

BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF COLORADO

IN THE MATTER OF CHANGES TO THE) CAUSE NO. 1R
RULES OF PRACTICE AND PROCEDURE OF)
THE OIL & GAS CONSERVATION) DOCKET NO. 171200767
COMMISSION OF THE STATE OF COLORADO)
) TYPE: RULEMAKING

AMENDED NOTICE OF RULEMAKING HEARING

TO ALL INTERESTED PARTIES AND TO WHOM IT MAY CONCERN:

The Oil and Gas Conservation Commission of the State of Colorado ("Commission"), on its own motion, will consider additions and amendments to Commission Rules of Practice and Procedure, 2 C.C.R. 404-1 ("Rules"), 100-Series definitions; 216; 303; 306; 312; 313; 317B; 318A; 325; 328; 330; 602; 604; 605; 706; 711; 802; 906; 907; 1002; 1004; 1100-Series; 1203; 1204; and 1205, as part of its "Flowline Rulemaking." A clean version of the draft proposed rules is attached as Appendix A. A redline version of the draft proposed rules is attached as Appendix B. A clean version of the draft Statement of Basis, Specific Statutory Authority and Purpose is attached as Appendix C. A redline version of the draft Statement of Basis, Specific Statutory Authority and Purpose is attached as Appendix D. The Commission first noticed consideration of the draft proposed rules on October 15, 2017. As explained in the October 15, 2017 notice, the Commission is also exploring the North Dakota Industrial Commission rules adopted in Order Number 27865, amending reporting requirements, and any other necessary conforming changes. The draft proposed rules noticed here, incorporate additional changes as a result of a review of the North Dakota Industrial Commission rules, changes to the safety reporting requirements and such other conforming changes.

On August 22, 2017, Governor John Hickenlooper announced seven oil and gas policy initiatives, two of which required rulemaking by the Commission. This Flowline Rulemaking is in response to the Governor's announcement and the Commission's review of its Rules. The Commission has the authority to conduct this rulemaking pursuant to §§ 34-60-105(1), 34-60-106(2)(a), 34-60-106(2)(d), and 34-60-108, C.R.S.

NOTICE IS HEREBY GIVEN that the Commission has scheduled the above entitled matter for a rulemaking hearing commencing on:

Date: Monday, December 11, 2017
Tuesday, December 12, 2017
Wednesday, December 13, 2017

Time: 9:00 a.m.

Place: Colorado Oil and Gas Conservation Commission
1120 Lincoln Street
Suite 801
Denver, CO 80203

Public Participation. The Commission encourages the public to participate in the rulemaking by commenting on the proposed rules in advance of or during the rulemaking hearing. Any person may submit written comments in advance of the hearing pursuant to the procedures described below. In addition, any person may participate in the process and offer oral testimony during the public comment period at the hearing. The Commission may place a time limit on public comments during the hearing depending on the number of people who wish to comment. Speakers are asked to be concise, and avoid repeating comments made by others or reading previously submitted written comments. The Commission requests that any written comments be submitted on or before **Friday, December 1, 2017**. Individuals and groups with common interests are encouraged to consolidate their comments in a single written document signed by all supporters.

Persons or groups who know in advance they would like to address the Commission during the rulemaking hearing should notify the Commission via email to ***DNR_COGCC.Rulemaking@state.co.us*** by **Friday, December 1, 2017**. An estimate of the time needed for comments must be included with the notice. Persons who sign up in advance will be given priority both in the order and length of comments during the rulemaking hearing. Individuals and groups with common interests are encouraged to consolidate their comments through a single spokesperson.

Party Status. Persons or organizations wanting to participate in this rulemaking as a party, were required to file a written request for party status with the Commission on or before **Monday, October 30, 2017**. The Commission will compile a list of all parties with contact information and make it available on the Commission's website. Late requests for party status will not be accepted absent good cause for the delay.

Prehearing Statements and Party Filings. A party's prehearing statement must be filed with the Commission on or before the deadline established by the Hearing Officer. Prehearing statements are limited to 5 single spaced pages. Prehearing statements should summarize pertinent factual and legal issues and the submitting party's position on each issue. Parties are requested to include as an attachment to their prehearing statements a draft of their alternative rule language showing differences from the Staff's proposed rules in redline format. A party's response to prehearing statements, if any, is limited to 5 single spaced pages and must be filed with the Commission on or before the deadline established by the Hearing Officer. Parties are required to serve electronic copies of their prehearing statements and responses on all other parties. Parties must be able to participate in a prehearing conference that will be held on **Tuesday, November 7, 2017, from 9:00 a.m. to noon**, at the Commission's Denver Office.

Filing and service. On or before the deadlines identified above, all written comments, requests for party status prehearing statements, and responses must be filed with the Commission via U.S. Mail in hard copy and electronic copy as follows:


1. The original and 2 copies delivered to Julie Prine, Hearings and Regulatory Affairs Manager, Docket No. 1717000767, Oil and Gas Conservation Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado, 80203; and
2. An electronic copy emailed, preferably in portable document format (*pdf*), to ***DNR_COGCC.Rulemaking@state.co.us***.

The Commission may modify or amend the rules described or proposed herein, and make conforming modifications to other rules, as it determines reasonably necessary through the course of the stakeholder process, comment period, and rulemaking hearing.

In accordance with the Americans with Disabilities Act, if any person requires special accommodations as a result of a disability for this hearing, please contact Margaret Humecki at (303) 894-2100 ext. 5139, prior to the hearing and arrangements will be made.

Copies of the proposed Rules and other information about the Flowline Rulemaking are available on the Commission's internet homepage at ***http://cogcc.state.co.us*** by following the "Flowline Rulemaking" hyperlink or upon request at the Commission offices, 1120 Lincoln Street, Suite 801, Denver, CO 80203.

OIL AND GAS CONSERVATION COMMISSION OF
THE STATE OF COLORADO

By 
Julie Prine, Secretary

Dated: October 31, 2017

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FLOWLINE RULEMAKING INITIAL 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 and continued transportation by pipeline.

CRUDE OIL TRANSFER LINE means a pipe or piping system that is not regulated by the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration pursuant to 49 C.F.R. § 195.2, and which transfers crude oil or condensate generated by more than one oil and gas facility to an offsite production or storage facility.

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 the 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. The different types of flowlines are:

Wellhead Line means a flowline that transmits 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, that 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, or process vessel and operates at atmospheric pressure at the flowline's outlet;

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

Peripheral Piping means a flowline transferring fluids between oil and gas facilities for lease use, that may include, but is not limited to, fuel gas, lift gas, instrument gas, and power fluids.

Produced Water Flowline means a flowline used to transfer produced water for treatment, storage, discharge, injection or reuse for oil and gas operations.

Produced Water Transfer System means a pipe or piping system that transports produced water generated at more than one well.

A segment of pipe transferring only freshwater is not a flowline. A line that would otherwise satisfy the above definition 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;

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- 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.

This definition does not include gathering lines.

GATHERING LINE means a gathering pipeline as defined by 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.

GRADE 1 GAS LEAK means a 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.

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 expected to be applied to a flowline when in service.

OFF-LOCATION FLOWLINE means a flowline from a well to a production facility that is not on the same oil and gas location as the well.

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

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 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 ANSI/ASME A13.1.

FLOWLINE REGULATIONS (1100 Series)

1101. Registration Requirements

- a. **Registration of Off-Location Flowlines.** An operator of an off-location flowline must submit a Flowline Form, Form 44, to the Director after completing construction and must include the following information:
 - (1) GPS location points for the risers;
 - (2) pipe and bedding materials used in construction;
 - (3) flowline diameter;
 - (4) fluids that will be transferred;

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- (5) the maximum anticipated operating pressure and initial pressure test results;
 - (6) a schematic drawing of the flowline, associated oil and gas locations, and existing and proposed pipelines related to the oil and gas locations; and
 - (7) the COGCC Facility ID assigned to the associated oil and gas locations.
- b. **Domestic Tap Registration.**
- (1) Upon installation or discovery, operators must report to the Director the GPS location for the point of flowline connection and the address of the point of delivery of all domestic taps connected to an operator's flowline.
 - (2) For Domestic Taps installed after February 14, 2018, an operator must register the domestic tap pursuant to subpart (1) and ensure:
 - A. The domestic tap is locatable by a tracer line or location device placed adjacent to or in the trench of the domestic tap to facilitate locating it;
 - B. A licensed plumber properly installs:
 - i. properly-sized regulators on the domestic tap at the point it connects to the operator's flowline and at the point it delivers gas to the dwelling or structure where the gas is utilized; and
 - ii. all necessary piping to accommodate appropriate odorization, and gas utilization metering equipment;
 - C. All materials used for the domestic tap are designed for gas service and are installed using appropriate cover and bedding material in accordance with industry standards;
 - D. Markers 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. Markers must include the language required by Rule 1102.f.(2); and
 - E. Odorant is supplied at the time of installation until abandonment of the domestic tap.
- c. **Crude Oil Transfer Line Registration.** At least 30 days before beginning construction of a crude oil transfer line, an operator must submit a Form 12 to the Director that includes a schematic showing the gathering line's route, including its crossings of public by-ways, road crossings, sensitive wildlife habitats, sensitive areas and natural and manmade watercourses to the Director.

1102. FLOWLINE AND CRUDE OIL TRANSFER LINE INSTALLATION, OPERATIONS, MAINTENANCE, REPAIR AND RECLAMATION

- 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 conditions; and
 - (2) Compatible with the substances to be transported.

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b. Design and Installation.

(1) Each component of a flowline or crude oil transfer line must meet one of the following standards appropriate for the component:

- A. 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;
- B. 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;
- C. 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; or
- D. API Specification 15S, Spoolable Reinforced Plastic Line Pipe, Second Edition, March 2016 (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.

(2) Each component of a flowline or crude oil transfer line must be designed to:

- A. Prevent failure from internal or external corrosion and the effects of transported fluids;
- B. Withstand maximum anticipated operating pressures and other internal loadings without impairment;
- C.D. Withstand anticipated external pressures and loads that will be imposed on the pipe after installation;and
- D. Allow for line maintenance, periodic line cleaning, and integrity testing.

c. Installation.

(1) Installation crews must be trained in all flowline or crude oil transfer line installation practices

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for which they are tasked to perform.

- (2) 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.
 - (3) 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.
 - (4) 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.
 - (5) 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 owner to open cut the road.
 - (6) Unless the manufacturer's installation procedures and practices direct otherwise:
 - 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.
 - (7) 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.
 - (8) 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 springlift of the pipe 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.
 - (9) Flowlines and crude oil transfer lines must be installed as designed.
 - (10) 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.
- d. **Cover.**
- (1) All installed flowlines 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

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flowline from being installed with minimum cover, or when there is a written agreement between the surface owner and the operator, a flowline may be installed with less than minimum cover or above ground.

- (3) All installed crude oil transfer lines must have a minimum cover of three (3) feet.

e. Excavation, backfill 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 run 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.

f. Marking.

- (1) In Designated Setback Locations, and where crossing public rights-of-way or utility easement, an operator must install and maintain a marker that identifies the location of flowlines or crude oil transfer lines.
- (2) The marker must include the following language:

"Warning", "Caution" or "Danger" followed by the words "gas (or name of gas or fluid transported) 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 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.

- g. **Inspection.** All newly constructed crude oil transfer lines must be inspected by third-party independent inspectors to ensure the crude oil transfer line is installed as prescribed by the manufacturer's specifications and in accordance with the requirements of the 1100 series rules. An inspector must be trained, experienced and qualified in the phase of construction being inspected. A list of all third-party independent inspectors and a description of each independent inspector's qualifications, certifications, experience, and specific training must be provided to the Director upon request pursuant to Rule 205.

h. Maintenance.

- (1) Each operator must take reasonable precautions to prevent failures, leakage and 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, it must correct it within a reasonable time. However, if the condition presents an immediate hazard to persons or property, the operator may not operate the affected part of the system until the operator has corrected the condition.
- (3) Any flowline or crude oil transfer line not actively in use must have all valves locked or tagged out.

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i. Repair.

- (1) Each operator must, in repairing its flowlines or crude oil transfer line, 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 components meet the installation requirements of the 1100 series rules. A flowline or crude oil transfer line installed prior to February 14, 2018, that undergoes a major modification or change in service after February 14, 2018, must satisfy all requirements of the 1100 series rules before an operator can place the flowline or crude oil transfer line in to service.
- (3) An operator may not use any pipe, valve, or fitting, for replacement or repair of a flowline, unless it is designed to the maximum anticipated operating pressure.
- (4) An operator must pressure test any repaired flowline or crude oil transfer line before returning it to service.

j. Operating requirements.

- (1) No flowline or crude oil transfer line may be operated until it has demonstrated compliance with Rule 1103.
- (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. A flowline or crude oil transfer line must be equipped with adequate controls and protective equipment to prevent it from operating above the maximum operating pressure.

k. Corrosion control.

- (1) All coated pipe must be electronically inspected prior to placement 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 pipeline;
 - 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) 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.
- (3) Cathodic protection systems must meet or exceed the minimum criteria set forth in the National Association of Corrosion Engineers standard practice Control of External Corrosion on Underground or Submerged Metallic Piping Systems.
- (4) If internal corrosion is anticipated or detected, the flowline or crude oil transfer line operator

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must take prompt remedial action to correct any deficiencies, such as increased pigging, use of corrosion inhibitors, internal coating of the pipeline (e.g. an epoxy paint or other plastic liner), or a combination of these methods.

- l. Crude oil transfer line as built.** For a crude oil transfer line placed into service after February 14, 2018, the operator must, within 30-days from the date of being placed into service, file with the Director a Form 44, and register with the Utility Notification Center of Colorado (UNCC). Operators must include the following information:

 - (1) a schematic layout of the facility that shows the location of all associated above ground equipment and the pipeline centerline from the point of origin to the termination point;
 - (2) a geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) in an environmental systems research institute (Esri) shape file format that has a completed attribute table containing the required data; and
 - (3) an affidavit of completion that states the operator designed and installed the crude oil transfer line in compliance with the 1100 Series rules and submitted the ERSI shape file to the UNCC.
 - (4) the proposed pipe material (i.e., size, weight, grade, wall thickness, coating, and standard dimension ration);
 - (5) the type of fluid to be transported;
 - (6) the method for testing integrity;
 - (7) proposed burial depth of the crude oil transfer line; and
 - (8) the location and construction method proposed for all public by-ways, road crossings, sensitive wildlife habitats, sensitive areas and natural and manmade watercourses (i.e., bored and cased or bored only).
- m. Record Keeping.** An operator must keep records of flowline or crude oil transfer line size, route, materials, maximum anticipated operating pressure, pressure test results, and integrity management documentation for the life of the flowline. These records are available for inspection by the Director pursuant to Rule 205.
- n. One Call participation.** Every operator must become a Tier One member of the 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 filing an Operator Registration, Form 1, Change of Operator, Form 10, Gas Facility Registration, Form 12, or Flowline Form, Form 44.(2) Upon completing an asset purchase, transfer, construction or relocation of a flowline or crude oil transfer line, an operator must update within 30-days its 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.
- o. Notification.** The operator of a crude oil transfer line must submit a Form 42 notice of change to

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the Director identifying any crude oil transfer line or portion thereof that has been removed from service for more than one year.

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1103. INTEGRITY MANAGEMENT

- a. **Notification.** At least ten days before conducting an initial pressure test or an annual pressure test, an operator must submit a Form 42 to the Director to allow a representative of the Commission to witness the testing process and results.
- b. **Initial Pressure Test Requirements.** After installation or being taken out of service and before operating a segment of flowline or crude oil transfer line, an operator must test the flowline or crude oil transfer line to 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 conduct the test using wellhead pressure sources and well bore fluids, including gas.
- c. **Off-Location Flowlines.** All off-location flowlines must be subject to one of the following integrity management programs:
 - (1) Annual pressure test;
 - (2) Continuous pressure monitoring; or
 - (3) For aboveground flowlines, annual visual inspection.
- d. **Belowground Dump Lines.** An operator must verify integrity of belowground dump lines by performing an annual static-head test.
- e. **Aboveground Dump Lines and Small Diameter Peripheral Piping.** An operator must verify integrity of aboveground dump lines or peripheral piping by performing an annual visual inspection.
- f. **Integrity Management for All Other Flowlines.** Any flowlines not subject to c. through e. above, must be subject to one of the following integrity management programs:
 - (1) A pressure test every three years and annual visual inspection; or
 - (2) Continuous pressure monitoring.
- g. **Crude oil transfer lines.** All crude oil transfer lines are subject to one of the following integrity management programs:
 - (1) Annual pressure test;
 - (2) Continuous pressure monitoring; or
 - (3) Smart pigging conducted every three years.
- h. **Leak protection, detection, and monitoring.**
 - (1) All crude oil transfer line operators must file with the Director any leak protection and monitoring plan prepared by the operator or required by the Director, pursuant to the Rule 205.

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(2) All crude oil transfer line operators must develop and maintain a plan to share all inflow and outflow data. The data may include, but is not limited to, the flow and fluid properties of rate, volume, temperature, and pressure in order to perform a material balance computation. The plan must provide for data sharing between the production facility operator, the crude oil transfer line operator, and the operator at the point or points of disposal, storage, or sale. If a data discrepancy is observed, the party observing the data discrepancy is to notify all other parties and action must be taken to determine the cause. The crude oil transfer line operator is to retain a record of all data discrepancies. If requested, copies of such records must be filed with the Director pursuant to Rule 205.

i. Pressure Test Requirements. A pressure test must subject the flowline or crude oil transfer line to the maximum anticipated operating pressure and be conducted in accordance with one of the following:

- (1) 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 editions of the standard. API RP 1110 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 RP 1110 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.
- (2) The American Society for Testing and Materials Standard Practice for Field Leak Testing of Polyethylene (PE) and Crosslinked Polyethylene (PEX) Pressure Piping Systems Using Hydrostatic Pressure (ASTM F2164 – 13), and no later editions of the standard. ASTM F2164 – 13 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, ASTM F2164 – 13 may be examined at any state publications depository library and is available from ASTM at ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959, 1-877-909-2786

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

- (1) Pressure data are monitored continuously, i.e., 24 hours, 7 days a week, and the monitoring is sufficiently sophisticated to identify integrity or pressure anomalies;
- (2) Systems are capable of being shut-in for repairs immediately upon discovery of an anomaly, either through automation or through a documented, manual process;
- (3) The operator documents the continuous monitoring program, including integrity anomalies and the documentation demonstrates how an operator will maintain and repair anomalies in flowlines or crude oil transfer lines; and
- (4) A map of the flowline or crude oil transfer line system is available in ESRI shapefile format. The shapefile must show the flowline or crude oil transfer line alignments, location of isolation valves, and pressure-monitoring points.

k. Visual Inspection Requirements. An operator must perform a visual, 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 may use audio, visual, or olfactory or other detection technology, like optical gas imaging or LASERs, to detect integrity failures. An operator must document the employee conducting the inspection, detection methodology, and date and time of the inspection.

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1104. ABANDONMENT

- a. A flowline or crude oil transfer line remains subject to all of the requirements in Rules 1101 through 1103 until the operator completes all abandonment requirements set forth below.
- b. 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 and 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 cathodic protection and above-grade equipment associated with the riser.
 - (2) **Removal.** The operator must remove the flowline or crude oil transfer line and risers, and cathodic protection and above-grade equipment associated with the riser.
- c. Once an operator removes a flowline or crude oil transfer line from service and is in the process of abandoning it, the operator must lockout and tagout the risers associated with the flowline or crude oil transfer line using appropriate devices.
- d. Within 10 days of an operator completing abandonment requirements for a flowline or crude oil transfer line, the operator must file a Notice of Flowline Abandonment, Form 44, with the Director. If the operator abandons an Off-Location Flowline and has not submitted GPS location points for the flowline's risers, the Notice of Flowline Abandonment must include this information.
- e. The Director will provide the filed Notice of Flowline Abandonment, Form 44 to the appropriate Local Governmental Designee and UNCC.
- f. These abandonment requirements apply to compressor or gas plant feeder pipelines upon decommissioning or closure of a portion or all of a compressor station or gas plant.

DRILLING, DEVELOPMENT, PRODUCTION AND ABANDONMENT (300 Series)

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

- i. A completed Form 10 is required for any change of operator for all oil and gas facilities, except for produced water transfer systems, 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

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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. PRODUCED WATER TRANSFER SYSTEM, AND GAS FACILITY REGISTRATION/CHANGE OF OPERATOR

- a. An operator must submit a Form 12 to register a new produced water transfer system, gas gathering system, a new gas processing plant, or a new underground gas storage facility. The operator must attach a flowline layout drawing and a topographic map to the Form 12.
- b. When an operator makes significant changes to an existing produced water transfer system, gas gathering system, gas processing plant, or underground gas storage facility, the operator must submit a Form 12 to update the Commission's records regarding the facility. The operator must attach an updated flowline layout drawing and an updated topographic map to the Form 12.
- c. An operator must submit a Form 12 to change the operator of a produced water transfer system, gas gathering system, gas processing plant, or an underground gas storage facility. The operator must attach documentation confirming transfer of the asset(s) to the Form 12 for a change of operator.
- d. At least 30 days before beginning construction of a gas gathering line with segments subject to safety regulation by the Office of Pipeline Safety, U.S. Department of Transportation, an operator must submit a Form 12 to the Director. The operator must attach a schematic showing the gathering line's route and its crossings of public by-ways and natural and manmade watercourses to the Form 12.

328. MEASUREMENT OF OIL

- d. **Tank Gauging.** Measurement by tank gauging must be completed in accordance with industry standards as specified in:
 - i. 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;
 - ii. 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;
 - iii. 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;
 - iv. 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
 - v. 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.

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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 fire, explosion, accidental detonation, or uncontrolled release of pressure.
 - (2) Any accident that involves a fatal injury.
 - (3) Any accident involving a major or life-threatening injury.
 - (4) Any injury to the member of the general public that requires Medical Treatment.
 - (5) Any natural event or accident that results in an actual or threatened safety event.
- d. Initial notification from the operator of a reportable safety event described in c. (1) -(7) above, must occur as soon as practicable, but no more than 24 hours after the safety event. An Accident Report, Form 22, must be submitted to the Director within 3-days of the accident.
 - (1) At the Director's request, the operator must submit a supplemental report that details the root cause analysis, information about any repairs, or other information related to the accident.
 - (2) At the Director's request, the operator must present its root cause analysis about the accident to the Commission or to an 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 shall be taken where terrain, location or other conditions do not permit this minimum distance requirements.

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- 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.

605.d. **Mechanical Conditions.** All valves, pipes and fittings must be securely fastened, inspected at regular intervals, and maintained in good mechanical condition. An operator must fully open and close all valves at least annually and repair or replace valves that are not fully operational. Any valve, flange, fitting or other component connected to a flowline must have a manufacturer's rating that is equal to or greater than the flowline's maximum anticipated operating pressure.

(1) A valve must be installed at each of the following locations:

- A. 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;
- B. On each flowline entering or leaving a breakout tank in a manner that permits isolation of the breakout tank from other facilities;
- C. At locations along a flowline system that will minimize the likelihood of damage or pollution from accidental discharge of hydrocarbons or E&P Waste, as appropriate for the terrain in open country or for populated areas;
- D. On each flowline to allow integrity testing of the flowline without interrupting fluid flow of other connected pipelines;
- E. On each side of a flowline crossing a waterbody that is more than 100 feet (30 meters) wide from high-water mark to high-water mark; and
- F. On each side of a flowline crossing a reservoir holding water for human consumption.

(2) Check Valves Required.

- A. 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, separator, or manifold with a check valve or other means of shut-off. The check valve or other means of shut-off must be in the flowline serving the well. The check valve must be located between the wellhead and the point where the flowline connects with any other flowline, common separator, or common manifold.
 - i. For wells produced through a common flowline or separator, the operator must place the check valve or other means of shut-off in each flowline leading from a well as close to the wellhead connection as is practicable.
 - ii. For wells produced through a common manifold, the operator may place the check valve or other means of shut-off in each flowline from a well near a point where the flowline enters the manifold or as close to the wellhead connection as practicable.

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- B. The check valve or other means of shut-off must be installed to permit fluids moving from the well to the common flowline, separator, or manifold and to prevent any fluid from entering the well through the flowline.
- C. The operator must keep the check valve or other means of shut-off in good working order.
- D. Upon the Director's request, operators must test the operation of the check valve or other means of shut-off.

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

E&P WASTE MANAGEMENT (900 Series)

906. SPILLS AND RELEASES

b. Reporting spills or releases of E&P Waste or produced fluids.

- (1) Report to the Director. Operators shall report a spill or release of E&P Waste or produced fluids that meet any of the following criteria to the Director verbally or in writing as soon as practicable, but no more than twenty-four (24) hours after discovery (the "Initial Report").
 - A. A spill/release of any size that impacts or threatens to impact any waters of the state, a residence or occupied structure, livestock, or public byway;
 - B. A spill/release in which one (1) barrel or more of E&P Waste or produced fluids is spilled or released outside of berms or other secondary containment;
 - C. A spill/release of five (5) barrels or more regardless of whether the spill/release is completely contained within berms or other secondary containment; or
 - D. Any Grade 1 Gas Leak. Operators reporting a Grade 1 Gas Leak must use a Form 44 to submit the Initial Report or subsequent information required by this section.

The Initial Report to the Director shall include, at a minimum, the location of the spill/release and any information available to the Operator about the type and volume of waste involved.

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If the Initial Report was not made by submitting a COGCC Spill/Release Report, Form 19 the Operator must submit a Form 19 with the Initial Report information as soon as practicable but not later than 72 hours after discovery of the spill/release unless extended by the Director.

In addition to the Initial Report to the Director, the Operator shall make a supplemental report on Form 19 not more than 10 calendar days after the spill/release is discovered that includes an 8 1/2 x 11 inch topographic map showing the governmental section and location of the spill or an aerial photograph showing the location of the spill; all pertinent information about the spill/release known to the Operator that has not been reported previously; and information relating to the initial mitigation, site investigation, and remediation measures conducted by the Operator.

The Director may require further supplemental reports or additional information.

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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.

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.

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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 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.

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- (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.

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FLOWLINE RULEMAKING INITIAL 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 and continued transportation by pipeline.

CRUDE OIL TRANSFER LINE means a pipe or piping system that is not regulated by the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration pursuant to 49 C.F.R. § 195.2, and which transfers crude oil or condensate generated by more than one oil and gas facility to an offsite production or storage facility.

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

FLOWLINES means a segment of pipe transferring oil, gas, or condensate between a wellhead and the 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, shall mean these segments of pipe from the wellhead downstream through the production facilities ending at: in the case of gas lines, the gas metering equipment; or in the case of oil lines the oil loading point or LACT unit; or in the case of water lines, the water loading point, the point of discharge to a pit, the injection wellhead, or the permitted surface water discharge point. The different types of flowlines are:

Wellhead Line means a flowline that transmits 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, that 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, or process vessel and operates at atmospheric pressure at the flowline's outlet;

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

Peripheral Piping means a flowline transferring fluids between oil and gas facilities for lease use, that may include, but is not limited to, fuel gas, lift gas, instrument gas, and power fluids.

Produced Water Flowline means a flowline used to transfer produced water for treatment, storage, discharge, injection or reuse for oil and gas operations.

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Produced Water Transfer System means a pipe or piping system that transports produced water generated at more than one well.

A segment of pipe transferring only freshwater is not a flowline. A line that would otherwise satisfy the above definition 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.

This definition does not include gathering lines.

GATHERING LINE means a gathering pipeline as defined by 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 ~~shall mean a pipeline and equipment described below that transports gas from a production facility (ordinarily commencing downstream of the final production separator at the inlet flange of the custody transfer meter) to a natural gas processing plant or transmission line or main. The term "gathering line" includes valves, metering equipment, communication equipment, cathodic protection facilities, and pig launchers and receivers, but does not include dehydrators, treaters, tanks, separators, or compressors located downstream of the final production facilities and upstream of the natural gas processing plants, transmission lines, or main lines.~~

GRADE 1 GAS LEAK means a 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.

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 expected to be applied to a flowline when in service.

OFF-LOCATION FLOWLINE means a flowline from a well to a production facility that is not on the same oil and gas location as the well.

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

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 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 ANSI/ASME A13.1.

PIPELINE-FLOWLINE REGULATIONS (1100 Series)

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1101. Registration Requirements

a. Registration of Off-Location Flowlines. An operator of an off-location flowline must submit a Flowline Form, Form 44, to the Director after completing construction and must include the following information:

- (1) GPS location points for the risers;
- (2) pipe and bedding materials used in construction;
- (3) flowline diameter;
- (4) fluids that will be transferred;
- (5) the maximum anticipated operating pressure and initial pressure test results;
- (6) a schematic drawing of the flowline, associated oil and gas locations, and existing and proposed pipelines related to the oil and gas locations; and
- (7) the COGCC Facility ID assigned to the associated oil and gas locations.

b. Domestic Tap Registration.

- (1) Upon installation or discovery, operators must report to the Director the GPS location for the point of flowline connection and the address of the point of delivery of all domestic taps connected to an operator's flowline.
- (2) For Domestic Taps installed after February 14, 2018, an operator must register the domestic tap pursuant to subpart (1) and ensure:
 - A. The domestic tap is locatable by a tracer line or location device placed adjacent to or in the trench of the domestic tap to facilitate locating it;
 - B. A licensed plumber properly installs:
 - i. properly-sized regulators on the domestic tap at the point it connects to the operator's flowline and at the point it delivers gas to the dwelling or structure where the gas is utilized; and
 - ii. all necessary piping to accommodate appropriate odorization, and gas utilization metering equipment;
 - C. All materials used for the domestic tap are designed for gas service and are installed using appropriate cover and bedding material in accordance with industry standards;
 - D. Markers 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. Markers must include the language required by Rule 1102.f.(2); and
 - E. Odorant is supplied at the time of installation until abandonment of the domestic tap.

c. Crude Oil Transfer Line Registration. At least 30 days before beginning construction of a crude oil transfer line, an operator must submit a Form 12 to the Director that includes a schematic

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showing the gathering line's route, including its crossings of public by-ways, road crossings, sensitive wildlife habitats, sensitive areas and natural and manmade watercourses to the Director.

1102. FLOWLINE AND CRUDE OIL TRANSFER LINE INSTALLATION, OPERATIONS, MAINTENANCE, AND REPAIR AND RECLAMATION

a. Material. ~~Materials for pipe and pipe~~ other components of pipelines shall ~~must~~ be:

~~(1)A.~~ Able to maintain the structural integrity of the pipeline-flowline or crude oil transfer line under anticipated operating temperature, pressure, and other conditions that may be anticipated; and

~~(2)B.~~ Compatible with the substances to be transported.

~~C.~~ Locatable by a tracer line or location device placed adjacent to or in the trench of all buried nonmetallic pipelines to facilitate the location of such pipelines.

b. Design and Installation.

(1) Each component of a flowline or crude oil transfer line must meet one of the following standards appropriate for the component:

A. 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;

B. 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;

C. 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;
or

D. API Specification 15S, Spoolable Reinforced Plastic Line Pipe, Second Edition, March 2016 (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.

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- (2) Each component of a pipeline-flowline or crude oil transfer line must shall be designed and installed to:
- A. prevent Prevent failure from internal or external corrosion and the effects of transported fluids;
 - B. and to wWithstand maximum anticipated operating pressures and other internal loadings without impairment of its serviceability;
 - C. The pipe shall D. h Have sufficient wall thickness or be installed with adequate protection to withstand anticipated external pressures and loads that will be imposed on the pipe after installation; and.
 - D. Allow for line maintenance, periodic line cleaning, and integrity testing.

c. Installation.

- (1) Installation crews must be trained in all flowline or crude oil transfer line installation practices for which they are tasked to perform.
- (2) 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.
- (3) 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.
- (4) 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.
- (5) 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 owner to open cut the road.
- (6) Unless the manufacturer's installation procedures and practices direct otherwise:
- 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.
- (7) 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.
- (8) A flowline or crude oil transfer line trench must be backfilled in a manner that provides firm

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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 springlift of the pipe 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.

(9) Flowlines and crude oil transfer lines must be installed as designed.

(10) 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.

e.d. Cover.

(1) All installed pipelines-flowlines must shall have cover sufficient to protect them from damage. On crop-land cropland, all pipelines-flowlines shall-must have a minimum cover of three (3) feet.

(2) Where an underground structure, geologic, economic-or other uncontrollable condition prevents pipelines-a flowline from being installed with minimum cover, or when there is a written agreement between the surface owner and the operator, the a flowline line-may be installed with less than minimum cover or above ground.

(3) All installed crude oil transfer lines must have a minimum cover of three (3) feet.

f.e. Excavation, backfill and reclamation.

(1) When pipelines-flowlines or crude oil transfer lines cross-crop-lands croplands, unless waived by the surface owner, the operator shall must segregate topsoil while trenching, and trenches shall-be backfilled trenches so that the soils can shall-must be returned to their original relative positions and contour. This requirement to segregate and backfill topsoil shall does not apply to trenches which are twelve (12) inches or less in width. Operator must make Reasonable efforts shall-be made-to run pipelines-flowlines or crude oil transfer lines parallel to crop irrigation rows on flood irrigated land.

(2) On crop-lands and non-crop-lands, pipeline-All trenches must shall be maintained in order to correct subsidence and reasonably minimize erosion.

(2)(3) Interim and final reclamation, including revegetation, must shall-be performed in accordance with the applicable 1000 Series rules.

f. Marking.

(1) In Designated Setback Locations, and where crossing public rights-of-way or utility easement, an operator must install and maintain a marker that identifies the location of pipelinesflowlines or crude oil transfer lines.

(2) The marker must include the following language:

"Warning", "Caution" or "Danger" followed by the words "gas (or name of natural gas or petroleum fluid transported) pipelineflowline (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

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letters must be legible, written on a background of sharply contrasting color and on each side with at least one (1) inch high with one-quarter (¼) inch stroke.

g. Inspection. All newly constructed crude oil transfer lines must be inspected by third-party independent inspectors to ensure the crude oil transfer line is installed as prescribed by the manufacturer's specifications and in accordance with the requirements of the 1100 series rules. An inspector must be trained, experienced and qualified in the phase of construction being inspected. A list of all third-party independent inspectors and a description of each independent inspector's qualifications, certifications, experience, and specific training must be provided to the Director upon request pursuant to Rule 205.

h. Maintenance.

(1) Each operator must take reasonable precautions to prevent failures, leakage and corrosion of pipelines/flowlines and crude oil transfer lines.

(2) Whenever an operator discovers any condition that could adversely affect the safe and proper operation of its pipeline/flowline or crude oil transfer line, it must correct it within a reasonable time. However, if the condition presents an immediate hazard to persons or property, the operator may not operate the affected part of the system until the operator has corrected the condition.

(3) Any flowline or crude oil transfer line not actively in use must have all valves locked or tagged out.

i. Repair.

(1) Each operator must, in repairing its pipeline/flowlines or crude oil transfer line, 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 components meet the installation requirements of the 1100 series rules. A flowline or crude oil transfer line installed prior to February 14, 2018, that undergoes a major modification or change in service after February 14, 2018, must satisfy all requirements of the 1100 series rules before an operator can place the flowline or crude oil transfer line in to service.

(3) An operator may not use any pipe, valve, or fitting, for replacement or repair of a flowline, unless it is designed to the maximum anticipated operating pressure.

(4) An operator must pressure test any repaired flowline or crude oil transfer line before returning it to service.

j. Operating requirements.

(1) No flowline or crude oil transfer line may be operated until it has demonstrated compliance with Rule 1103.

(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. A flowline or crude oil transfer line must be equipped with adequate controls and protective equipment to prevent it from operating above the maximum

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operating pressure.

k. Corrosion control.

(1) All coated pipe must be electronically inspected prior to placement 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 pipeline;
- 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) 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.

(3) Cathodic protection systems must meet or exceed the minimum criteria set forth in the National Association of Corrosion Engineers standard practice Control of External Corrosion on Underground or Submerged Metallic Piping Systems.

(4) If internal corrosion is anticipated or detected, the flowline or crude oil transfer line operator must take prompt remedial action to correct any deficiencies, such as increased pigging, use of corrosion inhibitors, internal coating of the pipeline (e.g. an epoxy paint or other plastic liner), or a combination of these methods.

l. Crude oil transfer line as built. For a crude oil transfer line placed into service after February 14, 2018, the operator must, within 30-days from the date of being placed into service, file with the Director a Form 44, and register with the Utility Notification Center of Colorado (UNCC). Operators must include the following information:

(1) a schematic layout of the facility that shows the location of all associated above ground equipment and the pipeline centerline from the point of origin to the termination point;

(2) a geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) in an environmental systems research institute (Esri) shape file format that has a completed attribute table containing the required data; and

(3) an affidavit of completion that states the operator designed and installed the crude oil transfer line in compliance with the 1100 Series rules and submitted the ERSI shape file to the UNCC.

(4) the proposed pipe material (i.e., size, weight, grade, wall thickness, coating, and standard dimension ration);

(5) the type of fluid to be transported;

(6) the method for testing integrity;

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- (7) proposed burial depth of the crude oil transfer line; and
- (8) the location and construction method proposed for all public by-ways, road crossings, sensitive wildlife habitats, sensitive areas and natural and manmade watercourses (i.e., bored and cased or bored only).
- m. Record Keeping. An operator must keep records of flowline or crude oil transfer line size, route, materials, maximum anticipated operating pressure, pressure test results, and integrity management documentation for the life of the flowline. These records are available for inspection by the Director pursuant to Rule 205.
- ~~j.n. One Call participation. As to any pipelines over which the Commission has jurisdiction, each~~
Every operator shall become a Tier One member of the 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 filing an Operator Registration, Form 1, Change of Operator, Form 10, Gas Facility Registration, Form 12, or Flowline Form, Form 44.
- (2) Upon completing an asset purchase, transfer, construction or relocation of a flowline or crude oil transfer line, an operator must update within 30-days its 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.
- o. Notification. The operator of a crude oil transfer line must submit a Form 42 notice of change to the Director identifying any crude oil transfer line or portion thereof that has been removed from service for more than one year.
- g. Pressure testing of flowlines.

11021103. OPERATIONS, MAINTENANCE, AND REPAIR INTEGRITY MANAGEMENT

- a. Notification. At least ten days before conducting an initial pressure test or an annual pressure test, an operator must submit a Form 42 to the Director to allow a representative of the Commission to witness the testing process and results.
- b. Initial Pressure Test Requirements. After installation or being taken out of service and ~~b~~Before operating a segment of flowline or crude oil transfer line, an operator must test the flowline or crude oil transfer line it shall be tested to maximum anticipated operating pressure and demonstrate integrity. In conducting tests, each operator ~~must~~shall ensure that reasonable precautions are taken to protect its employees and the general public. The operator may conduct the test ~~testing may be conducted using well head wellhead~~ pressure sources and well bore fluids, including natural gas. ~~Such pressure tests shall be repeated once each calendar year to maximum anticipated operating pressure, and operators shall maintain records of such testing for Commission inspection for at least three (3) years.~~
- c. Off-Location Flowlines. All off-location flowlines must be subject to one of the following integrity management programs:
- (1) Annual pressure test;

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- (2) Continuous pressure monitoring; or
 - (3) For aboveground flowlines, annual visual inspection.
 - d. Belowground Dump Lines. An operator must verify integrity of belowground dump lines by performing an annual static-head test.
 - e. Aboveground Dump Lines and Small Diameter Peripheral Piping. An operator must verify integrity of aboveground dump lines or peripheral piping by performing an annual visual inspection.
 - f. Integrity Management for All Other Flowlines. Any flowlines not subject to c. through e. above, must be subject to one of the following integrity management programs:
 - (1) A pressure test every three years and annual visual inspection; or
 - (2) Continuous pressure monitoring.
 - g. Crude oil transfer lines. All crude oil transfer lines are subject to one of the following integrity management programs:
 - (1) Annual pressure test;
 - (2) Continuous pressure monitoring; or
 - (3) Smart pigging conducted every three years.
 - h. Leak protection, detection, and monitoring.
 - (1) All crude oil transfer line operators must file with the Director any leak protection and monitoring plan prepared by the operator or required by the Director, pursuant to the Rule 205.
 - (2) All crude oil transfer line operators must develop and maintain a plan to share all inflow and outflow data. The data may include, but is not limited to, the flow and fluid properties of rate, volume, temperature, and pressure in order to perform a material balance computation. The plan must provide for data sharing between the production facility operator, the crude oil transfer line operator, and the operator at the point or points of disposal, storage, or sale. If a data discrepancy is observed, the party observing the data discrepancy is to notify all other parties and action must be taken to determine the cause. The crude oil transfer line operator is to retain a record of all data discrepancies. If requested, copies of such records must be filed with the Director pursuant to Rule 205.
 - i. Pressure Test Requirements. A pressure test must subject the flowline or crude oil transfer line to the maximum anticipated operating pressure and be conducted in accordance with one of the following:
 - (1) -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 editions of the standard. API RP 1110 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 RP 1110 may be examined at any state publications depository library and is available from API at 1220 L Street, NW Washington, DC 20005-

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4070, 1-202-682-8000.

(1)–

(2) The American Society for Testing and Materials Standard Practice for Field Leak Testing of Polyethylene (PE) and Crosslinked Polyethylene (PEX) Pressure Piping Systems Using Hydrostatic Pressure (ASTM F2164 – 13), and no later editions of the standard. ASTM F2164 – 13 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, ASTM F2164 – 13 may be examined at any state publications depository library and is available from ASTM at ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959, 1-877-909-2786

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

- (1) Pressure data are monitored continuously, i.e., 24 hours, 7 days a week, and the monitoring is sufficiently sophisticated to identify integrity or pressure anomalies;
- (2) Systems are capable of being shut-in for repairs immediately upon discovery of an anomaly, either through automation or through a documented, manual process;
- (3) The operator documents the continuous monitoring program, including integrity anomalies and the documentation demonstrates how an operator will maintain and repair anomalies in flowlines or crude oil transfer lines; and
- (4) A map of the flowline or crude oil transfer line system is available in ESRI shapefile format. The shapefile must show the flowline or crude oil transfer line alignments, location of isolation valves, and pressure-monitoring points.

k. Visual Inspection Requirements. An operator must perform a visual, 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 may use audio, visual, or olfactory or other detection technology, like optical gas imaging or LASERs, to detect integrity failures. An operator must document the employee conducting the inspection, detection methodology, and date and time of the inspection.

- ~~a. Flowline segments operating at less than fifteen (15) psig are excepted from pressure testing requirements.~~

11034. ABANDONMENT

~~Each pipeline abandoned in place shall be disconnected from all sources and supplies of natural gas and petroleum, purged of liquid hydrocarbons, depleted to atmospheric pressure, and cut off three (3) feet below ground surface, or the depth of the pipeline, whichever is less and sealed at the ends. This requirement shall also apply to compressor or gas plant feeder pipelines upon decommissioning or closure of a portion or all of a compressor station or gas plant. Notice of such abandonment shall be filed with the Commission and with the local governmental designee or local government jurisdiction.~~

- a. A flowline or crude oil transfer line remains subject to all of the requirements in Rules 1101 through 1103 until the operator completes all abandonment requirements set forth below.
- b. 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 and comply with one of the following:
 - (1) -Abandonment in place. The operator must:

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- 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 cathodic protection and above-grade equipment associated with the riser.
- (2) Removal. The operator must remove the flowline or crude oil transfer line and risers, and cathodic protection and above-grade equipment associated with the riser.
- c. Once an operator removes a flowline or crude oil transfer line from service and is in the process of abandoning it, the operator must lockout and tagout the risers associated with the flowline or crude oil transfer line using appropriate devices.
 - d. Within 10 days of an operator completing abandonment requirements for a flowline or crude oil transfer line, the operator must file a Notice of Flowline Abandonment, Form 44, with the Director. If the operator abandons an Off-Location Flowline and has not submitted GPS location points for the flowline's risers, the Notice of Flowline Abandonment must include this information.
 - e. The Director will provide the filed Notice of Flowline Abandonment, Form 44 to the appropriate Local Governmental Designee and UNCC.
 - f. These abandonment requirements apply to compressor or gas plant feeder pipelines upon decommissioning or closure of a portion or all of a compressor station or gas plant.

DRILLING, DEVELOPMENT, PRODUCTION AND ABANDONMENT (300 Series)

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

- i. A completed Form 10 is shall be required for any change of operator for all oil and gas facilities, excluding-except for produced water transfer systems, gas gathering systems, gas-processing plants, and underground gas storage facilities-as those shall be changed with a Form 12, Gas Facility Registration/Change of Operator, which are governed by Rule 313B.

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

All operators of gasoline or other extraction plants shall must make monthly reports to the Director on a Form 11. Such forms shall must contain all information required thereon and shall 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. PRODUCED WATER TRANSFER SYSTEM, AND GAS FACILITY REGISTRATION/CHANGE OF OPERATOR

- a. An operator must submit a Form 12 to register a new produced water transfer system, gas gathering system, a new gas processing plant, or a new underground gas storage facility. The operator must attach a flowline layout drawing and a topographic map to the Form 12.

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- b. When an operator makes significant changes to an existing produced water transfer system, gas gathering system, gas processing plant, or underground gas storage facility, the operator must submit a Form 12 to update the Commission's records regarding the facility. The operator must attach an updated flowline layout drawing and an updated topographic map to the Form 12.
- c. An operator must submit a Form 12 to change the operator of a produced water transfer system, gas gathering system, gas processing plant, or an underground gas storage facility. The operator must attach documentation confirming transfer of the asset(s) to the Form 12 for a change of operator.
- d. At least 30 days before beginning construction of a gas gathering line with segments subject to safety regulation by the Office of Pipeline Safety, U.S. Department of Transportation, an operator must submit a Form 12 to the Director. The operator must attach a schematic showing the gathering line's route and its crossings of public by-ways and natural and manmade watercourses to the Form 12.

328. MEASUREMENT OF OIL

- d. **Tank Gauging.** Measurement by tank gauging shall ~~shall~~ must be completed in accordance with industry standards as specified in:
 - i. 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;
 - ii. 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;
 - iii. 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;
 - iv. 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
 - v. 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.

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)

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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 ~~Employees shall be familiarized with these Rules as provided herein as they relate to their job functions.~~ Each new employee should have his or her job outlined, explained and demonstrated.
- b. ~~Employees shall~~ must immediately report unsafe and potentially dangerous conditions to their supervisor and any such ~~these~~ 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 fire, explosion, accidental detonation, or uncontrolled release of pressure.
 - (2) Any accident that involves a fatal injury.
 - (3) Any accident involving a major or life-threatening injury.
 - (4) Any injury to the member of the general public that requires Medical Treatment.
 - (5) Any natural event or accident that results in an actual or threatened safety event.
- d. Initial notification from the operator of a reportable safety event described in c. (1) -(7) above, must occur as soon as practicable, but no more than 24 hours after the safety event. An Accident Report, Form 22, must be submitted to the Director within 3-days of the accident.
 - (1) At the Director's request, the operator must submit a supplemental report that details the root cause analysis, information about any repairs, or other information related to the accident.
 - (2) At the Director's request, the operator must present its root cause analysis about the accident to the Commission or to an 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 ~~shall~~ 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 shall be taken where terrain, location or other conditions do not permit this minimum distance requirements.
- g. ~~Existing wells are exempt from the provisions of these regulations as they relate to the location of the well.~~
- h.g. ~~Existing producing facilities shall be~~ 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.

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- 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.

605.d. **Mechanical Conditions.** All valves, pipes and fittings shall ~~shall~~ must be securely fastened, inspected at regular intervals, and maintained in good mechanical condition. An operator must fully open and close all valves at least annually and repair or replace valves that are not fully operational. Any valve, flange, fitting or other component connected to a flowline must have a manufacturer's rating that is equal to or greater than the flowline's maximum anticipated operating pressure.

(1) A valve must be installed at each of the following locations:

- A. 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;
- B. On each flowline entering or leaving a breakout tank in a manner that permits isolation of the breakout tank from other facilities;
- C. At locations along a flowline system that will minimize the likelihood of damage or pollution from accidental discharge of hydrocarbons or E&P Waste, as appropriate for the terrain in open country or for populated areas;
- D. On each flowline to allow integrity testing of the flowline without interrupting fluid flow of other connected pipelines;
- E. On each side of a flowline crossing a waterbody that is more than 100 feet (30 meters) wide from high-water mark to high-water mark; and
- F. On each side of a flowline crossing a reservoir holding water for human consumption.

(2) Check Valves Required.

- A. 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, separator, or manifold with a check valve or other means of shut-off. The check valve or other means of shut-off must be in the flowline serving the well. The check valve must be located between the wellhead and the point where the flowline connects with any other flowline, common separator, or common manifold.
 - i. For wells produced through a common flowline or separator, the operator must place the check valve or other means of shut-off in each flowline leading from a well as close to the wellhead connection as is practicable.
 - ii. For wells produced through a common manifold, the operator may place the check valve or other means of shut-off in each flowline from a well near a point where the flowline enters the manifold or as close to the wellhead connection as practicable.
- B. The check valve or other means of shut-off must be installed to permit fluids moving from the well to the common flowline, separator, or manifold and to prevent any fluid from entering the well through the flowline.
- C. The operator must keep the check valve or other means of shut-off in good working order.

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D. Upon the Director's request, operators must test the operation of the check valve or other means of shut-off.

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

711. ~~Natural-g Produced water transfer systems, gas gathering, natural-gas processing and underground natural-gas storage facilities.~~

Operators of ~~produced water transfer systems, natural-gas gathering, natural-gas processing, or underground natural-gas storage facilities~~ shall ~~must be required to~~ 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 the Director, or in an amount ~~to be determined by order of the Commission~~. Operators of small systems gathering or processing less than five (5) MMSCFD may provide individual financial assurance in the amount of five thousand dollars (\$5,000).

E&P WASTE MANAGEMENT
(900 Series)

906. SPILLS AND RELEASES

b. Reporting spills or releases of E&P Waste or produced fluids.

(1) Report to the Director. Operators shall report a spill or release of E&P Waste or produced fluids that meet any of the following criteria to the Director verbally or in writing as soon as practicable, but no more than twenty-four (24) hours after discovery (the "Initial Report").

- A. A spill/release of any size that impacts or threatens to impact any waters of the state, a residence or occupied structure, livestock, or public byway;
- B. A spill/release in which one (1) barrel or more of E&P Waste or produced fluids is spilled or released outside of berms or other secondary containment;
- C. A spill/release of five (5) barrels or more regardless of whether the spill/release is completely contained within berms or other secondary containment; ~~or~~

D. Any Grade 1 Gas Leak. Operators reporting a Grade 1 Gas Leak must use a Form 44 to submit the Initial Report or subsequent information required by this section.

The Initial Report to the Director shall include, at a minimum, the location of the spill/release and any information available to the Operator about the type and volume of waste involved.

If the Initial Report was not made by submitting a COGCC Spill/Release Report, Form 19 the Operator must submit a Form 19 with the Initial Report information as soon as practicable but not later than 72 hours after discovery of the spill/release unless extended by the Director.

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In addition to the Initial Report to the Director, the Operator shall make a supplemental report on Form 19 not more than 10 calendar days after the spill/release is discovered that includes an 8 1/2 x 11 inch topographic map showing the governmental section and location of the spill or an aerial photograph showing the location of the spill; all pertinent information about the spill/release known to the Operator that has not been reported previously; and information relating to the initial mitigation, site investigation, and remediation measures conducted by the Operator.

The Director may require further supplemental reports or additional information.

APPENDIX B

Flowline Rulemaking
Docket No. 171200767

Amended Initial Draft of Proposed Rules
October 15, 2017

CONFORMING CHANGES

DEFINITIONS (100 Series)

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

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

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

PRODUCTION FACILITY shall mean any storage, separation, treating, dehydration, artificial lift, power supply, compression, pumping, metering, monitoring, flowline, and other equipment directly associated with a well in oil wells, gas wells, or injection wells.

PRODUCTION PITS shall mean these 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 at natural 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 shall mean these pits used in oil and gas operations, including pits related to produced water flowlines or associated with E&P waste at from natural 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 gas-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.

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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.~~ Gathering lines;

~~D.~~ Seismic operations;

~~E.~~ Pipelines for oil, gas, or water; or

~~F.~~ Roads.

317B. PUBLIC WATER SYSTEM PROTECTION

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

- (1) **Drilling, Completion, Production and Storage ("DCPS") Operations** shall mean 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

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facilities are operated. DCPS Operations ~~shall-excludes~~ roads, gathering lines, ~~pipelines~~, and routine operations and maintenance.

- (2) **Existing Oil and Gas Location** ~~shall-means~~ an oil and gas location, excluding roads, ~~pipelines~~, 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** ~~shall-means~~ an oil and gas location, excluding roads, ~~pipelines~~, and gathering lines, that is not an existing oil and gas location.
- (4) **New Surface Disturbance** ~~shall-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** ~~shall-means~~ a road, ~~or~~ gathering line, ~~or~~ ~~pipeline~~ 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 gathering and flow lines~~, and natural 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.

APPENDIX C

Statement of Basis, Specific Statutory Authority, and Purpose New Rules and Amendments to Current Rules of the Colorado Oil and Gas Conservation Commission, 2 CCR 404-1

Cause No. IR Docket No. 171200767 Flowline Rulemaking

This statement sets forth the basis, specific statutory authority, and purpose for new rules and amendments (“Flowline Rules”) to the Colorado Oil and Gas Conservation Commission (“Commission”) Rules of Practice and Procedure, 2 CCR 404-1 (“Rules”). The Commission promulgated the Flowline Rules on December 11 & 12, 2017.

In adopting amendments to the Rules, the Commission relied upon the entire administrative record for this Rulemaking proceeding, which formally began on October 15, 2017, when the Commission submitted its Notice of Rulemaking to the Colorado Secretary of State.

Background

On August 22, 2017, Governor John Hickenlooper announced the state’s seven policy initiatives following the state’s review of oil and gas operations that included stakeholder meetings. The Commission’s swift review was in response to the tragic home explosion in Firestone, Colorado on April 17, 2017, that killed two people and injured a third. The Governor called for the review on May 2, 2017, after the Frederick Firestone Fire Protection District completed its investigation into the home explosion. The investigation identified an abandoned oil and gas flowline connected to an active well as the cause of the explosion. The Rulemaking implements changes to the Commission’s flowline and safety rules in accordance with the state’s review and Governor’s announcement.

Stakeholder and Public Participation.

On September 8, 2017, the Commission issued a Rulemaking scoping document that identified proposed changes to existing flowline rules. The scoping document solicited stakeholders to submit comments regarding the scope of the proposed flowline Rulemaking on or before September 29, 2017. Comments to the scoping document were received in writing, and in person at two stakeholder meetings that were held on September 21 and 25, 2017. More than 50 persons or parties attended the stakeholder meetings and the Commission received written comments during the stakeholder process. Among those in attendance at the stakeholder meetings were citizens, representatives of local governments, and industry groups.

The Commission encouraged public participation in the Rulemaking by allowing the public to comment on the proposed rules in advance of or during the hearing. Persons or organizations desiring to do so could also participate in the Rulemaking as a party. Parties could submit prehearing statements and comments, including alternative

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rules or amendments, and respond to the prehearing statements and comments submitted by other parties.

Statutory Authority.

The Commission's authority to promulgate amendments to the Rules is derived from the following sections of the Colorado Oil and Gas Conservation Act ("Act"), §§ 34-60-101 - 130, C.R.S.:

- Section 34-60-105(1), C.R.S. (Commission has the power to make and enforce rules);
- Section 34-60-106(2)(a), C.R.S. (Commission has the authority to regulate the drilling, producing, and plugging of wells and all other operations for the production of oil or gas);
- Section 34-60-106(2)(d), C.R.S. (Commission has authority to regulate "Oil and gas operations so as to prevent and mitigate significant adverse environmental impacts on any air, water, soil, or biological resource resulting from oil and gas operations to the extent necessary to protect public health, safety, and welfare, including protection of the environment and wildlife resources, taking into consideration cost-effectiveness and technical feasibility."); and
- Section 34-60-108, C.R.S. (Commission has authority and procedure to adopt rules).

Identification of New and Amended Rules.

In response to the Governor's directive to review its flowline regulations, consistent with its statutory authority and its legislative mandates, and in accord with the administrative record, the Commission added or amended the following Rules:

- 100-Series Rules: definitions of Breakout Tank, Domestic Tap, Flowline, Wellhead Line, Oil Transfer Line, Production Piping, Production Line, Dump Line, Manifold Piping, Process Piping, Peripheral Piping, Produced Water Flowline, Gathering Line, Grade 1 Gas Leak, Lockout, Maximum Anticipated Operating Pressure, Off-Location Flowline, Pipeline, Riser, Tagout and Tagout Device.
- 300-Series Rules: 312, 313A, 313B, and 328.d.;
- 600-Series Rules: 602 and 605.d.;
- 700-Series Rules: 711;
- 1100-Series Rules; and

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- The Commission also adopted conforming or clarifying changes to Rules affected by flowline or related changes. 100-Series (Blowdown Pits, Oil and Gas Facility, Oil and Gas Operations, Plugging and Abandonment, Production Facility, Production Pits, and Special Purpose Pits); 303.b.; 317B; 318A; 328; 325; 330; 604; 706; 802; 907; 1002; 1004; 1203; 1204; and 1205.

Overview of Purpose and Intent.

On September 11, 2017, the Commissioners directed Staff to implement the two announced policy initiatives that require Commission rulemaking. The seven policy initiatives Governor Hickenlooper announced were:

- Strengthening the Commission's Flowline regulations;
- Enhancing the 8-1-1 "one-call" program;
- Creating a nonprofit orphan well fund to plug and abandon orphan wells and provide refunds for in-home methane monitors;
- Prohibiting future domestic gas taps;
- Creating a technical workgroup to improve safety training;
- Requesting peer-review of certain Commission regulations; and
- Exploring an ambient methane leak detection pilot program.

Of these seven policy initiatives, the Commission can address two through rulemaking: strengthening the flowline regulations and improving the uniformity of operator participation in the 8-1-1 "one-call" program. In addition, the Commission can complement the Governor's domestic tap initiative by improving safety oversight of oil and gas operations through the requirement of domestic tap reporting.

First, the Governor's call to update the Commission's flowline regulations stems from the information received by the Commission in response to its May 2, 2017 Notice to Operators (NTO) as well as the Commission's own review of its flowline rules. The NTO required operators to, over the course of two months: identify, locate, and pressure test certain flowlines and submit that information to the Commission; and identify, mark, and lock out/tag out risers for abandoned flowlines and then, consistent with abandonment requirements, cut those risers to three-feet below grade. The Commission received new data on approximately 120,000 flowlines and associated risers, which data was the first step for the Commission to develop a relational database that uses flowline riser location to interrelate oil and gas locations.

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While operators were working through the NTO requirements and submitting data about flowlines during the summer of 2017, the Commission continued - with an elevated priority - its review of the flowline regulatory regime. Beginning in 2015, the Commission started reviewing its flowline program based upon recommendations contained within its 2014 Risk Based Inspections report prepared for the Colorado General Assembly. In 2015, the Commission established a Flowline Integrity Group within the Engineering Unit dedicated to enforcing the Commission's flowline regulations. The Commission has also reviewed its own and other state and federal rules regulating pipelines to ascertain areas where Colorado's flowline regulations could be improved. During this review, Staff identified regulatory changes that the Commission adopted in Order 1R-103. However, not all of the changes identified in Order 1R-103 were incorporated into the Rules; this Rulemaking corrects that oversight. Thus, the changes adopted by the Commission in the Flowline Rules reflect the research and findings made since 2015, as well as input from the stakeholders received before and during the Rulemaking.

Second, the Commission intends to improve the uniformity of operator participation in the Utility Notification Center of Colorado (UNCC), Colorado's "one-call" or "8-1-1" program. This reflects an improved collaboration between the Commission, the UNCC, and operators. In the wake of the Firestone tragedy, many people asked that the Commission create a database that maps all flowlines in Colorado. During the course of stakeholder meetings, the opportunity to partner with UNCC became the Commission's preferred option for housing increased, more specific information about flowlines. Requiring operators to become Tier One members and to supply UNCC with digital information about an operator's belowground operations (i.e., vertical portions of wells and flowlines) provides an elegant, efficient, and effective option for a state-wide organization to host information about belowground oil and gas operations. UNCC has an existing database that citizens and businesses rely on every day when preparing to dig. The team at UNCC is uniquely prepared with the expertise, staff, and existing database to incorporate information from operators that may change week-to-week and provide the updated information to the people who most need it - property owners preparing to dig. Relying on UNCC to host this information also provides a centralized information source for all Colorado citizens, local governments, and businesses of all underground facilities-not just oil and gas exploration and production facilities. To enhance this collaboration, the Commission imposed increased requirements for operators' participation in the UNCC program.

In addition, the Commission also amended specific regulatory requirements in an effort to prevent fluid releases from pipelines and empower the Commission to respond in the event of an exploration and production fluid release. First, the Commission clarified and enhanced provisions related to its oversight of lines transporting produced water, and gas gathering lines to ensure the Commission can adequately respond to a release of exploration and production waste. Second, the Commission included an additional method to gauge tanks that provides accurate and reliable data, and does not require opening hatches, thus preventing the release of

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gases. Third, the Commission imposed specific requirements for check valves. Check valves operate to allow fluid flow in only one direction and serve an important purpose where reversing flow could cause damage.

The changes adopted by the Commission also require reviewing the entire set of Rules to make conforming changes, which are reflected in the amended rules.

Amendments and Additions to Rules.

100 Series Rules: Amended Definitions.

The definitions of “flowline” and “gathering line” were amended from a technical, narrative description to a description that reflects the different spheres of authority held by the Commission and the Colorado Public Utilities Commission (PUC) or the Pipeline and Hazardous Materials Safety Administration (PHMSA), a federal agency within the U.S. Department of Transportation. An additional source of guidance that assists in determining jurisdiction between the Commission and PUC or PHMSA is API RP 80, Guidelines for the Definition of Onshore Gas Gathering Lines, 1st Edition, April 1, 2000. Respecting the extent of PHMSA regulation, the Commission created a definition of crude oil transfer line to implement construction, operation, and other standards for these lines to ensure appropriate regulatory oversight. The Commission also added a definition of “pipeline” to create a term that encompasses both flowlines, crude oil transfer lines, and gathering lines as some provisions in the Rules need to apply to both categories of lines. The Commission also added descriptions of types of flowlines to assist in understanding the different installation or integrity management needs of these various lines. Focused, technical stakeholder comments from the Colorado Petroleum Council and Colorado Oil and Gas Association were integral to the Commission’s development of these definitions. The Commission’s amendments distinguish between flowlines that exist on a single oil and gas location and those flowlines that leave one location to transport fluids to a different location, what are defined as “Off-Location Flowlines”.

Notably, the Commission added a definition of a Grade 1 Gas Leak. This definition is included to assist in the reporting of gas leaks to the Commission. Additionally, the Commission added definitions to clarify terminology, such as riser, dump lines, and maximum anticipated operating pressure. These definitions are incorporated to assist the public understanding of oil and gas operations as well as operator compliance with the amended Rules.

1100 Series Rules: Revised Flowline Regulations.

The 1100 Series were revised and reorganized to clearly delineate the life cycle of a flowline, from its registration with the Commission, through construction and installation, to integrity management and finally abandonment. In revising the 1100 Series, the following section changes were made:

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Rule 1101. Registration Requirements

Rule 1102. Installation, Operations, Maintenance, Repair and Reclamation

Rule 1103. Flowline Integrity Management

Rule 1104. Abandonment

The details contained within each of these sections is discussed below.

1. Rule 1101.

The changes to Rule 1101 focused on gaining increased information about specific types of lines. The Commission imposed a registration requirement for flowlines that convey fluids away from an oil and gas location and to a different site. This regulation ensures the Commission continues to continually collect updated and new data gathered from operators responding to the NTO. Operators must now submit information about the off-location Flowlines, including GPS endpoints of risers, materials used to construct, related locations (by COGCC Facility Number), and fluid conveyed. This information will build into the relational database the Commission is creating to better inform staff, the public, and operators about the movement of exploration and production fluids.

The Commission also required the registration of all known domestic taps. In the furtherance of public safety associated with oil and gas operations, operators are required to report to the Director the GPS location of the point a domestic tap connects to a flowline and the address of the location of where the tap delivers gas. The Commission also imposed installation requirements for future domestic taps to ensure improved protection of public health, safety, and welfare and the environment. La Plata County raised this concern during the stakeholder process. The safety and integrity of domestic taps are not regulated by the Commission. Rather, PHMSA requires the testing of all pressure regulating or similar devices on domestic taps every 3 calendar years. *See* 49 CFR § 192.740(a). This addresses some concerns raised to the Commission including Boulder County's stakeholder comments.

Third the Commission requires the registration before construction of a crude oil transfer line. This is to provide the Commission with initial information about these lines, which are subject to other requirements in other sections. A similar registration provision for gas gathering lines is included in 313B.

2. Rule 1102.

Rule 1102 establishes the standards operators must follow and employ when designing and installing flowlines as well as crude oil transfer lines, as appropriate. As the Commission found during its review, having more specific installation and construction standards - that are tested and established by third-parties - would

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create a more uniform and improved regulatory regime as well as provide greater certainty for the regulated industry. The Commission included in the Flowline Rules industry standards that operators must follow when designing and installing their lines. Industry stakeholder comments supported using improved standards established by third parties.

Operators are also required to conduct repairs and maintenance on flowlines and crude oil transfer lines so as to prevent failures, leaks and corrosion of lines and injury to persons and property. In furtherance of the Commission's expectation that flowlines and crude oil transfer lines will be properly maintained so as to ensure safety to persons and property, the Commission required that all flowlines not in active use have all valves locked or tagged out. This requirement is integral to protecting public safety.

Operators are also now required to become Tier One members of the UNCC and to participate in Colorado's One Call notification system. Rule 1102 requires operators to include their UNCC member code on their Operator Registration, Form 1, Form 10 or Form 12 that are filed with the Commission. With the Commission registration, operators are granting the Director permission to access information the UNCC has on file for that operator, including the location of underground oil and gas facilities. Operators are also required to submit and update information with UNCC to ensure that the UNCC database is accurate.

Rule 1102 also requires operators to maintain accurate records relating to maintenance, repairs, testing and other related data so operators have a living history of management for each flowline or crude oil transfer line. In accordance with Rule 205, the Director has the authority to inspect these records. Maintaining these records is imperative to ensuring that operators are maintaining compliance with Section 1100. Boulder County's stakeholder comments encouraged and recognized the importance of this requirement.

3. *Rule 1103.*

The purpose of Rule 1103 was to establish a comprehensive Integrity Management program that requires testing of all flowlines or crude oil transfer lines both prior to being put into service and after. All new flowlines or crude oil transfer lines, including flowlines that have been repaired, are required to be tested to their maximum anticipated operating pressure in accordance with the appropriate industry standard, e.g., 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). Consistent with the NTO, flowlines that must be tested to their maximum anticipated operating pressure include: Wellhead Lines, Oil Transfer Lines, all Production Piping except Dump Lines, Peripheral Piping and Produced Water

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Flowlines.

Once in service, flowlines and crude oil transfer lines are required to be tested for integrity on a periodic basis. Rule 1103 allows operators to select from several testing options, such as continuous pressure monitoring and optical gas imaging to satisfy the testing requirements. These options include industry accepted technologies, some of which are used to comply with other regulatory programs such as the Colorado Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII.

Because an operator likely does not have control over the surface lands, Rule 1103 provides for increased oversight of off-location flowlines and crude oil transfer lines because they move produced fluids between two or more different oil and gas locations. Off-location flowlines must demonstrate integrity through annual pressure test, continuous pressure monitoring or annual visual inspection if it is an above ground off-location flowline.

The Commission recognizes that dump lines may not be suitable for a pressure test. These lines may not be designed or intended for internal pressure such as vacuum systems, or they may contain parts that cannot be isolated. Additionally, it may be impractical to conduct pressure testing on lines that cannot be temporarily closed to isolate the test section. Line systems that are not suitable for applied pressure testing, are nonetheless required to maintain mechanical integrity. For belowground dump lines, operators must conduct a static head test every three years. For above ground dump lines, operators must conduct an annual visual inspection. Inspections will include visual examination of joint appearance, mechanical checks of bolts and joint tightness, and such other relevant examinations and methods to verify integrity.

4. *Rule 1104.*

In the Flowline Rulemaking, the Commission moved the abandonment provisions of Rule 1103 to a new Rule 1104. The abandonment provisions were also revised by the Commission to clarify and specify that all flowlines and crude oil transfer lines are considered active, and thus subject to Rules 1102 and 1103, unless the line has been abandoned. This means that even if a flowline or crude oil transfer line is not in active use, operators must still test the line, in accordance with Rule 1103, for integrity. Rule 1104 specifies the steps that must be taken to fully abandon a line, which now include lockout and tagout of all risers associated with the line, if it is not being used, but not yet abandoned.

Additionally, the Commission required in Rule 1104, that upon abandonment of a flowline or crude oil transfer line, operators must notify the Director by filing a Form 44. The Notice of Flowline Abandonment on Form 44 will be provided to the local

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government designee and the UNCC.

Other Rule Additions and Amendments

The Commission made the following additions and amendments to the below-listed rules. These changes were primarily designed to clarify specific details of these rules or to conform them to the amendments to the 1100 Series Rules.

100 Series Rules: Definitions

The 100 Series definitions were amended to make conforming changes to defined terms.

200 Series Rules: Revised Comprehensive Drilling Plans

Rule 216 was amended to make conforming changes to defined terms.

300 Series Rules: Revised Registration and Fluid Management Requirements

Rule 313B was added by the Commission to require the registration of all produced water flowline transfer systems. In registering a produced water flowline transfer system, the operator must provide a facility layout drawing and topographic map. The registration requirements for produced water flowline transfer systems also apply to new gas processing plants and new underground gas storage facilities. In furtherance of public health, safety and welfare the Commission believed it was imperative to have the registration information called for in Rule 313B for these facilities. Additionally, in furtherance of public health, safety and welfare the Commission believed it was imperative to have the registration information for gas gathering lines.

As amended, Rule 328 incorporates an alternate method of tank gauging that requires the volume of oil produced to be measured before removal. This requirement is more protective of public health, safety, and the environment because it does not require opening a hatch, and thus prevents gas emissions. In addition, the Commission has historically approved variances allowing for operators to use this methodology, thus demonstrating its efficacy. This amendment allows operators to use an equally effective gauging method that is safer without seeking a variance.

The Commission made conforming changes to Rules 303, 312, 313 and 317B.

600 Series: Required Accident Reporting, Annual Valve Checks, and Installation of Check Valves.

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The Commission amended Rule 602's accident reporting requirements to ensure accidents are appropriately reported to the Commission, and clarify what information the Commission may seek from an operator about the accident. Stakeholders indicated concern and interest in improving this regulation.

Rule 605.d. has been revised to require annual valve checks and to require the installation of valves on flowlines at certain locations, including certain water crossing areas. Additionally, Rule 605.d., now requires check valves on flowlines when two or more wells produce through that flowline. This requirement is more protective of public health, safety, and the environment because it allows for the shutting down of a flowline in the event of a failure, thus significantly decreasing the volume of produced fluids that may have otherwise escaped from the flowline.

700 Series: Revised Bonding for E&P Waste from Water or Gas Gathering.

Rule 711 was amended to make conforming changes to defined terms. Additionally, an operator of a produced water flowline transfer systems must provide a financial assurance. The Commission determined that it was necessary to require a bond for produced water flowline transfer systems due to the potential health and safety hazards associated with a failure of a produced water flowline transfer system and release of E&P Waste.

900 Series Rules: Addition of Grade 1 Gas Leak Reporting.

Rule 906 was amended to include the mandatory reporting of any Grade 1 Gas Leak.

Rule 907 was amended to make conforming changes to defined terms.

Effective Date.

The Commission adopted the proposed amendments in accordance with the Governor's announced initiatives, which added to and amended definitions in the Rule 100 Series, revised the 1100 Series, and amended 303, 312, 313, 317B, 328, 602, 605, 711, 906, and 907, at its hearing on December 11-12, 2017, in Cause No. IR, Docket No. 171200767. These amendments will become effective, per Section 24-4-103, C.R.S., twenty days after publication in the Colorado Register.

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Statement of Basis, Specific Statutory Authority, and Purpose New Rules and Amendments to Current Rules of the Colorado Oil and Gas Conservation Commission, 2 CCR 404-1

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This statement sets forth the basis, specific statutory authority, and purpose for new rules and amendments (“Flowline Rules”) to the Colorado Oil and Gas Conservation Commission (“Commission”) Rules of Practice and Procedure, 2 CCR 404-1 (“Rules”). The Commission promulgated the Flowline Rules on December 11 & 12, 2017.

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rules or amendments, and respond to the prehearing statements and comments submitted by other parties.

Statutory Authority.

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- Section 34-60-105(2)(a), C.R.S. (Commission has the authority to regulate the drilling, producing, and plugging of wells and all other operations for the production of oil or gas);
- Section 34-60-106(2)(d), C.R.S. (Commission has authority to regulate "Oil and gas operations so as to prevent and mitigate significant adverse environmental impacts on any air, water, soil, or biological resource resulting from oil and gas operations to the extent necessary to protect public health, safety, and welfare, including protection of the environment and wildlife resources, taking into consideration cost-effectiveness and technical feasibility."); and
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Identification of New and Amended Rules.

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- 300-Series Rules: 312, 313A, 313B, and 328.d.;
- 600-Series Rules: 602 and 605.d.;
- 700-Series Rules: 711;
- 1100-Series Rules; and

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- The Commission also adopted conforming or clarifying changes to Rules affected by flowline or related changes. 100-Series (Blowdown Pits, Oil and Gas Facility, Oil and Gas Operations, Plugging and Abandonment, Production Facility, Production Pits, and Special Purpose Pits); 303.b.; 317B; 318A; 328; 325; 330; ~~602~~-604; 706; 802; 907; 1002; 1004; 1203; 1204; and 1205.

Overview of Purpose and Intent.

On September 11, 2017, the Commissioners directed Staff to implement the two announced policy initiatives that require Commission rulemaking. The seven policy initiatives Governor Hickenlooper announced were:

- Strengthening the Commission's Flowline regulations;
- Enhancing the 8-1-1 "one-call" program;
- Creating a nonprofit orphan well fund to plug and abandon orphan wells and provide refunds for in-home methane monitors;
- Prohibiting future domestic gas taps;
- Creating a technical workgroup to improve safety training;
- Requesting peer-review of certain Commission regulations; and
- Exploring an ambient methane leak detection pilot program.

Of these seven policy initiatives, the Commission can address two through rulemaking: strengthening the flowline regulations and improving the uniformity of operator participation in the 8-1-1 "one-call" program. In addition, the Commission can complement the Governor's domestic tap initiative by improving safety oversight of oil and gas operations through the requirement of domestic tap reporting.

First, the Governor's call to update the Commission's flowline regulations stems from the information received by the Commission in response to its May 2, 2017 Notice to Operators (NTO) as well as the Commission's own review of its flowline rules. The NTO required operators to, over the course of two months: identify, locate, and pressure test certain flowlines and submit that information to the Commission; and identify, mark, and lock out/tag out risers for abandoned flowlines and then, consistent with abandonment requirements, cut those risers to three-feet below grade. The Commission received new data on approximately 120,000 flowlines and associated risers, which data was the first step for the Commission to develop a relational database that uses flowline riser location to interrelate oil and gas locations.

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While operators were working through the NTO requirements and submitting data about flowlines during the summer of 2017, the Commission continued - with an elevated priority - its review of the flowline regulatory regime. Beginning in 2015, the Commission started reviewing its flowline program based upon recommendations contained within its 2014 Risk Based Inspections report prepared for the Colorado General Assembly. In 2015, the Commission established a Flowline Integrity Group within the Engineering Unit dedicated to enforcing the Commission's flowline regulations. The Commission has also reviewed its own and other state and federal rules regulating pipelines to ascertain areas where Colorado's flowline regulations could be improved. During this review, Staff identified regulatory changes that the Commission adopted in Order 1R-103. However, not all of the changes identified in Order 1R-103 were incorporated into the Rules; this Rulemaking corrects that oversight. Thus, the changes adopted by the Commission in the Flowline Rules reflect the research and findings made since 2015, as well as input from the stakeholders received before and during the Rulemaking.

Second, the Commission intends to improve the uniformity of operator participation in the Utility Notification Center of Colorado (UNCC), Colorado's "one-call" or "8-1-1" program. This reflects an improved collaboration between the Commission, the UNCC, and operators. In the wake of the Firestone tragedy, many people asked that the Commission create a database that maps all flowlines in Colorado. During the course of stakeholder meetings, the opportunity to partner with UNCC became the Commission's preferred option for housing increased, more specific information about flowlines. Requiring operators to become Tier One members and to supply UNCC with digital information about an operator's belowground operations (i.e., vertical portions of wells and flowlines) provides an elegant, efficient, and effective option for a state-wide organization to host information about belowground oil and gas operations. UNCC has an existing database that citizens and businesses rely on every day when preparing to dig. The team at UNCC is uniquely prepared with the expertise, staff, and existing database to incorporate information from operators that may change week-to-week and provide the updated information to the people who most need it - property owners preparing to dig. Relying on UNCC to host this information also provides a centralized information source for all Colorado citizens, local governments, and businesses of all underground facilities-not just oil and gas exploration and production facilities. To enhance this collaboration, the Commission imposed increased requirements for operators' participation in the UNCC program.

In addition, the Commission also amended specific regulatory requirements in an effort to prevent fluid releases from pipelines and empower the Commission to respond in the event of an exploration and production fluid release. First, the Commission clarified and enhanced provisions related to its oversight of lines transporting produced water, and gas gathering lines to ensure the Commission can adequately respond to a release of exploration and production waste. Second, the Commission included an additional method to gauge tanks that provides accurate and reliable data, and does not require opening hatches, thus preventing the release of

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gases. Third, the Commission imposed specific requirements for check valves. Check valves operate to allow fluid flow in only one direction and serve an important purpose where reversing flow could cause damage.

The changes adopted by the Commission also require reviewing the entire set of Rules to make conforming changes, which are reflected in the amended rules.

Amendments and Additions to Rules.

100 Series Rules: Amended Definitions.

The definitions of “flowline” and “gathering line” were amended from a technical, narrative description to a description that reflects the different spheres of authority held by the Commission and the Colorado Public Utilities Commission (PUC) or the Pipeline and Hazardous Materials Safety Administration (PHMSA), a federal agency within the U.S. Department of Transportation. An additional source of guidance that assists in determining jurisdiction between the Commission and PUC or PHMSA is API RP 80, Guidelines for the Definition of Onshore Gas Gathering Lines, 1st Edition, April 1, 2000. Respecting the extent of PHMSA regulation, the Commission created a definition of crude oil transfer line to implement construction, operation, and other standards for these lines to ensure appropriate regulatory oversight. The Commission also added a definition of “pipeline” to create a term that encompasses both flowlines, crude oil transfer lines, and gathering lines as some provisions in the Rules need to apply to both categories of lines. The Commission also added descriptions of types of flowlines to assist in understanding the different installation or integrity management needs of these various lines. Focused, technical stakeholder comments from the Colorado Petroleum Council and Colorado Oil and Gas Association were integral to the Commission’s development of these definitions. The Commission’s amendments distinguish between flowlines that exist on a single oil and gas location and those flowlines that leave one location to transport fluids to a different location, what are defined as “Off-Location Flowlines”.

Notably, the Commission added a definition of a Grade 1 Gas Leak. This definition is included to assist in the reporting of gas leaks to the Commission. Additionally, the Commission added definitions to clarify terminology, such as riser, dump lines, and maximum anticipated operating pressure. These definitions are incorporated to assist the public understanding of oil and gas operations as well as operator compliance with the amended Rules.

1100 Series Rules: Revised Flowline Regulations.

The 1100 Series were revised and reorganized to clearly delineate the life cycle of a flowline, from its registration with the Commission, through construction and installation, to integrity management and finally abandonment. In revising the 1100 Series, the following section changes were made:

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Rule 1101. Registration Requirements

Rule 1102. Installation, Operations, Maintenance, Repair and Reclamation

Rule 1103. Flowline Integrity Management

Rule 1104. Abandonment

The details contained within each of these sections is discussed below.

1. Rule 1101.

The changes to Rule 1101 focused on gaining increased information about specific types of lines. The Commission imposed a registration requirement for flowlines that convey fluids away from an oil and gas location and to a different site. This regulation ensures the Commission continues to continually collect updated and new data gathered from operators responding to the NTO. Operators must now submit information about the off-location Flowlines, including GPS endpoints of risers, materials used to construct, related locations (by COGCC Facility Number), and fluid conveyed. This information will build into the relational database the Commission is creating to better inform staff, the public, and operators about the movement of exploration and production fluids.

The Commission also required the registration of all known domestic taps. In the furtherance of public safety associated with oil and gas operations, operators are required to report to the Director the GPS location of the point a domestic tap connects to a flowline and the address of the location of where the tap delivers gas. The Commission also imposed installation requirements for future domestic taps to ensure improved protection of public health, safety, and welfare and the environment. La Plata County raised this concern during the stakeholder process. The safety and integrity of domestic taps are not regulated by the Commission. Rather, PHMSA requires the testing of all pressure regulating or similar devices on domestic taps every 3 calendar years. *See* 49 CFR § 192.740(a). This addresses some concerns raised to the Commission including Boulder County's stakeholder comments.

Third the Commission requires the registration before construction of an crude oil gathering-transfer line. This is to provide the Commission with an understanding of how fluids are moving and in the event of a release provide proper agency response initial information about these lines, which are subject to other requirements in other sections. A similar registration provision for gas gathering lines is included in 313B.

2. Rule 1102.

Rule 1102 establishes the standards operators must follow and employ when designing and installing flowlines as well as crude oil transfer lines, as appropriate.

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As the Commission found during its review, having more specific installation and construction standards - that are tested and established by third-parties - would create a more uniform and improved regulatory regime as well as provide greater certainty for the regulated industry. The Commission included in the Flowline Rules industry standards that operators must follow when designing and installing their lines. Industry stakeholder comments supported using improved standards established by third parties.

Operators are also required to conduct repairs and maintenance on flowlines and crude oil transfer lines so as to prevent failures, leaks and corrosion of lines and injury to persons and property. In furtherance of the Commission's expectation that flowlines and crude oil transfer lines will be properly maintained so as to ensure safety to persons and property, the Commission required that all flowlines not in active use have all valves locked or tagged out. This requirement is integral to protecting public safety.

Operators are also now required to become Tier One members of the UNCC and to participate in Colorado's One Call notification system. Rule 1102 requires operators to include their UNCC member code on their Operator Registration, Form 1, Form 10 or Form 12 that are filed with the Commission. With the Commission registration, operators are granting the Director permission to access information the UNCC has on file for that operator, including the location of underground oil and gas facilities. Operators are also required to submit and update information with UNCC to ensure that the UNCC database is accurate.

Rule 1102 also requires operators to maintain accurate records relating to flowline maintenance, repairs, testing and other related data so operators have a living history of management for each flowline's management or crude oil transfer line. In accordance with Rule 205, the Director has the authority to inspect these records. Maintaining these records is imperative to ensuring that operators are maintaining compliance with Section 1100. Boulder County's stakeholder comments encouraged and recognized the importance of this requirement.

3. Rule 1103.

The purpose of Rule 1103 was to establish a comprehensive Flowline-Integrity Management program that requires testing of all flowlines or crude oil transfer lines both prior to being put into service and after. All new flowlines or crude oil transfer lines, including flowlines that have been repaired, are required to be tested to their maximum anticipated operating pressure in accordance with the appropriate industry standard, e.g., 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). Consistent with the NTO, flowlines that must be tested to their maximum

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anticipated operating pressure include: Wellhead Lines, Oil Transfer Lines, all Production Piping except Dump Lines, Peripheral Piping and Produced Water Flowlines.

Once in service, ~~Flowlines~~ flowlines and crude oil transfer lines are required to be tested for integrity on a periodic basis. Rule 1103 allows operators to select from several testing options, such as continuous pressure monitoring and optical gas imaging to satisfy the testing requirements. These options include industry accepted technologies, some of which are used to comply with other regulatory programs such as the Colorado Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII.

Because an operator likely does not have control over the surface lands, Rule 1103 provides for increased oversight of off-location flowlines and crude oil transfer lines ~~that because they~~ move produced fluids between two or more different oil and gas locations. Off-location flowlines must demonstrate integrity through annual pressure test, continuous pressure monitoring or annual visual inspection if it is an above ground off-location flowline.

The Commission recognizes that dump lines may not be suitable for a pressure test. These lines may not be designed or intended for internal pressure such as vacuum systems, or they may contain parts that cannot be isolated. Additionally, it may be impractical to conduct pressure testing on lines that cannot be temporarily closed to isolate the test section. Line systems that are not suitable for applied pressure testing, are nonetheless required to maintain mechanical integrity. For belowground dump lines, operators must conduct a static head test every three years. For above ground dump lines, operators must conduct an annual visual inspection. Inspections will include visual examination of joint appearance, mechanical checks of bolts and joint tightness, and such other relevant examinations and methods to verify integrity.

4. *Rule 1104.*

In the Flowline Rulemaking, the Commission moved the abandonment provisions of Rule 1103 to a new Rule 1104. The abandonment provisions were also revised by the Commission to clarify and specify that all flowlines and crude oil transfer lines are considered active, and thus subject to Rules 1102 and 1103, unless the line has been abandoned. This means that even if a flowline or crude oil transfer line is not in active use, operators must still test the ~~flowline~~, in accordance with Rule 1103, for integrity. Rule 1104 specifies the steps that must be taken to fully abandon a ~~flowline~~, which now include lockout and tagout of all risers associated with the ~~flowline~~, if ~~the flowline~~ it is not being used, but not yet abandoned.

Additionally, the Commission required in Rule 1104, that upon abandonment of a

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flowline or crude oil transfer line, operators must notify the Director by filing a Form 44. The Notice of Flowline Abandonment on Form 44 will be provided to the local government designee and the UNCC.

Other Rule Additions and Amendments

The Commission made the following additions and amendments to the below-listed rules. These changes were primarily designed to clarify specific details of these rules or to conform them to the amendments to the 1100 Series Rules.

100 Series Rules: Definitions

The 100 Series definitions were amended to make conforming changes to defined terms.

200 Series Rules: Revised Comprehensive Drilling Plans

Rule 216 was amended to make conforming changes to defined terms.

300 Series Rules: Revised Registration and Fluid Management Requirements

Rule 313B was added by the Commission to require the registration of all produced water flowline transfer systems. In registering a produced water flowline transfer system, the operator must provide a facility layout drawing and topographic map. The registration requirements for produced water flowline transfer systems also apply to new gas processing plants and new underground gas storage facilities. In furtherance of public health, safety and welfare the Commission believed it was imperative to have the registration information called for in Rule 313B for these facilities. Additionally, in furtherance of public health, safety and welfare the Commission believed it was imperative to have the registration information for gas gathering lines.

As amended, Rule 328 incorporates an alternate method of tank gauging that requires the volume of oil produced to be measured before removal. This requirement is more protective of public health, safety, and the environment because it does not require opening a hatch, and thus prevents gas emissions. In addition, the Commission has historically approved variances allowing for operators to use this methodology, thus demonstrating its efficacy. This amendment allows operators to use an equally effective gauging method that is safer without seeking a variance.

The Commission made conforming changes to Rules 303, 312, 313 and 317B.

600 Series: Required Accident Reporting, Annual Valve Checks, and

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Installation of Check Valves.

The Commission amended Rule 602's accident reporting requirements to ensure accidents are appropriately reported to the Commission, and clarify what information the Commission may seek from an operator about the accident. Stakeholders indicated concern and interest in improving this regulation.

Rule 605.d. has been revised to require annual valve checks and to require the installation of valves on flowlines at certain locations, including certain water crossing areas. Additionally, Rule 605.d., now requires check valves on flowlines when two or more wells produce through that flowline. This requirement is more protective of public health, safety, and the environment because it allows for the shutting down of a flowline in the event of a failure, thus significantly decreasing the volume of produced fluids that may have otherwise escaped from the flowline.

700 Series: Revised Bonding for E&P Waste from Water or Gas Gathering.

Rule 711 was amended to make conforming changes to defined terms. Additionally, an operator of a produced water flowline transfer systems must provide a financial assurance. The Commission determined that it was necessary to require a bond for produced water flowline transfer systems due to the potential health and safety hazards associated with a failure of a produced water flowline transfer system and release of E&P Waste.

900 Series Rules: Addition of Grade 1 Gas Leak Reporting.

Rule 906 was amended to include the mandatory reporting of any Grade 1 Gas Leak.

Rule 907 was amended to make conforming changes to defined terms.

Effective Date.

The Commission adopted the proposed amendments in accordance with the Governor's announced initiatives, which added to and amended definitions in the Rule 100 Series, revised the 1100 Series, and amended 303, 312, 313, 317B, 328, 602, 605, 711, 906, and 907-[INSERT], at its hearing on December 11-12, 2017, in Cause No. IR, Docket No. 171200767. These amendments will become effective, per Section 24-4-103, C.R.S., twenty days after publication in the Colorado Register.