TITLE 19NATURAL RESOURCES AND WILDLIFECHAPTER 15OIL AND GASPART 28NATURAL GAS GATHERING SYSTEMS

19.15.28.1 ISSUING AGENCY: Oil Conservation Commission. [19.15.28.1 NMAC – N, xx/xx/xxx]

19.15.28.2 SCOPE: 19.15.28 NMAC applies to persons engaged in oil and-natural gas gathering and processing within New Mexico. [19.15.28.2 NMAC – N, xx/xx/xxx]

19.15.28.3 STATUTORY AUTHORITY: 19.15.28 NMAC is adopted pursuant to the Oil and Gas Act, Section 70-2-6, Section 70-2-11 and Section 70-2-12 NMSA 1978. [19.15.27.3 NMAC – N, xx/xx/xxx]

19.15.28.4 DURATION: Permanent.

[19.15.27.4 NMAC – N, xx/xx/xxxx]

19.15.28.5 EFFECTIVE DATE: {Date}, unless a later date is cited at the end of a section. [19.15.28.5 NMAC – N, xx/xx/xxx]

19.15.28.6 OBJECTIVE: To regulate the venting and flaring of natural gas from natural gas gathering systems to prevent waste and <u>protect</u>, public health and the environment. [19.15.28.6 NMAC - N, xx/xx/xxxx]

19.15.28.7 DEFINITIONS: Terms shall have the meaning specified in 19.15.2 NMAC except as specified below.

A. "ALARM" means advanced leak and repair monitoring technology for detecting natural gas or oil leaks or releases that is not required by applicable state or federal law, rule, or regulation and which the division has approved as eligible to earn a credit against the reported volume of lost natural gas pursuant to Paragraph (3) of Subsection B of 19.15.28.10 NMAC.

B. "AVO" means audio, visual and olfactory.

C. "**Custody transfer point**" means the transfer of natural gas from upstream separation, processing<u>.</u> or-treatment<u>, or in-field gathering</u> to a pipeline or any other form of transportation<u>occurring at sales metering</u> equipment.

D. "Emergency" means a temporary, infrequent, and unavoidable event in which the loss of natural gas is uncontrollable or necessary to avoid a risk of an immediate and substantial adverse impact on safety, public health or the environment, but does not include an event arising from or related to:

(1) the operator's failure to install appropriate equipment of sufficient capacity to accommodate the anticipated or actual rate and pressure of the natural gas gathering system;

(2) the operator's failure to limit the gathering of natural gas when the volume of natural gas exceeds the capacity of the natural gas gathering system;

(3) scheduled maintenance;

(4) unscheduled maintenance or a malfunction that results in venting or flaring of natural gas by an upstream operator for which the operator fails to comply with Paragraph (2) of Subsection D of 19.15.28.8 NMAC;

(5) the operator's negligence, including a recurring equipment failure; or

(6) three or more emergencies <u>within a single reporting area pursuant to Subsection A of</u>

<u>19.15.28.10 NMAC</u> experienced by the operator within the preceding 60 days, unless the division determines the operator could not have reasonably anticipated the current event and it was beyond the operator's control.

E. "Flare" or "Flaring" means the controlled combustion of natural gas in a device designed for that purpose.

F. "Flare stack" means an appropriately designed stack <u>a device</u> equipped with a burner used <u>to</u> <u>flare for the combustion and disposal of natural gas</u>.

G. "Gathering pipeline" means a pipeline that gathers natural gas <u>within a natural gas gathering</u> <u>system</u> from the custody transfer point to the connection point with a natural gas processing plant or a transmission or distribution system.

H. "GIS" means geographic information system.

I. "**GPS**" means global positioning system.

J. "Malfunction" means a sudden, unavoidable failure or breakdown of equipment beyond the reasonable control of the operator that substantially disrupts operations-and requires correction, but does not include a failure or breakdown that is caused entirely or in part by poor maintenance, careless operation, or other preventable equipment failure or breakdown.

K. "Natural gas" means a gaseous mixture of hydrocarbon compounds, primarily composed of methane, and includes both casinghead gas and gas as those terms are defined in 19.15.2 NMAC.

L. "Natural gas gathering system" means the gathering pipelines and associated facilities that compress, dehydrate or treat natural gas from <u>after</u> the custody transfer point to the <u>and ending at the</u> connection point with a natural gas processing plant or transmission or distribution system.

M. "New gathering pipeline" means a gathering pipeline placed into service after {effective date of rule}.

N. "Vent" or "Venting" means the release of uncombusted natural gas to the atmosphere. [19.15.28.7 NMAC – N, xx/xx/xxxx]

19.15.28.8 VENTING AND FLARING OF NATURAL GAS:

A. Venting <u>or and</u>-flaring of natural gas from a natural gas gathering system <u>that</u> constitutes waste <u>as</u> <u>defined in 19.15.2 NMAC and and</u> is prohibited <u>except as authorized in Subsection B of 19.15.28.8 NMAC</u>. The operator has a general duty to maximize the gathering of natural gas and to-minimize <u>the waste of natural gas</u> <u>throughe venting and flaring the release of natural gas to the atmosphere</u>. The operator may vent or flare natural gas <u>only except as authorized in Subsection B of 19.15.28.8 NMAC</u>. In all circumstances, <u>t</u>The operator shall flare rather than vent natural gas except when flaring is not technically feasible or would pose a risk to safe operations or personnel safety and venting is a safer alternative than flaring.

B. The operator shall not flare or vent natural gas except:

(1) to the extent authorized by a valid federally enforceable air quality permit issued by the New Mexico environment department;

(<u>1</u>2) during an emergency or malfunction, but only to avoid a risk of an immediate and substantial adverse impact on safety, public health, or the environment. The operator shall report natural gas vented or flared during an emergency or malfunction to the division pursuant to Paragraph (1) of Subsection F of 19.15.28.8 NMAC; or

(23) during the following activities unless prohibited by applicable state and federal law, rule, or regulation for the emission of hydrocarbons and volatile organic compounds:

(a) scheduled-repair and maintenance, including blowing down and depressurizing equipment to perform repair or maintenance;

- (b) normal operation of a gas-activated pneumatic controller or pump;
- (c) normal operation of a dehydration units and amine treatment units;
- (d) normal operation of a compressors, or compressor engines, and turbines;
- (e) normal operation of a storage tank or other low-pressure production vessel, but

not including venting from a thief hatch, located on a tank routed to a flare or control device, that is not fully and timely properly closed or from a seal that is not maintained on an established schedule;

- (f) gauging or sampling a storage tank or other low-pressure vessel;
- (g) loading out liquids from a storage tank or other low-pressure vessel to a

transport vehicle;

- (h) blowdown to repair a gathering pipeline;
- (i) pigging a gathering pipeline;-or
- (j) purging a gathering pipeline<u>; or</u>
- (k) commissioning of pipelines, equipment, or facilities only for as long as

necessary to purge introduced impurities from the pipeline or equipment.

C. Performance standards.

(1) The operator shall take all reasonable actions to prevent and minimize leaks and releases of natural gas from a natural gas gathering system and shall implement an operations plan to minimize the waste of natural gas for each non-contiguous natural gas gathering system. The plan should include procedures to reduce leaks and releases, such as a routine maintenance program, cathodic protection, corrosion control, liquids management and integrity management. The operator shall file its operations plan with the division:

(a) for a natural gas gathering system placed into service after [effective date of rule], within 60 days following the date the natural gas gathering system is placed into service;

(b) for a natural gas gathering system in place on or before {effective date of rules}, within 90 days following {the effective date of these rules}; and

(c) for a natural gas gathering system to which the operator added a new gathering pipeline during the calendar year or changed the operations plan, an updated operations plan no later than March 31 of the following year.

(2) During scheduled maintenance, replacement, or repair of a new or existing natural gas gathering system, the operator shall not vent natural gas during blowdown and shall route natural gas to a portable flare stack which complies with the flare stack standards, inspection, and recordkeeping requirements in Subsection E of 19.15.27.8 NMAC.

(3) During unscheduled maintenance, replacement or repair of a new or existing natural gas gathering system, to the extent that it is technically feasible and would not pose a risk to safe operations or personnel safety, the operator shall not vent route natural gas during blowdown and shall route natural gas to a portable flare stack which complies with the flare stack standards, inspection and recordkeeping in Subsection E of 19.15.27.8 NMAC.

(4) The operator shall conduct a weekly AVO inspection of the compressors, dehydrators and treatment facilities associated with a natural gas gathering system to confirm those components are operating properly and there are no leaks or releases except as allowed in Subsection B of 19.15.28.8 NMAC.

(a) During an AVO inspection the operator shall inspect all components, including flare stacks, thief hatches, closed vent systems, pumps, compressors, pressure relief devices, valves, lines, flanges, connectors, and associated piping to identify defects, leaks, and releases by:

(i) visually inspecting <u>externally</u> for cracks and hole; loose connections; leaks; broken and missing caps; broken, damaged seals and gaskets; broken, missing and open hatches; and broken, missing and open access covers and closure devices; and to ensure a flare stack is operating in conformance with its design;

(ii) listening for pressure and liquid leaks; and

(iii) smelling for unusual and strong odors.

(b) The operator shall make and keep a record of an AVO inspection for no less than five years and make such records available for inspection by the division upon request.

(c) Subject to the division's prior written approval, the operator may use a remote or automated monitoring technology to detect leaks and releases in lieu of an AVO inspection.

(5) The operator shall perform an annual instrument monitoring of the entire length of a gathering pipeline using an AVO technique, ALARM technology, aerial visual inspections, or other valid method to detect leaks and releases. The operator shall record and, upon the division's request, report to the division-the date and time of the monitoring, the method and technology used and the name of the employee(s) who conducted the monitoring. The operator shall retain records of monitoring for at least five years. Personnel conducting inspections shall be knowledgeable on the methods and technology being used. If the operator uses ALARM technology to detect and isolate a leak or release within 48 hours of discovery and repair the leak or release within 15 days of discovery, the operator may obtain a credit against its reported volume of lost natural gas pursuant to Paragraph (4) of Subsection B of 19.15.28.10 NMAC.

Reporting to affected upstream operators.

(1) No less than 14 days prior to the date of scheduled maintenance, replacement or repair of a natural gas gathering system, the operator shall provide written notification to each upstream operator whose natural gas is gathered by the system of the date and expected duration that the system will not gather natural gas.

(2) As soon as possible but no more than 2412 hours after discovery of the need for an emergency or malfunction, or the need for unscheduled maintenance, or malfunction, replacement or repair of a natural gas gathering system, the operator shall provide verbal written notification to each upstream operator whose natural gas is gathered by the system of the date and expected duration that the system will not gather natural gas.

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and shall provide written confirmation of the verbal notification, including the date, time, person, and telephone number to whom verbal notification was given no later than 24 hours after discovery.

(3) The operator shall make and keep a record of each notification for no less than five years and make such records available for inspection by the division upon request.

E. Measurement of vented and flared natural gas.

(1) The operator shall measure <u>or estimate</u> the volume of natural gas that it vents, flares or beneficially uses regardless of the reason or authorization for such venting or flaring.

(2) The operator shall install equipment to measure the volume of natural gas vented or flared from a natural gas gathering system.

(3) Measuring equipment shall <u>conform to an industry standard such as American Petroleum</u> Institute (API) Manual of Petroleum Measurement Standards (MPMS) Chapter 14,10 Measurement of Flow to <u>Flaresbe an orifice meter or other measurement device or technology such as a thermal mass or ultrasonic flow</u> meter approved by the division that, at the time of installation, complies with the accuracy ratings and design standards for the measurement of natural gas, such as the American petroleum institute, international organization for standards, or American gas association.

(4) Measuring equipment shall not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measuring equipment.

(5) For an event for which <u>When If</u> metering is not practicable <u>due to circumstances</u>, such as <u>low flow rate or</u> low pressure venting and flaring, the operator shall estimate the volume of vented or flared natural gas <u>using a methodology that can be independently verified</u>.

Reporting of vented and or flared natural gas.

Venting or flaring caused by <u>an</u> emergency, or <u>a</u> malfunction, or of long duration.

(a) The operator shall notify the division of venting or flaring that exceeds 50 MCF in volume and either results from an emergency or malfunction or lasts eight hours or more cumulatively within any 24-hour period <u>from a single event</u> by filing a form C-129 with the division as follows:

(i) for venting or flaring that equals or exceeds 50 MCF but is less than 500 MCF from a single event, notify the appropriate division district office in writing by filing a form C-129 no later than 15 days following discovery or commencement of venting or flaring; or

(ii) for venting or flaring that equals or exceeds 500 MCF or otherwise qualifies as a major release as defined in 19.15.29.7 NMAC from a single event, notify the appropriate division district office verbally or by e-mail as soon as possible and no later than 24 hours following discovery or commencement of venting or flaring and provide the information required in form C-129. No later than 15 days following the discovery or commencement of venting or flaring, the operator shall file a form C-129 that verifies, updates, or corrects the verbal or e-mail notification; and

(iii) no later than 15 days following the termination of venting or flaring, notify the appropriate division district office by filing a form C-129.

(b) The operator shall provide and certify the accuracy of the following information in the form C-129:

	(i)	operator's name;
	(ii)	name and type of facility;
	(iii)	equipment involved;
	(iv)	compositional analysis of vented or flared natural gas;
	(v)	date(s) and time(s) that venting or flaring was discovered or
commenced and terminated;		
	(vi)	measured or estimated volume of vented or flared natural gas;
	(vii)	cause and nature of venting or flaring;
	(viii)	steps taken to limit the duration and magnitude of venting or flaring;
and		
	(ix)	corrective actions taken to eliminate the cause and recurrence of
venting or flaring.		
(c)	At the division's request, the operator shall provide and certify additional	
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information by the specified date.

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(d) The operator shall file a form C-141 instead of a form C-129 for the release of a liquid during venting or flaring that is or may be a major or minor release under 19.15.29.7 NMAC.

(2) Monthly reporting of vented and flared natural gas. The operator shall <u>separately</u> report the volume of vented <u>natural gas</u> and <u>the volume of</u> flared natural gas for each month in each category listed below. Beginning July <u>1,ne</u> 2021, the operator shall <u>gather data for submit</u>-quarterly reports in a format specified by the division <u>and submit by November 15, 2021 for the third quarter and February 15, 2022 for the fourth quarter</u>. Beginning January 2022, the operator shall submit a form C-115B monthly on or before the 15th day of the second month following the month in which it vented or flared natural gas. The operator shall specify whether it estimated or measured each reported volume. In filing the initial report, the operator shall provide the methodology (measured or estimated using calculations and industry standard factors) used to report the volumes on the form, and shall report changes in the methodology on future forms. The operator shall make and keep records of the measurements and estimates, including records showing how it calculated the estimates, for no less than five years and make such records available for inspection by the division upon request. The categories are:

- (a) emergency;
- (b) non-scheduled maintenance and malfunction;
- (c) routine repair and maintenance, including blowdown and depressurization;
- (d) beneficial use, including pilot and purge gas, fired equipment and engines;
- (e) gathering pipeline blowdown and purging;
- (f) gathering pipeline pigging;
- (g) uncontrolled storage tanks;
- (h) venting as a result of normal operation of pneumatic controllers and pumps;
- (i) improperly closed or maintained thief hatches <u>on tanks that are</u>routed to a flare

or control device; and

(j) other not described above.

(3) Upon submittal of the C-115B report, the division will compile and publish an operator's vented and flared natural gas information for each month on a volumetric and gas capture percentage basis The operator shall report the lost natural gas for each month on a volumetric and percentage basis on form C 115B.

(a) To calculate the lost natural gas on a volumetric basis, the operator shall deduct the volume of natural gas used for beneficial use, and vented or flared during an emergency and ALARM credits authorized by Paragraphs (5) and (6) of Subpart B of 19.15.28.10 NMAC, from the volume of natural gas reported on its form C-115B for the calendar year.

(b) To calculate the lost natural gas on a percentage basis, the operator shall deduct the volume of natural gas reported on its form C-115B for the calendar year, but not including the volume of natural gas used for beneficial use <u>and</u>,-vented or flared during an emergency <u>and ALARM credits authorized by</u> Paragraphs (5) and (6) of Subpart B of 19.15.28.10 NMAC, from the total volume of natural gas gathered, and divide by the total volume of natural gas gathered.

(4) Upon request by the division, the operator, at its own expense, shall retain a third-party approved by the division to verify any data or information collected or reported pursuant to Subsections E and F of 19.15.28.8 NMAC and make recommendations to correct or improve the collection and reporting of data and information, submit a report of the verification and recommendations to the division by the specified date, and implement the recommendations in the manner approved by the division.

(5) Upon the New Mexico environment department's request, the operator shall promptly provide a copy of any form filed pursuant to 19.15.28 NMAC. [19.15.28.8 NMAC – N, xx/xx/xxxx]

19.15.28.9 LOCATION REQUIREMENTS:

The operator shall file with the division a GIS digitally formatted as-built map:

(1) for a new gathering pipeline or natural gas gathering system, no later than 90 days after placing the gathering pipeline or system into service;

(2) for an existing gathering pipeline or natural gas gathering system, no later than May 31, 2021; and

(3) for an addition to an existing gathering pipeline or natural gas gathering system, no later than 90 days after placing the addition into service.

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B. To ensure proper field identification of a gathering pipeline in an emergency, the as-built map shall include a layer which identifies the pipeline size and construction material type.

C. No later than May 31 of each year, the operator shall file with the division an updated GIS digitally formatted as-built map of its gathering pipeline or natural gas gathering system, which shall include a GIS layer that identifies the date, location and volume of vented or flared natural gas of each emergency, malfunction and release reported to the division since 19.15.28 NMAC became applicable to the pipeline or system.

DC. <u>TheAn</u> operator may assert confidentiality for the GIS digitally formatted as-built map and GIS layer, which the division will review pursuant to Section 71-2-8 NMSA 1978. [19.15.28.9 NMAC – N, xx/xx/xxxx]

19.15.28.10 STATEWIDE NATURAL GAS CAPTURE REQUIREMENTS:

A. Statewide natural gas capture requirements. Commencing January 1, 2022, the operator of a natural gas gathering system shall reduce the annual volume of vented and flared natural gas in order to capture <u>no</u> <u>less than</u> ninety-eight percent of the natural gas gathered in each of two reporting areas, one north and one south of the Township 10 North line, by December 31, 2026. The division shall calculate and publish each operator's baseline gas capture rate based on the operator's 2021 <u>quarterly reports as per Paragraph (2) of Subsection G of 19.15.28.8 NMAC monthly data reported on form C 115B for each reporting area in which the operator has a natural gas gathering system. In each calendar year between January 1, 2022 and December 31, 2026, the operator shall increase the its annual percentage of natural gas captured in each reporting area in which it operates based on the following formula: (2021 baseline loss rate minus two percent) divided by five.</u>

(1) The following table provides examples of the formula based on a range of baseline natural gas capture rates.

Baseline Natural Gas	Minimum Required Annual
Capture Rate	Natural Gas Capture Percentage
	Increase
90-98%	0-1.6%
80-89%	>1.6-3.6%
70-79%	>3.6-5.6%
0-69%	>5.6-19.6%

(2) If the operator's baseline capture rate is less than sixty percent, the operator shall submit by the specified date to the division for approval, a plan to meet the minimum required annual capture percentage increase.

(3) An operator that acquires a natural gas gathering system from another operator shall comply with its statewide natural gas capture requirements for the acquired system no later than December 1, 2026, unless the division approves a later date. An operator's acquisition of a natural gas gathering system from another operator shall not affect its annual natural gas capture requirements. No later 60 days following the acquisition, the operator may file a written request to the division requesting to modify its gas capture percentage requirements for good cause based on its acquisition. The division may approve, approve with conditions, or deny the request in its sole discretion.

(4) Operators that are affiliated shall consolidate their natural gas capture reporting and compliance obligations.

B. Accounting. No later than February 15 each year beginning in 20222023, the operator shall submit a report certifying compliance with its statewide gas capture requirements. The operator's volume of vented and flared natural gas shall be counted as lost natural gas and excluded from the volume of natural gas gathered or used for beneficial use in the calculation of its statewide natural gas capture requirements, except that the operator may exclude from the volume of gathered natural gas:

(1) the operator may exclude from the volume of gathered natural gas the volume of vented and flared natural gas pursuant to Subparagraph (a) of Paragraph (2) of Subsection F of 19.15.28.8 NMAC for which the operator timely filed, and the division approved, a form C-129; and

(2) the operator may exclude from the volume of gathered natural gas the volume of natural gas reported as a beneficial use pursuant to Subparagraphs (d) or (h) of Paragraph (2) of Subsection F of 19.15.28.8

NMAC, provided that the operator identifies the volume of vented natural gas, the reason that the operator vented the natural gas rather than capturing it and any other relevant information requested by the division; and an operator that used a division-approved ALARM technology to monitor for leaks and (3) releases may obtain a credit against the volume of lost natural gas if it discovered the leak or release using the ALARM technology, and the operator: isolated the leak or release within 48 hours following field verification; (a) **(b)** repaired the leak or release within 15 days or another date approved by the division; timely notified the division by filing a form C-129 or form C-141; (c) timely reported the volume of natural gas leaked or released on form C 115 as (d) an ALARM event pursuant to Subparagraph (n) of Paragraph (2) of Subsection F of 19.15.28.8 NMAC; and used ALARM monitoring technology as a routine and on-going aspect of its (<u>d</u>e) waste-reduction practices. For discrete waste-reduction practices such as aerial methane **(i)** monitoring, the operator must use the technology at least twice per year; and for waste-reduction practices such as automated emissions monitoring (ii) systems that operate routinely or continuously, the division will determine the required frequency of use. An operator may file an application with the division for a credit against its volume of (4) lost natural gas that identifies: the ALARM technology used to discover the leak or release; (a) the dates on which the leak or release was discovered, field-verified, isolated, **(b)** and repaired; the method used to measure or estimate the volume of natural gas leaked or (c) released; (**d**) a description and the date of each action taken to isolate and repair the leak or release; visual documentation or other verification of discovery, isolation, and repair of (e) the leak or release; **(f)** a certification that the operator did not know or have reason to know of the leak or release before discovery using ALARM technology; and a description of how the operator used ALARM technology as a routine and (g) on-going aspect of its waste-reduction practices. For each leak or release reported by an operator that meets the requirements of (5) Paragraphs (3) and (4) of Subsection B of 29.15.28.10 NMAC, the division, in its sole discretion, may approve a credit that the operator can apply against its reported volume of lost natural gas as follows: a credit of forty percent of the volume of natural gas discovered and isolated (a) within 48 hours of discovery and timely repaired; and **(b)** an additional credit of twenty percent if the operator used ALARM technology no less than once per calendar quarter as a routine and on-going aspect of its waste-reduction practices. (6)A division-approved ALARM credit shall: (a) be used only by the operator who submitted the application pursuant to Paragraph (4) of Subsection B of 29.15.28.10 NMAC; not be transferred to or used by another operator, including a parent, subsidiary, **(b)** related entity or person acquiring the natural gas gathering system; be used only once; and (c) expire 24 months after division approval. (**d**) C. Third-party verification. Upon request by the division, the operator, at its own expense, shall retain a third party approved by tThe division may request that an operator to verify any data or information collected or reported pursuant to this Part, Subsections E and F of 19.15.28.8 NMAC and make recommendations to correct or improve the collection and reporting of data and information, submit a report of the verification and recommendations to the division by the specified date, and implement the recommendations in the manner approved

by the division. If the division and the operator cannot reach agreement on the division's request, the operator may file an application for hearing before the division. The operator, at its own expense, shall retain a third party

approved by the division to conduct the activities agreed to by the division and the operator or ordered by the division following a hearing. [19.15.28.10 NMAC – N, xx/xx/xxxx]