

## DEFINITIONS 100 SERIES

**COMMENCEMENT OF PRODUCTION OPERATIONS** means that a Well is capable of producing either separable gas or salable liquid hydrocarbons.

**COMPLETED WELL.** A well will be considered completed when oil or gas is produced through wellhead equipment from the producing interval(s) after the production string has been installed.

**CUTTINGS TRENCH** means a depression used specifically for the onsite disposal of dried cuttings generated from drilling a well.

**FLARING** means the combustion of natural gas during upstream Oil and Gas Operations, excluding gas that is intentionally used for onsite processes. Combustion required by the Air Quality Control Commission for purposes of emissions control is not Flaring.

**FLOWBACK** means the process of allowing fluids and entrained solids to flow from a Well following Stimulation, either in preparation for a subsequent phase of treatment or in preparation for cleanup and placing the Well into production. The term flowback also means the fluids and entrained solids that emerge from a Well during the flowback process. The flowback period begins when material introduced into the Well during the treatment returns to the surface following hydraulic fracturing or refracturing. The flowback period ends when gas is produced in separable quantities.

**INVESTIGATION-DERIVED WASTE** means those materials generated during site investigation and remediation activities, including but not limited to personal protective equipment, soil cuttings, drilling mud, purged Groundwater, decontamination fluids, and disposable or consumable equipment and supplies.

**LAND APPLICATION** means the disposal method by which treated E&P Waste is spread upon and mixed into soils.

**LAND TREATMENT** means the method by which E&P Waste is treated ex situ at the land surface to result in a reduction of hydrocarbon concentration by biodegradation and other natural attenuation processes. Land Treatment may be enhanced by tilling, disking, aerating, composting, or the addition of nutrients or microbes.

**OILY WASTE** means those materials containing unrefined petroleum hydrocarbons in concentrations in excess of the concentration levels in Table 915-1. Oily waste may include crude oil, condensate, or other material, such as soil, frac sand, drilling fluids, cuttings, and pit sludge that contain hydrocarbons.

**POLLUTION** means anthropogenic contamination or other degradation of the physical, chemical, biological, or radiological integrity of air, water, soil, or biological resource that is not authorized by the Commission's Rules or applicable regulations promulgated by another federal, state, or local government agency.

**PRODUCTIVITY TEST** means a test for determination of a reservoir's ability to produce economic quantities of oil or gas.

**PRODUCTION EVALUATION** means an evaluation of production potential for determination of requirements for infrastructure capacity and equipment sizing.

**UPSET CONDITION** means a sudden, unavoidable failure, breakdown, event, or malfunction, beyond the reasonable control of the Operator, of any equipment or process that results in abnormal operations and requires correction.

**VENTING** means intentionally allowing natural gas to escape into the atmosphere.

- G. U.S. Environmental Protection Agency, 40 C.F.R. § 60.5375a, What GHG and VOC standards apply to well affected facilities? (2016) (hereinafter, “40 C.F.R. § 60.5375a”). Only the version of 40 C.F.R. § 60.5375a that became effective on August 2, 2016 applies to this rule; later amendments do not apply. 40 C.F.R. § 60.5375a may be examined at the U.S. Environmental Protection Agency, Region 8, 1595 Wynkoop St, Denver, CO 80202, and is available online at <https://www.govinfo.gov/content/pkg/FR-2016-06-03/pdf/2016-11971.pdf>.
- H. U.S. Environmental Protection Agency, Regional Screening Levels for Chemical Contaminants at Super Fund Sites (hereinafter, "EPA's RSLs"). Only the version of EPA's RSLs in effect as of November 2, 2020 applies; later amendments do not apply. EPA's RSLs may be examined at the U.S. Environmental Protection Agency, Region 8, 1595 Wynkoop St, Denver, CO 80202, and are available online at <https://www.epa.gov/risk/regional-screening-levels-rsls>.
- I. Western Coordinating Committee on Nutrient Management, Soil, Plant, and Water Reference Methods for the Western Region (4th edition, 2013). Only the 4th edition (2013) of the Soil, Plant, and Water Reference Methods for the Western Region applies to this rule; later amendments do not apply. Soil, Plant, and Water Reference Methods for the Western Region may be examined at the Soil Science Society of America, 5585 Guilford Road, Madison, WI 53711, and is available online at <https://www.naptprogram.org/files/napt/publications/method-papers/western-states-methods-manual-2013.pdf>.

## **902. POLLUTION**

- a. Operators will prevent Pollution.
- b. Operators will prevent adverse environmental impacts on any air, water, soil, or biological resource resulting from Oil and Gas Operations and will protect and minimize adverse impacts to public health, safety, welfare, the environment, and wildlife resources.
- c. Operators will prevent the unauthorized discharge or disposal of oil, condensate, gas, E&P Waste, chemical substances, trash, discarded equipment, and other oil field waste.
- d. No Operator, in the conduct of any Oil or Gas Operation, may perform any act or practice which violates numeric or narrative water quality standards or classifications established by the Water Quality Control Commission for Waters of the State, or any Point of Compliance established by the Director pursuant to Rule 914. The Director may require the Operator to establish one or more points of compliance for any event of Pollution, which will be complied with by all parties determined to be a responsible party for such Pollution.
- e. No Operator, in the conduct of any Oil or Gas Operation, may perform any act or practice which constitutes a violation of any applicable air quality laws, regulations, or permits as administered by the Air Quality Control Commission or any other local or federal agency with authority for regulating air quality associated with such activities.
- f. No person may accept water produced from Oil and Gas Operations, or other oil field waste for disposal in a commercial disposal facility, without first obtaining a Certificate of Designation from the County in which such facility is located, in accordance with the regulations pertaining to solid waste disposal sites and facilities as promulgated by the Colorado Department of Public Health and Environment.

## **903. VENTING OR FLARING NATURAL GAS**

- a. **Notice to Local Governments and Emergency Responders.**

- (1) **Prior Notice.** As soon as practicable prior to, but no later than two hours before, any planned Flaring and Venting of natural gas allowed pursuant to this Rule 903, Operators will provide verbal, written, or electronic notice to the Local Governmental Designee of the Relevant and Proximate Local Governments, if applicable, and to the local emergency response authorities.
- (2) **Subsequent Notice.** In the event of Flaring or Venting due to an Upset Condition, Operators will immediately provide verbal, written, or electronic notice to the Local Governmental Designee of the Relevant and Proximate Local Governments, if applicable, and to the local emergency response authorities.
- (3) **Waiver.** Local Governments and local emergency response authorities may waive their right to notice under this Rule 903.a at any time, pursuant to Rule 302.f.(1).A.
- (4) **Recordkeeping.** Operators will maintain records of notice provided pursuant to this Rule 903.a, and provide the records to the Director upon request.

**b. Emissions During Drilling Operations.**

- (1) Operators will capture or combust gas escaping from the Well during drilling operations using the best available technology.
- (2) If capturing or combusting gas would pose safety risks to onsite personnel, Operators may request the Director's approval to Vent. Operators may obtain verbal approval, but will provide a written request which includes any documentation necessary to support such approval by submitting a Form 4, Sundry Notice within 7 days. The Operator need not seek a formal variance pursuant to Rule 502.a. A Form 23 may also be required if the criteria in Rule 428.c. are met. If Venting approved pursuant to this Rule 903.b.(2) exceeds 24 hours, the Operator must seek the Director's renewed approval to continue venting.
- (3) Combustors will be located a minimum of 100 feet from the nearest surface hole location and enclosed.

**c. Emissions During Completion Operations.**

- (1) **Reduced Emission Completions Practices.**
  - A. Reduced Emission Completion Practices are required on all newly completed and re-completed oil and gas wells.
  - B. To comply with the Reduced Emission Completion Practices required by Rule 903.c.(1).A, unless otherwise specified in this Rule 903.c, Operators will adhere to the standards for well completion and re-completion in 40 C.F.R. § 60.5375a, as incorporated by reference in Rule 901.b.
- (2) Operators may Flare gas during completion operations with specific written approval from the Director under any of the following circumstances:
  - A. The Operator obtains the Director's approval to Flare through an approved Gas Capture Plan pursuant to Rule 903.e.
  - B. The Operator submits, and the Director approves, a Form 4, Sundry Notice, allowing the Operator to flare gas that would otherwise not be permitted pursuant to Rule 903.c.



gas escaping into the air during liquids unloading if the escape of the gas poses a risk to public health, safety, or welfare due to the risk of a fire, explosion, or inhalation.

- H. Flaring approved pursuant to Rule 903.d.(3) or on a Form 4, Sundry Notice prior to November 2, 2020.
- (2) For any instance of Venting or Flaring permitted pursuant to Rules 903.d.(1).A–G for a period that exceeds 8 consecutive or 24 cumulative hours, the Operator will submit a Form 4, Sundry Notice reporting:
- A. The estimated or measured volume and content of gas Vented or Flared;
  - B. Gas analysis of the gas Vented or Flared, including hydrogen sulfide; and
  - C. Explanation, rationale, and cause for the Venting or Flaring event.
- (3) At wells that have Commenced Production Operations prior to November 2, 2020 that are not connected to a natural gas gathering line, the Operator may request permission from the Director to Flare natural gas, or to Vent casinghead gas, by submitting a Sundry Notice, Form 4. The Director may approve a request to Flare, or Vent casinghead gas, for a period not to exceed 12 months, if the Director determines that Flaring the gas or Venting casinghead gas is necessary to produce the Well and will protect public health, safety, welfare, the environment, and wildlife resources. The Form 4, Sundry Notice will describe:
- A. The estimated volume and content of the gas to be Flared;
  - B. Gas analysis including hydrogen sulfide for the subject well;
  - C. For requests based on lack of available infrastructure, the Operator will state why the Well cannot be connected to infrastructure;
  - D. When the Well(s) will be connected to infrastructure, and why the Operator commenced production of the Well before infrastructure was available and whether the mineral Owner will be compensated for the Vented or Flared gas; and
  - E. Options for using the gas instead of Flaring or Venting, including to generate electricity, gas processing to recover natural gas liquids, or other options for using the gas.
- (4) **Measurement and Reporting.**
- A. Operators will measure the volume of all gas Vented, Flared, or used at an Oil and Gas Location by direct measurement or by estimating the volume of gas Vented, Flared or used. The volume of gas Vented, Flared, or used will be reported on a per well basis on the Operator's Form 7, Monthly Report of Operations.
  - B. Operators will notify all mineral owners of the volume of oil and gas that is Vented, Flared, or used on-lease. Operators will maintain records of such notice and provide the records to the Director upon request.
- (5) All Flared gas will be combusted in an enclosed device equipped with an auto-igniter or continuous pilot light and a design destruction efficiency of at least 98% for hydrocarbons.
- (6) **Pits.**

- A. Pits with uncontrolled actual Volatile Organic Compound (VOC) emissions of greater than 2 tons per year (tpy) will not be located within 2,000 feet of a Building Unit or a Designated Outside Activity Area.
- B. After November 2, 2020, Operators will not construct new pits with uncontrolled actual VOC emissions greater than 5 tpy.
- C. Operators will provide the basis for their determination of applicability under Rule 903.d.(6) to the Director on a Form 4, Sundry Notice no later than November 2, 2021 for existing pits, or on a Form 15, Pit Permit for new pits.

**e. Gas Capture Plans.**

**(1) Gas Capture Plan Submission.**

- A. Operators will submit a Gas Capture Plan as an attachment to their Form 2A, pursuant to Rule 304.c.(12).
- B. Gas Capture Plans will demonstrate compliance with the requirements of Rules 903.b–d and include the following information:
  - i. A description and map of the location of the closest or contracted natural gas gathering system or point of sale.
  - ii. The name of the company operating the closest or contracted natural gas gathering system.
  - iii. The Operator's plan for connecting their facility to a natural gas gathering system, including:
    - aa. Discussion of potential rights of way issues;
    - bb. Construction schedules;
    - cc. Date of availability of the gas gathering line;
    - dd. Whether the nearest or contracted gas gathering system has capacity to accept the anticipated gas to be produced at the location at the time of application; and
    - ee. Alternatives to flaring during production operations prior to connection to gas gathering lines, including, but not limited to: onsite use, natural gas liquid processing, electrical power generation, gas to liquid, or other options.
  - iv. For a Wildcat (Exploratory) Well or if the Operator anticipates conducting a Production Evaluation or Productivity Test, a description of the planned Production Evaluation or Productivity Test and any issues related to the Operator's ability to connect to a gas gathering line.
  - v. Any anticipated safety risks that will require the Operator to allow gas to escape, rather than being captured during drilling operations, pursuant to Rule 903.b.(2).

- (2) Verification.** Operators will verify that their facility has been connected to a gathering line by submitting a Form 10, Certificate of Clearance pursuant to Rule 219.

- (3) **Compliance.** If an Operator does not connect its facility to a gathering line as described in the Operator's Gas Capture Plan, the Director may require the Operator to shut in a Well until it is connected to a gathering line. The Operator may request a Commission hearing pursuant to Rule 503.a.(10), however, the Well will remain shut in until the Commission's hearing occurs.

#### 904. EVALUATING CUMULATIVE AIR EMISSIONS IMPACTS

- a. As a condition of approving an Oil and Gas Development Plan pursuant to Rule 307.b.(1), the Commission may require an Operator to participate in studies evaluating cumulative air emissions impacts of oil and gas development, conducted in consultation with the Colorado Department of Public Health and the Environment.
- b. The study(s) will include, but not be limited to, evaluation of:
- (1) Cumulative greenhouse gas emissions; and
  - (2) Cumulative hazardous air pollutant emissions and monitoring techniques.

#### 905. MANAGEMENT OF E&P WASTE

a. **General Requirements.**

- (1) **Operator Obligations.** Operators will ensure that E&P Waste is properly stored, handled, transported, treated, recycled, or disposed to prevent threatened or actual adverse environmental impacts to air, water, soil, or biological resources or to the extent necessary to ensure compliance with the concentration levels in Table 915-1, and WQCC Regulation 41 numeric and narrative groundwater quality standards and classifications, as incorporated by reference in Rule 901.b.
- (2) **Protecting Waters of the State.** Operators will conduct E&P Waste management activities, and construct and operate all Oil and Gas Locations, to protect the Waters of the State from adverse environmental impacts caused by E&P Waste.
- (3) **Reuse and Recycling.** To encourage and promote waste minimization, Operators may propose plans for managing E&P Waste through beneficial use, reuse, and recycling by submitting a written management plan to the Director for approval on a Form 4, Sundry Notice. Such plans will describe, at a minimum:
  - A. The type(s) of waste;
  - B. The proposed volume and use of the waste;
  - C. The method of waste treatment;
  - D. Product quality assurance;
  - E. Final disposition of the waste;
  - F. A copy of any certification or authorization that may be required by other laws and regulations;
  - G. A proposed timeline for reuse and recycling; and
  - H. Any additional information requested by the Director.