrity management programs:

- A. A pressure test every three years;
- B. Smart pigging conducted every three years; or
- C. Continuous pressure monitoring.

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

(2) If an operator elects to use smart pigging to comply with this section, the smart pig must be able to measure flowline wall thickness, and measure for flowline defects that could affect integrity, including measurement of metal loss.

1104.f. **Off-Location Flowlines and Crude Oil Transfer Lines.**

(1) For all off-location flowlines and crude oil transfer lines, but not including off-location produced water flowlines, operators must conduct an annual AVO inspection using an optical gas imaging instrument in accordance with 1104.j. and adhere to one of the following integrity management programs:

- A. Annual pressure testing;
- B. Continuous pressure monitoring; or
- C. Smart pigging conducted every three years.

(2) For off-location produced water flowlines, operators must conduct an annual AVO inspection and adhere to one of the following integrity management programs:

- A. Annual pressure testing;
- B. Continuous pressure monitoring; or
- C. Smart pigging conducted every three years.

The use of an optical gas imaging instrument is not required with an AVO test for off-location produced water flowlines.

(3) If an operator elects to use smart pigging to comply with this section, the smart pig must be able to measure flowline wall thickness, and measure for flowline defects that could affect integrity, including measurement of metal loss.

1104.g. **Leak protection, detection, and monitoring.**

- (1) All crude oil transfer line operators must prepare and file with the Director a leak protection and monitoring plan.
- (2) All crude oil transfer line operators must develop and maintain a plan to coordinate the assessment of all inflow and outflow data. The plan must provide for the assessment of inflow and outflow data between the production facility operator, the crude oil transfer line operator, and the operator at the point or points of disposal, storage, or sale. Upon discovery of a material data discrepancy, the discovering party is to notify all other appropriate parties and take action to determine the cause. The crude oil transfer line operator is to retain a record of all material data discrepancies.

1104.h. **Pressure Test Requirements.**

- (1) Initial Pressure Test.
 - A. For flowlines and Crude Oil Transfer Lines installed after May 1, 2018, the initial pressure

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

test must be conducted in accordance with the provisions of one of the following applicable standards

- i. American Society of Mechanical Engineers (ASME), Process Piping, 2016 Edition (ASME 31.3-2016) and no later edition;
- ii. ASME Pipeline Transportation Systems for Liquids and Slurries, 2016 Edition (ASME B31.4-2016) and no later edition;
- iii. ASME Gas Transmission and Distribution Piping Systems, 2016 Edition (ASME B31.8-2016) and no later edition;
- iv. API Specification 15S, Spoolable Reinforced Plastic Line Pipe, Second Edition, March 2016 (API Specification 15S) and no later edition;
- v. API Specification 15LR (R2013), Low Pressure Fiberglass Line Pipe and Fittings, Seventh Edition, August 2001 (API Specification 15LR) and no later edition;
- vi. API RP 1110, Recommended Practice for the Pressure Testing of Steel Pipelines for the Transportation of Gas, Petroleum Gas, Hazardous Liquids, Highly Volatile Liquids or Carbon Dioxide (6th Ed., February 1, 2013) (API RP 1110) and no later edition, or
- vii. ASTM F2164-13, Standard Practice for Field Leak Testing of Polyethylene (PE) and Crosslinked Polyethylene (PEX) Pressure Piping Systems Using Hydrostatic Pressure, or manufacturer's recommendations and must test the line to at least maximum anticipated operating pressure.

B. The ASME, API and ASTM standards identified in A. above are available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. Additionally, the standards may be examined at any state publications depository library. The ASME standards are available to purchase from the ASME at Two Park Avenue, New York, NY 10016-5990, 1-800-843-2763. The API standard is available to purchase from the API at 1220 L Street, NW Washington, DC 20005-4070, 1-202-682-8000. The ASTM standard is available to purchase from the ASTM at ASTM International, West Conshohocken, PA, 19428-2959, 1-877-909-2786.

C. The test can be hydrostatic or the test fluid can be the produced fluids of oil, produced water or natural gas in accordance with the applicable sections of the above-mentioned standards.

D. A successful test must demonstrate that the line does not leak.

(2) **Annual and Triennial Pressure Testing Requirements.** For annual or triennial pressure tests conducted to meet the requirements of Sections 1104.e and 1104.f:

- A. A pressure test must test to at least the maximum operating pressure and run for at least 30 minutes once the fluid pressure has stabilized.
- B. The test can be hydrostatic or the test fluid can be the produced fluids of oil, produced water or natural gas.
- C. A successful test will demonstrate the line does not leak, that pressure loss does not exceed 10%, and the fluid pressure is stable for the last five minutes of the pressure test.

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

1104.i. **Continuous Pressure Monitoring Requirements.** An operator's continuous pressure monitoring program must ensure:

- (1) Pressure data are monitored continuously, i.e., 24 hours per day and 7 days a week, and the monitoring is sufficiently sophisticated to identify flowline or crude oil transfer line integrity or pressure anomalies;
- (2) Systems are capable of being shut-in for repairs immediately upon discovery of a suspected leak, either through automation or a documented, manual process; and
- (3) The operator documents the continuous monitoring program, including suspected or identified integrity failures and how the operator will maintain and repair flowlines or crude oil transfer lines.

1104.j. **Audio, Visual and Olfactory (AVO) Inspection Requirements.** When performing an audio, visual and olfactory, aerial, or other survey of the entire flowline length to detect integrity failures, leaks, spills, or releases, or signs of a leak, spill, or release like stressed vegetation or soil discoloration, an operator must use an optical gas imaging instrument designed for and capable of detecting hydrocarbons contained in the pipeline. An operator must document the date and time of the inspection, the detection methodology or technology used and the name of the employee who conducted the inspection.

1104.k. **Gas Leak Reporting.**

- (1) An operator must initially report a Grade 1 Gas Leak from a flowline to the Director verbally or in writing using a Flowline Report, Form 44, as soon as practicable, but no more than six (6) hours after discovery.
- (2) The initial report to the Director must include, at a minimum, the location of the gas leak and any additional information related to the leak's cause, status, or impacts known to the operator.
- (3) If the operator initially reported the leak verbally, the operator must submit a Flowline Report, Form 44, that includes information identified in (2) as soon as practicable but not later than 72 hours after discovery of the gas leak unless extended by the Director.
- (4) Within 10 calendar days of discovering the gas leak, the operator must provide a supplemental report by submitting a Flowline Report, Form 44, to the Director. The supplemental report must include:
 - A. A topographic map showing the governmental section and location of the leak or an aerial photograph showing the location of the leak;
 - B. All pertinent information about the gas leak known to the operator that has not been reported previously in writing, including corrective actions; and
 - C. Information relating to the initial mitigation, site investigation, and remediation measures conducted by the operator.
- (5) The Director may require further supplemental reports or additional information.

1105. ABANDONMENT

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

- 1105.a. A flowline or crude oil transfer line remains subject to all of the requirements in Rules 1101 through 1104 until the operator completes all abandonment requirements set forth below.
- 1105.b. Upon removing a flowline or crude oil transfer line from service, an operator must immediately lockout or tag out the risers while the operator is in the process of abandoning the pipeline. Lockout and tagout devices must stay in place at all times during the process of abandoning the flowline or crude oil transfer line until the operator removes the riser.
- 1105.c. For abandonment, operators must permanently remove a flowline or crude oil transfer line from service by physically separating it from all sources of fluids or pressure within the time frame set forth in Section 1004.a. Abandonment must also comply with one of the following:
- (1) **Abandonment in place.** The operator must:
 - A. Purge the flowline or crude oil transfer line of any liquids;
 - B. Deplete the flowline or crude oil transfer line to atmospheric pressure;
 - C. Cut the flowline's or crude oil transfer line's risers to three (3) feet below grade or to the depth of the flowline or crude oil transfer line, whichever is shallower;
 - D. Seal the ends of the flowline or crude oil transfer line below grade; and
 - E. Remove above-ground cathodic protection and equipment associated with the riser.
 - (2) **Removal.** The operator must remove the flowline or crude oil transfer line and its risers, the riser associated with cathodic protection, and above-ground equipment.
- 1105.d. Within 30 days of an operator completing abandonment requirements for an off-location flowline or crude oil transfer line the operator must submit a Flowline Report, Form 44, to the Director. If the operator abandons an off-location flowline and has not submitted latitude and longitude for the flowline's risers, the Flowline Report, Form 44, must include this information.
- 1105.e. The Director will provide a Flowline Report, Form 44, for an off-location flowline or crude oil transfer line abandonment to the appropriate Local Governmental Designee and UNCC.

DRILLING, DEVELOPMENT, PRODUCTION AND ABANDONMENT (300 Series)

312. COGCC Form 10. CERTIFICATE OF CLEARANCE AND/OR CHANGE OF OPERATOR

* * *

- i. A Form 10, Change of Operator is required within 15 days of the transfer of ownership of production facilities including off-location flowlines and crude oil transfer lines. A Form 10 is not required for gas gathering systems, gas processing plants, and underground gas storage facilities, which are governed by Rule 313B.

313A. COGCC Form 11. MONTHLY REPORT OF GASOLINE OR OTHER EXTRACTION PLANT

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

All operators of gasoline or other extraction plants must make monthly reports to the Director on a Form 11. Such forms must contain all information required thereon and must be filed with the Director on or before the twenty-fifth (25th) day of each month covering the preceding month.

313B. COGCC Form 12. GAS GATHERING SYSTEMS, PROCESSING OR STORAGE FACILITY REGISTRATION/CHANGE OF OPERATOR

a. 30 days after placing a new gas gathering system, a new gas compressor station, a new gas processing plant, or a new underground gas storage facility into service, an operator must submit a Gas Facility Registration, Form 12. The following information must be included:

- (1) The name and type, of system or facility.
- (2) The legal location (quarter-quarter, section, township, range, county) of a gas compressor station or a gas processing plant or legal location description (quarter-quarter, section, township, range, county) of the geographic area covered by the gas gathering system, or an underground gas storage facility.
- (3) The latitude and longitude of a gas compressor station or a gas processing plant or a representative latitude and longitude near the center of a gas gathering system, or an underground gas storage facility.
- (4) A facility layout drawing of a gas compressor station, a gas processing plant or an underground gas storage facility and the surrounding topography.
- (5) A topographic map or a geographic area map covering the gathering system that sufficiently shows the gathering line's route, section, township and range lines, waterways, public roadways, county lines and municipal boundaries.

b. The operator of an unregistered gas gathering system, gas compressor station, gas processing plant, or underground gas storage facility existing prior to May 1, 2018, must submit a Form 12 – Registration no later than October 31, 2019.

The operator of a registered gas gathering system, gas compressor station, gas processing plant, or underground gas storage facility existing prior to May 1, 2018, must submit a Gas Facility Registration, Form 12 no later than October 31, 2019 that includes the information specified in Section a.(1) – (6) above.

c. The operator of an existing gas gathering system, gas processing plant, gas compressor station, or underground storage facility must report annually the addition or removal of any gathering pipelines report on a Gas Facility Registration, Form 12. The operator of an existing underground storage facility must report annually the expansion or decommissioning of more than 10% of the capacity of such facility on a Gas Facility Registration, Form 12. .

d. Within 30 days of transfer of ownership of a gas gathering system, gas compressor station, gas processing plant, or an underground gas storage facility, an operator must submit a Gas Facility Registration/Change of Operator, Form 12. Documentation confirming transfer of ownership must be attached to the Form 12. All records related to the installation, repair, and monitoring are to be transferred to the new operator.

328. MEASUREMENT OF OIL

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

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d. **Tank Gauging.** Measurement by tank gauging must be completed in accordance with industry standards as specified in:

- (1) The API Manual of Petroleum Measurement Standards, Chapter 3.1A Standard Practice for the Manual Gauging of Petroleum and Petroleum Products, (Second Edition, August 2005) and no later editions;
- (2) The API Manual of Petroleum Measurement Standards, Chapter 3.1B Standard Practice for the Manual Gauging of Petroleum and Petroleum Products, (Second Edition, June 2001) and no later editions;
- (3) The API Manual of Petroleum Measurement Standards, Chapter 3.1A Standard Practice for the Manual Gauging of Petroleum and Petroleum Products, (Second Edition, August 2005) and no later editions;
- (4) The API Manual of Petroleum Measurement Standards Chapter 18.1 - Custody Transfer - Section 1-Measurement Procedures for Crude Oil Gathered from Small Tanks by Truck (Second Edition, April 1997) and no later editions, or
- (5) The API Manual of Petroleum Measurement Standards Chapter 18.2, Custody Transfer of Crude Oil from Lease Tanks Using Alternative Measurement Methods, (First Edition, July 2016) and no later editions.
- (6) The API Manuals identified in i. through v. above are available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. In addition, the API Manuals may be examined at any state publications depository library and is available from API at 1220 L Street, NW Washington, DC 20005-4070, 1-202-682-8000.

* * *

SAFETY REGULATIONS (600 Series)

602. GENERAL

The training and actions of an operator's employees, as well as the proper location and operation of equipment, are essential to any safety program.

- a. Operators must familiarize their employees with these Rules as they relate to their job functions. Each new employee should have his or her job outlined, explained and demonstrated.
- b. Employees must immediately report unsafe and potentially dangerous conditions to their supervisor and any such conditions shall be remedied as soon as practicable.
- c. An operator must notify the Director of reportable safety events at an oil and gas facility. Reportable safety events include:
 - (1) Any accidental fire, explosion, or detonation, or uncontrolled release of pressure;

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

- (2) Any accident or natural event that results in a reportable injury as defined by the U.S. Department of Labor, Occupational Safety and Health Administration, at 29 C.F.R. § 1904.39 in existence as of the date of this regulation and no later amendments. 29 C.F.R. § 1904.39 is available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. Additionally, 29 C.F.R. § 1904.39 may be found at <https://www.osha.gov>. ; or
 - (3) Any accident or natural event that results in an injury to a member of the general public that requires medical treatment.
- d. Initial notification from the operator of a reportable safety event described in c.(1) -(3) above, must occur as soon as practicable, but no more than 6 hours after the safety event. An Accident Report, Form 22, must be submitted to the Director within 3-days of the accident or natural event.
 - (1) At the Director's request, the operator must submit a supplemental report that details the root cause, information about any repairs, or other information related to the accident.
 - (2) At the Director's request, the operator must present its root cause about the accident to the Commission or to an oil and gas safety review organization approved by the Director.
 - e. Where unsafe or potentially dangerous conditions exist and first responders are on-site, the owner or operator must respond as directed by first responders (such as sheriff, fire district director, etc.)
 - f. Vehicles of persons not involved in drilling, production, servicing, or seismic operations must be located a minimum distance of one hundred (100) feet from the wellbore, or a distance equal to the height of the derrick or mast, whichever is greater. Equivalent safety measures must be taken where terrain, location or other conditions do not permit this minimum distance requirement.
 - g. Existing producing facilities are exempt from the provisions of these regulations with respect to minimum distance requirements and setbacks unless they are found by the Director to be unsafe.
 - h. Self-contained sanitary facilities shall be provided during drilling operations and at any other similarly staffed oil and gas operations facility

605. OIL AND GAS FACILITIES.

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- d. **Mechanical Conditions.** All valves, pipes and fittings must be securely fastened, inspected at regular intervals, and maintained in good mechanical condition.

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FINANCIAL ASSURANCE AND OIL AND GAS CONSERVATION AND ENVIRONMENTAL RESPONSE FUND (700 Series)

711. Produced water transfer systems, gas gathering, gas processing and underground gas storage facilities.

Operators of produced water transfer systems, gas gathering, gas processing, or underground gas storage facilities must provide statewide blanket financial assurance to ensure compliance with the 900 Series rules in the amount of fifty thousand dollars (\$50,000), or in an amount voluntarily agreed to with

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

the Director, or in an amount determined by order of the Commission. Operators of small systems gathering or processing less than five (5) MMSCFD or seven hundred (700) barrels of water per day may provide individual financial assurance in the amount of five thousand dollars (\$5,000).

CONFORMING CHANGES

DEFINITIONS (100 Series)

OIL AND GAS FACILITY means equipment or improvements used or installed at an oil and gas location for the exploration, production, withdrawal, treatment, or processing of crude oil, condensate, E&P waste, or gas.

OIL AND GAS OPERATIONS means exploring for oil and gas, including conducting seismic operations and the drilling of test bores; siting, drilling, deepening, recompleting, reworking, or abandoning a well; producing operations related to any well, including installing flowlines; the generating, transporting, storing, treating, or disposing exploration and production wastes; and any constructing, site preparing, or reclaiming activities associated with such operations.

PLUGGING AND ABANDONMENT means the cementing of a well, the removal of its associated production facilities, the abandonment of its flowline(s), and the remediation and reclamation of the wellsite.

PRODUCTION FACILITY means any storage, separation, treating, dehydration, artificial lift, power supply, compression, pumping, metering, monitoring, flowline, and other equipment directly associated with a well.

PRODUCTION PITS means pits used after drilling operations and initial completion of a well, including pits related to produced water flowlines or associated with E&P waste from gas gathering, processing and storage facilities, which constitute:

SKIMMING/SETTLING PITS used to provide retention time for settling of solids and separation of residual oil for the purposes of recovering the oil or fluid.

PRODUCED WATER PITS used to temporarily store produced water prior to injection for enhanced recovery or disposal, off-site transport, or surface-water discharge.

PERCOLATION PITS used to dispose of produced water by percolation and evaporation through the bottom or sides of the pits into surrounding soils.

EVAPORATION PITS used to contain produced waters which evaporate into the atmosphere by natural thermal forces.

SPECIAL PURPOSE PITS means pits used in oil and gas operations, including pits related to produced water flowlines or associated with E&P waste from gas gathering, processing and storage facilities, which constitute:

BLOWDOWN PITS used to collect material resulting from, including but not limited to, the emptying or depressurizing of wells, vessels, or flowlines, or E&P waste from gathering systems.

FLARE PITS used exclusively for flaring gas.

EMERGENCY PITS used to contain liquids during an initial phase of emergency response operations related to a spill/release or process upset conditions.

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

BASIC SEDIMENT/TANK BOTTOM PITS used to temporarily store or treat the extraneous materials in crude oil which may settle to the bottoms of tanks or production vessels and which may contain residual oil.

WORKOVER PITS used to contain liquids during the performance of remedial operations on a producing well in an effort to increase production.

PLUGGING PITS used for containment of fluids encountered during the plugging process.

DRILLING, DEVELOPMENT, PRODUCTION AND ABANDONMENT (300 Series)

303. REQUIREMENTS FOR FORM 2, APPLICATION FOR PERMIT-TO-DRILL, DEEPEN, RE-ENTER, OR RECOMPLETE, AND OPERATE; FORM 2A, OIL AND GAS LOCATION ASSESSMENT.

* * *

303.b. FORM 2A, OIL AND GAS LOCATION ASSESSMENT.

* * *

(2) **Exemptions.** A new Form 2A shall not be required for the following:

- A. Surface disturbance, other than for purposes described in subsections 303.b.(1) B and C. above, at an existing Oil and Gas Location within the originally disturbed area, even if interim reclamation has been performed;
- B. For an Oil and Gas Location covered by an approved Comprehensive Drilling Plan and where such Comprehensive Drilling Plan contains information substantially equivalent to that which would be required for a Form 2A for the proposed Oil and Gas Location and the Comprehensive Drilling Plan has been subject to procedures substantially equivalent to those required for a Form 2A, including but not limited to consultation with Surface Owners, local governments, the Colorado Department of Public Health and Environment or Colorado Parks and Wildlife, where applicable, and public notice and opportunity to comment, and where the operator does not seek a variance from the Comprehensive Drilling Plan or a provision of these rules that is not addressed in the Plan;
- C. Seismic operations;
- D. Pipelines for oil, gas, or water; or
- E. Roads.

* * *

317B. PUBLIC WATER SYSTEM PROTECTION

a. **Definitions.** For purposes of this Rule 317B:

- (1) **Drilling, Completion, Production and Storage ("DCPS") Operations** means operations at (i) well sites for the drilling, completion, recompletion, workover, or stimulation of wells or chemical and production fluid storage, and (ii) any other oil and gas location at which production

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Staff's Final Proposed Rules
January 26, 2018

- facilities are operated. DCPS Operations excludes roads, gathering lines, and routine operations and maintenance.
- (2) **Existing Oil and Gas Location** means an oil and gas location, excluding roads, and gathering lines, permitted or constructed prior to the later of May 1, 2009 for federal land or April 1, 2009 for all other land or the date that the oil and gas location becomes subject to Rule 317B by virtue of its proximity to a Classified Water Supply Segment.
 - (3) **New Oil and Gas Location** means an oil and gas location, excluding roads and gathering lines, that is not an existing oil and gas location.
 - (4) **New Surface Disturbance** means surface disturbance that expands the area of surface covered by an oil and gas location beyond that initially disturbed in the construction of the oil and gas location.
 - (5) **Non-Exempt Linear Feature** means a road or gathering line that is not necessary to cross a stream or connect or access a well or a gathering line.

* * *

E&P WASTE MANAGEMENT (900 Series)

907. MANAGEMENT OF E&P WASTE

* * *

- f. **Other E&P Waste.** Other E&P waste such as workover fluids, tank bottoms, pigging wastes from pipelines, and gas gathering, processing, and storage wastes may be treated or disposed of as follows:
 - (1) Disposal at a commercial solid waste disposal facility;
 - (2) Treatment at a centralized E&P waste management facility permitted in accordance with Rule 908;
 - (3) Injection into a Class II injection well permitted in accordance with Rule 325; or
 - (4) An alternative method proposed in a waste management plan in accordance with rule 907.a.(3) and approved by the Director.