From:	Bradfute, Jennifer (MRO)
To:	NMOAI, NMENV; Kuehn, Elizabeth, NMENV; WasteRule, EMNRD, EMNRD; Polak, Tiffany, EMNRD
Subject:	[EXT] Marathon Oil"s Comments to the draft Methane Rules
Date:	Wednesday, September 16, 2020 2:40:42 PM
Attachments:	image001.png Exhibit 1 - NMED Rule 9-16-2020 (003).pdf Exhibit 2 - EMNRD Rule - 9-16-2020 -J.pdf Exhibit 1 - NMED Rule 9-16-2020 (003).docx Exhibit 2 - EMNRD Rule - 9-16-2020.docx EMNRD Clean - 9-16-2020.docx FINAL - Marathon Oil Comment Letter, NMED and EMNRD 9-16.pdf

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Liz and Tiffany,

Please see Marathon Oil's comments and proposed redlines to the draft rules. Thank you again for the opportunity to provide comments to the drafts.

For EMNRD – we do propose a lot of redlines, but many of these redlines focus on streamlining reporting. As a result, we have also included a clean version of our proposal. The goal of including a clean version is to show that if redlines are accepted by the agency, the intent of the draft rule largely stays intact.

We would be happy to discuss any of Marathon's comments or recommendations with the agencies.

Thank you,
Jennifer

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Marathon Oil

EXHIBIT 1 – Redline of NMED Rule

Rule Preamble: The New Mexico Environment Department has developed the following draft regulation pursuant to the directives of Section 74-2-5.3 of the New Mexico Air Quality Control Act. The objective of the proposed rule is to establish emissions standards for volatile organic compounds (VOC) and nitrogen oxides (NOx) for oil and gas production and processing sources located in areas of the State within the Environmental Improvement Board's jurisdiction where ozone concentrations are exceeding 95% of the national ambient air quality standard.

This is a preliminary draft being released for public input in advance of the Department filing a formal rulemaking petition with the Board and requesting a public hearing. The purpose of this initial, pre-petition comment period is to foster transparency and facilitate continued engagement from stakeholders, members of the public, and other interested parties. Specifically, the Department is seeking public input on the proposed rule language to assist in identifying potential regulatory and technical issues, and areas that require additional clarification or modification. Additional opportunities for public input and changes to the draft rule will occur through the formal rule-making process following the filing of the rulemaking petition. This initial, pre-petition process will help ensure that major issues or problematic areas are identified and can be addressed prior to the initiation of the formal process.

NMED is soliciting specific review and public input on a number of proposed provisions and concepts in the draft rule. In particular, for the equipment standards section, NMED requests feedback on the following:

1. The proposed definitions of stripper wells and marginal wells under the draft rule and the regulatory requirements that would apply to those wells under Section 20.2.50.25 NMAC;
2. Examples of technologies or regulatory programs utilizing non-combustion emission control technologies, like fuel cells, as a means of reducing or eliminating emissions for inclusion in Section 20.2.50.15 NMAC;
3. Specific regulatory language regarding criteria necessary to demonstrate equivalency of alternative equipment leak monitoring plans in Section 20.2.50.16(C) NMAC;
4. Specific regulatory language to establish a pre-approved equipment leak monitoring plan in 20.2.50.16(C) NMAC;
5. For leak detection and repair requirements under Section 20.2.50.16 NMAC, specific standards to be used by NMED to determine if certain new or existing technologies (real-time remote fence line and aerial surveillance, for example) or proposals are enforceable, effective, and equivalent. Specific feedback on data capture requirements, quality assurance, error rates, calibration requirements, training and certification, interference issues, quantification methods, and pollutant identification will assist the Department in exploring this option further;
6. Regulatory requirements for oil and gas evaporative ponds in Section 20.2.50.26 NMAC, including whether to establish emission standards based on the pond's potential to emit or throughput; and
7. Opportunities for greater transparency.

Comments or input on the draft rules may be submitted electronically to nm.methanestrategy@state.nm.us or via hardcopy to Liz Bisbey-Kuehn, NMED Air Quality Bureau, 525 Camino de los Marquez, Santa Fe, NM 87505 by 5 p.m. Aug. 20, 2020.

TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 2 AIR QUALITY (STATEWIDE)
PART 50 OIL AND NATURAL GAS REGULATION FOR OZONE PRECURSORS

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TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 2 AIR QUALITY (STATEWIDE)
PART 50 OIL AND NATURAL GAS REGULATION FOR OZONE PRECURSORS

20.2.50.1 ISSUING AGENCY:
New Mexico Environmental Improvement Board.

20.2.50.2 SCOPE:
This rule applies to sources located within counties that have areas with ambient ozone concentrations in excess of ninety-five percent of the national ambient air quality standard for ozone, including but not limited to Chaves, Eddy, Lea, Rio Arriba, Sandoval, and San Juan. Sources located in Bernalillo County, on Tribal Lands, and in other areas that are not within the Board's jurisdiction are excluded. This rule is intended to supplement Title 20.

20.2.50.3 STATUTORY AUTHORITY: NMSA 1978, § 74-2-5.3

20.2.50.4 DURATION: Permanent.

20.2.50.5 EFFECTIVE DATE:
A. **[To be determined]**, except where a later date is cited in a section or paragraph.

Commented [A1]: We recommend delaying the effective date or creating a tiered effective date for the most costly requirements in the draft rule. This will help vendors have sufficient equipment in place.

20.2.50.6 APPLICABILITY:
A. Except as provided in paragraph (B), Part 50 applies to crude oil production and natural gas production equipment and operations that extract, collect, store, transport, or handle hydrocarbon liquids or produced water in the areas specified in 20.2.50.2 NMAC. Crude oil production includes the well and extends to the point of custody transfer to the crude oil transmission pipeline or any other form of transportation. Natural gas production, processing, transmission, and storage includes the well and extends to, but does not include, the local distribution company custody transfer station.
B. Oil refineries are not subject to this Part.
C. Equipment located at stripper well~~s~~ facilities, as defined in 20.2.50.8 NMAC~~, is~~ are required to comply with the provisions~~exempt from the requirements of this Part 50, except as~~ specified in 20.2.50.25 NMAC only and are exempt from all other requirements of Part 50.
~~D. Individual facilities with a site-wide total annual potential to emit less than 215 tpy) of volatile organic compounds (VOC) are exempt from the requirements of this Part, except as specified in 20.2.50.25 NMAC.~~
D. Shut-in wells, as defined in 20.2.50.8 NMAC, are exempt from the requirements of this Part 50, provided:
(a) Prior to shut in tanks are consolidated, emptied, and system degassed to the extent practicable to minimize emissions during inactive time; and
Upon bringing Wellhead site back online, monitoring and testing requirements

Commented [A2]: We recommend moving this under the definition for Striper Well Facilities and combining C and D.

under this Part will resume; and

(b) Time of which the well is shut-in will be documented.

20.2.50.7 OBJECTIVE:

The objective of this Part is to establish emission standards for volatile organic compounds (VOC) and nitrogen oxides (NO_x) for oil and gas production and processing sources.

20.2.50.8 DEFINITIONS:

In addition to the terms defined in 20.2.2 NMAC (Definitions), as used in this Part:

A. "Air Pollution Control Equipment" means open flares, enclosed combustion devices, thermal oxidizers, vapor recovery units, fuel cells, condensers, other combustion devices, air fuel ratio controllers, oxidative catalytic converters, selective and non- selective catalytic converters, or emission reduction equipment or technologies used to comply with emission standards and emission reduction requirements in 20.2.50 NMAC that are approved by the Department.

B. "Approved Instrument Monitoring Method" means an infra-red camera, U.S. EPA Method 21, or other instrument-based monitoring method or program approved by the Department in advance and in accordance with 20.2.50 NMAC.

C. "Auto-Igniter" means a device which will automatically attempt to relight the pilot flame in the combustion chamber of a control device in order to combust volatile organic compound emissions.

D. "Bleed rate" means the rate in standard cubic feet per hour at which natural gas and VOC is continuously or intermittently vented (bleeds) from a pneumatic controller.

~~E. "Calendar Year" means a year beginning January 1 and ending December 31.~~

~~F.~~E. "Centrifugal Compressor" means any machine used for raising the pressure of natural gas by drawing in low pressure natural gas and discharging significantly higher-pressure natural gas by means of mechanical rotating vanes or impellers. Screw, sliding vane, and liquid ring compressors are not centrifugal compressors.

~~G. "Commencement of operation" means for oil and natural gas wellheads, the date any permanent production equipment is in use and product is flowing to sales lines, gathering lines, or storage tanks from the first producing well at the stationary source, but no later than the end of well completion operations.~~

~~H.~~F. "Compressor station" means any permanent combination of one or more compressors that move natural gas at increased pressure through gathering or transmission pipelines, or into or out of storage. This includes, but is not limited to, gathering and boosting stations and transmission compressor stations.

~~I.~~G. "Component" means each pump seal, flange, pressure relief device (including thief hatches or other openings on a controlled storage tank), connector, and valve that contains or contacts a process stream with hydrocarbons, except for components in process streams consisting of glycol, amine, produced water, or methanol.

~~J.~~H. "Connector" means flanged, screwed, or other joined fittings used to connect two pipes or a pipe and a piece of process equipment or that close an opening in a pipe that could be connected to another pipe. Joined fittings welded completely around the circumference of the interface are not considered connectors.

I. "Credible Information" means information of the type that would qualify as admissible evidence in proceeding before a New Mexico Court, and that is validated

by the submitter against requirements contained in either this Part or applicable permits, rules or orders issued by the Department; *provided that* the submitter must calculate alleged emissions estimates and make a threshold showing of the alleged violation, and the Department, in its discretion, must then independently find the submitted information to be credible.

~~K.~~J. "Custody Transfer" means the transfer of oil or natural gas after processing and/or treatment in the producing operations or from storage ~~vessels~~ tanks or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation.

~~L.~~K. "Department" means the New Mexico Environment Department.

~~M.~~L. "Downtime" ~~means the~~is any period of time when air pollution control equipment is not operational and an associated well is producing. ~~or a well is producing and the air pollution control equipment is not in operation~~.

~~N.~~M. "Enclosed Combustion Device" means any combustion device where gaseous fuel is combusted in an enclosed chamber. This may include, but is not limited to enclosed flares, boilers, re-boilers, and heaters.

N. "Evaporative Pond" shall mean evaporation ponds which are either (i) not permitted by the New Mexico Oil Conservation Division, or (ii) ponds which are located within a Surface Waste Management Facility permitted under Part 19.15.36 NMAC. For the purposes of this Part, recycling, storage, treatment and reuse equipment utilized pursuant to NMSA 1978, § 70-13-1, et seq. shall not qualify as an Evaporative Pond.

Commented [A3]: The purpose of the Produced Water Act was to encourage water recycling and reuse – particularly within the oil field. If below requirements apply to produced water recycling facilities, it will be uneconomic to recycle and reuse produced water within the oil field. This definition is intended to: (1) indicates that certain types of evaporative ponds are subject to regulation; and (2) make clear that, if a pond is used pursuant to the Produced Water Act, it is not subject to these requirements.

O. "Existing" means any piece of equipment regulated by this Part that began operation prior to the effective date of the rule and has not since been modified or reconstructed.

P. "Gas processing plant" means equipment assembled for the extraction of natural gas liquids from natural gas, the fractionation of the liquids into natural gas products, or other operations associated with the processing of natural gas products. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the products.

Q. "Gathering and boosting site" means any permanent combination of equipment that collects or move natural gas, crude oil, condensate, or produced water ~~between~~ downstream of the wellhead site. ~~and m~~ Midstream oil and natural gas collection or distribution facilities ~~such~~ including~~as~~ tank batteries or compressor stations, or sites into or out of storage.

R. "Glycol Dehydrator" means any device in which a liquid glycol absorbent (including, ethylene glycol, diethylene glycol, or triethylene glycol) directly contacts a natural gas stream and absorbs water.

S. "Hydrocarbon liquids" means any naturally occurring, unrefined petroleum liquid and can include oil, condensate, ~~produced water,~~ and intermediate hydrocarbons.

~~S.~~T. "Infra-red Camera" means an optical gas imaging instrument designed for and capable of detecting hydrocarbons.

~~T.~~U. "Liquids Unloading" means the removal of accumulated liquids from the wellbore that reduce or stop natural gas production.

~~U.~~V. "Liquid Transfers" means the loading and unloading of hydrocarbon liquids ~~or produced water~~ between storage tanks and tanker trucks or tanker rail cars for transport.

~~V.~~W. "Modification" means any physical change in, or change in the method of operation of, a stationary source which results in an increase in the potential emission rate of any regulated air contaminant emitted by the source or which results in the emission of any

regulated air contaminant not previously emitted, but does not include:

(1) a change in ownership of the source;

(2) routine maintenance, repair or replacement;

(3) installation of air pollution control equipment, and all related process equipment and materials necessary for its operation, undertaken for the purpose of complying with regulations adopted by the board or pursuant to the federal act; or

(4) unless previously limited by enforceable permit conditions:

(a) an increase in the production rate, if such increase does not exceed the operating design capacity of the source;

(b) an increase in the hours of operation; or

(c) use of an alternative fuel or raw material if, prior to January 6, l975, the source was capable of accommodating such fuel or raw material, or if use of an alternate fuel or raw material is caused by any natural gas curtailment or emergency allocation or any other lack of supply of natural gas.

~~W.~~X. "Natural Gas Compressor Station" means one or more compressors designed to compress natural gas from well pressure to gathering system pressure prior to the inlet of a natural gas processing plant, or to move compressed natural gas through a transmission pipeline.

~~X.~~Y. "Natural Gas-Fired Heater" means an enclosed device using controlled flame and with a primary purpose to transfer heat directly to a process material or to a heat transfer material for use in a process.

~~Y.~~Z. "Natural Gas Processing Plant" means any processing equipment engaged in the extraction of natural gas liquids from natural gas, fractionation of mixed natural gas liquids to natural gas products, or both. A Joule-Thompson valve, a dew point depression valve, or an isolated or standalone Joule-Thompson skid is not a natural gas processing plant.

AA. "New" means any piece of equipment regulated by this Part that began operation on or after the effective date.

BB. "Optical gas imaging" means an imaging technology that utilizes high-sensitivity infra-red cameras designed for and capable of detecting hydrocarbons.

CC. "Pneumatic Controller" means an automated instrument used for maintaining a process condition such as liquid level, pressure, flow volume, delta-pressure and temperature.

DD. "Pneumatic Pump" means a positive displacement pump powered by pressurized natural gas that uses the reciprocating action of flexible diaphragms in conjunction with check valves to pump a fluid. A pump in which a fluid is displaced by a piston driven by a diaphragm is not considered a diaphragm pump. A lean glycol circulation pump that relies on energy exchange with the rich glycol from the contactor is not considered a diaphragm pump.

EE. "Potential to Emit" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is ~~federally~~ legally and practicably enforceable. The potential to emit for nitrogen dioxide shall be based on total oxides of nitrogen.

FF. "Produced Water" means water that is extracted from the earth from an oil or natural

gas production well, or that is separated from crude oil, condensate, or natural gas after extraction.

GG. "Reciprocating Compressor" means a piece of equipment that increases the pressure of process gas by positive displacement, employing linear movement of the piston rod.

HH. "Responsible Official" means one of the following:

(1) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating.

(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

(3) For a municipality, state, federal or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of US EPA).

II. "Shut-in well " means a Wellhead site~~well~~ that is not being used for beneficial purposes such as production, injection or monitoring and that is not being drilled, completed, repaired or worked over.

"Startup" means the setting into operation of any air pollution control equipment or process equipment.

JJ. "Storage tank" means any single storage tank that is designed to contain an accumulation of hydrocarbon liquids or produced water and is constructed primarily of non-earthen materials (such as wood, concrete, steel, fiberglass, or plastic). ~~storageprocess vessel, or fixed roof storage vessel or series of storage vessels that are connected together via a liquid line.~~

~~**KK.** "Storage vessel" means a single tank or other vessel that is designed to contain an accumulation of hydrocarbon liquids or produced water and is constructed primarily of non-earthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provide structural support, or a process vessel such as surge control vessels, bottom receivers, or knockout vessels. A well completion vessel that receives recovered liquids from a well after commencement of operation for a period which exceeds 60 days is considered a storage vessel. A storage vessel does not include: vessels that are skid-mounted or permanently attached to something that is mobile (such as trucks, railcars, barges, or ships); are located at the site for less than 180 consecutive days; or pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere.~~

LL. "Stripper well facilities" means an individual oil or gas well with a maximum daily average oil production not exceeding ~~10~~ 15barrels of oil per day, or a natural gas well with a maximum daily average natural gas production not exceeding ~~60~~250,000 standard cubic feet per day, or any wellhead site with a site-wide total annual potential to emit less than 25 tons per year (tpy) of volatile organic compounds (VOCs) ~~with a maximum daily average combined oil and natural gas production not exceeding 10 barrels of oil equivalent per day during any 12-month consecutive time period.~~

MM. "Wellhead site" means all equipment ~~at a single stationary source~~ directly associated with one or more oil wells or natural gas wells upstream of the gathering and boosting

Commented [A4]: We are recommending this definition to better ensure consistency and clarity in the below proposed rules.

Commented [A5]: The term "Storage Vessel" is not used often in the below rules. Do you need a definition? Or can this concept be covered by the definition for storage tanks?

Commented [A6]: A number of wells outside of the proposed definition for "stripper well" will likely be uneconomic to continue to operate. There are a number of different ways that this issue could be remedied. The simplest way is to increase the thresholds within this definition.

Other options include:

(1)Creating a definition/exemption for non-economic wells. This would better take into account the impact on the economy and the remaining life of existing assets, to ensure that premature abandonment does not occur.

(2) Creating alternative ways to establish a sufficient PTE, which does not require retrofitting/replacements of equipment.

site(s). natural gas processing plant. This equipment includes, but is not limited to, equipment used for extraction, collection, routing, storage, separation, treating, dehydration, artificial lift, combustion, compression, pumping, metering, monitoring, and flowline.

NN. "Workover" mean any operation done on, within, or through the wellbore or downhole after the initial completion of a well.

20.2.50.9 AMENDMENT AND SUPERSESSION OF PRIOR REGULATIONS [PLACEHOLDER]

20.2.50.10 DOCUMENTS:

Documents incorporated and cited in this Part may be viewed at the New Mexico Environment Department, Air Quality Bureau, Harold Runnels Building, 1190 St. Francis Dr., or 2048 Galisteo St., Santa Fe, NM 87502 [87505].

20.2.50.11 PLACEHOLDER

20.2.50.12 GENERAL PROVISIONS

A. General Requirements

(1) All equipment subject to requirements under 20.2.50 NMAC shall be operated and maintained consistent with manufacturer specifications and/or good engineering and maintenance practices. The owner or operator shall keep manufacturer specifications and maintenance practices on file as needed and make them available upon request by the Department.

(2) Owners and operators of equipment subject to requirements under 20.2.50 NMAC shall establish and implement a plan to minimize emissions during routine or predictable startup, shutdown, and scheduled maintenance through work practice standards and good air pollution control practices. [20.2.7.14 NMAC]

Owners and operators of equipment subject to requirements under 20.2.50 NMAC are exempt from operating, maintenance, reporting and monitoring requirements of inactive wells provided:

Prior to shut in tanks are consolidated, emptied, and system degassed to the extent practicable to minimizeso no emissions occur during inactive time.

Upon bringing equipment back online, initiation of required monitoring and testing must be reinstated within 7 days.

Annual testing will be required if the well commences operation at any point during the year

() Time of which the well is inactive will be documented.

(3) The emission of an air contaminant in excess of the quantity, rate, opacity, or concentration specified in 20.2.50 NMAC that results in an excess emission is a violation of 20.2.50 NMAC.

(4) The owner or operator of equipment having an excess emission shall comply with 20.2.7 NMAC and, to the extent practicable, operate the equipment, including associated air pollution control equipment, in a manner consistent with good air

Commented [A7]: This is another area where a shut-in well exemption could be inserted.

pollution control practices for minimizing emissions.

(5) The owner or operator of equipment that has an excess emission may claim an affirmative defense for the excess emission pursuant to 20.2.7.111, 20.2.7.112, and 20.2.7.113 NMAC.

(6) Within one year of the effective date of this rule, owners and operators of equipment subject to 20.2.50 shall develop and implement a~~a C~~ computer ~~M~~maintenance ~~M~~management ~~S~~system (CMMS) ~~requiring an Equipment Monitoring Information and Tracking TagTag (EMITT) shall physically tag the unit with an EMITT that is scannable with a hand held scanner (RFID or QR)~~ that is able to uniquely ~~identif~~identify pieces of equipment governed by this Part. ~~ies the each regulated piece of equipment unless otherwise exempted within the equipment section of the rule. unit to which it is assigned and the. EMITT CMMS shall be maintained by the owner or operator.~~ Data in the ~~EMITT~~ CMMS ~~shall~~will be ~~scannable by~~available upon request to state inspectors and shall include ~~to provide at a minimum~~, the following information:

(a) Unique unit identification number;
(b) UTM coordinates of the facility;
(c) Type of unit (tank, VRU, dehydrator, pneumatic controller, etc.);
(d) For equipment, the VOC (and NOx, if applicable) potential to emit, if applicable, in pounds per hour and tons per year; and
(e) For control equipment, the controlled VOC (and NOx, if applicable) potential to emit, if applicable, in pounds per hour and tons per year ~~and the design control efficiency in percent~~.

~~(7) The EMITT shall be linked to an EMITT Database accessible to state inspectors that at a minimum supplies the data required by Section 20.2.50.12 NMAC and any other data required for that equipment under this Part.~~

Commented [A8]: Many operators currently use operations management software, such as SAP PM. However, this software does not have printable tags with scanners. It will be very costly for operators to transition SAP information to another software platform. Also, this rule may necessitate that operators prematurely abandon well-recognized software platforms.

Commented [A9]: If the goal is to share information via cloud computing, there are less expensive and labor intensive ways to share this information, like uploading information electronically to a cloud from current software systems.

B. Monitoring Requirements

(1) All equipment subject to control or monitoring requirements under this Part shall be inspected monthly to ensure proper maintenance and operation, unless a different inspection schedule is specified in the section below applicable to that particular type equipment. If the emission unit is shutdown at the time when periodic monitoring or inspections are due to be accomplished, the owner or operator is not required to restart the unit for the sole purpose of performing the monitoring or inspection but shall so note in the equipment or controller's records.

(2) All periodic monitoring events shall be conducted at 90% or greater of the unit's capacity. If the 90% capacity cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions.

(3) In order to allow for ~~equivalent~~ new and alternate monitoring technologies that satisfy the requirements of this regulation, prior to implementing, owners and operators may request an equally effective, enforceable, and equivalent alternative monitoring strategy to the Department for approval.

(a) Each request shall be made on application forms provided by the Department. Upon approval of a request, the Department will issue an Alternative Monitoring Approval Letter. All Alternative Monitoring Approval Letters will

be published on a link on the Department's webpage to provide authorization for the use of the approved alternative monitoring method.

(b) The Agency will upon receipt of request, review the request and provide approval or denial within 30 days. If no approval or denial is received, it is assumed that the proposed alternative technology is approved for use until revoked by the Department.~~Each owner or operator will need to request and receive approval from the Department in order to operate under an approved Alternative Monitoring Strategy~~.

(4) Each ~~EMITT~~ CMMS shall ~~be initially scanned and the~~capture required monitoring data ~~shall be electronically captured~~ during the monitoring event. ~~The captured data shall be uploaded (either live or subsequently) into the database.~~ At a minimum, the uploaded data shall include:

(a) Date and time of the monitoring event;

~~(b) The name of the monitoring personnel;~~

~~(c)~~(b) Unique unit identification number;

~~(d)~~(c) Type of unit;

~~(e)~~(d) A description of any maintenance or repair activities conducted during the inspection; and

~~(f)~~(e)R~~equired r~~esults of any monitoring required by 20.2.50 NMAC.

C. Recordkeeping Requirements

(1) Owners and operators shall keep records of any inspections and/or maintenance required under this Part within the CMMS. Records shall include:

(a) Date and time of the monitoring event;

~~(b) The name of the monitoring personnel;~~

~~(c)~~(b) Unique unit identification number;

~~(d)~~(c) Type of unit;

~~(e)~~(d) Required results of any monitoring required by 20.2.50 NMAC;

~~(f)~~(e)Equipment make and~~,~~ model ~~and serial number~~;

~~(g)~~(f) A copy of the equipment manufacturer's maintenance or repair recommendations;

~~(h)~~(g) A description of any maintenance or repair activities conducted during the inspection; and

~~(i)~~(h)All results of any required parameter readings.

(2) Owners and operators shall keep records required this Part for a period of five years. The records shall be retained electronically within the CMMS. The Department may treat any loss of data or failure to maintain required records ~~(including failure to transfer records upon sale or transfer or ownership or operating authority)~~ as a failure to collect the data.

(3) Owners and operators shall keep records of emissions from equipment malfunctions and routine or predictable emissions during startup, shutdown, and scheduled maintenance.

(4) Owners and operators of equipment having an excess emission shall record the following information no later than ten (10) days after the end of the excess

emission event:

(a) The equipment type and identification number;
(b) The location, date, and time;
(c) The emission limit or air quality regulation that was exceeded;
(d) The air contaminant and the magnitude of the excess emission expressed in the units of the limit or air quality regulation;
(e) The cause of the excess emission and any steps taken to limit the magnitude and duration of the excess emissions;
(f) The corrective action(s) taken to eliminate the cause of the excess emission and prevent a recurrence, if required; and
(g) Whether the owner or operator attributes the excess emission to malfunction, startup, or shutdown.

(5) Records of each ~~EMITT~~ CMMS monitoring event required by 20.2.50.12.B NMAC shall be ~~electronically uploaded (either in real time or subsequently) into~~captured in the ~~EMITT~~ CMMS database. At a minimum, the uploaded data shall include the data required in 20.2.50.12.B(4) and 20.2.50.12.C(4) NMAC and made available to the Agency upon request.

~~**(0)** Prior to the transfer of ownership of any equipment subject to this Part, the current owner or operator shall conduct and document a full compliance evaluation of all equipment subject to the rule. The documentation shall indicate whether or not each piece of equipment subject to requirements under this Part is currently complying with those requirements. The compliance determination shall be conducted no earlier than one year prior to the transfer.~~

Commented [A10]: This type of burden should fall on the acquiring company.

~~F.~~D. Reporting Requirements

(1) Owners and operators shall submit reports upon the request of the Department. Any reports requested by the Department shall be submitted electronically via the Department's Secure Extranet Portal (SEP) at https://sep.net.env.nm.gov/sep/login-form.

~~**(2)** Owner and operators of a source having an excess emission shall submit a Root Cause and Corrective Action Analysis, as directed in 20.2.7.114 NMAC, upon the request of the department.~~

20.2.50.13 STANDARDS FOR ENGINES AND TURBINES

Commented [A11]: The compliance deadlines for this sub-section should be longer than other compliance deadlines in the draft rule. Marathon has reached out to engine vendors who rent equipment to industry and they will not have sufficient equipment available to satisfy these requirements. Many larger oil and gas companies rent engines, indicating that there will be significant equipment shortages.

Also, NMED must consider the remaining useful life of existing equipment. Will these requirement essentially require useful equipment to be abandoned and prematurely replaced?

A. Applicability

(1) New and existing portable and stationary natural gas-fired spark ignition engines, compression ignition engines, and natural gas-fired combustion turbines located at wellheads, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations are subject to the requirements of 20.2.50.13 NMAC.

(2) Existing sources that were subject to federal standards of performance under 40 CFR Part 60 and Part 63 between March 25, 2004 and January 1, 2009 are exempt from the requirements of 20.2.50.13 NMAC.

B. Emission Standards

(1) Owners and operators of each portable or stationary natural gas-fired spark

ignition engine, compression ignition engine, and natural gas-fired combustion turbine shall ensure compliance with the emission standards in 20.2.50.13.B NMAC by the dates specified in 20.2.50.13.B NMAC.

(2) Each natural gas-fired spark ignition engine shall comply with the applicable emission standards in Table 1 of 20.2.50.13 NMAC.

(3) By ~~January 1~~December 31, 2022, owners and operators of existing engines shall complete an inventory of all existing engines and shall prepare a schedule for each existing engine to ensure that all existing engines comply with these requirements and meet or exceed the emission standards in Table 1 by January 1, 2028. The schedule shall meet the following requirements:

(a) By January 1, 2025~~4~~, owners and operators shall ensure 30% of the company's fleet of existing engines meet the requirements of Table 1.

(b) By January 1, 2026~~8~~, owners and operators shall ensure an additional 35% of the company's fleet of existing engines meet the requirements of Table 1.

(c) By January 1, 2030~~28~~, owners and operators shall ensure that the remaining 35% of the company's fleet of existing engines meet the requirements of Table 1.

Table 1 - Emission Standards for Natural Gas-Fired Spark-Ignition Engines

For each natural gas-fired spark-ignition engine constructed or reconstructed and installed before the effective date of 20.2.50 NMAC, the owner or operator shall ensure the existing engine(s) does not exceed the following emission standards as determined by the compliance schedule required in 20.2.50.13.B(3) NMAC:				
Engine Type	Rated bhp	NOx	CO	NMNEHC (as propane)
Lean-burn	≤100	2.0 g/bhp-h	2.0 g/bhp-h	-
Lean-burn	>100 - ≤500	1.0 g/bhp-h	2.0 g/bhp-h	0.70 g/bhp-h
Lean-burn	>500	0.50 g/bhp-h	47 ppmvd @ 15% O2 or 93% reduction	0.30 g/bhp-h
Rich-burn	≤100	2.0 g/bhp-h	2.0 g/bhp-h	-
Rich-burn	>100 - ≤500	1.0~~0.25~~ g/bhp-h	2.0~~0.30~~ g/bhp-h	0.20 g/bhp-h
Rich-burn	>500	0.20 g/bhp-h	0.30 g/bhp-h	0.20 g/bhp-h

For each natural gas-fired spark-ignition engine constructed or reconstructed and installed on or after the effective date of 20.2.50 NMAC, the owner or operator shall ensure the engine does not exceed the following emission standards upon startup:				
Engine Type	Rated bhp	NOx	CO	NMNEHC (as propane)
Lean-burn	≤100	1.0 g/bhp-h	2.0 g/bhp-h	0.70 g/bhp-h
Lean-burn	>100 - ≤500	1.0 g/bhp-h	0.70 g/bhp-h	0.30 g/bhp-h
Lean-burn	>500 - <2,370	0.50 g/bhp-h	0.25 g/bhp-h	0.30 g/bhp-h
Lean-burn	≥2,370	0.30 g/bhp-h Uncontrolled or 0.05 g/bhp-h with Control	0.25 g/bhp-h	0.30 g/bhp-h
Rich-burn	≤100	1.0 g/bhp-h	2.0 g/bhp-h	0.70 g/bhp-h
Rich-burn	>100 - ≤500	0.25 g/bhp-h	~~0.30~~1.5 g/bhp-h	0.20 g/bhp-h
Rich-burn	>500	0.20 g/bhp-h	0.30 g/bhp-h	0.20 g/bhp-h

(4) Owners and operators of natural gas-fired spark ignition engines that control NOx emissions with a control technology that uses ammonia or urea as a reagent shall ensure that the exhaust ammonia slip is limited to 10 ppmvd or less, corrected to 15 percent oxygen.

(5) Owners and operators of each compression ignition engine shall ensure compliance with the applicable emission standards in 20.2.50.13.B(5)(a) NMAC and 20.2.50.13.B(5)(b) NMAC.

(a) Stationary compression ignition engines that are subject to and complying with standards in 40 CFR Part 60, subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, are exempt from the requirements of this paragraph.

(b) Portable and stationary compression ignition engines with a maximum design power output equal to or greater than 500 horsepower that are not subject to the emission standards under 20.2.50.13.B(5)(a) NMAC shall limit NOx emissions to no more than 9 g/bhp-h. For each compression-ignition engine constructed or reconstructed and installed before the effective date of this Part, the owner or operator shall ensure compliance no later than one year from the effective date. For each compression-ignition engine constructed or reconstructed and installed on or after the effective date of this Part, the owner or operator shall ensure compliance upon startup.

(6) Owners and operators of portable or stationary compression ignition engines that control NOx emissions with a control technology that uses ammonia or urea as a reagent shall ensure that the exhaust ammonia slip is limited to 10 ppmvd or less corrected to 15 percent oxygen.

(7) Owners and operators of stationary natural gas-fired combustion turbines with a maximum design rating equal to or greater than 1,000 bhp (or a maximum heat input capacity equal to or greater than 2.54 MMBtu/hr) shall comply with the applicable emission standards for existing, new, or reconstructed turbines listed in

Table 2 of 20.2.50.13 NMAC.

Table 2 - Emission Standards for Stationary Combustion Turbines

For each natural gas-fired combustion turbine constructed or reconstructed and installed before the effective date of 20.2.50 NMAC, the owner or operator shall ensure the turbine does not exceed the following emission standards no later than one year from the effective date:				
Turbine Rating (bhp)	Turbine Rating (MMBtu/hr)	NOx (ppmvd @15% O2)	CO (ppmvd @ 15% O2)	NMNEHC (as propane, ppmvd @15% O2)
≥1,000 and <5,000	≥2.54 and <12.7	25	25	9
≥5,000 and <15,000	≥12.7 and <38.2	15	25	9
≥15,000	≥38.2	15	10 or 93% reduction	5 or 50% reduction
For each natural gas-fired combustion turbine constructed or reconstructed and installed on or after the effective date of 20.2.50 NMAC, the owner or operator shall ensure the turbine does not exceed the following emission standards upon startup:				
Turbine Rating (bhp)	Turbine Rating (MMBtu/hr)	NOx (ppmvd @15% O2)	CO (ppmvd @ 15% O2)	NMNEHC (as propane, ppmvd @15% O2)
≥5,000 and <15,900	≥12.7 and <40.4	15	10	9
≥15,900	≥40.4	9.0 Uncontrolled or 2.0 with Control	10 Uncontrolled or 1.8 with Control	5

(8) Owners and operators of stationary natural gas-fired combustion turbines that control NOx emissions with a control technology that uses ammonia or urea as a reagent shall ensure that the exhaust ammonia slip is limited to 10 ppmvd or less, corrected to 15% oxygen.

(9) Owners and operators of new or existing engines or turbines shall install an Equipment Monitoring and Information Tracking Tag (EMITT) on each engine or turbine in accordance with 20.2.50.12 NMAC.

C. Monitoring Requirements

~~**(1)**~~ Maintenance and repair ~~for all spark ignition engines, compression ignition engines, and stationary combustion turbines shall meet the minimum engine or turbine manufacturer's recommended maintenance schedule.. A~~activities that result in excess emissions and involve engine or turbine maintenance, adjustment, replacement, or repair of functional components with the potential to affect the operation of an emission unit shall be documented in CMMS system. ~~as they occur for the following events:~~

~~() Routine maintenance that takes a unit out of service for more than two hours during any 24-hour period.~~

~~**(3)**~~**(1)** ~~Unscheduled repairs that require a unit to be taken out of service for more than two hours in any 24-hour period.~~

~~**(4)**~~**(2)** Oxidation catalytic converters, selective and non-selective catalytic converters, and air-fuel ratio (AFR) controllers shall be maintained according to manufacturer's or supplier's recommended maintenance~~, including replacement~~

~~of oxygen sensors as necessary for oxygen-based controllers~~. During periods of catalyst or AFR controller maintenance, the owner or operator shall shut down the engine(s) or turbine(s) until the catalyst or AFR controller can be replaced with a functionally equivalent spare to allow the engine or turbine to remain in operation.

~~(5)~~(3) Compliance with the emission standards in 20.2.50.13.B NMAC shall be demonstrated on units >300hp by performing an initial and annual test for NOx, CO, and non- methane non-ethane hydrocarbons (NMNEHC) using a portable analyzer or EPA Reference Methods. For units with g/hp-hr emission standards, the engine load shall be calculated by using the following equations:

$$\text{Load (Hp)} = \frac{\text{Fuel consumption (scfh) x Measured fuel heating value (LHV btu/scf)}}{\text{Manufacturer's rated BSFC (btu/bhp-hr) at 100\% load or best efficiency}}$$

$$\text{Load (Hp)} = \frac{\text{Fuel consumption (gal/hr) x Measured fuel heating value (LHV btu/gal)}}{\text{Manufacturer's rated BSFC (btu/bhp-hr) at 100\% load or best efficiency}}$$

Where:
LVH = lower heating value, btu/scf, or btu/gal, as appropriate
BSCF = brake specific fuel consumption

(a) Periodic monitoring utilizing a portable analyzer shall be conducted in accordance with the requirements of the current version of ASTM D 6522. However, if a facility has met a previously approved Department criterion for portable analyzers, the analyzer may be operated in accordance with that criterion until it is replaced.
(b) The default time period for each test run shall be at least 20 minutes.
(c) Each performance test shall consist of three separate runs. The arithmetic mean of results of the three runs shall be used to determine compliance with the applicable emission standard.
(d) For all periodic monitoring events, three test runs shall be conducted at 90% or greater of the unit's capacity. If the 90% capacity cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring test report.
(e) During emissions tests, pollutant and diluent concentration shall be monitored and recorded. Fuel flow rate shall be monitored and recorded if stack gas flow rate is determined utilizing EPA Reference Method 19. This information shall be included with the monitoring test report.
(f) Stack gas flow rate shall be calculated in accordance with EPA Reference Method 19 utilizing fuel flow rate (scf) determined by a dedicated fuel flow meter and fuel heating value (Btu/scf). The owner or operator shall provide a contemporaneous fuel gas analysis (preferably on the day of the test, but no earlier than three months prior to the test date) and a recent fuel flow meter calibration certificate (within the most recent quarter) with the final test

report. Alternatively, stack gas flow rate may be determined by using EPA Reference Methods 1 through 4.

(g) The owner or operator shall submit a notification and protocol for periodic emissions tests upon the request of the Department.

~~(6)~~(4) ~~Testing shall be conducted once per calendar year~~. Performance testing required by 40 CFR 60, Subparts GG, IIII, JJJJ, or KKKK, or 40 CFR 63, Subpart ZZZZ may be used to satisfy these periodic testing requirements if they meet the requirements of this section and are completed once per calendar year.

~~(7)~~(5) Each monitoring, testing, inspection, or tune-up of an engine or turbine will be captured in the CMMS system ~~shall include the initial scanning of the EMITT~~, and the required monitoring data entry shall be made in accordance with the requirements of 20.2.50.12 NMAC.

D. Recordkeeping Requirements

(1) The owner or operator of spark ignition engines, compression ignition engines, or stationary combustion turbines shall maintain records in accordance with 20.2.50.12 NMAC for each engine or turbine of:

(a) The make~~,~~ model, ~~serial number,~~ and equipment identification number for each engine, turbine, and any control equipment,

(b) A copy of the engine or turbine manufacturer's or control equipment manufacturer's recommended maintenance and repair schedule,

(c) Inspections, maintenance and repairs activities on all engines, turbines, and control equipment, including:

(i) Date(s) and time(s) of inspection, maintenance, and/or repair;

(ii) Date(s) any subsequent analyses were performed (if applicable); ~~Name of the person or qualified entity conducting the inspection, maintenance, and/or repair;~~

~~(iii) A description of the physical condition of the equipment as found during any required inspection;~~

~~(iv)~~(iii) Description of maintenance or repair activities conducted; and

~~(v)~~(iv) Results of required equipment inspections including a description of any condition which required adjustment to bring the equipment back into compliance and a description of the required adjustments.

(d) Results of any required parameter readings.

(2) The owner or operator of spark ignition engines, compression ignition engines, or stationary combustion turbines shall maintain records of initial and annual performance testing in accordance with 20.2.50.12 NMAC for each engine or turbine, including:

(a) The make, model, ~~serial number,~~ and equipment identification number for all

tested engines, turbines, and emission control equipment);

(b) Date(s) and time(s) of sampling or measurements;

(c) Date(s) analyses were performed;

(d) The qualified entity that performed the analyses;

(e) Analytical or test methods used;

(f) Results of analyses or tests; and

(g) Operating conditions existing at the time of sampling or measurement.

(3) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements.

Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.14 STANDARDS FOR COMPRESSOR SEALS

A. Applicability

(1) All new and existing centrifugal compressors using wet seals located at tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations are subject to the requirements of 20.2.50.14 NMAC. Any new or existing centrifugal compressor located at a wellhead is not subject to the requirements of 20.2.50.14 NMAC.

(2) All new and existing reciprocating compressors >300hp located at ,,

gathering and boosting sites, natural gas processing plants, and transmission compressor stations are subject to the requirements of 20.2.50.14 NMAC. Any new or existing reciprocating compressor located at a wellhead site is not subject to the requirements of 20.2.50.14 NMAC.

B. Emission Standards

(1) Owners and operators of existing centrifugal compressors shall control VOC emissions from each centrifugal compressor wet seal fluid degassing system by 95%, beginning on the effective date of this Part. Emissions shall be captured and routed via a closed vent system to a control system, a recovery system, fuel cell, or a process stream.

(2) Owners and operators of existing reciprocating compressors >300 hp shall, either:

(a) Replace the reciprocating compressor rod packing after every 26,000 hours of compressor operation or every 36 months, whichever is reached later. The owner or operator shall begin counting the hours and months of compressor operation toward the first replacement of the rod packing beginning no later than one year from the effective date; OR

(b) Beginning no later than ~~one~~ three years from the effective date, collect emissions from the rod packing under negative pressure and route via a closed vent system to a control system, a recovery system, fuel cell, or a process stream.

(3) Owners and operators of new centrifugal compressors shall control VOC emissions from each centrifugal compressor wet seal fluid degassing system by 98% upon startup. Emissions shall be captured and routed via a closed vent

system to a control system, a recovery system, fuel cell, or a process stream.

(4) Owners and operators of new reciprocating compressors >300 hp shall, upon startup, either:

(a) Replace the reciprocating compressor rod packing after every 26,000 hours of compressor operation, or every 36 months, whichever is reached later; OR

(b) Collect emissions from the rod packing under negative pressure and route via a closed vent system to a control system, a recovery system, fuel cell, or a process stream.

(5) Owners and operators of new and existing centrifugal and reciprocating compressors shall ~~install an Equipment Monitoring Information Tracking Tag (EMITT)~~ capture in CMMS system ~~on~~ each compressor in accordance with 20.2.50.12 NMAC.

(6) Owners and operators complying with the control requirements in 20.2.50.14.B NMAC through use of a control device shall comply with the control device requirements in 20.2.50.15 NMAC.

(7) Owners and operators with an air permit shall incorporate these requirements in their permit during their next scheduled or requested permit or permit revision.

C. Monitoring Requirements

(1) The owner or operator of a centrifugal compressor complying with 20.2.50.14.B(1) NMAC or 20.2.50.14.B(3) NMAC shall maintain a closed vent system encompassing the wet seal fluid degassing system that complies with the monitoring requirements in 20.2.50.15 NMAC.

(2) The owner or operator of a reciprocating compressor complying with 20.2.50.14.B(2)(a) NMAC or 20.2.50.14.B(4)(a) NMAC shall ~~continuously~~ monitor the number of hours of operation with a non-resettable hour meter and track the number of months since initial startup or since the previous reciprocating compressor rod packing replacement.

(3) The owner or operator of a reciprocating compressor complying with 20.2.50.14.B(2)(b) NMAC or 20.2.50.14.B(4)(b) NMAC shall monitor the rod packing emissions collection system semiannually to ensure that it operates under negative pressure and routes emissions through a closed vent system to a control device.

(4) Owners and operators complying with the requirements in 20.2.50.14.B NMAC through use of a control device shall comply with the monitoring requirements in **20.2.50.15** NMAC.

~~**(1)** Owners and operators of new and existing centrifugal and reciprocating compressors, during each required monitoring activity, shall scan the compressor EMITT and perform monitoring data entry in accordance with the requirements of 20.2.50.12 NMAC.~~

~~**(3)**~~**(1)** Owners and operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

D. Recordkeeping Requirements

(1) The owner or operator of a centrifugal compressor shall maintain records of:

(a) The identification number and location of each centrifugal compressor using a wet seal system,

(b) The date of construction, reconstruction, or modification of each centrifugal

compressor,

(c) The records of the monitoring and inspections required in 20.2.50.14.C NMAC. The records shall include the time and date of the inspection, ~~the person conducting the inspection,~~ a notation of which checks required in 20.2.50.12.C NMAC were completed, a description of any problems observed during the inspection, and a description and date of any corrective actions taken, and

(d) The location, type, make, model and unique identification number of any control equipment, recovery system, fuel cell, or process used to comply with the control requirements in 20.2.50.14.B NMAC.

(2) The owner or operator of a reciprocating compressor shall maintain records of the following:

(a) The identification number and location of each reciprocating compressor;

(b) The date of construction, reconstruction, or modification of each reciprocating compressor; and

(c) The records of the monitoring and inspections required in 20.2.50.14.C NMAC. The records shall meet the requirements of 20.2.50.14.C NMAC and shall include:

(i) The number of hours of operation and the number of months of operation since initial startup or the last rod packing replacement;

(ii) The records of pressure in the rod packing emissions if a collection system is used; and

(iii) The time and date of the inspection, ~~the person conducting the inspection,~~ a notation of which checks required in 20.2.50.14.C NMAC were completed, a description of any problems observed during the inspection, and a description and date of any corrective actions taken.

(3) Owners and operators complying with the requirements in 20.2.50.14.B NMAC through use of a control device shall comply with the recordkeeping requirements in 20.2.50.15 NMAC.

(4) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements

(1) Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.15 STANDARDS FOR CONTROL DEVICES

A. Applicability

(1) These requirements apply to open flares, enclosed combustors, thermal oxidizers, vapor recovery units, condensers, closed vent collection systems, other combustion devices, or emissions reduction equipment or technologies used to comply with the emission standards and emission reduction requirements in this Part.

B. General Requirements

(1) All air pollution control equipment used to demonstrate compliance with this Part

shall be installed, operated, and maintained consistent with ~~manufacturer specifications and~~ good engineering and maintenance practices.

(2) All air pollution control equipment shall be adequately designed and sized to achieve the control efficiency rates required by this Part and to handle anticipated fluctuations in emissions of VOC or NOx.~~.~~

(3) Owners and operators of a flare, combustion device, vapor recovery equipment, or other emission reduction technology or control device used to comply with the emission standards in this Part shall ~~install an Equipment Monitoring and Information Tracking Tag (EMITT) on~~be captured in the CMMS system ~~each flare, combustion device, vapor recovery equipment, or other emission reduction technology or control device~~ in accordance with 20.2.50.12 NMAC.

(4) Owners and operators shall inspect all air pollution control equipment used to control emissions from equipment subject to emission standards under this Part at least monthly to ensure proper maintenance and operation. Each ~~EMITT~~ inspection or monitoring event shall be captured in CMMS system ~~initially scanned~~ and the required monitoring data shall be electronically captured during the monitoring event.

(5) Owners and operators shall ensure that any flare, combustion device, vapor recovery equipment, or other emission reduction technology or control device used to comply with emission standards in this Part shall at all times operate as a closed vent system that captures and routes all VOC emissions from equipment subject to regulation under this Part to the control or vapor recovery device.~~ and that un-combusted gas is not vented to the atmosphere.~~

(6) Owners and operators shall keep manufacturer specifications for all control or vapor recovery equipment on file. The information shall include:
   (a) Manufacturer's name, control device name and model;
   (b) Maximum heating value for open flares, enclosed combustors, and thermal oxidizers;
   (c) Fuel gas flow range for open flares, enclosed combustors, and thermal oxidizers; and
   (d) Designed destruction or vapor recovery efficiency.

(7) Owners and operators shall keep records of any stack testing or control or vapor recovery efficiency testing for all control equipment as required by applicable regulations. The records shall be kept in accordance with 20.2.50.12 NMAC for each flare, combustion device, vapor recovery equipment, or other emission reduction technology or control device and shall include:
   (a) Control device type, name and model;
   (b) Location;
   (c) Date of the stack test; and
   (d) A summary of the stack test results.

C. Requirements for Open Flares

(1) Emission Standards
   (a) The flare shall be designed to combust all gas sent to the flare. Owners and operators shall not intentionally send gas to the flare in excess of the flare's maximum rated capacity.
   (b) Owners and operators shall equip all flares with a continuous pilot flame, an

Commented [A12]: Flares don't combust ALL gas. Instead, we recommend stating something similar to this: The flare shall have a combustion efficiency of >98% when operated within manufacturer's recommended conditions.

auto-igniter, or require manual ignition.

(i) Flares with a continuous pilot flame or an auto-igniter shall be equipped with a system to monitor~~help ensure~~ the flare is operated with a flame present at all times that gas is being sent to the flare.

(ii) Owners and operators of flares with manual ignition shall inspect and ensure a flame is present upon initiating each flaring event~~-~~.

(iii) Any new flare constructed or re-constructed after the effective date of this Part shall be equipped with a~~n~~ continuous pilot flame or auto-igniter. The auto-igniter shall be installed and operational upon startup.

(iv) Any existing flare constructed prior to the effective date of this Part shall be equipped with a~~n~~ continuous pilot flame or-auto-igniter no later than ~~one~~ three years after the effective date**.**

(c) Owners and operators shall operate any flare used for controlling VOC emissions to comply with this Part with no visible emissions, except for periods not to exceed a total of sixty (60) seconds during any fifteen (15) consecutive minutes. The flare shall be designed so that an observer can, by means of visual observation from the outside of the flare, or by other means such as a continuous monitoring device, determine whether it is operating properly.

(2) Monitoring Requirements

(a) Owners and operators of flares with a continuous pilot or an auto igniter shall continuously monitor the presence of a pilot flame using a thermocouple equipped with a continuous recorder and alarm to detect the presence of a flame. Owners and operators may use any other equivalent device that fulfills the same purpose.

(b) Owners and operators of manually ignited flares shall monitor the presence of a flame using continual visual observation during each flaring event.

(c) Owners and operators, at least quarterly, and upon observing any visible emissions, shall perform a U.S. EPA Method 22 observation while the flare pilot flame is present to certify compliance with visible emission requirements. The observation period shall be a minimum of fifteen (15) consecutive minutes.

(d) Each ~~EMITT~~ inspection or monitoring event shall be ~~initially scanned~~captured in the CMMS system ~~and the required monitoring data shall be electronically captured during the monitoring event~~ in accordance with the monitoring requirements of 20.2.50.12 NMAC.

(3) Recordkeeping Requirements

(a) The owner or operator of open flares subject to regulation under 20.2.50.15.A NMAC shall keep records for each flare in accordance with 20.2.50.12 NMAC of the following:

(i) All instances of alarm activation, including the date and cause of alarm activation, actions taken to bring the flare into a normal operating condition, ~~the name of the personnel conducting the inspection,~~ and any maintenance activities performed;

(ii) The results of the U.S. EPA Method 22 observations and flame inspection for manual flares and

(iii) The results of any gas analysis for the gas being flared, including VOC

content and heating value.

(4) Reporting Requirements

Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

D. Requirements for Enclosed Combustion Devices (ECD) and Thermal Oxidizers (TO)

(1) Emission Standards

(a) The ECD/TO shall combust all gas sent to the ECD/TO. Owners and operators shall not send gas to the ECD/TO in excess of the ECD/TO's maximum rated capacity.

(b) Owners and operators shall equip all ECDs/TOs with a continuous pilot flame or an operational auto-igniter. ECDs/TOs constructed or re-constructed prior to the effective date of this Part shall be equipped with a continuous pilot flame or an auto-igniter no later than one year after the effective date. ECDs/TOs constructed or re-constructed on or after the effective date shall be equipped with a continuous pilot flame or an operational auto-igniter upon startup.

(c) ECDs/TOs with a continuous pilot flame or an auto-igniter shall be equipped with a system to ensure that the ECD/TO is operated with a flame present at all times that gas is being sent the ECD/TO. Combustion shall be maintained for the duration of time that gas is being sent to the ECD/TO.

(d) Owners and operators shall operate ECDs/TOs used to control VOC emissions to comply with the emission standards in this Part with no visible emissions, except for periods not to exceed a total of sixty (60) seconds during any fifteen (15) consecutive minutes. The combustion device shall be designed so that an observer can, by means of visual observation from the outside of the combustion device, or by other means, such as a continuous monitoring device, determine whether it is operating properly.

(2) Monitoring Requirements

(a) Owners and operators of ECDs/TOs with a continuous pilot or an auto igniter shall continuously monitor the presence of a pilot flame using a thermocouple equipped with a continuous recorder and alarm to detect the presence of a flame. Owners and operators may use any other equivalent device that fulfills the same purpose.

(b) Owners and operators, at least quarterly, and upon observing any visible emissions, shall perform a Method 22 observation while the ECD/TO pilot flame is present to certify compliance with the visible emission requirements. The observation shall be a minimum of fifteen minutes.

(c) Each EMITT inspection or monitoring event shall be initially scanned and the required monitoring data shall be electronically captured during the monitoring event in accordance with the monitoring requirements of 20.2.50.12 NMAC.

(3) Recordkeeping Requirements

(a) The owner or operator of an ECD/TO subject to regulation under 20.2.50.15.A NMAC shall keep records in accordance with 20.2.50.12 NMAC for each ECD/TO of:

(i) All instances of alarm activation, including the date and cause of alarm activation, actions taken to bring the ECD/TO into normal operating

conditions, ~~the name of the personnel conducting the inspection,~~ and any maintenance activities performed;

(ii) The results of the Method 22 observations; and

(iii) The results of any gas analysis for the gas being combusted, including VOC content and heating value.

(4) Reporting Requirements

(a) Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

E. Requirements for Vapor Recovery Units (VRU)

(1) Emission Standards

(a) Owners and operators shall operate the VRU as a closed vent system that captures and routes all VOC emissions from units back to the process stream or to a sales pipeline and does not vent to the atmosphere under normal operations.

(b) Owners and operators shall control emissions during startup, shutdown, and maintenance (SSM) or other VRU downtime with a backup control device (flare/ECD/TO) or redundant VRU.

(2) Monitoring Requirements

(a) Owners and operators shall comply with the standards for equipment leaks in **20.2.50.16** NMAC, or, alternatively, shall implement a program that meets the requirements of NSPS Subpart OOOOa (40 CFR 60.5416a).

(b) Each VRU ~~EMITT~~ inspection or monitoring event shall be ~~initially scanned and the required monitoring data shall be electronically~~ captured in the CMMS system ~~during the monitoring event requirements of~~in accordance with 20.2.50.12 NMAC.

(3) Recordkeeping Requirements

(a) For each VRU inspection or monitoring event, the owner or operator shall record the results of the VRU inspections in accordance with 20.2.50.12 NMAC, including ~~the name of the personnel conducting the inspection, and~~ noting any maintenance or repairs that are required.

(4) Reporting Requirements

Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

Commented [A13]: OOOOa considers VRUs process units and not control devices. Currently within the NMED air permits (Section 72), the VRU can be considered either a process unit or a control device. Not all VRUs are utilized in the same way on each facility. It is recommended that this section only apply for VRUs which are designated and approved as control devices (not process units) by the NMED air permit under Section 72.

Commented [A14]: The only way these could vent is if a PSV blew.

We are assuming that the agency is not excluding emergency pressure relief in this?

20.2.50.16 STANDARDS FOR EQUIPMENT LEAKS

A. Applicability

All new and existing wellhead sites~~s, tank batteries~~, gathering and boosting sites, gas processing plants, transmission compressor stations and associated piping are subject to the requirements of 20.2.50.16 NMAC.

B. Emission Standards

Each owner and operator of oil and gas production and processing equipment located at a site identified in 20.2.50.16.A NMAC shall demonstrate compliance with 20.2.50.16 NMAC by performing the monitoring, recordkeeping, and reporting

requirements specified in this Section.

C. Monitoring Requirements

(1) Owners or operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

(2) Default Equipment Leak Monitoring Requirements:

(a) Owners or operators shall conduct an audible, visual, and olfactory (AVO) inspection of each thief hatch, closed vent system, pneumatic pumps, compressor, pressure relief device, open-ended valve or line, valve, flange, connector, piping, and any associated equipment to identify defects and leaking components at least ~~weekly~~ monthly as follows:

(i) Visually inspect for cracks, holes or gaps in piping or covers; loose connections; liquid leaks; broken or missing caps; broken, cracked or otherwise damaged seals or gaskets; broken or missing hatches; or broken or open access covers or other closure devices;

(ii) Listen for pressure leaks or liquid leaks.

(iii) Smell for unusual or strong odors.

(iv) Any positive audible, visual, or odorous indication shall be considered a leak. All AVO leaks shall ~~be~~ have location ~~tagged with a visible tagtag~~documented and reported to owner or operator's management or designee within three calendar days.

(b) Owners or operators shall conduct an inspection using EPA Reference Method 21 (40 CFR 60, Appendix B) (RM 21) or optical gas imaging (OGI) with infrared cameras of each thief hatch, closed vent system, pneumatic pump, compressor, pressure relief device, open-ended valve or line, valve, flange, connector, piping, and any associated equipment to identify leaking components at a frequency determined according to the following schedule:

(i) For wellhead sites ~~production and tank battery facilities~~:

(A) Annually if a piece of equipment at the wellhead site has a ~~at facilities with where an individual regulated equipment~~ potential to emit ~~is~~ less than 6~~2~~ tpy VOC.

(B) Semi-annually if the piece of equipment at the wellhead site has a~~at facilities with where a an individual regulated equipment~~ potential to emit of ~~is equal to or~~ equal to or greater than ~~2~~6 tpy ~~and less than 5 tpy~~ VOC.
~~Quarterly at facilities with a potential to emit equal to or greater than 5 tpy VOC.~~

(ii) For gathering and boosting ~~sites~~sites, gas processing plants, and transmission compressor stations:

(A) Quarterly at facilities with a potential to emit less than 25 tpy VOC.

(B) Monthly at facilities with a potential to emit equal to or greater than 25 tpy VOC.

(c) The inspections required under 20.2.50.16.C(2)(b) NMAC shall be conducted using RM 21 or OGI with infrared cameras.

(i) For leaks determined using RM 21:

(A) The instrument shall be calibrated before each day of its use by the

procedures specified in RM 21.

(B) The instrument shall be calibrated with zero air (less than 10 ppm of hydrocarbon in air); and a mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

(C) A leak is detected if an instrument reading of 500 ppm or greater of hydrocarbon is measured that is not associated with normal equipment operation, such as pneumatic device actuation and crank case ventilation.

(ii) For leaks determined using OGI:

~~(A) The instrument must comply with the specifications, the daily instrument checks, and the leak survey requirements at 40 CFR 60.18(i)(1) through (3).~~).

~~(B)~~(A) A leak is detected if any emissions are imaged by the OGI instrument that are not associated with normal equipment operation, such as pneumatic device actuation and crank case ventilation.

(d) If a component is unsafe, difficult, or inaccessible to monitor, the owner or operator is not required to inspect the component until it becomes feasible to do so.

(i) Difficult to monitor components are those that cannot be monitored without elevating the monitoring personnel more than two (2) meters above a supported surface or are unable to be reached via a wheeled scissor-lift or hydraulic type scaffold that allows access to components up to 7.6 meters (25 feet) above the ground.

(ii) Unsafe to monitor components are those that cannot be monitored without exposing monitoring personnel to an immediate danger as a consequence of completing the monitoring.

(iii) Inaccessible to monitor components are those that are buried, insulated, or obstructed by equipment or piping that prevents access to the components by monitoring personnel.

(3) Alternative Equipment Leak Monitoring Plans

(a) As an equivalent means of compliance with 20.2.50.16 NMAC, owners or operators may comply with the equipment leak requirements through an individual alternative monitoring plan approved by the Department under 20.2.50.12.B(3) , subject to the following requirements:

(i) Upon the Department's approval of an alternative monitoring plan, the owner or operator shall comply with the terms and conditions of the approved alternative monitoring plan.

(ii) A responsible official shall certify compliance with the approved alternative monitoring plan on behalf of the owner or operator on an annual basis.

(iii) The Department may terminate an approved alternative monitoring plan if the Department finds that the owner or operator failed to comply with any provision of the plan and failed to correct and disclose the violation(s) to the Department ~~within 15 calendar days~~days ~~of identifying the violation~~.

(iv) Upon the Department's denial or termination of an approved alternative monitoring plan, the owner or operator shall comply with the

default monitoring requirements under 20.2.50.16.C(2) NMAC within 30 days.

(b) As an equivalent means of compliance with 20.2.50.16 NMAC, owners or operators may comply with equipment leak requirements through one of the pre-approved monitoring ~~plans~~plans maintained by the Department, subject to the following requirements:

(i) The owner or operator shall notify the Department of the pre-approved monitoring plan that the owner or operator will follow and shall comply with the terms and conditions of the pre-approved monitoring plan.

(ii) A responsible official shall certify compliance with the pre-approved monitoring plan on behalf of the owner or operator on an annual basis.

(iii) The Department may terminate the use of a pre-approved monitoring plan by the owner or operator if the Department finds that the owner or operator failed to comply with any provision of the plan and failed to correct and disclose the violation(s) to the Department within 15 calendar days of identifying the violation.

(iv) Upon the Department terminating the use of an approved monitoring plan by an owner or operator, the owner or operator shall comply with the default monitoring requirements under 20.2.50.16.C(2) NMAC within 30 days.

D. Repair Requirements

(1) For any leaks detected in 20.2.50.16(C) NMAC:

(a) The owner or operator shall ~~place a visible tagtag on the~~document location of leaking component until the component has been repaired;

(b) All leaks detected using optical gas imaging shall ~~be repaired~~have an initial repair attempt within ~~7~~5 days of discovery. ~~, all other l~~Leaks shall be repaired within ~~15~~ 30 days of discovery;

(c) The equipment must be re-monitored no later than ~~15~~ 30 days after ~~discovery~~ repair of the leak to demonstrate that it has been ~~repaired~~repaired; and

(d) If the leak cannot be repaired within 30~~7~~ days ~~for leaks detected using optical gas imaging and within 14 days for all other leaks~~ without a process unit shutdown, it may be designated "Repair delayed," and must be repaired before the end of the next process unit shutdown.

E. Recordkeeping Requirements

(1) Owners or operators shall keep records of all monitoring under 20.2.50.16.C NMAC and provide such records to the Department upon request.

(2) Owners or operators subject to 20.2.50.16.C NMAC shall keep records of the following for all AVO, RM21, and OGI inspections conducted as required under 20.2.50.16.C NMAC:

(a) The facility location and unique inventory control number or name;

(b) The date of inspection

(c) The monitoring method (AVO, RM 21, or OGI);

~~(d) The name of the operator(s) performing the inspection;~~

~~(e)~~(d) A list of the leaks requiring repair or a statement that no leaks were found;

and

~~(f)~~(e)~~Whether a visible flag was placed on the leak or not~~documentation of each individual leak location;

(3) Owners or operators shall keep the following records for any leak detected:

(a) Date the leak is detected;

(b) Dates of attempts to repair;

(c) For leaks with a designation of "repair delayed" keep the following:

(i) The reason for delay if the leak is not repaired within 30 days of leak discovery;

(ii) The signature of the authorized representative whose decision it was that the repair could not be implemented without a process shutdown;

(d) The date of successful leak repair;

(e) The date the leak was monitored after the repair and the results of the monitoring; and

(f) A list of components that are designated as unsafe, difficult, or inaccessible to monitor, an explanation stating why the component is so designated, and the schedule for monitoring such component(s).

~~(4) For leaks determined using optical gas imaging with infrared cameras, owners or operators shall keep the records of the specifications, the daily instrument checks and the leak survey requirements specified at 40 CFR §60.18(i)(1) – (3).~~

~~(5)~~(4) Owners or operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

F. Reporting Requirements

(1) Owners and operators shall report the certifications required under 20.2.50.16.C(3)(a)(ii) and (b)(ii) NMAC to the Department annually.

(2) Owners or operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.17 STANDARDS FOR NATURAL GAS WELL LIQUIDS UNLOADING

A. Applicability

(1) All manual liquids unloading, including those associated with down-hole well maintenance events, performed at NMOCD classified natural gas wells are subject to the requirements of 20.2.50.17 NMAC.

(2) Owners and operators shall comply with these requirements for any manual liquids unloading performed after the effective date of this Part.

B. Emission Standards

(1) Owners and operators of natural gas wells shall use best management practices during the life of the well to avoid the need for manual liquids unloading.

(2) Owners and operators of natural gas wells shall use the following best management practices during manual liquids unloading to minimize emissions, consistent with well site conditions and good engineering practices:

(a) Reduce wellhead pressure prior to blowdown;

(b) Monitor manual liquids unloading in close proximity to the well or via remote telemetry; and

(c) Close all well head vents to the atmosphere and return the well to normal

production operation as soon as practicable.

(3) Owners and operators of a natural gas well shall install an Equipment Monitoring and Information Tracking Tag (EMITT) on each natural gas well in accordance with 20.2.50.12 NMAC.

C. Monitoring Requirements

(1) Owners and operators subject to 20.2.50.17 NMAC shall monitor the following parameters during manual liquids unloading:

(a) Wellhead pressure;

(b) Flow rate of the vented natural gas (to the extent feasible); and

(c) Duration of venting to the storage tank/atmosphere.

(2) Owners and operators shall calculate the volume and mass of VOC vented during each manual liquids unloading event.

(3) Each manual liquids unloading event shall ~~include the scanning of the EMITT~~be documented in CMMS system and monitoring data entry in accordance with the requirements of 20.2.50.12 NMAC.

(4) Owners and operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

D. Recordkeeping Requirements

(1) Owners and operators subject to 20.2.50.17 NMAC shall keep the following records for each manual liquids unloading:

(a) The identification number and location of the well;

(b) The date(s) the manual liquids unloading was performed;

(c) Wellhead pressure;

(d) Flow rate of the vented natural gas (to the extent feasible. If not feasible, the owner or operator shall use the maximum potential flow rate in the emission calculation);

(e) Duration of venting to the storage tank/atmosphere;

(f) A description of the management practices used to minimize release of VOC prior to and during the manual liquids unloading; and

(g) A calculation of the VOC emissions vented during the manual liquids unloading based on the duration, volume, and mass of VOC.

(2) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements

Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.18 STANDARDS FOR GLYCOL DEHYDRATORS

A. Applicability

(1) All new and existing glycol dehydrators with a potential to emit equal to or greater than 2 tpy of VOC and located at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor

stations are subject to the requirements of 20.2.50.18 NMAC.

B. Emission Standards

(1) Owners and operators of an existing glycol dehydrator constructed on or before the effective date of this Part with a potential to emit equal to or greater than 2 tpy of VOC shall have a minimum combined capture and control efficiency of 95 percent of VOC emissions from the still vent and flash tank, no later than one year after the effective date. If a combustion control device is used, the combustion control device shall have a minimum design combustion efficiency of 98 percent.

(2) Owners and operators of a new glycol dehydrator constructed after the effective date of this Part with a potential to emit equal to or greater than 2 tpy of VOC shall have a combined capture and control efficiency of 95 percent of VOC emissions from the still vent and flash tank upon startup. If a combustion control device is used, the combustion control device shall have a minimum design combustion efficiency of 98 percent.

(3) Owners and operators of a new or existing glycol dehydrator subject to control requirements under 20.2.50.18 NMAC shall comply with the following equipment requirements:

(a) The still vent and flash tank emissions shall be routed at all times to the reboiler firebox, condenser, combustion control device, fuel cell, to a process point that either recycles or recompresses the emissions or uses the emissions as fuel, or to a vapor recovery unit (VRU) that reinjects the VRU VOC emissions back into the process stream or natural gas gathering pipeline.

(b) If a VRU is used, it shall consist of a closed loop system of seals, ducts, and a compressor that will reinject the natural gas into the process stream or the natural gas gathering pipeline. The VRU shall be operational at least 95 percent of the time the facility is in operation, resulting in a minimum combined capture and control efficiency of 95 percent. The VRU shall be installed, operated, and maintained according to the manufacturer's specifications.

(c) The still vent and flash tank emissions shall not be vented to the atmosphere.

(d) Owners and operators of a glycol dehydrator shall install an Equipment Monitoring and Information Tracking Tag (EMITT) on each glycol dehydrator in accordance with 20.2.50.12 NMAC.

(4) Any new or existing glycol dehydrator subject to control requirements under 20.2.50.18 NMAC will become exempt from these requirements when its uncontrolled actual annual VOC emissions decreases to an amount less than 2 tpy.

(5) Owners and operators complying with the control requirements in 20.2.50.18.B(1) NMAC or 20.2.50.18.B(2) NMAC through use of a control device shall comply with the control device operational requirements in 20.2.50.15 NMAC.

C. Monitoring Requirements

(1) The owner or operator of a glycol dehydrator subject to control requirements in 20.2.50.18 NMAC shall conduct an annual extended gas analysis on the dehydrator inlet gas and calculate the uncontrolled VOC emissions (tpy) and controlled VOC emissions (tpy).

(2) The owner or operator of any glycol dehydrator subject to control requirements shall inspect the glycol dehydrator, including the reboiler and regenerator, and the

control equipment semi-annually to ensure it is operating as initially designed and in accordance with the manufacturer's recommended procedures.

(3) Owners and operators complying with the requirements in 20.2.50.18.B(1) NMAC or 20.2.50.18.B(2) NMAC through use of a control device shall comply with the monitoring requirements in 20.2.50.15 NMAC.

(4) Owners and operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

D. Recordkeeping Requirements

(1) Owners and operators subject to control requirements in 20.2.50.18 NMAC shall maintain records of the following for each glycol dehydrator, in accordance with 20.2.50.12 NMAC:

(a) The dehydrator's location and unique inventory control number or name;

(b) Glycol circulation rate, monthly natural gas throughput, and the date of the most recent throughput measurement;

(c) The data and methodology used to estimate the potential to emit of VOC (the method must be a Department approved calculation methodology);

(d) The controlled and uncontrolled VOC emissions (tpy);

(e) The location, type, make, model and unique identification number of any control equipment;

(f) The date and the results of all equipment inspections, including any maintenance or repairs needed to bring the glycol dehydrator into compliance; and

(g) Copies of the glycol dehydrator manufacturer's operation and maintenance recommendations.

(2) Owners and operators complying with the requirements in 20.2.50.18.B(1) NMAC or 20.2.50.18.B(2) NMAC through use of a control device shall comply with the recordkeeping requirements in 20.2.50.15 NMAC.

(3) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements.

(1) Owners and operators complying with the requirements in 20.2.50.18.B(1) NMAC or 20.2.50.18.B(2) NMAC through use of a control device shall comply with the reporting requirements in 20.2.50.15 NMAC.

(2) Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.19 STANDARDS FOR HEATERS

A. Applicability

(1) All new and existing natural gas-fired heater units with a rated heat input equal to or greater than 10 MMBtu/hr including, but not limited to, heater treaters, heated flash separator units, evaporator units, fractionation column heaters, and glycol dehydrator reboilers in use at wellhead sites, ~~tank batteries,~~ gathering and boosting sites, natural gas processing plants, and transmission compressor stations

are subject to the requirements of 20.2.50.19 NMAC.

B. Emission Standards

(1) In order to ensure compliance with good combustion engineering practices, the owner or operator of a natural gas-fired heater units shall ensure compliance with the emission limits in Table 1 of 20.2.50.19 NMAC.

Table 1 - Emission Standards for NO_x and CO

Date of Construction:	NO_x (ppmvd @ 3% O_2)	CO (ppmvd @ 3% O_2)
Constructed or reconstructed before the effective date of 20.2.50 NMAC	30	300
Constructed or reconstructed on or after the effective date of 20.2.50 NMAC	30	130
less than 3,785 (less than 1,000)	64 (2.5)	102 (4.0)
3,785 to less than 5,678 (1,000 to less than 1,500)	51 (2.0)	89 (3.5)
5,678 less than 9,464 (1,500 to less than 2,500)	38 (1.5)	76 (3.0)
9,464 or more (2,500 or more)	25 (1.0)	64 (2.5)

(i) Pressure test of the cargo tank's internal vapor valve as follows:

(A) After completing the tests under 20.2.50.20.C(3)(i) NMAC, use the procedures in Method 27 to repressurize the tank to 460 mm H_2O (18 in. H_2O), gauge. Close the tank's internal vapor valve(s), thereby isolating the vapor return line and manifold from the tank.

(B) Relieve the pressure in the vapor return line to atmospheric pressure, then reseal the line. After 5 minutes, record the gauge pressure in the vapor return line and manifold. The maximum allowable 5-minute pressure increase is 130 mm H_2O (5 in. H_2O).

(2) Owners or operators complying with the requirements in 20.2.50.20.B(1) NMAC through use of a control device shall comply with the monitoring requirements in 20.2.50.15 NMAC.

(3) Owners or operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

C. Recordkeeping Requirements

(1) For each liquid transfer operation, the owner or operator shall maintain records of:

(a) The tank's location and the tank's unique inventory control number or name and,

(b) The location, type, make, and model of any control equipment.

(2) Each owner or operator shall maintain records of the inspections required in

20.2.50.20.C NMAC. These records shall include the following:
(i) the time and date of the inspection;
~~(ii) the person conducting the inspection;~~
~~(iii)~~(ii) a notation that each of the checks required under 20.2.50.20.C NMAC were completed;
~~(iv)~~(iii) a description of any problems observed during the inspection; and
~~(v)~~(iv) a description and date of any repairs and corrective actions taken.

(3) Owners and operators shall create and maintain a calendar year record for each site summarizing, calculating, recording, and totaling the liquid loading operation liquids and associated VOC emissions. Each calendar year, the owners and operators shall create a company-wide record summarizing the liquid transfer total calculated emissions for the company.

(4) Owners and operators complying with the requirements in 20.2.50.20.B(1) NMAC through use of a control device shall comply with the recordkeeping requirements in 20.2.50.15 NMAC.

(5) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

D. Reporting Requirements

(1) Owners and operators complying with the requirements in 20.2.50.20.B(1) NMAC through use of a control device shall comply with the reporting requirements in 20.2.50.15 NMAC.

(2) Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.20 STANDARDS FOR PIG LAUNCHING AND RECEIVING

A. Applicability

(1) All new and existing pipeline pig launching and receiving operations located within the property boundary at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations are subject to the requirements of 20.2.50.21 NMAC.

B. Emission Standards

(1) The owner or operator of new and existing pipeline pig launching and receiving operations with a potential to emit equal to or greater than 1.0 tpy of VOC shall capture and reduce VOC emissions by at least 98%, beginning on the effective date of this Part.

(2) The owner or operator conducting the pig launching and receiving operations shall:

(a) Employ best management practices to minimize the liquids present in the pig receiver chamber and to prevent emissions from the pig receiver chamber to the atmosphere after receiving the pig in the receiving chamber and prior to opening the receiving chamber to the atmosphere;

(b) Employ methods to prevent emissions including, but not limited to, installing liquids ramps, installing liquid drains, routing high-pressure chambers to a low-pressure line or vessel, using ball valve type chambers, or

using multiple pig chambers;

(c) Recover and dispose of all receiver liquids in a manner that prevents emissions to the atmosphere; and

(d) Ensure that any material collected is returned to the process or disposed of in a manner compliant with the state law.

(3) Owners and operators of a pig launching and receiving operation shall install an Equipment Monitoring and Information Tracking Tag (EMITT) on each pig launcher and each pig receiver in accordance with 20.2.50.12 NMAC.

(4) Any existing pipeline pig launching and receiving operation subject to control requirements may become exempt from those requirements when its actual annual emissions of VOC decreases to an amount less than 0.5 tpy of VOC.

(5) Owners and operators complying with the control requirements in 20.2.50.21.B(2) NMAC through use of a control device shall comply with the control device operational requirements in 20.2.50.15 NMAC.

C. Monitoring Requirements

(1) The owner or operator of any pig launching and receiving equipment shall monitor the type and volume of liquids cleared.

(2) The owner or operator of any pig launching and receiving equipment subject to control requirements shall inspect the equipment for leaks using RM 21 or OGI with infrared cameras immediately prior to the commencement and immediately after the conclusion of each pig launching or receiving operation, and according to the requirements in 20.2.50.16 NMAC.

(3) Owners and operators complying with the requirements in 20.2.50.21.B(1) NMAC through use of a control device shall comply with the monitoring requirements in 20.2.50.15 NMAC.

(4) Owners and operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

D. Recordkeeping Requirements

(1) Owners and operators shall maintain the following records in accordance with 20.2.50.12.C NMAC for each pig launching and receiving operation or event:

(a) Records of each pigging operation including the date and time of the pigging operation, and the type and volume of liquids cleared;

(b) The data and methodology used to estimate the actual emissions to the atmosphere;

(c) The data and methodology used to estimate the potential to emit; and

(d) The type of control(s), location, make, model and, if applicable, the unique identification number of the control equipment.

(2) Owners and operators complying with the requirements in 20.2.50.21.B(1) NMAC through use of a control device shall comply with the recordkeeping requirements in 20.2.50.15 NMAC.

(3) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements

(1) Owners and operators complying with the requirements in 20.2.50.21.B(1) NMAC through use of a control device shall comply with the reporting

requirements in 20.2.50.15 NMAC.

(2) Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.21 STANDARDS FOR PNEUMATIC CONTROLLERS AND PUMPS

A. Applicability

(1) All new and existing natural gas-driven pneumatic controllers and pumps located at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations are subject to the requirements of 20.2.50.22 NMAC.

B. Emission Standards

(1) Natural gas-driven pneumatic controllers and natural gas-driven pneumatic pumps constructed on or after the effective date of this Part shall comply with the requirements of 20.2.50.22 NMAC upon startup.

(2) Natural gas-driven continuous bleed pneumatic controllers and natural gas-driven pneumatic pumps ~~-~~constructed before the effective date of this Part shall comply with the requirements of 20.2.50.22 NMAC within ~~one year~~three years of the effective date of this Part.

(3) Standards for natural gas-driven pneumatic controllers.

(a) Owners and operators of each pneumatic controller located at a natural gas processing plant shall ensure the pneumatic controller has a VOC emission rate of zero.

(b) Owners and operators of each pneumatic controller located at a wellhead site, tank battery, gathering and boosting site, or transmission compressor station with ~~access to~~ electrical grid power shall ensure the pneumatic controller has a VOC emission rate of zero.

(c) Owners and operators of each pneumatic controller located at a wellhead site, ~~tank battery,~~ gathering and boosting site, or transmission compressor station without ~~access to~~ electrical power shall ensure the pneumatic controller has a documented bleed rate of less than or equal to 6 standard cubic feet per hour.

(d) Pneumatic controllers with a bleed rate greater than 6 standard cubic feet per hour are permitted where the owner or operator has demonstrated that a higher bleed rate is required based on functional needs, including but not limited to response time, safety, and positive actuation.

(4) Standards for natural gas-driven pneumatic pumps.

(a) Owners and operators of each pneumatic pump located at a natural gas processing plant shall ensure the pneumatic pump has a VOC emission rate of zero.

(b) Owners and operators of each pneumatic pump located at a wellhead site~~, tank battery~~, gathering and boosting site, or transmission compressor station with ~~access to~~ electrical grid power shall ensure the pump has a VOC emission rate of zero.~~.~~

(c) Owners and operators of each pneumatic pump located at a wellhead site, ~~tank battery,~~ gathering and boosting site, or transmission compressor station without access to electrical power shall reduce VOC emissions from the pneumatic pump by 95% if it is technically feasible to route emissions to a

Commented [A15]: For intermittents (i.e., provisions for intermittents, air for facilities with only single controllers):

There is no minimum number of controllers for air if electricity, as a result, there is no determination regarding sufficient electricity on site (i.e., there should be an another inquiry added to determine whether the operator has enough electricity for an air compression system) and that capacity. This was a point of technical discussion addressed in the MAP and several valid technical concerns were raised.

Recommend a technical infeasibility consideration when facilities exceed electrical grid capacity for pneumatic controllers.

control device~~,~~ fuel cell, ~~-~~or process.

(d) If there is a control device available onsite, but it is unable to achieve a 95% emission reduction, and it is not technically feasible to route the pneumatic pump emissions to a fuel cell or process this section, the owner or operator shall route the pneumatic pump emissions to this control device.

C. Monitoring Requirements

(1) Owners and operators of pneumatic controllers or pumps with a natural gas bleed rate equal to zero are not subject to the requirements of this section.

(2) Owners and operators of pneumatic controllers with a natural gas bleed rate greater than zero shall on a monthly basis ~~scan each controller and, considering the EMITT specified design continuous or intermittent bleed rate,~~ conduct an audible, visual, and olfactory (AVO) inspection and shall also inspect each pneumatic controller, perform necessary maintenance (such as cleaning, tuning, and repairing leaking gaskets, tubing fittings, and seals; tuning to operate over a broader range of proportional band; eliminating unnecessary valve positioners), and maintain the pneumatic controller ~~according to manufacturer specifications~~ to ensure that the controller's natural gas emissions are minimized.

(3) Each ~~EMITT~~ pneumatic controller or ~~shall~~pump specifications shall be identified in the CMMS system ~~linked to a database allowing the state inspectors to~~, at a minimum, ~~identify~~include:

(a) unique ~~pneumatic controller and pneumatic pump~~ identification number;

(b) type of controller (continuous or intermittent);

(c) if continuous, design continuous bleed rate in standard cubic feet per hour;

(d) if intermittent, bleed volume per intermittent bleed in standard cubic feet; and

(e) design annual bleed in standard cubic feet per year.

(4) Owners and operators of natural gas-driven a pneumatic pump with a natural gas bleed rate greater than zero shall on a monthly ~~basis scan each pump or actuator and, considering the EMITT specified design pump rate or actuation volume~~, conduct an audible, visual, and olfactory (AVO) inspection and shall also inspect the pneumatic pump and perform necessary maintenance, and maintain the pneumatic pump according to manufacturer specifications to ensure that the pump's natural gas emissions are minimized.

(5) Owners and operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

D. Recordkeeping Requirements

(1) Owners and operators of pneumatic controllers, pumps with a natural gas bleed rate equal to zero are not subject to the requirements of this section.

(2) Owners and operators shall maintain an ~~electronic pneumatic controller~~ inspection log for each pneumatic controller with a natural gas bleed rate greater than zero at

each facility, including for each inspection:

(a) Unique pneumatic controller ID number;

(b) ~~EMITT scanned inspection~~Inspection dates;

(c) ~~Name of the inspector~~;

(d) AVO inspection results;

(e) Any AVO level discrepancy in continuous or intermittent bleed rate;

(f) Maintenance dates; and

(g) Maintenance activities.

(3) Owners and operators who determine that the use of a natural gas-driven pneumatic controller with a bleed rate greater than 6 standard cubic feet per hour is required shall maintain a record in the ~~EMITT~~ CMMS system ~~database of~~ each such pneumatic controller documenting why a bleed rate greater than 6 standard cubic feet per hour is required per the requirements in 20.2.50.22.B NMAC.

(4) Owners and operators shall maintain records in the ~~EMITT~~ CMMS system ~~database~~ of natural gas-driven pneumatic pumps with an emission rate greater than zero and their associated pump numbers at each facility, including:

(a) For natural gas-driven pneumatic pumps in operation less than 90 days per calendar year, records of the days of operation each calendar ~~year~~year.

(b) Records of control devices designed to achieve less than 95% emission reduction, including an evaluation or manufacturer specifications indicating the percentage reduction the control device is designed to achieve.

(c) Records of the engineering assessment ~~and certification by a qualified professional engineer~~ that routing pneumatic pump emissions to a control device, fuel cell, or process is technically infeasible.

(5) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements.

Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.22 STANDARDS FOR STORAGE TANKS

A. Applicability

(1) All new and existing hydrocarbon storage tanks with an uncontrolled potential to emit equal to or greater than 6~~2~~ tpy of VOC and located at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations are subject to regulation under 20.2.50.23 NMAC.

B. Emission Standards

(1) All existing hydrocarbon storage tanks with a potential to emit equal to or greater than 6~~2~~ tpy and less than 10 tpy of VOC shall have a combined capture and control of VOC emissions by at least 95 percent no later than one year after the effective date of this Part.

(2) All existing hydrocarbon storage tanks with a potential to emit equal to or greater than 10 tpy of VOC shall have a combined capture and control of VOC emissions

by at least 98 percent, no later than one year after the effective date of this Part.

(3) All new hydrocarbon storage tanks constructed after the effective date of this part with a potential to emit equal to or greater than 2 tpy and less than 10 tpy of VOC shall have a combined capture and control of VOC emissions by at least 95 percent upon startup.

(4) All new hydrocarbon storage tanks constructed after the effective date of this Part with a

potential to emit equal to or greater than 10 tpy of VOC shall have a combined capture and control and control of VOC emissions by at least 98 percent upon startup.

(5) Any new or existing storage tank subject to control requirements under 20.2.50.23 NMAC becomes exempt from those requirements when its uncontrolled actual annual VOC emissions decreases to less than 2 tpy.

(6) If air pollution control equipment is not installed by the applicable date specified in 20.2.50.23.B(1) through 20.2.50.23.B(4) NMAC, compliance with 20.2.50.23.B(1) through 20.2.50.23.B(4) NMAC may be demonstrated by shutting in all wells producing into that storage tank by that applicable date and so long as production does not resume from any such well until the air pollution control equipment is installed and operational.

(7) Owners and operators of an existing or new tank with a thief hatch shall install a control device on the thief hatch which allows the thief hatch to open sufficiently to relieve overpressure in the tank and to automatically close once the tank overpressure is relieved. The thief hatch shall be equipped with a manual lock-open safety device to ensure positive hatch opening during times of human ingress. The lock-open safety device will only be engaged during in the presence of owner or operator staff and during active ingress activities.

(8) Owners and operators of a new or existing hydrocarbon storage tank(s) shall ~~install an Equipment Monitoring and Information Tracking Tag (EMITT)~~document in CMMS system ~~on~~ each storage tank in accordance with 20.2.50.12 NMAC.

(9) Owners and operators complying with the control requirements in 20.2.50.23.B(1) NMAC through 20.2.50.23.B(4) NMAC through use of a control device shall comply with the control device operational requirements in 20.2.50.15 NMAC.

(10) After the compliance deadlines established in the rule, it is a violation to operate any tank not complying with the requirements of this section.

C. Monitoring Requirements

(1) The owner or operator of any storage tank subject to control requirements shall monitor the total monthly liquid throughput (barrels) and the upstream separator pressure (psig) on a monthly basis. ~~Any time the storage tank is unloaded less frequently than monthly, the throughput and separator pressure monitoring shall be conducted prior to the storage tank being unloaded~~.

(2) The owner or operator of any storage tank subject to control requirements shall conduct an auditory, visual, and olfactory (AVO) inspection on a ~~weekly~~ monthly basis. ~~Any time the storage tank is unloaded less frequently than weekly, the AVO inspections shall be conducted prior to the storage tank being unloaded.~~

(3) The owner or operator of any storage tank subject to control requirements shall

inspect the tanks monthly to ensure compliance with the requirements of 20.2.50.23 NMAC. Inspections shall include a check to ensure the tanks have no leaks, that all hatches are closed, the pressure relief valves are properly seated, and all vent lines are closed.

(4) Each monitoring or inspection shall ~~include the scanning of the EMITT~~by captures in the CMMS system ~~and the simultaneous entry of the required monitoring data~~ in accordance with the requirements of 20.2.50.12 NMAC.

(5) Owners and operators complying with the requirements in 20.2.50.23.B(1) NMAC through 20.2.50.23.B(4) NMAC through use of a control device shall comply with the monitoring requirements in 20.2.50.15 NMAC.

(6) Owners and operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

D. Recordkeeping Requirements

(1) Owners and operators subject to control requirements under 20.2.50.23 NMAC shall, on a monthly basis, maintain records in accordance with 20.2.50.12 NMAC for each storage tank of:

(a) The tank's location and unique inventory control number or name;

(b) Monthly liquid throughput and the most recent date of measurement;

(c) The documented ~~average~~ monthly upstream separator pressure;

(d) The data and methodology used to calculate the potential to emit of VOC (the calculation methodology must be a Department approved methodology); and ~~The controlled and uncontrolled VOC emissions (tpy); and~~

(e) The location, type, make, model and unique identification number of any control equipment.

~~(2) Records of liquid throughput required in 20.2.50.23.D(1) NMAC shall be verified by dated delivery receipts from the purchaser of the hydrocarbon liquids, or metered volumes of hydrocarbon liquids sent downstream, or other proof of transfer.~~

~~(3)~~(2) Records of the inspections required in 20.2.50.23.C NMAC shall include the time and date of the inspection, ~~the person conducting the inspection,~~ a notation that each check required under 20.2.50.23.C NMAC was completed, a description of any problems observed during the inspection, and a description and date of any corrective actions taken in accordance with 20.2.50.12 NMAC.

~~(4)~~(3) Owners and operators complying with the requirements in 20.2.50.23.B(1) NMAC through 20.2.50.23.B(4) NMAC through use of a control device shall comply with the recordkeeping requirements in 20.2.50.15 NMAC.

~~(5)~~(4) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements.

(1) Owners and operators complying with the requirements in 20.2.50.23.B(1) NMAC through 20.2.50.23.B(4) NMAC through use of a control device shall comply with the reporting requirements in 20.2.50.15 NMAC.

(2) Owners and operators shall comply with the reporting requirements in 20.2.50.12

NMAC.

20.2.50.23 STANDARDS FOR WORKOVERS

A. Applicability
   (1) All workovers performed at oil and natural gas wells are subject to the requirements of 20.2.50.24 NMAC for any workovers performed after the effective date of this Part.

B. Emission Standards
   (1) Owners and operators of oil or natural gas wells shall use the following best management practices during workovers to minimize emissions, consistent with well site conditions and good engineering practices:
      (a) Reduce wellhead pressure prior to blowdown to minimize the volume of natural gas vented;
      (b) Monitor manual venting in close proximity to the well or via remote telemetry; and
      (c) Route natural gas flow to the sales line or process, if possible.

C. Monitoring Requirements
   (1) Owners and operators subject to 20.2.50.24 NMAC shall monitor the following parameters during workovers:
      (a) Wellhead pressure;
      (b) Flow rate of the vented natural gas (to the extent feasible); and
      (c) Duration of venting to the atmosphere.
   (2) Owners and operators shall calculate the volume and mass of VOC vented during each workover.
   (3) Owners and operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

D. Recordkeeping Requirements
   (1) Owners and operators subject to 20.2.50.24 NMAC shall keep the following records for each workover:
      (a) The identification number and location of the well;
      (b) The date(s) the workover was performed;
      (c) Wellhead pressure;
      (d) Flow rate of the vented natural gas (to the extent feasible. If measurement of the flow rate is not feasible, the owner or operator shall use the maximum potential flow rate in the emission calculation);
      (e) Duration of venting to the atmosphere;
      (f) A description of the management practices used to minimize release of VOC prior to and during the workover; and
      (g) A calculation of the VOC emissions vented during the workover based on the duration, volume, and mass of VOC.
   (2) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements
   (1) Owners and operators shall comply with the reporting requirements in 20.2.50.12

NMAC.

(2) If it is not feasible to prevent VOC emissions from being ~~emitted~~ vented to the atmosphere from any workover event, the owner or operator shall notify all residents by certified mail located within 0.25 miles of the well of the planned workover at least three (3) calendar days prior to the workover event.

~~20.2.50.24~~ STANDARDS FOR OIL AND NATURAL GAS STRIPPER WELL~~S~~ FACILITIES ~~AND FACILITIES WITH SITE-WIDE VOC POTENTIAL TO EMIT LESS THAN 15 TPY~~

~~A.~~F. Applicability

(1) Stripper wells facilities as~~,~~ defined in 20.2.50.8 as any oil ~~and natural gas~~ well producing less than ~~10~~ 15barrels of oil per day or any natural gas well producing less than ~~60~~ 250 thousand standard cubic feet of natural gas per day, or an individual well head site with PTE less than 25 tpy VOCs are subject to the requirements of 20.2.50.25 NMAC.

(2) Owners or operators of stripper well~~s~~ facilities shall comply with these requirements no later than ~~one~~ five years~~year~~ after the effective date of this Part.

~~(3) Facilities with a site-wide annual PTE of less than 15 tons per year of VOC are subject to the requirements of 20.2.50.25 NMAC.~~

~~(4) Owners or operators of facilities with a site-wide annual PTE of less than 15 tons per year of VOC shall comply with these requirements no later than one year after the effective date of this Part.~~

~~(5)~~(3) If at any time a facility identified in 20.2.50.25.A(1) or (3) NMAC exceeds the daily production limit or PTE threshold of ~~15~~ 25 tpy of VOC, the owner or operator shall conduct semi-annual LDAR monitoring as required by 20.2.50.16.C(2)(b) NMAC for a period of two years.

~~B.~~G. Emission Standards

(1) Owners or operators shall ensure that all equipment located at a stripper well facility ~~or low-PTE facility~~ shall be operated and maintained consistent with ~~with manufacturer specifications and~~ good engineering and maintenance practices. The owner or operator shall keep manufacturer specifications and maintenance practices on file and make them available upon request by the Department.

(2) Owners or operators of an oil or natural gas stripper well or individual facility with a site-wide PTE less than ~~15~~ 25 tpy of VOC shall, within the first calendar quarter of the year, use actual production volumes to calculate the VOC and NOx emissions from the stripper well site.

(3) Owners or operators of an oil or natural gas stripper well(s) or facility(s) with a site-wide PTE less than ~~15~~ 25 tpy of VOC shall maintain a database of company-wide calculated VOC and NOx emissions estimates for each site and must update the database annually.

~~C.~~H. Monitoring Requirements

(1) Owners or operators complying with 20.2.50.25 NMAC shall monitor the following for each stripper well ~~or~~ facility ~~with a site-wide PTE of VOC less than 15 tpy~~:

(a) the unique identifier of the stripper well or facility (API number and

name, as applicable);

(b) the UTM coordinates of the stripper well or facility and its county of location;

(c) the annual total well production rate in barrels of oil per year and natural gas production in thousand standard cubic feet per year; and

(d) Dates, duration, and VOC emission estimates of any venting or flaring event longer than eight (8) hours.

(2) ~~Owners or operators shall comply with the monitoring requirements in 20.2.50.12 NMAC~~.

~~D.~~I. Recordkeeping Requirements

(1) Owners or operators complying with 20.2.50.25 NMAC shall:

(a) maintain electronic records of the following for each stripper well and low-PTE facility:

(i) the unique identifier of the stripper well and low-PTE facility (number and name, as applicable);

(ii) the UTM coordinates of the stripper well and low-PTE facility and its county of location;

(iii) the total annual well production in barrels of oil per year and natural gas production in thousand standard cubic feet; and

(iv) Dates, duration, and VOC emission calculation of any venting or flaring event lasting longer than eight (8) hours, and the cause of the event.

(2) Within the first calendar quarter of the year, record the calculated total annual emissions of VOC and NOx from each stripper well site and low-PTE facility in tons, and the company-wide total VOC and NOx emissions from stripper wells and low-PTE facilities in tons. All venting and flaring emissions > 8 hours shall be included in the calculated total annual emissions.

~~(3) Within the first calendar quarter of the year, provide a description of the management practices used to minimize and prevent the release of VOC and NOx at each stripper well and low-PTE facility.~~

~~(4) Owners or operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC~~.

~~E.~~J. Reporting Requirements

Owners or operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

~~20.2.50.25~~20.2.50.24 STANDARDS FOR EVAPORATION PONDS

A. Applicability

(1) All new and existing oil and natural gas evaporation ponds with pond capacity equal to or greater than [TBD barrels] or a potential to emit greater than [10 lbs/day VOC] and located at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, transmission compressor stations, or not associated with a facility but located in San Juan, Lea, Eddy, Rio Arriba, Sandoval counties are subject to the requirements of 20.2.50.26 NMAC.

(2) Owners or operators of oil and natural gas evaporation ponds shall comply with

Commented [A16]: This could catch recycle ponds approved by NMOCD. It is very important to try and exclude those here if the state wants to continue to encourage the use of recycled water within the oil field.

We have recommended excluding recycling facilities permitted under the Produced Water Act from the definition of "evaporative pond." Another option would be to expressly exempt those facilities in this part here.

these requirements no later than 180 days after the effective date of this Part.

B. Emission Standards

(1) Owners or operators of an oil or natural gas evaporation pond shall use best management practices to minimize emissions of VOC, consistent with good engineering practices.

(2) Prior to unloading into a pond(s), all liquids shall be first loaded into a 20.2.50.23 NMAC compliant liquid storage tank designed to minimize subsequent VOC emissions from the pond.

(3) Owners or operators shall install an impermeable continuous barrier or cover over the entire surface area of the liquid, which prevents VOC emissions from being emitted to the atmosphere. Owners and operators shall ensure that VOC emissions are collected and routed to a control device for destruction.

Commented [A17]: May want to include-"or processed in some way that reduces the VOC content in the water prior to pond unloading."

Commented [A18]: How is an evaporation pond supposed to work if the liquid surface is covered? This is also not very feasible for larger ponds and increases the costs 2x, or more, at least.

C. Monitoring Requirements

(1) For each oil or natural gas evaporation pond, the owners or operators subject to 20.2.50.26 NMAC shall:

(a) on a monthly basis, perform an inspection to ensure that the barrier is an impermeable continuous barrier or cover that covers the entire surface area of liquid;

(b) on a monthly basis, ensure that all VOC emissions are being captured and routed to a control device; and

(c) monitor the monthly total and annual total oil and natural gas evaporation pond throughput in thousands of gallons of liquids.

(2) Owners or operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

D. Recordkeeping Requirements

(1) Owners or operators subject to 20.2.50.26 NMAC shall maintain electronic records of the following for each evaporation pond:

(a) the unique identifier of the evaporation pond (number and name, as applicable);

(b) the UTM coordinates of the evaporation pond site and its county of location;

(c) the results of the barrier or cover inspection, including the date, time, and name of the personnel performing the inspection;

(d) the results of the VOC capture and control device inspection, including the date, time, and name of the personnel performing the inspection; and

(e) the total calculated VOC emissions in tons per year.

(2) Owners or operators of an oil or natural gas evaporation pond shall, within the first calendar quarter of the year, record the calculated emission estimates of VOC from the evaporation pond in tons per year.

(3) Owners or operators of an oil or natural gas evaporation pond shall record a description of the management practices used to minimize release of VOC at the evaporation pond, and the company-wide total VOC emissions from evaporation ponds in tons per year.

(4) Owners or operators of an oil or natural gas evaporation pond shall, within the first calendar quarter of the year, use actual volumes of liquid loaded into each site's pond(s) to calculate total site-wide VOC emissions from all evaporation

ponds.

(5) Owners or operators of an oil or natural gas evaporation pond(s) shall maintain a database of company-wide calculated annual total VOC emissions estimates in tons per year from each pond.

(6) Owners or operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements

Owners or operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.27 PROHIBITED ACTIVITIES AND CREDIBLE INFORMATION PRESUMPTIONS

A. Failure to comply with any of the emissions standards, recordkeeping, reporting, or other requirements of this Part within the timeframes specified shall constitute a violation of this Part subject to enforcement action under Section 74-2-12 of the Act.

~~B. If credible information obtained by the Department indicates that a source is not in compliance with any provision of this Part, the source shall be presumed to be in violation of this Part unless and until the owner or operator provides credible evidence or information demonstrating otherwise.~~

~~D.~~B. ~~If credible information provided to the Department by a member of the public indicates that a source is not in compliance with any provision of this Part, the source shall be presumed to be in violation of this Part unless and until the owner or operator provides credible evidence or information demonstrating otherwise.~~

20.2.50.28 ECONOMIC HARDSHIP AND PREMATURE EQUIPMENT ABANDONMENT EXCEPTIONS

A. An application may be filed with the Department for an exception or variance from the standards and requirements in this Part, when such standards and requirements will result in:

(1) economic hardship;

(2) a potential oil and gas lease expiration;

(3) premature abandonment of an oil or gas well; or

(4) requires the replacement of equipment or software prior to the expiration of the useful life of such equipment or software,

B. Applications filed for exceptions or variances under 20.2.50.28 must include:

(1) The name of the applicant, along with a valid mailing address, email address, and phone number;

(2) A description of the event or conditions justifying the exception or variance

Commented [A19]: The issues with this section are addressed in Marathon's comment letter. These issues could likely be addressed in a few different ways:

(1) NMED could specify certain types of credible information that it is willing to consider. This could be information similar to fly over surveys or other similar types of information which would not encourage individuals to try to physically go to well site equipment, resulting in safety concerns.

(2)NMED could create or reference a specific hearing process which allows for (1) cross examination of any accusations, due process, and evidentiary considerations.

As drafted, this looks like a very open-ended and does not require any sort of due process, which we understand is not the agency's intent. Courts have scrutinized EPA's credible evidence rules for these same types of issues. In any event, no violation or penalty order could issue based solely on third-party hearsay evidence under New Mexico law. Creating a more robust procedural requirement will help lower costs related to litigation involving frivolous claims for both the agency and industry.

Also, this rule may encourage third party activists to remove EMITT tags at well sites or tamper with equipment to cause violations. How can this issue be protected against? Industry's only option to create evidence would be to install expensive camera equipment at well sites, which is very costly and will likely be subject to theft.

application;

(3) The location of the impacted wells, equipment, and leases; and

(4) A detailed description of the proposed variance or exception.

C. The Department must in writing deny, approve the application as submitted, or approve the application in a manner which imposes different terms and conditions than what was requested in the application.

D. Applicants shall be given the opportunity to request a hearing or appeal the issuance of a denial or an approval which imposes different terms or conditions than what was requested in the application.

E. If the application pertains to a potential lease expiration or the premature abandonment of a oil or gas well, equipment, or software, the applicant may operate pursuant to the conditions that it has requested in the exception or variance application until a final order is issued by the Department and such operations shall not constitute a violation of this Part.

OCD DRAFT
July 20, 2020

EXHIBIT 2 – Redline of EMNRD Rule

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AN GAS
PART 27 VENTING AND FLARING OF NATURAL GAS

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

19.15.27.2 SCOPE: 19.15.27 NMAC applies to persons engaged in oil and gas development and production within New Mexico.
[19.15.27.2 NMAC – N, xx/xx/xx]

19.15.27.3 STATUTORY AUTHORITY: 19.15.27 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/xx]

19.15.27.4 DURATION: Permanent.
[19.15.27.4 NMAC – N, xx/xx/xx]

19.15.27.5 EFFECTIVE DATE: [DATE], unless a later date is cited at the end of a section.
[19.15.27.5 NMAC – N, xx/xx/xx]

19.15.27.6 OBJECTIVE: To regulate the venting and flaring of natural gas from wells and production equipment and facilities to prevent waste and protect correlative rights, public health and the environment.
[19.15.27.6 NMAC – N, xx/xx/xx]

19.15.27.7 DEFINITIONS: Definitions shall have the meaning specified in 19.15.2 NMAC except as specified below.

A. "ALARM" means advanced leak and repair monitoring, which may include but is not limited to remote leak detection systems, fly over surveys, well monitoring systems approved by the New Mexico Environment Department, and other advanced leak detection technology.

B. "Air Pollution Control Equipment" means air pollution control equipment as defined by the New Mexico Environment Department.

"C. **Average daily production"** has the same meaning as in Subsection A of 19.15.6.7 NMAC.

D~~C~~. **"AVO"** means audio, visual ~~or~~ and olfactory, which may include, but is not limited to, ALARM systems, remote leak detection, and well monitoring systems approved by the New Mexico Environment Department or the Division.

E. **"Beneficial Use"** means a use of oil, natural gas, or water for any and all rights and privileges necessary, incident to or convenient for operations permitted under an oil and gas lease, communitization agreement, or unit agreement.

F~~D~~. **"Completion operations"** means the period that begins with the initial perforation of the well in the completed interval and concludes on the earlier of 30 days after commencement of initial flowback~~-~~ or when permanent production equipment is in use at the well.

G~~E~~. **"Drilling ~~operations~~"** means the period that begins when a well is spud and concludes when casing and cementing has been completed and casing slips have been set to install tubing head in the well.

H~~F~~. **"Emergency"** means a sudden unexpected occurrence or an unforeseen combination of circumstances~~temporary, infrequent and unavoidable event~~ in which the loss of natural gas is uncontrollable or necessary.

~~G. "~~

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

I. **"Gas-to-oil ratio (GOR)"** for purposes of 19.15.27 NMAC means the ratio of natural gas to oil in the production stream expressed in standard cubic feet of natural gas per barrel of oil.

J. **"Initial flowback"** means the period during completion operations that begins with the onset of flowback and concludes when it is technically feasible for a separator to function.

K. **Major Emergency:** A venting or flaring event that is the result of an emergency: (1) that results in estimated volumes in excess of 500 MCF, or (2) a situation that creates a threat to public safety.

L. **Major Malfunction**: A venting or flaring event that is the result of a malfunction: (1) that results in estimated volumes in excess of 500 MCF, or (2) a situation that creates a threat to public safety.

M. **"Malfunction"** means any sudden and failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions."
~~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.~~

N~~L~~. **"N_2"** means nitrogen gas.

O~~M~~. **"Natural gas"** means a salable gaseous mixture of hydrocarbon compounds, primarily composed of methane, and includes both casinghead gas and gas as defined in 19.15.2 NMAC.

Commented [A1]: This definition matches the rights afforded under most oil and gas lease agreements, including the right of "free use" of gas given under the New Mexico Statutory lease forms.

Commented [A2]: Has the agency looked at how its orders (i.e., pooling order) reference the term completion or completions to see if there are any unintended consequences related to defining this term in the regulations? Stated another way, has the division determined if this definition will change or alter the deadlines for such operations contemplated under already issued orders?

Commented [A3]: The New Mexico Supreme Court has embraced a different definition of the term "drilling operations" in the context of leasehold and JOA interpretation disputes. Could this term be limited to just the word "drilling" to avoid discrepancies in the law?

Commented [A4]: Emergencies, however, have not historically qualified as waste under the Oil and Gas Act. Proposed for the agency's consideration is a definition more similar to what is found in other New Mexico statutes and regulations.

Commented [A5]: This definition would not include things such as a gas buster which would meet the definition here. For sake of clarity would suggest utilizing air pollution control equipment and deleting this definition.

Commented [A6]: The goal of adding this word is to properly consider non-saleable gas, such as H2S. We did not find an express exception in the proposed rule (as drafted) for non-salable H2S and Nitrogen, but other existing NMOCD regulatory requirements do likely require H2S to be combusted.

P~~N~~. **"Production operations"** means the period that begins on the earlier of 31 days following the commencement of initial flowback ~~or when permanent production equipment is in use at a well and~~ concludes when the well is plugged and abandoned.

Q. **"Salable"** means that hydrocarbons meet a specification that can be sold and transported pursuant to an applicable midstream, transportation, or purchase and sale agreement.

R~~O~~. **"Separation flowback"** means the period during completion operations that begins when it is technically feasible for a temporary separator to function and concludes on the earlier of 30 days after initial flowback begins or when permanent production equipment is in use at the well or production facility.

S~~P~~. **"Vent" or "Venting"** means the release of uncombusted salable natural gas to the atmosphere but does not include equipment leaks regulated by the New Mexico Environment Department.

[19.15.27.7 NMAC – N, xx/xx/xx]

19.15.27.8 VENTING AND FLARING OF NATURAL GAS:

A. Venting and flaring of natural gas during drilling, completion or production operations constitutes surface waste, as defined by the Oil and Gas Act, if the venting or flaring constitutes an unnecessary and excessive surface loss or destruction of gas without beneficial use. ~~and is prohibited except as authorized below~~ The beneficial use of gas is permitted and does not constitute a waste. Venting and flaring is prohibited except as authorized below. ~~An operator has a general duty to maximize the recovery of natural gas and to minimize the release of natural gas to the atmosphere.~~

B. Venting and flaring during drilling ~~operations~~.

(1) If technically feasible, t~~T~~he operator shall capture or combust natural gas escaping from the well using best available control technologies.

(2) If flaring occurs during drilling, ~~A~~ air pollution control equipment ~~flare stack~~ that is used shall ~~be located at a minimum of 100 feet from the nearest surface hole location and shall be enclosed and~~ equipped with an automatic ignition system or continuous pilot.

(3) T~~In an emergency or malfunction, t~~he operator may vent natural gas during drilling if gas capture is technically infeasible or in order ~~only~~ to avoid a risk of an immediate and substantial adverse impact on safety, public health or the environment.

(4) Operator, however, may flare or vent natural gas if flaring is required or permitted in accordance with federal or state law, rule, regulation, order, or permits~~-~~. If such flaring or venting is done in accordance with a law, rule, regulation, order or permit, it shall be exempted from the gas capture requirements contained within Part 19.15.27.9.

~~The operator shall~~

~~**(a)** notify the division of the venting or flaring as soon as possible by email, but no more than two hours following discovery of the emergency or malfunction;~~

~~**(b)** file a form C-129 no later than 24 hours after commencing to vent or flare pursuant to Subparagraph (4) of Subsection E of 19.15.27.8 NMAC;~~

~~**(c)** notify the division as soon as practicable after it stops venting or flaring; and~~

~~comply with the applicable requirement to report a release pursuant to 19.15.29 NMAC.~~

Commented [A7]: Our understanding is that leaks (via LDAR) is regulated by NMED.

Commented [A8]: In general, we recommend removing most of 19.15.27.8 and instead relying on the 98% gas capture requirements in 19.15.27.9. This will allow operators some flexibility to focus investments on innovative technology to better achieve gas capture.

Note that current oil prices are around $40/bbl for WTI. The Federal Reserve Bank of Dallas has recently found that "shut-in prices" in August of 2020 for the New Mexico Delaware Basin are around $32/bbl. The proposed rules will increase New Mexico operating costs by requiring retrofits, the installation of meters, and imposing additional reporting.

Commented [A9]: If it is not technically feasible to capture gas during drilling, should these volumes be included in the 98% gas capture requirement? Do these volumes qualify waste under the statutory definition for surface waste?

Commented [A10]: If this language is kept, we recommend that this deadline be aligned with EER reporting deadlines to the NMED, which are:
Initial: following business day after discovery
Final: 10 days following the event

Commented [A11]: If this content is kept in the rule, we recommend specifying how the communication must be made and documented.

Commented [A12]: This language, related to C-129 filings, either has inconsistences or less information than the C-129 requirements discussed below. I recommend having one section (below) that applies to C-129s.

C. Venting and flaring during completion operations.

(1) During initial flowback, the operator shall route flowback fluids into a completion or storage tank and commence operation of a separator when~~as soon as~~ it is technically feasible for a separator to function.

(2) During separation flowback, the operator shall capture and route recovered natural gas to a gas flowline or collection system, re-inject the natural gas~~it into the well~~ or beneficially use the natural gas~~it use on-site as a fuel source or for another purpose that a purchased fuel or raw material would serve~~.

(3) If flaring is necessary, t~~T~~he operator may route recovered natural gas to a flare ~~if routing or using the natural gas as described in Subparagraph (2) of Paragraph C of 19.15.27.8 NMAC poses a risk to safe operation or personnel safety~~, provided that the flare is equipped with an automatic igniter or continuous pilot.

(4) The operator may vent natural gas if gas capture is technically infeasible or ~~only~~ if capturing or flaring the natural gas poses a risk to safe operations or personnel safety~~, and venting is safer than capturing and or flaring~~.

(5) Operator, however, may flare or vent natural gas if flaring is required or permitted in accordance with federal or state law, rule, regulation, order, or permits. If such flaring or venting is done in accordance with a law, rule, regulation, order or permit, it shall be exempted from the gas capture requirements contained within Part 19.15.27.9.

D. Venting and flaring during production operations.

(1) During production operations, t~~T~~he operator shall not vent or flare natural gas except as authorized below in Subparagraph (2) of Subsection D of 19.15.27.8 NMAC.

(2) The operator may vent or flare natural gas during production operations:

(a) if flaring is required or permitted in accordance with federal or state law, rule, regulation, order, or a permit issued by a federal agency or New Mexico Environment Department and operator complies with the gas capture requirements contained in Part 19.15.27.9.

~~to the extent authorized by a valid federally enforceable air quality permit issued by the environment department;~~

(b) 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~~;

(c) to unload or clean-up a well to atmospheric pressure,

(i) if the operator allows the well to vent only so long as necessary to achieve a stabilized rate and pressure;

(ii) for liquids unloading by manual purging, when the operator remains present on-site until the end of unloading, takes all reasonable actions to achieve a stabilized rate and pressure at the earliest practical time and takes all reasonable actions to minimize venting to the maximum extent practicable;

(iii) for a well equipped with a plunger lift system or an automated control system, when the operator optimizes the operation of the system to minimize the venting of natural gas; or

(iv) during downhole well maintenance, if and only when the operator ~~uses a workover rig, swabbing rig, coiled tubing~~

Commented [A13]: It would helpful to have clarification as to if a C-129 is needed during completions in emergency situations, same as drilling. There is no specific reference in the draft rules.

Commented [A14]: If it is not technically feasible to capture gas during these operations, should these volumes be included in the 98% gas capture requirement? Are these volumes waste if they can't feasibly be captured?

~~unit or similar specialty equipment, and~~ minimizes the venting of natural gas to the extent consistent with safe operation and best management practices; and

(d) during the following activities to the extent authorized by applicable state or federal law, including any permits, notices and regulations, which regulate~~ing~~ the emission of hydrocarbons and volatile organic compounds:

(i) gauging or sampling of a storage tank or other low-pressure production vessel;

(ii) loading out liquids from a storage tank or other low-pressure production vessel to a transport vehicle;

(iii) scheduled repair and maintenance, including blowing down and depressurizing production equipment to perform repair and maintenance;

(iv) normal operation of a gas-activated pneumatic controller or pump;

(v) normal operation of a storage tank or other low-pressure production vessel, but not including venting from a thief hatch that has not been fully and timely closed or from a seal that has not been maintained on an established schedule;

(vi) a bradenhead test;

(vii) a packer leakage test; or

(viii) a production test that does not exceed 24 hours unless the division requires or approves a longer test period.

(3) The operator shall conduct an AVO inspection which can be completed using the~~in compliance with~~ the New Mexico Environment Department's LDAR requirements [enter CITE], or using AVO inspections at t~~. on t~~he frequency specified below to confirm that all production equipment is operating properly and there is no venting except as allowed by Paragraph (2) of Subsection D of 19.15.27.8 NMAC. The operator shall conduct the AVO inspection quarterly,- or~~and shall:~~

~~**a)** conduct the AVO inspection weekly during the first year of production;~~

(a) If using an LDAR program approved the Environment Department, operator shall ~~**(b)** conduct the AVO inspection weekly on a well with an average daily production greater than 10 barrels of oil or 60,000 cubic feet of~~ make and keep a record of such ~~each AVO~~ inspections pursuant to the statutes, regulations and rules issued by the New Mexico Environment Department, and shall make such records available for inspection upon request by the Division. ~~for not less than five years and make such record available for inspection by the division upon request.~~

(be) If an operator is in compliance with the gas capture requirements contained in Section 19.15.27.9, then the operator shall only be required to perform AVO inspections semi-annually under this Part.

~~For venting or flaring during an emergency or malfunction pursuant to Subparagraph (b) of Paragraph (2) of Subsection D of 19.15.27.8 NMAC, the operator shall~~

Commented [A15]: 19.15.28.22 Section B subsection 3(e-g) says this is an acceptable form of venting? Can this language match the requirements contained in that Part?

Commented [A16]: NMED's draft rules allow for exemptions for facilities with a PTE of <15tpy of VOCs. Can there be a similar exemption in rule so there is clarity and consistancy?

Commented [A17]: We recommend creating an exemption for lower producing wells so that the rule doesn't result in the unnecessary forfeiture of real property rights.

Another option would be to better define what is required under AVO inspections. Is this similar to LDAR or merely someone on lease looking at the flare? Can this be accomplished through remote systems or advanced technology?

Commented [A18]: This would comport with OOOOa.

~~**(a)** notify the division of the venting or flaring by email as soon as possible, but no more than two hours following discovery of the venting or flaring;~~

~~**(b)** file a form C-129 no later than 24 hours after commencing to vent or flare;~~

~~**(c)** notify the division as soon as practicable after the cessation of venting and flaring; and~~

(5) Performance standards for separation, storage tank and flare equipment.

(a) The operator shall design a temporary or permanent separation or storage tank to minimize the natural gas flashing and vapor accumulation for equipment installed after the Effective Date of this Rule. Wells drilled prior to the Effective Date of this Rule shall be included in the gas capture requirements contained in Part 19.15.27.9.

(b) The operator shall equip a permanent storage tank associated with production operations that is installed after {effective date of rule} with an automatic gauging system to reduce the venting of natural gas.

(c) The operator shall combust all natural gas in air pollution control equipment~~a flare stack~~ designed for and operated at maximum efficiency.

(i) A flare stack installed after the Effective Date of this Rule ~~after May 31, 2021~~ shall be equipped with an automatic ignitor or continuous pilot.

~~**(ii)** A flare stack before June 1, 2021 shall be retrofitted with an automatic ignitor or continuous pilot no later than 18 months after {effective date of rule}~~

(de) The operator shall inspect all flare stacks quarterly~~at least once per week~~ to confirm that flare stacks~~it~~ are~~is~~ being properly maintained and operated in conformance with ~~its~~ design, and shall make and keep a record of each inspection for not less than five years and make such records available for inspection by the division upon request.

E. Measurement and reporting of vented and flared natural gas.

(1) The operator shall measure, calculate or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion operations and production operations regardless of the reason or authorization for such venting and flaring.

(a) The operator shall install equipment to measure the volume of ~~vented and~~ flared natural gas using high pressure flaring equipment, from a well authorized by an APD issued after May 31, 2022~~1~~ that has an average daily production greater than 40~~10~~ barrels of oil or ~~6~~250~~0~~,000 cubic feet of natural gas.~~**(b)** Measurement equipment shall be designed in accordance with the accuracy ratings and design standards in 43 C.F.R. § 3175.20.~~

(b) Equipment leaks shall not be considered vented or flared volumes under the Part.

(c) Measurement 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 measurement equipment.

(d~~d~~) For a well that does not require measurement equipment, or in the event measurement equipment cannot be used to accurately measure the volume of vented or flared natural gas from certain equipment, the operator shall calculate or estimate the volume of vented and flared natural gas based API measurement standards or on the result of an annual GOR test for that well reported on form C-116.

Commented [A19]: We recommend that this requirement align with NMED EER reporting timelines (as noted above).

Commented [A20]: Can NMOCD allow for grandfathering of equipment if the operator is in compliance with the gas capture requirements?

Commented [A21]: Will on-site cameras or remote monitoring count under this provision? If there are no issues found, how should non-events be recorded?

Commented [A22]: According to the proposed 19.15.28.22 NMAC Section C subsection 5, pipeline operators are allowed to calculate where it is not practicable to meter. Can this same standard be applied to this Part of the proposed rules?

Commented [A23]: We recommend extending this date.

Commented [A24]: BLM has released new proposed rules that will be published in the Federal Register for Part 3175. Will this citation remain valid?

Commented [A25]: In some cases, it is not the best practice to install a meter on our flare lines for safety concerns as "Differential Pressure" metering inherently puts a restriction in a previously designed safety system. If there are safety concerns related to this requirement and previously designed safety systems, in this situation measurement standards or calculations would be a better option.

(e) The operator shall install additional measurement equipment whenever the division determines: (1) that the API measurement standards, calculations, estimates, or existing measurement equipment or GOR test is not sufficient to measure the volume of vented and flared natural gas, and (2) that accurate measurements can be obtained through such additional measurement equipment, ~~P~~provided that the division shall send written notice to the operator of any such requirements and that operator be given no less than thirty days to respond to such notification or request a hearing.

(2) The operator shall report the lost natural gas for each year~~month~~ on a volumetric ~~and percentage~~ basis on form C-115B. The Division shall allow amendments to the C-115 and C-115B to be filed for individual PUN codes.

Commented [A26]: Will the Division allow for amended information to be filed on a PUN basis rather than having to resubmit the entire C-115 report?

(a) To calculate the lost natural gas on a volumetric basis, the operator shall deduct the volume of natural gas sold, used for beneficial use, injected, vented or flared during an emergency or malfunction, and not suitable for transportation, from the natural gas produced.

~~**(b)** To calculate the lost natural gas on a percentage basis, the operator shall add the volume of natural gas sold, used for beneficial use, injected, vented or flared during an emergency or malfunction, and not suitable for transportation, and divide by sum by the total natural gas produced.~~

(3) The operator shall report the volume of vented and flared natural gas for each month in each category in this subparagraph on form C-115B, and state whether the reported volume was calculated, estimated or measured. The operator shall make and keep records of the measurements and estimates, including how the estimated volumes were calculated, for not less than five years and make such records available for inspection by the division upon request.

~~**(a)** emergency or malfunction;~~
~~**(b)** non-scheduled maintenance;~~
~~**(c)** equipment malfunction by operator;~~
~~**(d)** equipment malfunction by third party;~~
~~**(e)** drilling operations;~~
~~**(f)** completion operations;~~
~~**(g)** routine equipment repair and maintenance, including blowdown and depressurization;~~
~~**(h)** routine downhole maintenance, including operation of workover rigs, swabbing rigs, coiled tubing units and similar specialty equipment;~~
~~**(i)** gas beneficially used; pilot gas for combustion devices;~~
~~**(j)** purge gas to test or fuel combustion devices;~~
~~**(k)** manual liquid unloading;~~
~~**(l)** bradenhead tests;~~
~~**(m)** packer leakage tests;~~
~~**(n)** uncontrolled storage tanks;~~
~~**(o)** insufficient pipeline availability or capacity;~~
~~**(p)** natural gas quality that is not suitable for transportation and processing because of a high percentage of N_2 or H_2S;~~

~~**(q)** venting in excess of the design specifications of pneumatic controllers and pumps as a result of malfunction or improper or infrequent maintenance;~~

~~**(r)** commencing on January 1, 2022, venting as a result of normal operation of pneumatic controllers and pumps,, except that~~

~~**(i)** in November 2021, the operator shall report the volume of vented natural gas that it reported to a state or federal agency, as revised to include data from pneumatic controllers and pumps in use during 2021 that were not included in the 2020 report; and~~

~~**(ii)***provided that* an operator who vents or flares less than 500,000 cubic feet per year of natural gas is exempted from this subparagraph;~~

~~**(s)** thief hatches that are not properly closed or maintained; and~~

~~**(t)** other volumes not described above.~~

~~**(4)** The operator shall report any venting or flaring that results from an emergency as soon as practicable. This report may be made through a phone call or email to the agency.~~

(45) The operator shall notify the division of any major emergency, major malfunction or a period of venting and flaring that exceeds eight consecutive hours in any 24 hour period as soon as practicable by phone call or email, provided that such reporting shall occur before 12 hours after such event(s) are first discovered. A ~~and of all venting or flaring attributed to emergency or malfunction of any duration by submitting a~~ form C-129 shall be filed no later than- 24 hours after the first date on which the venting or flaring event occurred, or on the next business day if such event occurs on a weekend or holiday~~7248~~24 ~~hours after the commencement of venting and flaring, provided that if the event occurs on a Saturday, Sunday, or recognized holiday, such report will be due on the following workday~~. For all other venting and flaring that are the result of an emergency or malfunction, operator shall file a C-129 with the division fifteen (15) days after discovery of the event.

(a) The operator's form C-129 shall provide and certify the accuracy of the following information:

- **(i)** operator's name;
- **(ii)** name and type of facility;
- **(iii)** equipment involved;
- **(iv)** compositional analysis of the vented and flared natural gas if the natural gas is vented or flared because the quality that is not suitable for transportation and processing because of a high percentage of N_2 or H_2S;
- **(v)** date and time that venting or flaring occurred;
- **(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.

(b) At the division's request, the operator shall provide additional information by the specified date and a certification of the accuracy of the information.

Commented [A27]: It would be a significant burden and costly to provide this information or to prove that an operator can qualify for this exemption, which will make it very difficult to use/qualify for.

Commented [A28]: This is also impossible to accurately quantify.

Commented [A29]: Software is not currently being used by operators which accommodates reporting for the specified categories. Is there a way to streamline the categories into fewer buckets? Also what happens when 2 or more different categories apply?

We have recommended 5 different buckets of information in our comment letter, which we recommend creating a form for. We also recommend keeping these requirements more general in the rule to give some flexibility if form changes are needed.

Commented [A30]: Question: For every leak we potentially find on a quarterly LDAR would a separate set of reporting (C-129 forms) be required? In general, operators will not have documentation of when a leak started. This may result in a lot of reports, which is a problem under the current C-129 system.

Commented [A31]: Catching a sample from tanks or flare line could be tricky due to the low pressure environment. We suggest adding verbiage for accepting compositional analysis from simulations. Or, create a system to use compositional analysis from a particular area.

(5) The filing of a C-129 under this Part shall satisfy the requirement to file a C-141 report for any release of vented or flared gas, provided that operator provide the division with all information and attachments required for a C-141 filing.~~(5)The operator shall report the vented and flared natural gas volumes on royalty statements or check stubs issued to royalty owners in fee and state oil and gas leases on a volumetric and percentage basis to all royalty owners in the mineral estate, being produced by the well on a monthly basis, and keep such reports for not less than five years and make such records available for inspection by the division upon request.~~

~~**(6)** Upon the environment department's request, the operator shall promptly provide a copy of any form filed pursuant to 20.2.27 NMAC.~~

[19.15.27.8 NMAC – N, xx/xx/xx]

19.15.27.9 STATEWIDE NATURAL GAS CAPTURE REQUIREMENTS:

A. Statewide natural gas capture requirements. Commencing January 1, 2022, the operator shall reduce the annual volume of vented and flared natural gas resulting from ~~the total sum of its drilling, completion operations, and~~ production operations within the state ~~on a statewide basis~~ in order to capture ninety-eight percent of the salable natural gas produced from its wells no later December 31, 2026. The division shall calculate and publish each operator's baseline natural gas capture rate based on the operator's 2021 annually reported volumetric ~~monthly~~ data of salable natural gas and lost natural gas for each year~~month~~ on a volumetric ~~and percentage~~ basis on form C-115B. Unless and until a 98% gas capture rate is achieved by the operator, i~~I~~n each calendar year between January 1, 2022 and December 31, 2026, the operator shall increase the percentage of natural gas captured based on the following formula: (2021 baseline loss rate) divided by five.

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

Baseline Natural Gas Capture Rate	Minimum Required Annual Natural Gas Capture Percentage Increase
90-98%	0-1.6%
80-89%	>1.6-3.6%
70-79%	>3.6-5.6%
0-69%	>5.6-20%

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

(3) ~~An~~ If operator that acquires one or more wells from another operator that alter the operator's Baseline Natural Gas Capture Rate~~s~~, the operator shall submit an amended statewide plan to the Division or the operator may choose to comply with acquiree's plan for the well or wells that are acquired. ~~its statewide natural gas capture requirements no later than December 1, 2026 unless the division approves a later date.~~

B. Accounting. No later than 45 days after January 1, 2022 and each year thereafter, the operator shall submit an annual report to the Division certifying compliance with the statewide gas capture requirements in subparts A and C.

Commented [A32]: ONRR's electronic reporting does not allow this information to be submitted in the C-115B categories proposed in the draft. How will this work for federal minerals? Will the NMOCD accept ONRR reports and reporting standards?

Commented [A33]: We recommend deleting this requirement. Royalty owners have separate contracts with operators which govern the payment of royalties and other New Mexico statutes govern the payment of royalty proceeds to these owners.

What if a royalty owner does not agree to allow their payment information to be reviewed by NMOCD (documents subject to IPRA)? This information is can be subject to confidentiality agreements or requirements.

Commented [A34]: How will approvals work?

Commented [A35]: An acquiree's plan may not be executable by the acquiring company. As drafted, the rule would likely impede certain acreage trades and divestitures. These proposed edits are recommended to give acquiring companies the ability to move

C. Credits and Exclusions. The operator's volume of vented and flared natural gas shall be counted as produced natural gas and excluded from the volume of natural gas sold or used for beneficial use in the calculation of its statewide natural gas capture requirements, except for the following credits which may be obtained and applied by the operator towards its 98% gas capture threshold in the year in which they are earned:.

(1) The volume of natural gas sold, used for beneficial use, injected, vented or flared during an emergency or malfunction, and not suitable for transportation, from the natural gas produced shall not be included in the calculation of the operator's gas capture threshold.

(2) The operator may exclude from the volume of produced natural gas the volume of vented and flared natural gas from a pneumatic pump or controller that is properly operated.

(2) Subject to the division's approval, the operator may exclude natural gas from the volume of produced natural gas, specifically Subparagraph (p) of Paragraph (3) of Subsection E of 19.15.27.8 NMAC, provided that the operator identified the volume of natural gas, the reasons that the operator vented or flared the natural gas rather than capturing it and any other relevant information requested by the division.

(3) Subject to the division's approval, the operator may exclude natural gas that is beneficially used or injected from the volume of produced natural gas, specifically **(4)** The operator may exclude natural gas from the volume of produced natural gas, specifically Subparagraph (r) of Paragraph (3) of Subsection E of 19.15.27.8 NMAC. , provided that the operator identified the volume of vented natural gas, the reasons that the operator vented the natural gas rather than capturing it and any other relevant information requested by the division.

(354) The operator may obtain aa credit of up to 10 % against its reported volume of lost natural gas by using a division approved- ALARM technology to monitor, discover, report, isolate and make repairs to prevent leaks of natural gas. To obtain a credit, the operator shall

(a) use ALARM technology at least two times per calendar year to obtain a credit of 5%;

(b) to obtain an additional credit of 5%, operator shall make the initial discovery using the ALARM technology; and

(c) isolate the leak of natural gas from its own well within 48 hours of discovery and make the repair within 15 days of discovery.

(45) The operator may use a credits against its reported volume of lost natural gas loss no more than once in any 2413 month period following the division's approval of such credit.

(56) Additional credits may be obtained as follows:The credit shall be determined as follows:

(a) a credit of thirty percent of the volume of natural gas discovered and isolated within 48 hours of discovery and timely repaired if the leak occurs at the operator's well or production facilities;

(a) an additional credit of ten percent if the operator uses ALARM technology no less than four times per year; and

Commented [A36]: Deletions are being recommended because we are recommending changes to the C-115B requirements. If these exceptions are kept in the rule, the following comments provide input on the proposed exceptions made by the Division.

Commented [A37]: (p) states: "natural gas quality that is not suitable for transportation and processing because of a high percentage of N_2 or H_2S." This gas typically can't be sold or used, It seems odd that this sort of flaring would count against gas capture percentages without obtaining approval from the Division.

Commented [A38]: (a) allows for flaring in the event of an emergency. Based on the definition of surface waste in the Oil and Gas Act, shouldn't there be exemptions for all venting and flaring events that are necessary and not excessive? Not just emergencies?

Commented [A39]: (r) relates to the normal operation of pneumatic pumps. Calculating gas emitted would be onerous and burdensome, as would reporting. Would an operator need to justify normal operations of pneumatics? This would require a large C-129 submissions for each pneumatic pump each month?

Commented [A40]: Should the operator obtain credit for properly monitoring, even if a leak is not discovered? This would incentivize more flyovers.

Commented [A41]: Would this be another/separate annual report? How will approvals work?

Commented [A42]: How is this calculated? It is probably more efficient for the Division to assign a percent.

Commented [A43]: Can this be different types of ALARM technology? For example, if an operator employs 2 advanced leak inspections, with a system approved by NMED, and 2 flyovers does that count as 4 ALARM surveys?

(b) an additional credit of ten percent if the operator uses ALARM technology and, as a result of such use, provides credible information to an unaffiliated operator and the division that the unaffiliated operator's well has a leak of natural gas within five business days of discovery.

(67) To obtain a credit, the operator shall submit an application to the division describing

(a) the ALARM technology;

(b) the date of monitoring, discovery, isolation and repair, if required;

~~**(c)** the estimated volume of the natural gas lost and isolated after the date of discover~~

(d) a summary of the actions the operator took to isolate and repair the leak, if repairs were required;

(e) ~~visual~~ documentation showing use of ALARM technology ~~of the discovery and isolation~~;

(f) if applicable, a certification that the operator did not know or have reason to know of the leak of natural gas before the discovery using ALARM technology;

(g) any leaks timely reported which were found using the ALARM technology which are isolated and repaired according to this part shall not be subject to enforcement or civil penalties when reported to the Division.

(78) Credits shall be used only if approved by the division, and only by the operator, and cannot be traded or used by another operator.

D. Violation of natural gas capture requirement. The division may pursue any action authorized by law against an operator that does not meet a statewide natural gas capture requirement, including to curtail an allowable~~production allowance~~, withhold or deny a drilling permit, suspend or revoke an authorization to transport or assess a civil penalty.

E. Natural gas management plan.

(1) Operators who have obtained at least a 98% gas capture rate under Part 19.15.27.9 are exempt from this subsection and are not required to submit a natural gas management plan.

(21) After May 31, 2021, the operator shall file a natural gas management plan~~.~~ ~~with each APD.~~ The operator may file a single natural gas management plan for multiple wells drilled from a single well pad or that will be connected to a central delivery point. These plans can be designated as confidential by the operator and such confidentiality shall be maintained by the division.

(32) The natural gas management plan shall describe the actions that the operator will take at each well to meet its statewide natural gas capture requirements, reduce waste, eliminate venting and flaring of natural gas to the greatest extent possible and maximize the efficient, safe and economic recovery of ~~the state's~~ oil and natural gas, and include the following information for each well:

(a) operator's name;

(b) well name(s), ~~API number~~, and location(s) ~~and footage~~;

(c) estimated drilling, completion and anticipated first production date;

Commented [A44]: This information is subject to confidentiality agreements/provisions and other operator information is not disclosed to competitors.

Commented [A45]: Since good monitoring is being obtained through the use of ALARM Technology, can there be an exclusion from enforcement by NMED & NMOCD for leaks found and timely repaired?

Commented [A46]: Could the Natural Gas Management Plan be a general plan (i.e. for an entire county for the applicant) and then add each pad as an appendix to the plan? Similar to SPCC plans. This would decrease burden on regulatory dept.

Commented [A47]: Incentives like this would encourage operators to obtain an established 98% gas capture rate sooner vs. later.

Commented [A48]: This language is confusing. Is the agency seeking information on State Trust Minerals?

Commented [A49]: API numbers are not assigned until after the APD is issued by the Division.

Commented [A50]: The Division's orders and long-standing practices have recognized that footages often change prior to drilling.

(d) anticipated natural gas volume production in units of MCFD annually for the first three years of production;

(e) existing natural gas gathering system contracted or anticipated to contract to gather the natural gas, including

(i) natural gas gatherer's name;

(ii) name and location of the natural gas gathering system;

(iii) approximate distance in feet of pipeline required to connect to the natural gas gathering system;

(iv) name and location of the anticipated natural gas processing plant contracted or anticipated to contract to process the natural gas;

(v) if available and able to be disclosed, maximum daily capacity of the natural gas pipeline and compressors;

(vi) if available and able to be disclosed, the current throughput of the natural gas pipeline at the time the plan is submitted and compressors;

(vii) if available and able to be disclosed, the anticipated daily capacity of the natural gas pipeline and compressors on the date of first sale; and

~~**(viii)** anticipated throughput of natural gas pipeline and compressors on the date of fireliability of the natural gathering system, including the average annual system downtime; [[Do we have access to this info~~

(x) if available and able to be disclosed, other issues and expansion plans affecting the gathering of natural gas in the general area;

~~**(f)** detailed map depicting each existing, planned and anticipated natural gas gathering system in the general area, including~~

~~**(i)** natural gas gatherer's name;~~

~~**(ii)** gathering pipelines;~~

(f) a flowback strategy, including

(i) temporary equipment to be used during flowback to reduce the venting of natural gas, including sand traps and settling tanks; and

(ii) measures to be used to flare natural gas if such natural gas cannot be routed immediately and directly to a sales line;

(g) options for the beneficial use of natural gas that cannot be connected to a natural gas gathering system; and if the operator determines, based on the available information at the time of submittal, that a natural gas gathering system will not be available or will not have capacity on the date of first production from the well to transport one hundred percent of the anticipated volume of natural gas produced, the operator shall submit a venting and flaring plan, with the natural gas management plan, containing a detailed analysis of the potential alternative uses for the natural gas until a gathering system is available that describes how the operator will avoid venting and flaring natural gas from the well including

(i) power generation on lease;

(ii) power generation for grid;

(iii) compression on lease;

(iv) liquids removal on lease;

(v) reinjection for underground storage;

(vi) reinjection for temporary storage;

(vii) reinjection for enhanced oil recovery; and

Commented [A51]: This information may not be available during the time of APD submission.

Commented [A52]: Midstream and purchasing agreements typically contain confidentiality provisions that may cause concerns with disclosing this information publically.

Commented [A53]: This creates a substantial administrative burden on operators and it is unclear how this relates to the prevention of methane emissions?

(viii) other alternative uses ~~approved by the division~~.

(4~~3~~) After the operator submits the natural gas management plan, if the natural gas gathering system becomes unavailable or will not have capacity to transport one hundred percent of the natural gas production from the well, ~~no later than 30 days after becoming aware of such information,~~ the operator shall submit ~~for the division's approval~~ a revised venting and flaring plan to the division containing the information specified above in Paragraph (2) of Subsection E of 19.15.27.9 NMAC.

(5~~4~~) The operator shall certify the following statements:

(a) the operator communicated with one or more operators of natural gas gathering systems in the general area about transporting natural gas from the well;

(b) the operator provided each operator of a natural gas gathering system in the general area with the location; dates of drilling, completion and anticipated first production; and anticipated volume of natural gas production in units of MCFD for the first three years of production of the well; and

(c) the operator determined that there is or will be

(i) a natural gas gathering system in the general area with sufficient capacity to transport natural gas on the date of anticipated first production of the well; or

(ii) a natural gas gathering system in the general area with sufficient capacity to transport natural gas during the anticipated productive life of the well.

(6~~5~~) The operator shall include a certification from each operator of a natural gas gathering system in the general area stating that the information submitted is accurate based on information available at the time of the submission; and that

~~**(i)** the operator complied with Subparagraphs (a) and (b) of Paragraph (4) of Subsection D of 19.15.27.9 NMAC; and~~

~~**(ii)** the operator of the natural gas gathering system has not disagreed with any statements regarding natural gas gathering systems included within the plan. concurs in the operator's determination in Items (i) or (ii) of Subparagraph (c) of Paragraph (4) of Subsection D of 19.15.27.9 NMAC.~~

(7~~6~~) If the operator does not comply with the plan submission requirements contained in this Part, ~~make the certifications or submit an adequate venting and flaring plan, or if the division determines that the operator will not have adequate natural gas takeaway capacity at the time a well will be spud,~~ the division may ~~:~~

~~**(a)** deny an the APD for wells included within the area covered by the plan.; or~~

~~**(b)** conditionally approve the APD.~~

[19.15.27.9 NMAC – N, xx/xx/xx]

Commented [A54]: Beneficial use of gas is a contractual right allowed under oil and gas leases. Separate approval has not been required by NMOCD (which is not a party to oil and gas leases) to beneficially use gas on-lease.

If the Division is concerned about a particular use, could you state: in accordance with applicable orders, rules and regulations. I would leave this general and not state Division rules/regs because BLM may have different requirements for on-lease gas uses.

Commented [A55]: Is further approval necessary if the operator is subject to the 98% gas capture requirement?

Commented [A56]: This language essentially would eliminate discretion for operator plans to maintain the 98% gas capture requirement. If the goal is flexibility, then could the Division require compliance with plan submissions and certifications requirements?
Another option would be to allow operators to certify that they have takeaway capacity in place within 10 days of the spud date, and provide for a shorter certification form when the certification can be made.

Commented [A57]: We may support conditional approvals. However, we had a lot of questions as to what a conditional approval would look like. How does conditional approval potentially impact operations for the operator? We would also like to know what the differences between an approval and conditional approval for APDs from NMOCD?

EXHIBIT 1 – Redline of NMED Rule

Rule Preamble: The New Mexico Environment Department has developed the following draft regulation pursuant to the directives of Section 74-2-5.3 of the New Mexico Air Quality Control Act. The objective of the proposed rule is to establish emissions standards for volatile organic compounds (VOC) and nitrogen oxides (NOx) for oil and gas production and processing sources located in areas of the State within the Environmental Improvement Board's jurisdiction where ozone concentrations are exceeding 95% of the national ambient air quality standard.

This is a preliminary draft being released for public input in advance of the Department filing a formal rulemaking petition with the Board and requesting a public hearing. The purpose of this initial, pre-petition comment period is to foster transparency and facilitate continued engagement from stakeholders, members of the public, and other interested parties. Specifically, the Department is seeking public input on the proposed rule language to assist in identifying potential regulatory and technical issues, and areas that require additional clarification or modification. Additional opportunities for public input and changes to the draft rule will occur through the formal rule-making process following the filing of the rulemaking petition. This initial, pre-petition process will help ensure that major issues or problematic areas are identified and can be addressed prior to the initiation of the formal process.

NMED is soliciting specific review and public input on a number of proposed provisions and concepts in the draft rule. In particular, for the equipment standards section, NMED requests feedback on the following:

1. The proposed definitions of stripper wells and marginal wells under the draft rule and the regulatory requirements that would apply to those wells under Section 20.2.50.25 NMAC;
2. Examples of technologies or regulatory programs utilizing non-combustion emission control technologies, like fuel cells, as a means of reducing or eliminating emissions for inclusion in Section 20.2.50.15 NMAC;
3. Specific regulatory language regarding criteria necessary to demonstrate equivalency of alternative equipment leak monitoring plans in Section 20.2.50.16(C) NMAC;
4. Specific regulatory language to establish a pre-approved equipment leak monitoring plan in 20.2.50.16(C) NMAC;
5. For leak detection and repair requirements under Section 20.2.50.16 NMAC, specific standards to be used by NMED to determine if certain new or existing technologies (real-time remote fence line and aerial surveillance, for example) or proposals are enforceable, effective, and equivalent. Specific feedback on data capture requirements, quality assurance, error rates, calibration requirements, training and certification, interference issues, quantification methods, and pollutant identification will assist the Department in exploring this option further;
6. Regulatory requirements for oil and gas evaporative ponds in Section 20.2.50.26 NMAC, including whether to establish emission standards based on the pond's potential to emit or throughput; and
7. Opportunities for greater transparency.

Comments or input on the draft rules may be submitted electronically to nm.methanestrategy@state.nm.us or via hardcopy to Liz Bisbey-Kuehn, NMED Air Quality Bureau, 525 Camino de los Marquez, Santa Fe, NM 87505 by 5 p.m. Aug. 20, 2020.

TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 2 AIR QUALITY (STATEWIDE)
PART 50 OIL AND NATURAL GAS REGULATION FOR OZONE PRECURSORS

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TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 2 AIR QUALITY (STATEWIDE)
PART 50 OIL AND NATURAL GAS REGULATION FOR OZONE PRECURSORS

20.2.50.1 ISSUING AGENCY:
New Mexico Environmental Improvement Board.

20.2.50.2 SCOPE:
This rule applies to sources located within counties that have areas with ambient ozone concentrations in excess of ninety-five percent of the national ambient air quality standard for ozone, including but not limited to Chaves, Eddy, Lea, Rio Arriba, Sandoval, and San Juan. Sources located in Bernalillo County, on Tribal Lands, and in other areas that are not within the Board's jurisdiction are excluded. This rule is intended to supplement Title 20.

20.2.50.3 STATUTORY AUTHORITY: NMSA 1978, § 74-2-5.3

20.2.50.4 DURATION: Permanent.

20.2.50.5 EFFECTIVE DATE:
A. **[To be determined]**, except where a later date is cited in a section or paragraph.

Commented [A1]: We recommend delaying the effective date or creating a tiered effective date for the most costly requirements in the draft rule. This will help vendors have sufficient equipment in place.

20.2.50.6 APPLICABILITY:
A. Except as provided in paragraph (B), Part 50 applies to crude oil production and natural gas production equipment and operations that extract, collect, store, transport, or handle hydrocarbon liquids or produced water in the areas specified in 20.2.50.2 NMAC. Crude oil production includes the well and extends to the point of custody transfer to the crude oil transmission pipeline or any other form of transportation. Natural gas production, processing, transmission, and storage includes the well and extends to, but does not include, the local distribution company custody transfer station.
B. Oil refineries are not subject to this Part.
C. Equipment located at stripper well~~s~~ facilities, as defined in 20.2.50.8 NMAC~~, is~~ are required to comply with the provisions~~exempt from the requirements of this Part 50, except as~~ specified in 20.2.50.25 NMAC only and are exempt from all other requirements of Part 50.
~~D. Individual facilities with a site-wide total annual potential to emit less than 215 tpy) of volatile organic compounds (VOC) are exempt from the requirements of this Part, except as specified in 20.2.50.25 NMAC.~~
D. Shut-in wells, as defined in 20.2.50.8 NMAC, are exempt from the requirements of this Part 50, provided:
(a) Prior to shut in tanks are consolidated, emptied, and system degassed to the extent practicable to minimize emissions during inactive time; and
Upon bringing Wellhead site back online, monitoring and testing requirements

Commented [A2]: We recommend moving this under the definition for Striper Well Facilities and combining C and D.

under this Part will resume; and

(b) Time of which the well is shut-in will be documented.

20.2.50.7 OBJECTIVE:

The objective of this Part is to establish emission standards for volatile organic compounds (VOC) and nitrogen oxides (NO_x) for oil and gas production and processing sources.

20.2.50.8 DEFINITIONS:

In addition to the terms defined in 20.2.2 NMAC (Definitions), as used in this Part:

A. "Air Pollution Control Equipment" means open flares, enclosed combustion devices, thermal oxidizers, vapor recovery units, fuel cells, condensers, other combustion devices, air fuel ratio controllers, oxidative catalytic converters, selective and non- selective catalytic converters, or emission reduction equipment or technologies used to comply with emission standards and emission reduction requirements in 20.2.50 NMAC that are approved by the Department.

B. "Approved Instrument Monitoring Method" means an infra-red camera, U.S. EPA Method 21, or other instrument-based monitoring method or program approved by the Department in advance and in accordance with 20.2.50 NMAC.

C. "Auto-Igniter" means a device which will automatically attempt to relight the pilot flame in the combustion chamber of a control device in order to combust volatile organic compound emissions.

D. "Bleed rate" means the rate in standard cubic feet per hour at which natural gas and VOC is continuously or intermittently vented (bleeds) from a pneumatic controller.

~~E. "Calendar Year" means a year beginning January 1 and ending December 31.~~

~~F.~~E. "Centrifugal Compressor" means any machine used for raising the pressure of natural gas by drawing in low pressure natural gas and discharging significantly higher-pressure natural gas by means of mechanical rotating vanes or impellers. Screw, sliding vane, and liquid ring compressors are not centrifugal compressors.

~~G. "Commencement of operation" means for oil and natural gas wellheads, the date any permanent production equipment is in use and product is flowing to sales lines, gathering lines, or storage tanks from the first producing well at the stationary source, but no later than the end of well completion operations.~~

~~H.~~F. "Compressor station" means any permanent combination of one or more compressors that move natural gas at increased pressure through gathering or transmission pipelines, or into or out of storage. This includes, but is not limited to, gathering and boosting stations and transmission compressor stations.

~~I.~~G. "Component" means each pump seal, flange, pressure relief device (including thief hatches or other openings on a controlled storage tank), connector, and valve that contains or contacts a process stream with hydrocarbons, except for components in process streams consisting of glycol, amine, produced water, or methanol.

~~J.~~H. "Connector" means flanged, screwed, or other joined fittings used to connect two pipes or a pipe and a piece of process equipment or that close an opening in a pipe that could be connected to another pipe. Joined fittings welded completely around the circumference of the interface are not considered connectors.

I. "Credible Information" means information of the type that would qualify as admissible evidence in proceeding before a New Mexico Court, and that is validated

by the submitter against requirements contained in either this Part or applicable permits, rules or orders issued by the Department; *provided that* the submitter must calculate alleged emissions estimates and make a threshold showing of the alleged violation, and the Department, in its discretion, must then independently find the submitted information to be credible.

~~K.~~J. "Custody Transfer" means the transfer of oil or natural gas after processing and/or treatment in the producing operations or from storage ~~vessels~~ tanks or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation.

~~L.~~K. "Department" means the New Mexico Environment Department.

~~M.~~L. "Downtime" ~~means the~~is any period of time when air pollution control equipment is not operational and an associated well is producing. ~~or a well is producing and the air pollution control equipment is not in operation~~.

~~N.~~M. "Enclosed Combustion Device" means any combustion device where gaseous fuel is combusted in an enclosed chamber. This may include, but is not limited to enclosed flares, boilers, re-boilers, and heaters.

N. "Evaporative Pond" shall mean evaporation ponds which are either (i) not permitted by the New Mexico Oil Conservation Division, or (ii) ponds which are located within a Surface Waste Management Facility permitted under Part 19.15.36 NMAC. For the purposes of this Part, recycling, storage, treatment and reuse equipment utilized pursuant to NMSA 1978, § 70-13-1, et seq. shall not qualify as an Evaporative Pond.

Commented [A3]: The purpose of the Produced Water Act was to encourage water recycling and reuse – particularly within the oil field. If below requirements apply to produced water recycling facilities, it will be uneconomic to recycle and reuse produced water within the oil field. This definition is intended to: (1) indicates that certain types of evaporative ponds are subject to regulation; and (2) make clear that, if a pond is used pursuant to the Produced Water Act, it is not subject to these requirements.

O. "Existing" means any piece of equipment regulated by this Part that began operation prior to the effective date of the rule and has not since been modified or reconstructed.

P. "Gas processing plant" means equipment assembled for the extraction of natural gas liquids from natural gas, the fractionation of the liquids into natural gas products, or other operations associated with the processing of natural gas products. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the products.

Q. "Gathering and boosting site" means any permanent combination of equipment that collects or move natural gas, crude oil, condensate, or produced water ~~between~~ downstream of the wellhead site. ~~and m~~ Midstream oil and natural gas collection or distribution facilities ~~such~~ including~~as~~ tank batteries or compressor stations, or sites into or out of storage.

R. "Glycol Dehydrator" means any device in which a liquid glycol absorbent (including, ethylene glycol, diethylene glycol, or triethylene glycol) directly contacts a natural gas stream and absorbs water.

S. "Hydrocarbon liquids" means any naturally occurring, unrefined petroleum liquid and can include oil, condensate, ~~produced water,~~ and intermediate hydrocarbons.

~~S.~~T. "Infra-red Camera" means an optical gas imaging instrument designed for and capable of detecting hydrocarbons.

~~T.~~U. "Liquids Unloading" means the removal of accumulated liquids from the wellbore that reduce or stop natural gas production.

~~U.~~V. "Liquid Transfers" means the loading and unloading of hydrocarbon liquids ~~or produced water~~ between storage tanks and tanker trucks or tanker rail cars for transport.

~~V.~~W. "Modification" means any physical change in, or change in the method of operation of, a stationary source which results in an increase in the potential emission rate of any regulated air contaminant emitted by the source or which results in the emission of any

regulated air contaminant not previously emitted, but does not include:

(1) a change in ownership of the source;

(2) routine maintenance, repair or replacement;

(3) installation of air pollution control equipment, and all related process equipment and materials necessary for its operation, undertaken for the purpose of complying with regulations adopted by the board or pursuant to the federal act; or

(4) unless previously limited by enforceable permit conditions:

(a) an increase in the production rate, if such increase does not exceed the operating design capacity of the source;

(b) an increase in the hours of operation; or

(c) use of an alternative fuel or raw material if, prior to January 6, l975, the source was capable of accommodating such fuel or raw material, or if use of an alternate fuel or raw material is caused by any natural gas curtailment or emergency allocation or any other lack of supply of natural gas.

~~W.~~X. "Natural Gas Compressor Station" means one or more compressors designed to compress natural gas from well pressure to gathering system pressure prior to the inlet of a natural gas processing plant, or to move compressed natural gas through a transmission pipeline.

~~X.~~Y. "Natural Gas-Fired Heater" means an enclosed device using controlled flame and with a primary purpose to transfer heat directly to a process material or to a heat transfer material for use in a process.

~~Y.~~Z. "Natural Gas Processing Plant" means any processing equipment engaged in the extraction of natural gas liquids from natural gas, fractionation of mixed natural gas liquids to natural gas products, or both. A Joule-Thompson valve, a dew point depression valve, or an isolated or standalone Joule-Thompson skid is not a natural gas processing plant.

AA. "New" means any piece of equipment regulated by this Part that began operation on or after the effective date.

BB. "Optical gas imaging" means an imaging technology that utilizes high-sensitivity infra-red cameras designed for and capable of detecting hydrocarbons.

CC. "Pneumatic Controller" means an automated instrument used for maintaining a process condition such as liquid level, pressure, flow volume, delta-pressure and temperature.

DD. "Pneumatic Pump" means a positive displacement pump powered by pressurized natural gas that uses the reciprocating action of flexible diaphragms in conjunction with check valves to pump a fluid. A pump in which a fluid is displaced by a piston driven by a diaphragm is not considered a diaphragm pump. A lean glycol circulation pump that relies on energy exchange with the rich glycol from the contactor is not considered a diaphragm pump.

EE. "Potential to Emit" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is ~~federally~~ legally and practicably enforceable. The potential to emit for nitrogen dioxide shall be based on total oxides of nitrogen.

FF. "Produced Water" means water that is extracted from the earth from an oil or natural

gas production well, or that is separated from crude oil, condensate, or natural gas after extraction.

GG. "Reciprocating Compressor" means a piece of equipment that increases the pressure of process gas by positive displacement, employing linear movement of the piston rod.

HH. "Responsible Official" means one of the following:

(1) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating.

(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

(3) For a municipality, state, federal or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of US EPA).

II. "Shut-in well " means a Wellhead site~~well~~ that is not being used for beneficial purposes such as production, injection or monitoring and that is not being drilled, completed, repaired or worked over.

"Startup" means the setting into operation of any air pollution control equipment or process equipment.

JJ. "Storage tank" means any single storage tank that is designed to contain an accumulation of hydrocarbon liquids or produced water and is constructed primarily of non-earthen materials (such as wood, concrete, steel, fiberglass, or plastic). ~~storageprocess vessel, or fixed roof storage vessel or series of storage vessels that are connected together via a liquid line.~~

~~**KK.** "Storage vessel" means a single tank or other vessel that is designed to contain an accumulation of hydrocarbon liquids or produced water and is constructed primarily of non-earthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provide structural support, or a process vessel such as surge control vessels, bottom receivers, or knockout vessels. A well completion vessel that receives recovered liquids from a well after commencement of operation for a period which exceeds 60 days is considered a storage vessel. A storage vessel does not include: vessels that are skid-mounted or permanently attached to something that is mobile (such as trucks, railcars, barges, or ships); are located at the site for less than 180 consecutive days; or pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere.~~

LL. "Stripper well facilities" means an individual oil or gas well with a maximum daily average oil production not exceeding ~~10~~15barrels of oil per day, or a natural gas well with a maximum daily average natural gas production not exceeding ~~60~~250,000 standard cubic feet per day, or any wellhead site with a site-wide total annual potential to emit less than 25 tons per year (tpy) of volatile organic compounds (VOCs) ~~with a maximum daily average combined oil and natural gas production not exceeding 10 barrels of oil equivalent per day during any 12-month consecutive time period.~~

MM. "Wellhead site" means all equipment ~~at a single stationary source~~ directly associated with one or more oil wells or natural gas wells upstream of the gathering and boosting

Commented [A4]: We are recommending this definition to better ensure consistency and clarity in the below proposed rules.

Commented [A5]: The term "Storage Vessel" is not used often in the below rules. Do you need a definition? Or can this concept be covered by the definition for storage tanks?

Commented [A6]: A number of wells outside of the proposed definition for "stripper well" will likely be uneconomic to continue to operate. There are a number of different ways that this issue could be remedied. The simplest way is to increase the thresholds within this definition.

Other options include:

(1)Creating a definition/exemption for non-economic wells. This would better take into account the impact on the economy and the remaining life of existing assets, to ensure that premature abandonment does not occur.

(2) Creating alternative ways to establish a sufficient PTE, which does not require retrofitting/replacements of equipment.

site(s). natural gas processing plant. This equipment includes, but is not limited to, equipment used for extraction, collection, routing, storage, separation, treating, dehydration, artificial lift, combustion, compression, pumping, metering, monitoring, and flowline.

NN. "Workover" mean any operation done on, within, or through the wellbore or downhole after the initial completion of a well.

20.2.50.9 AMENDMENT AND SUPERSESSION OF PRIOR REGULATIONS [PLACEHOLDER]

20.2.50.10 DOCUMENTS:

Documents incorporated and cited in this Part may be viewed at the New Mexico Environment Department, Air Quality Bureau, Harold Runnels Building, 1190 St. Francis Dr., or 2048 Galisteo St., Santa Fe, NM 87502 [87505].

20.2.50.11 PLACEHOLDER

20.2.50.12 GENERAL PROVISIONS

A. General Requirements

(1) All equipment subject to requirements under 20.2.50 NMAC shall be operated and maintained consistent with manufacturer specifications and/or good engineering and maintenance practices. The owner or operator shall keep manufacturer specifications and maintenance practices on file as needed and make them available upon request by the Department.

(2) Owners and operators of equipment subject to requirements under 20.2.50 NMAC shall establish and implement a plan to minimize emissions during routine or predictable startup, shutdown, and scheduled maintenance through work practice standards and good air pollution control practices. [20.2.7.14 NMAC]

Owners and operators of equipment subject to requirements under 20.2.50 NMAC are exempt from operating, maintenance, reporting and monitoring requirements of inactive wells provided:

Prior to shut in tanks are consolidated, emptied, and system degassed to the extent practicable to minimizeso no emissions occur during inactive time.

Upon bringing equipment back online, initiation of required monitoring and testing must be reinstated within 7 days.

Annual testing will be required if the well commences operation at any point during the year

(a) Time of which the well is inactive will be documented.

(2)(3) The emission of an air contaminant in excess of the quantity, rate, opacity, or concentration specified in 20.2.50 NMAC that results in an excess emission is a violation of 20.2.50 NMAC.

(3)(4) The owner or operator of equipment having an excess emission shall comply with
20.2.7 NMAC and, to the extent practicable, operate the equipment, including

Commented [A7]: This is another area where a shut-in well exemption could be inserted.

associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

~~(4)~~(5) The owner or operator of equipment that has an excess emission may claim an affirmative defense for the excess emission pursuant to 20.2.7.111, 20.2.7.112, and 20.2.7.113 NMAC.

~~(5)~~(6) Within one year of the effective date of this rule, owners and operators of equipment subject to 20.2.50 shall ~~develop and~~ implement a~~a C~~ computer ~~M~~maintenance ~~M~~management ~~S~~system (CMMS) ~~requiring an Equipment Monitoring Information and Tracking Tag~~Tag ~~(EMITT) shall physically tag the unit with an EMITT that is scannable with a hand held scanner (RFID or QR)~~ that is able to uniquely ~~identif~~identify pieces of equipment governed by this Part. ~~ies the each regulated piece of equipment unless otherwise exempted within the equipment section of the rule. unit to which it is assigned and the. EMITT CMMS shall be maintained by the owner or operator.~~ Data in the ~~EMITT~~ CMMS ~~shall~~will be ~~scannable by~~available upon request to state inspectors and shall include ~~to provide at a minimum~~, the following information:

(a) Unique unit identification number;
(b) UTM coordinates of the facility;
(c) Type of unit (tank, VRU, dehydrator, pneumatic controller, etc.);
(d) For equipment, the VOC (and NOx, if applicable) potential to emit, if applicable, in pounds per hour and tons per year; and
(e) For control equipment, the controlled VOC (and NOx, if applicable) potential to emit, if applicable, in pounds per hour and tons per year ~~and the design control efficiency in percent~~.

~~(6) The EMITT shall be linked to an EMITT Database accessible to state inspectors that at a minimum supplies the data required by Section 20.2.50.12 NMAC and any other data required for that equipment under this Part.~~

B. Monitoring Requirements

(1) All equipment subject to control or monitoring requirements under this Part shall be inspected monthly to ensure proper maintenance and operation, unless a different inspection schedule is specified in the section below applicable to that particular type equipment. If the emission unit is shutdown at the time when periodic monitoring or inspections are due to be accomplished, the owner or operator is not required to restart the unit for the sole purpose of performing the monitoring or inspection but shall so note in the equipment or controller's records.

(2) All periodic monitoring events shall be conducted at 90% or greater of the unit's capacity. If the 90% capacity cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions.

(3) In order to allow for ~~equivalent~~ new and alternate monitoring technologies that satisfy the requirements of this regulation, prior to implementing, owners and operators may request an equally effective, enforceable, and equivalent alternative monitoring strategy to the Department for approval.

(a) Each request shall be made on application forms provided by the Department. Upon approval of a request, the Department will issue an Alternative Monitoring Approval Letter. All Alternative Monitoring Approval Letters will

Commented [A8]: Many operators currently use operations management software, such as SAP PM. However, this software does not have printable tags with scanners. It will be very costly for operators to transition SAP information to another software platform. Also, this rule may necessitate that operators prematurely abandon well-recognized software platforms.

Commented [A9]: If the goal is to share information via cloud computing, there are less expensive and labor intensive ways to share this information, like uploading information electronically to a cloud from current software systems.

be published on a link on the Department's webpage to provide authorization for the use of the approved alternative monitoring method.

(b) The Agency will upon receipt of request, review the request and provide approval or denial within 30 days. If no approval or denial is received, it is assumed that the proposed alternative technology is approved for use until revoked by the Department.~~Each owner or operator will need to request and receive approval from the Department in order to operate under an approved Alternative Monitoring Strategy~~.

(4) Each ~~EMITT~~ CMMS shall ~~be initially scanned and the~~capture required monitoring data ~~shall be electronically captured~~ during the monitoring event. ~~The captured data shall be uploaded (either live or subsequently) into the database.~~ At a minimum, the uploaded data shall include:

(a) Date and time of the monitoring event;

~~(b) The name of the monitoring personnel;~~

~~(c)~~(b) Unique unit identification number;

~~(d)~~(c) Type of unit;

~~(e)~~(d) A description of any maintenance or repair activities conducted during the inspection; and

~~(f)~~(e)R~~equired r~~esults of any monitoring required by 20.2.50 NMAC.

C. Recordkeeping Requirements

(1) Owners and operators shall keep records of any inspections and/or maintenance required under this Part within the CMMS. Records shall include:

(a) Date and time of the monitoring event;

~~(b) The name of the monitoring personnel;~~

~~(c)~~(b) Unique unit identification number;

~~(d)~~(c) Type of unit;

~~(e)~~(d) Required results of any monitoring required by 20.2.50 NMAC;

~~(f)~~(e)Equipment make and~~,~~ model ~~and serial number~~;

~~(g)~~(f) A copy of the equipment manufacturer's maintenance or repair recommendations;

~~(h)~~(g) A description of any maintenance or repair activities conducted during the inspection; and

~~(i)~~(h)All results of any required parameter readings.

(2) Owners and operators shall keep records required this Part for a period of five years. The records shall be retained electronically within the CMMS. The Department may treat any loss of data or failure to maintain required records ~~(including failure to transfer records upon sale or transfer or ownership or operating authority)~~ as a failure to collect the data.

(3) Owners and operators shall keep records of emissions from equipment malfunctions and routine or predictable emissions during startup, shutdown, and scheduled maintenance.

(4) Owners and operators of equipment having an excess emission shall record the following information no later than ten (10) days after the end of the excess

emission event:

(a) The equipment type and identification number;
(b) The location, date, and time;
(c) The emission limit or air quality regulation that was exceeded;
(d) The air contaminant and the magnitude of the excess emission expressed in the units of the limit or air quality regulation;
(e) The cause of the excess emission and any steps taken to limit the magnitude and duration of the excess emissions;
(f) The corrective action(s) taken to eliminate the cause of the excess emission and prevent a recurrence, if required; and
(g) Whether the owner or operator attributes the excess emission to malfunction, startup, or shutdown.

(5) Records of each ~~EMITT~~ CMMS monitoring event required by 20.2.50.12.B NMAC shall be ~~electronically uploaded (either in real time or subsequently) into~~captured in the ~~EMITT~~ CMMS database. At a minimum, the uploaded data shall include the data required in 20.2.50.12.B(4) and 20.2.50.12.C(4) NMAC and made available to the Agency upon request.

~~**(6)** Prior to the transfer of ownership of any equipment subject to this Part, the current owner or operator shall conduct and document a full compliance evaluation of all equipment subject to the rule. The documentation shall indicate whether or not each piece of equipment subject to requirements under this Part is currently complying with those requirements. The compliance determination shall be conducted no earlier than one year prior to the transfer.~~

Commented [A10]: This type of burden should fall on the acquiring company.

D. Reporting Requirements

(1) Owners and operators shall submit reports upon the request of the Department. Any reports requested by the Department shall be submitted electronically via the Department's Secure Extranet Portal (SEP) at https://sep.net.env.nm.gov/sep/login-form.

~~**(2)** Owner and operators of a source having an excess emission shall submit a Root Cause and Corrective Action Analysis, as directed in 20.2.7.114 NMAC, upon the request of the department.~~

20.2.50.13 STANDARDS FOR ENGINES AND TURBINES

Commented [A11]: The compliance deadlines for this sub-section should be longer than other compliance deadlines in the draft rule. Marathon has reached out to engine vendors who rent equipment to industry and they will not have sufficient equipment available to satisfy these requirements. Many larger oil and gas companies rent engines, indicating that there will be significant equipment shortages.

Also, NMED must consider the remaining useful life of existing equipment. Will these requirement essentially require useful equipment to be abandoned and prematurely replaced?

A. Applicability

(1) New and existing portable and stationary natural gas-fired spark ignition engines, compression ignition engines, and natural gas-fired combustion turbines located at wellheads, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations are subject to the requirements of 20.2.50.13 NMAC.

(2) Existing sources that were subject to federal standards of performance under 40 CFR Part 60 and Part 63 between March 25, 2004 and January 1, 2009 are exempt from the requirements of 20.2.50.13 NMAC.

B. Emission Standards

(1) Owners and operators of each portable or stationary natural gas-fired spark

ignition engine, compression ignition engine, and natural gas-fired combustion turbine shall ensure compliance with the emission standards in 20.2.50.13.B NMAC by the dates specified in 20.2.50.13.B NMAC.

(2) Each natural gas-fired spark ignition engine shall comply with the applicable emission standards in Table 1 of 20.2.50.13 NMAC.

(3) By ~~January 1~~December 31, 2022, owners and operators of existing engines shall complete an inventory of all existing engines and shall prepare a schedule for each existing engine to ensure that all existing engines comply with these requirements and meet or exceed the emission standards in Table 1 by January 1, 2028. The schedule shall meet the following requirements:

(a) By January 1, 2025~~4~~, owners and operators shall ensure 30% of the company's fleet of existing engines meet the requirements of Table 1.

(b) By January 1, 2026~~8~~, owners and operators shall ensure an additional 35% of the company's fleet of existing engines meet the requirements of Table 1.

(c) By January 1, 2030~~28~~, owners and operators shall ensure that the remaining 35% of the company's fleet of existing engines meet the requirements of Table 1.

Table 1 - Emission Standards for Natural Gas-Fired Spark-Ignition Engines

For each natural gas-fired spark-ignition engine constructed or reconstructed and installed before the effective date of 20.2.50 NMAC, the owner or operator shall ensure the existing engine(s) does not exceed the following emission standards as determined by the compliance schedule required in 20.2.50.13.B(3) NMAC:				
Engine Type	Rated bhp	NOx	CO	NMNEHC (as propane)
Lean-burn	≤100	2.0 g/bhp-h	2.0 g/bhp-h	-
Lean-burn	>100 - ≤500	1.0 g/bhp-h	2.0 g/bhp-h	0.70 g/bhp-h
Lean-burn	>500	0.50 g/bhp-h	47 ppmvd @ 15% O2 or 93% reduction	0.30 g/bhp-h
Rich-burn	≤100	2.0 g/bhp-h	2.0 g/bhp-h	-
Rich-burn	>100 - ≤500	1.0~~0.25~~ g/bhp-h	2.0~~0.30~~ g/bhp-h	0.20 g/bhp-h
Rich-burn	>500	0.20 g/bhp-h	0.30 g/bhp-h	0.20 g/bhp-h

For each natural gas-fired spark-ignition engine constructed or reconstructed and installed on or after the effective date of 20.2.50 NMAC, the owner or operator shall ensure the engine does not exceed the following emission standards upon startup:				
Engine Type	Rated bhp	NOx	CO	NMNEHC (as propane)
Lean-burn	≤100	1.0 g/bhp-h	2.0 g/bhp-h	0.70 g/bhp-h
Lean-burn	>100 - ≤500	1.0 g/bhp-h	0.70 g/bhp-h	0.30 g/bhp-h
Lean-burn	>500 - <2,370	0.50 g/bhp-h	0.25 g/bhp-h	0.30 g/bhp-h
Lean-burn	≥2,370	0.30 g/bhp-h Uncontrolled or 0.05 g/bhp-h with Control	0.25 g/bhp-h	0.30 g/bhp-h
Rich-burn	≤100	1.0 g/bhp-h	2.0 g/bhp-h	0.70 g/bhp-h
Rich-burn	>100 - ≤500	0.25 g/bhp-h	~~0.30~~1.5 g/bhp-h	0.20 g/bhp-h
Rich-burn	>500	0.20 g/bhp-h	0.30 g/bhp-h	0.20 g/bhp-h

(4) Owners and operators of natural gas-fired spark ignition engines that control NOx emissions with a control technology that uses ammonia or urea as a reagent shall ensure that the exhaust ammonia slip is limited to 10 ppmvd or less, corrected to 15 percent oxygen.

(5) Owners and operators of each compression ignition engine shall ensure compliance with the applicable emission standards in 20.2.50.13.B(5)(a) NMAC and 20.2.50.13.B(5)(b) NMAC.

(a) Stationary compression ignition engines that are subject to and complying with standards in 40 CFR Part 60, subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, are exempt from the requirements of this paragraph.

(b) Portable and stationary compression ignition engines with a maximum design power output equal to or greater than 500 horsepower that are not subject to the emission standards under 20.2.50.13.B(5)(a) NMAC shall limit NOx emissions to no more than 9 g/bhp-h. For each compression-ignition engine constructed or reconstructed and installed before the effective date of this Part, the owner or operator shall ensure compliance no later than one year from the effective date. For each compression-ignition engine constructed or reconstructed and installed on or after the effective date of this Part, the owner or operator shall ensure compliance upon startup.

(6) Owners and operators of portable or stationary compression ignition engines that control NOx emissions with a control technology that uses ammonia or urea as a reagent shall ensure that the exhaust ammonia slip is limited to 10 ppmvd or less corrected to 15 percent oxygen.

(7) Owners and operators of stationary natural gas-fired combustion turbines with a maximum design rating equal to or greater than 1,000 bhp (or a maximum heat input capacity equal to or greater than 2.54 MMBtu/hr) shall comply with the applicable emission standards for existing, new, or reconstructed turbines listed in

Table 2 of 20.2.50.13 NMAC.

Table 2 - Emission Standards for Stationary Combustion Turbines

For each natural gas-fired combustion turbine constructed or reconstructed and installed before the effective date of 20.2.50 NMAC, the owner or operator shall ensure the turbine does not exceed the following emission standards no later than one year from the effective date:				
Turbine Rating (bhp)	Turbine Rating (MMBtu/hr)	NOx (ppmvd @15% O2)	CO (ppmvd @ 15% O2)	NMNEHC (as propane, ppmvd @15% O2)
≥1,000 and <5,000	≥2.54 and <12.7	25	25	9
≥5,000 and <15,000	≥12.7 and <38.2	15	25	9
≥15,000	≥38.2	15	10 or 93% reduction	5 or 50% reduction
For each natural gas-fired combustion turbine constructed or reconstructed and installed on or after the effective date of 20.2.50 NMAC, the owner or operator shall ensure the turbine does not exceed the following emission standards upon startup:				
Turbine Rating (bhp)	Turbine Rating (MMBtu/hr)	NOx (ppmvd @15% O2)	CO (ppmvd @ 15% O2)	NMNEHC (as propane, ppmvd @15% O2)
≥5,000 and <15,900	≥12.7 and <40.4	15	10	9
≥15,900	≥40.4	9.0 Uncontrolled or 2.0 with Control	10 Uncontrolled or 1.8 with Control	5

(8) Owners and operators of stationary natural gas-fired combustion turbines that control NOx emissions with a control technology that uses ammonia or urea as a reagent shall ensure that the exhaust ammonia slip is limited to 10 ppmvd or less, corrected to 15% oxygen.

(9) Owners and operators of new or existing engines or turbines shall install an Equipment Monitoring and Information Tracking Tag (EMITT) on each engine or turbine in accordance with 20.2.50.12 NMAC.

C. Monitoring Requirements

~~**(1)**~~ Maintenance and repair ~~for all spark ignition engines, compression ignition engines, and stationary combustion turbines shall meet the minimum engine or turbine manufacturer's recommended maintenance schedule.~~. ~~A~~activities that result in excess emissions and involve engine or turbine maintenance, adjustment, replacement, or repair of functional components with the potential to affect the operation of an emission unit shall be documented in CMMS system. ~~as they occur for the following events:~~

~~(a) Routine maintenance that takes a unit out of service for more than two hours during any 24-hour period.~~

~~**(2)**~~**(1)** ~~Unscheduled repairs that require a unit to be taken out of service for more than two hours in any 24-hour period.~~

~~**(3)**~~**(2)** Oxidation catalytic converters, selective and non-selective catalytic converters, and air-fuel ratio (AFR) controllers shall be maintained according to manufacturer's or supplier's recommended maintenance~~, including replacement~~

~~of oxygen sensors as necessary for oxygen-based controllers~~. During periods of catalyst or AFR controller maintenance, the owner or operator shall shut down the engine(s) or turbine(s) until the catalyst or AFR controller can be replaced with a functionally equivalent spare to allow the engine or turbine to remain in operation.

~~(4)~~(3) Compliance with the emission standards in 20.2.50.13.B NMAC shall be demonstrated on units >300hp by performing an initial and annual test for NOx, CO, and non- methane non-ethane hydrocarbons (NMNEHC) using a portable analyzer or EPA Reference Methods. For units with g/hp-hr emission standards, the engine load shall be calculated by using the following equations:

$$\text{Load (Hp)} = \frac{\text{Fuel consumption (scfh) x Measured fuel heating value (LHV btu/scf)}}{\text{Manufacturer's rated BSFC (btu/bhp-hr) at 100\% load or best efficiency}}$$

$$\text{Load (Hp)} = \frac{\text{Fuel consumption (gal/hr) x Measured fuel heating value (LHV btu/gal)}}{\text{Manufacturer's rated BSFC (btu/bhp-hr) at 100\% load or best efficiency}}$$

Where:
LVH = lower heating value, btu/scf, or btu/gal, as appropriate
BSCF = brake specific fuel consumption

(a) Periodic monitoring utilizing a portable analyzer shall be conducted in accordance with the requirements of the current version of ASTM D 6522. However, if a facility has met a previously approved Department criterion for portable analyzers, the analyzer may be operated in accordance with that criterion until it is replaced.
(b) The default time period for each test run shall be at least 20 minutes.
(c) Each performance test shall consist of three separate runs. The arithmetic mean of results of the three runs shall be used to determine compliance with the applicable emission standard.
(d) For all periodic monitoring events, three test runs shall be conducted at 90% or greater of the unit's capacity. If the 90% capacity cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring test report.
(e) During emissions tests, pollutant and diluent concentration shall be monitored and recorded. Fuel flow rate shall be monitored and recorded if stack gas flow rate is determined utilizing EPA Reference Method 19. This information shall be included with the monitoring test report.
(f) Stack gas flow rate shall be calculated in accordance with EPA Reference Method 19 utilizing fuel flow rate (scf) determined by a dedicated fuel flow meter and fuel heating value (Btu/scf). The owner or operator shall provide a contemporaneous fuel gas analysis (preferably on the day of the test, but no earlier than three months prior to the test date) and a recent fuel flow meter calibration certificate (within the most recent quarter) with the final test

report. Alternatively, stack gas flow rate may be determined by using EPA Reference Methods 1 through 4.

(g) The owner or operator shall submit a notification and protocol for periodic emissions tests upon the request of the Department.

~~(5)~~(4) ~~Testing shall be conducted once per calendar year~~. Performance testing required by 40 CFR 60, Subparts GG, IIII, JJJJ, or KKKK, or 40 CFR 63, Subpart ZZZZ may be used to satisfy these periodic testing requirements if they meet the requirements of this section and are completed once per calendar year.

~~(6)~~(5) Each monitoring, testing, inspection, or tune-up of an engine or turbine will be captured in the CMMS system ~~shall include the initial scanning of the EMITT~~, and the required monitoring data entry shall be made in accordance with the requirements of 20.2.50.12 NMAC.

D. Recordkeeping Requirements

(1) The owner or operator of spark ignition engines, compression ignition engines, or stationary combustion turbines shall maintain records in accordance with 20.2.50.12 NMAC for each engine or turbine of:

(a) The make~~,~~ model, ~~serial number,~~ and equipment identification number for each engine, turbine, and any control equipment,

(b) A copy of the engine or turbine manufacturer's or control equipment manufacturer's recommended maintenance and repair schedule,

(c) Inspections, maintenance and repairs activities on all engines, turbines, and control equipment, including:

(i) Date(s) and time(s) of inspection, maintenance, and/or repair;

(ii) Date(s) any subsequent analyses were performed (if applicable); ~~Name of the person or qualified entity conducting the inspection, maintenance, and/or repair;~~

~~(iii) A description of the physical condition of the equipment as found during any required inspection;~~

~~(iv)~~(iii) Description of maintenance or repair activities conducted; and

~~(v)~~(iv) Results of required equipment inspections including a description of any condition which required adjustment to bring the equipment back into compliance and a description of the required adjustments.

(d) Results of any required parameter readings.

(2) The owner or operator of spark ignition engines, compression ignition engines, or stationary combustion turbines shall maintain records of initial and annual performance testing in accordance with 20.2.50.12 NMAC for each engine or turbine, including:

(a) The make, model, ~~serial number,~~ and equipment identification number for all

tested engines, turbines, and emission control equipment);

(b) Date(s) and time(s) of sampling or measurements;

(c) Date(s) analyses were performed;

(d) The qualified entity that performed the analyses;

(e) Analytical or test methods used;

(f) Results of analyses or tests; and

(g) Operating conditions existing at the time of sampling or measurement.

(3) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements.

Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.14 STANDARDS FOR COMPRESSOR SEALS

A. Applicability

(1) All new and existing centrifugal compressors using wet seals located at tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations are subject to the requirements of 20.2.50.14 NMAC. Any new or existing centrifugal compressor located at a wellhead is not subject to the requirements of 20.2.50.14 NMAC.

(2) All new and existing reciprocating compressors >300hp located at ,,

gathering and boosting sites, natural gas processing plants, and transmission compressor stations are subject to the requirements of 20.2.50.14 NMAC. Any new or existing reciprocating compressor located at a wellhead site is not subject to the requirements of 20.2.50.14 NMAC.

B. Emission Standards

(1) Owners and operators of existing centrifugal compressors shall control VOC emissions from each centrifugal compressor wet seal fluid degassing system by 95%, beginning on the effective date of this Part. Emissions shall be captured and routed via a closed vent system to a control system, a recovery system, fuel cell, or a process stream.

(2) Owners and operators of existing reciprocating compressors >300 hp shall, either:

(a) Replace the reciprocating compressor rod packing after every 26,000 hours of compressor operation or every 36 months, whichever is reached later. The owner or operator shall begin counting the hours and months of compressor operation toward the first replacement of the rod packing beginning no later than one year from the effective date; OR

(b) Beginning no later than ~~one~~ three years from the effective date, collect emissions from the rod packing under negative pressure and route via a closed vent system to a control system, a recovery system, fuel cell, or a process stream.

(3) Owners and operators of new centrifugal compressors shall control VOC emissions from each centrifugal compressor wet seal fluid degassing system by 98% upon startup. Emissions shall be captured and routed via a closed vent

system to a control system, a recovery system, fuel cell, or a process stream.

(4) Owners and operators of new reciprocating compressors >300 hp shall, upon startup, either:

(a) Replace the reciprocating compressor rod packing after every 26,000 hours of compressor operation, or every 36 months, whichever is reached later; OR

(b) Collect emissions from the rod packing under negative pressure and route via a closed vent system to a control system, a recovery system, fuel cell, or a process stream.

(5) Owners and operators of new and existing centrifugal and reciprocating compressors shall ~~install an Equipment Monitoring Information Tracking Tag (EMITT)~~ capture in CMMS system ~~on~~ each compressor in accordance with 20.2.50.12 NMAC.

(6) Owners and operators complying with the control requirements in 20.2.50.14.B NMAC through use of a control device shall comply with the control device requirements in 20.2.50.15 NMAC.

(7) Owners and operators with an air permit shall incorporate these requirements in their permit during their next scheduled or requested permit or permit revision.

C. Monitoring Requirements

(1) The owner or operator of a centrifugal compressor complying with 20.2.50.14.B(1) NMAC or 20.2.50.14.B(3) NMAC shall maintain a closed vent system encompassing the wet seal fluid degassing system that complies with the monitoring requirements in 20.2.50.15 NMAC.

(2) The owner or operator of a reciprocating compressor complying with 20.2.50.14.B(2)(a) NMAC or 20.2.50.14.B(4)(a) NMAC shall ~~continuously~~ monitor the number of hours of operation with a non-resettable hour meter and track the number of months since initial startup or since the previous reciprocating compressor rod packing replacement.

(3) The owner or operator of a reciprocating compressor complying with 20.2.50.14.B(2)(b) NMAC or 20.2.50.14.B(4)(b) NMAC shall monitor the rod packing emissions collection system semiannually to ensure that it operates under negative pressure and routes emissions through a closed vent system to a control device.

(4) Owners and operators complying with the requirements in 20.2.50.14.B NMAC through use of a control device shall comply with the monitoring requirements in **20.2.50.15** NMAC.

~~**(1)** Owners and operators of new and existing centrifugal and reciprocating compressors, during each required monitoring activity, shall scan the compressor EMITT and perform monitoring data entry in accordance with the requirements of 20.2.50.12 NMAC.~~

~~**(2)**~~**(1)** Owners and operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

D. Recordkeeping Requirements

(1) The owner or operator of a centrifugal compressor shall maintain records of:

(a) The identification number and location of each centrifugal compressor using a wet seal system,

(b) The date of construction, reconstruction, or modification of each centrifugal

compressor,

(c) The records of the monitoring and inspections required in 20.2.50.14.C NMAC. The records shall include the time and date of the inspection, ~~the person conducting the inspection,~~ a notation of which checks required in 20.2.50.12.C NMAC were completed, a description of any problems observed during the inspection, and a description and date of any corrective actions taken, and

(d) The location, type, make, model and unique identification number of any control equipment, recovery system, fuel cell, or process used to comply with the control requirements in 20.2.50.14.B NMAC.

(2) The owner or operator of a reciprocating compressor shall maintain records of the following:

(a) The identification number and location of each reciprocating compressor;

(b) The date of construction, reconstruction, or modification of each reciprocating compressor; and

(c) The records of the monitoring and inspections required in 20.2.50.14.C NMAC. The records shall meet the requirements of 20.2.50.14.C NMAC and shall include:

(i) The number of hours of operation and the number of months of operation since initial startup or the last rod packing replacement;

(ii) The records of pressure in the rod packing emissions if a collection system is used; and

(iii) The time and date of the inspection, ~~the person conducting the inspection,~~ a notation of which checks required in 20.2.50.14.C NMAC were completed, a description of any problems observed during the inspection, and a description and date of any corrective actions taken.

(3) Owners and operators complying with the requirements in 20.2.50.14.B NMAC through use of a control device shall comply with the recordkeeping requirements in 20.2.50.15 NMAC.

(4) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements

(1) Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.15 STANDARDS FOR CONTROL DEVICES

A. Applicability

(1) These requirements apply to open flares, enclosed combustors, thermal oxidizers, vapor recovery units, condensers, closed vent collection systems, other combustion devices, or emissions reduction equipment or technologies used to comply with the emission standards and emission reduction requirements in this Part.

B. General Requirements

(1) All air pollution control equipment used to demonstrate compliance with this Part

shall be installed, operated, and maintained consistent with ~~manufacturer specifications and~~ good engineering and maintenance practices.

(2) All air pollution control equipment shall be adequately designed and sized to achieve the control efficiency rates required by this Part and to handle anticipated fluctuations in emissions of VOC or NOx.~~.~~

(3) Owners and operators of a flare, combustion device, vapor recovery equipment, or other emission reduction technology or control device used to comply with the emission standards in this Part shall ~~install an Equipment Monitoring and Information Tracking Tag (EMITT) on~~be captured in the CMMS system ~~each flare, combustion device, vapor recovery equipment, or other emission reduction technology or control device~~ in accordance with 20.2.50.12 NMAC.

(4) Owners and operators shall inspect all air pollution control equipment used to control emissions from equipment subject to emission standards under this Part at least monthly to ensure proper maintenance and operation. Each ~~EMITT~~ inspection or monitoring event shall be captured in CMMS system ~~initially scanned~~ and the required monitoring data shall be electronically captured during the monitoring event.

(5) Owners and operators shall ensure that any flare, combustion device, vapor recovery equipment, or other emission reduction technology or control device used to comply with emission standards in this Part shall at all times operate as a closed vent system that captures and routes all VOC emissions from equipment subject to regulation under this Part to the control or vapor recovery device.~~ and that un-combusted gas is not vented to the atmosphere.~~

(6) Owners and operators shall keep manufacturer specifications for all control or vapor recovery equipment on file. The information shall include:

(a) Manufacturer's name, control device name and model;

(b) Maximum heating value for open flares, enclosed combustors, and thermal oxidizers;

(c) Fuel gas flow range for open flares, enclosed combustors, and thermal oxidizers; and

(d) Designed destruction or vapor recovery efficiency.

(7) Owners and operators shall keep records of any stack testing or control or vapor recovery efficiency testing for all control equipment as required by applicable regulations. The records shall be kept in accordance with 20.2.50.12 NMAC for each flare, combustion device, vapor recovery equipment, or other emission reduction technology or control device and shall include:

(a) Control device type, name and model;

(b) Location;

(c) Date of the stack test; and

(d) A summary of the stack test results.

C. Requirements for Open Flares

(1) Emission Standards

(a) The flare shall be designed to combust all gas sent to the flare. Owners and operators shall not intentionally send gas to the flare in excess of the flare's maximum rated capacity.

(b) Owners and operators shall equip all flares with a continuous pilot flame, an

Commented [A12]: Flares don't combust ALL gas. Instead, we recommend stating something similar to this: The flare shall have a combustion efficiency of >98% when operated within manufacturer's recommended conditions.

auto-igniter, or require manual ignition.

(i) Flares with a continuous pilot flame or an auto-igniter shall be equipped with a system to monitor~~help ensure~~ the flare is operated with a flame present at all times that gas is being sent to the flare.

(ii) Owners and operators of flares with manual ignition shall inspect and ensure a flame is present upon initiating each flaring event~~-~~.

(iii) Any new flare constructed or re-constructed after the effective date of this Part shall be equipped with a~~n~~ continuous pilot flame or auto-igniter. The auto-igniter shall be installed and operational upon startup.

(iv) Any existing flare constructed prior to the effective date of this Part shall be equipped with a~~n~~ continuous pilot flame or-auto-igniter no later than ~~one~~ three years after the effective date**.**

(c) Owners and operators shall operate any flare used for controlling VOC emissions to comply with this Part with no visible emissions, except for periods not to exceed a total of sixty (60) seconds during any fifteen (15) consecutive minutes. The flare shall be designed so that an observer can, by means of visual observation from the outside of the flare, or by other means such as a continuous monitoring device, determine whether it is operating properly.

(2) Monitoring Requirements

(a) Owners and operators of flares with a continuous pilot or an auto igniter shall continuously monitor the presence of a pilot flame using a thermocouple equipped with a continuous recorder and alarm to detect the presence of a flame. Owners and operators may use any other equivalent device that fulfills the same purpose.

(b) Owners and operators of manually ignited flares shall monitor the presence of a flame using continual visual observation during each flaring event.

(c) Owners and operators, at least quarterly, and upon observing any visible emissions, shall perform a U.S. EPA Method 22 observation while the flare pilot flame is present to certify compliance with visible emission requirements. The observation period shall be a minimum of fifteen (15) consecutive minutes.

(d) Each ~~EMITT~~ inspection or monitoring event shall be ~~initially scanned~~captured in the CMMS system ~~and the required monitoring data shall be electronically captured during the monitoring event~~ in accordance with the monitoring requirements of 20.2.50.12 NMAC.

(3) Recordkeeping Requirements

(a) The owner or operator of open flares subject to regulation under 20.2.50.15.A NMAC shall keep records for each flare in accordance with 20.2.50.12 NMAC of the following:

(i) All instances of alarm activation, including the date and cause of alarm activation, actions taken to bring the flare into a normal operating condition, ~~the name of the personnel conducting the inspection,~~ and any maintenance activities performed;

(ii) The results of the U.S. EPA Method 22 observations and flame inspection for manual flares and

(iii) The results of any gas analysis for the gas being flared, including VOC

content and heating value.

(4) Reporting Requirements

Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

D. Requirements for Enclosed Combustion Devices (ECD) and Thermal Oxidizers (TO)

(1) Emission Standards

(a) The ECD/TO shall combust all gas sent to the ECD/TO. Owners and operators shall not send gas to the ECD/TO in excess of the ECD/TO's maximum rated capacity.

(b) Owners and operators shall equip all ECDs/TOs with a continuous pilot flame or an operational auto-igniter. ECDs/TOs constructed or re-constructed prior to the effective date of this Part shall be equipped with a continuous pilot flame or an auto-igniter no later than one year after the effective date. ECDs/TOs constructed or re-constructed on or after the effective date shall be equipped with a continuous pilot flame or an operational auto-igniter upon startup.

(c) ECDs/TOs with a continuous pilot flame or an auto-igniter shall be equipped with a system to ensure that the ECD/TO is operated with a flame present at all times that gas is being sent the ECD/TO. Combustion shall be maintained for the duration of time that gas is being sent to the ECD/TO.

(d) Owners and operators shall operate ECDs/TOs used to control VOC emissions to comply with the emission standards in this Part with no visible emissions, except for periods not to exceed a total of sixty (60) seconds during any fifteen (15) consecutive minutes. The combustion device shall be designed so that an observer can, by means of visual observation from the outside of the combustion device, or by other means, such as a continuous monitoring device, determine whether it is operating properly.

(2) Monitoring Requirements

(a) Owners and operators of ECDs/TOs with a continuous pilot or an auto igniter shall continuously monitor the presence of a pilot flame using a thermocouple equipped with a continuous recorder and alarm to detect the presence of a flame. Owners and operators may use any other equivalent device that fulfills the same purpose.

(b) Owners and operators, at least quarterly, and upon observing any visible emissions, shall perform a Method 22 observation while the ECD/TO pilot flame is present to certify compliance with the visible emission requirements. The observation shall be a minimum of fifteen minutes.

(c) Each EMITT inspection or monitoring event shall be initially scanned and the required monitoring data shall be electronically captured during the monitoring event in accordance with the monitoring requirements of 20.2.50.12 NMAC.

(3) Recordkeeping Requirements

(a) The owner or operator of an ECD/TO subject to regulation under 20.2.50.15.A NMAC shall keep records in accordance with 20.2.50.12 NMAC for each ECD/TO of:

(i) All instances of alarm activation, including the date and cause of alarm activation, actions taken to bring the ECD/TO into normal operating

conditions, ~~the name of the personnel conducting the inspection,~~ and any maintenance activities performed;

(ii) The results of the Method 22 observations; and

(iii) The results of any gas analysis for the gas being combusted, including VOC content and heating value.

(4) Reporting Requirements

(a) Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

E. Requirements for Vapor Recovery Units (VRU)

(1) Emission Standards

(a) Owners and operators shall operate the VRU as a closed vent system that captures and routes all VOC emissions from units back to the process stream or to a sales pipeline and does not vent to the atmosphere under normal operations.

(b) Owners and operators shall control emissions during startup, shutdown, and maintenance (SSM) or other VRU downtime with a backup control device (flare/ECD/TO) or redundant VRU.

(2) Monitoring Requirements

(a) Owners and operators shall comply with the standards for equipment leaks in **20.2.50.16** NMAC, or, alternatively, shall implement a program that meets the requirements of NSPS Subpart OOOOa (40 CFR 60.5416a).

(b) Each VRU ~~EMITT~~ inspection or monitoring event shall be ~~initially scanned and the required monitoring data shall be electronically~~ captured in the CMMS system ~~during the monitoring event requirements of~~in accordance with 20.2.50.12 NMAC.

(3) Recordkeeping Requirements

(a) For each VRU inspection or monitoring event, the owner or operator shall record the results of the VRU inspections in accordance with 20.2.50.12 NMAC, including ~~the name of the personnel conducting the inspection, and~~ noting any maintenance or repairs that are required.

(4) Reporting Requirements

Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

Commented [A13]: OOOOa considers VRUs process units and not control devices. Currently within the NMED air permits (Section 72), the VRU can be considered either a process unit or a control device. Not all VRUs are utilized in the same way on each facility. It is recommended that this section only apply for VRUs which are designated and approved as control devices (not process units) by the NMED air permit under Section 72.

Commented [A14]: The only way these could vent is if a PSV blew.

We are assuming that the agency is not excluding emergency pressure relief in this?

20.2.50.16 STANDARDS FOR EQUIPMENT LEAKS

A. Applicability

All new and existing wellhead sites~~s, tank batteries~~, gathering and boosting sites, gas processing plants, transmission compressor stations and associated piping are subject to the requirements of 20.2.50.16 NMAC.

B. Emission Standards

Each owner and operator of oil and gas production and processing equipment located at a site identified in 20.2.50.16.A NMAC shall demonstrate compliance with 20.2.50.16 NMAC by performing the monitoring, recordkeeping, and reporting

requirements specified in this Section.

C. Monitoring Requirements

(1) Owners or operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

(2) Default Equipment Leak Monitoring Requirements:

(a) Owners or operators shall conduct an audible, visual, and olfactory (AVO) inspection of each thief hatch, closed vent system, pneumatic pumps, compressor, pressure relief device, open-ended valve or line, valve, flange, connector, piping, and any associated equipment to identify defects and leaking components at least ~~weekly~~ monthly as follows:

(i) Visually inspect for cracks, holes or gaps in piping or covers; loose connections; liquid leaks; broken or missing caps; broken, cracked or otherwise damaged seals or gaskets; broken or missing hatches; or broken or open access covers or other closure devices;

(ii) Listen for pressure leaks or liquid leaks.

(iii) Smell for unusual or strong odors.

(iv) Any positive audible, visual, or odorous indication shall be considered a leak. All AVO leaks shall ~~be~~ have location ~~tagged with a visible tagtag~~documented and reported to owner or operator's management or designee within three calendar days.

(b) Owners or operators shall conduct an inspection using EPA Reference Method 21 (40 CFR 60, Appendix B) (RM 21) or optical gas imaging (OGI) with infrared cameras of each thief hatch, closed vent system, pneumatic pump, compressor, pressure relief device, open-ended valve or line, valve, flange, connector, piping, and any associated equipment to identify leaking components at a frequency determined according to the following schedule:

(i) For wellhead sites ~~production and tank battery facilities~~:

(A) Annually if a piece of equipment at the wellhead site has a ~~at facilities with~~ ~~where an individual regulated equipment~~ potential to emit ~~is~~ less than 6~~2~~ tpy VOC.

(B) Semi-annually if the piece of equipment at the wellhead site has a~~at facilities with~~ ~~where a an individual regulated equipment~~ potential to emit of ~~is equal to or~~ equal to or greater than ~~2~~6 tpy ~~and less than 5 tpy~~ VOC.
~~Quarterly at facilities with a potential to emit equal to or greater than 5 tpy VOC.~~

(ii) For gathering and boosting ~~sites~~sites, gas processing plants, and transmission compressor stations:

(A) Quarterly at facilities with a potential to emit less than 25 tpy VOC.

(B) Monthly at facilities with a potential to emit equal to or greater than 25 tpy VOC.

(c) The inspections required under 20.2.50.16.C(2)(b) NMAC shall be conducted using RM 21 or OGI with infrared cameras.

(i) For leaks determined using RM 21:

(A) The instrument shall be calibrated before each day of its use by the

procedures specified in RM 21.

(B) The instrument shall be calibrated with zero air (less than 10 ppm of hydrocarbon in air); and a mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

(C) A leak is detected if an instrument reading of 500 ppm or greater of hydrocarbon is measured that is not associated with normal equipment operation, such as pneumatic device actuation and crank case ventilation.

(ii) For leaks determined using OGI:

~~(A) The instrument must comply with the specifications, the daily instrument checks, and the leak survey requirements at 40 CFR 60.18(i)(1) through (3).~~).

~~(B)~~(A) A leak is detected if any emissions are imaged by the OGI instrument that are not associated with normal equipment operation, such as pneumatic device actuation and crank case ventilation.

(d) If a component is unsafe, difficult, or inaccessible to monitor, the owner or operator is not required to inspect the component until it becomes feasible to do so.

(i) Difficult to monitor components are those that cannot be monitored without elevating the monitoring personnel more than two (2) meters above a supported surface or are unable to be reached via a wheeled scissor-lift or hydraulic type scaffold that allows access to components up to 7.6 meters (25 feet) above the ground.

(ii) Unsafe to monitor components are those that cannot be monitored without exposing monitoring personnel to an immediate danger as a consequence of completing the monitoring.

(iii) Inaccessible to monitor components are those that are buried, insulated, or obstructed by equipment or piping that prevents access to the components by monitoring personnel.

(3) Alternative Equipment Leak Monitoring Plans

(a) As an equivalent means of compliance with 20.2.50.16 NMAC, owners or operators may comply with the equipment leak requirements through an individual alternative monitoring plan approved by the Department under 20.2.50.12.B(3) , subject to the following requirements:

(i) Upon the Department's approval of an alternative monitoring plan, the owner or operator shall comply with the terms and conditions of the approved alternative monitoring plan.

(ii) A responsible official shall certify compliance with the approved alternative monitoring plan on behalf of the owner or operator on an annual basis.

(iii) The Department may terminate an approved alternative monitoring plan if the Department finds that the owner or operator failed to comply with any provision of the plan and failed to correct and disclose the violation(s) to the Department ~~within 15 calendar days~~days ~~of identifying the violation~~.

(iv) Upon the Department's denial or termination of an approved alternative monitoring plan, the owner or operator shall comply with the

default monitoring requirements under 20.2.50.16.C(2) NMAC within 30 days.

(b) As an equivalent means of compliance with 20.2.50.16 NMAC, owners or operators may comply with equipment leak requirements through one of the pre-approved monitoring ~~plans~~plans maintained by the Department, subject to the following requirements:

(i) The owner or operator shall notify the Department of the pre-approved monitoring plan that the owner or operator will follow and shall comply with the terms and conditions of the pre-approved monitoring plan.

(ii) A responsible official shall certify compliance with the pre-approved monitoring plan on behalf of the owner or operator on an annual basis.

(iii) The Department may terminate the use of a pre-approved monitoring plan by the owner or operator if the Department finds that the owner or operator failed to comply with any provision of the plan and failed to correct and disclose the violation(s) to the Department within 15 calendar days of identifying the violation.

(iv) Upon the Department terminating the use of an approved monitoring plan by an owner or operator, the owner or operator shall comply with the default monitoring requirements under 20.2.50.16.C(2) NMAC within 30 days.

D. Repair Requirements

(1) For any leaks detected in 20.2.50.16(C) NMAC:

(a) The owner or operator shall ~~place a visible tag~~tag ~~on the~~document location of leaking component until the component has been repaired;

(b) All leaks detected using optical gas imaging shall ~~be repaired~~have an initial repair attempt within ~~7~~5 days of discovery. ~~, all other l~~Leaks shall be repaired within ~~15~~ 30 days of discovery;

(c) The equipment must be re-monitored no later than ~~15~~ 30 days after ~~discovery~~ repair of the leak to demonstrate that it has been ~~repaired~~repaired; and

(d) If the leak cannot be repaired within 30~~7~~ days ~~for leaks detected using optical gas imaging and within 14 days for all other leaks~~ without a process unit shutdown, it may be designated "Repair delayed," and must be repaired before the end of the next process unit shutdown.

E. Recordkeeping Requirements

(1) Owners or operators shall keep records of all monitoring under 20.2.50.16.C NMAC and provide such records to the Department upon request.

(2) Owners or operators subject to 20.2.50.16.C NMAC shall keep records of the following for all AVO, RM21, and OGI inspections conducted as required under 20.2.50.16.C NMAC:

(a) The facility location and unique inventory control number or name;

(b) The date of inspection

(c) The monitoring method (AVO, RM 21, or OGI);

~~(d) The name of the operator(s) performing the inspection;~~

~~(e)~~(d) A list of the leaks requiring repair or a statement that no leaks were found;

and

~~(f)~~(e)~~Whether a visible flag was placed on the leak or not~~documentation of each individual leak location;

(3) Owners or operators shall keep the following records for any leak detected:

(a) Date the leak is detected;

(b) Dates of attempts to repair;

(c) For leaks with a designation of "repair delayed" keep the following:

(i) The reason for delay if the leak is not repaired within 30 days of leak discovery;

(ii) The signature of the authorized representative whose decision it was that the repair could not be implemented without a process shutdown;

(d) The date of successful leak repair;

(e) The date the leak was monitored after the repair and the results of the monitoring; and

(f) A list of components that are designated as unsafe, difficult, or inaccessible to monitor, an explanation stating why the component is so designated, and the schedule for monitoring such component(s).

~~(4) For leaks determined using optical gas imaging with infrared cameras, owners or operators shall keep the records of the specifications, the daily instrument checks and the leak survey requirements specified at 40 CFR §60.18(i)(1) – (3).~~

~~(5)~~(4) Owners or operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

F. Reporting Requirements

(1) Owners and operators shall report the certifications required under 20.2.50.16.C(3)(a)(ii) and (b)(ii) NMAC to the Department annually.

(2) Owners or operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.17 STANDARDS FOR NATURAL GAS WELL LIQUIDS UNLOADING

A. Applicability

(1) All manual liquids unloading, including those associated with down-hole well maintenance events, performed at NMOCD classified natural gas wells are subject to the requirements of 20.2.50.17 NMAC.

(2) Owners and operators shall comply with these requirements for any manual liquids unloading performed after the effective date of this Part.

B. Emission Standards

(1) Owners and operators of natural gas wells shall use best management practices during the life of the well to avoid the need for manual liquids unloading.

(2) Owners and operators of natural gas wells shall use the following best management practices during manual liquids unloading to minimize emissions, consistent with well site conditions and good engineering practices:

(a) Reduce wellhead pressure prior to blowdown;

(b) Monitor manual liquids unloading in close proximity to the well or via remote telemetry; and

(c) Close all well head vents to the atmosphere and return the well to normal

production operation as soon as practicable.

(3) Owners and operators of a natural gas well shall install an Equipment Monitoring and Information Tracking Tag (EMITT) on each natural gas well in accordance with 20.2.50.12 NMAC.

C. Monitoring Requirements

(1) Owners and operators subject to 20.2.50.17 NMAC shall monitor the following parameters during manual liquids unloading:

(a) Wellhead pressure;

(b) Flow rate of the vented natural gas (to the extent feasible); and

(c) Duration of venting to the storage tank/atmosphere.

(2) Owners and operators shall calculate the volume and mass of VOC vented during each manual liquids unloading event.

(3) Each manual liquids unloading event shall ~~include the scanning of the EMITT~~be documented in CMMS system and monitoring data entry in accordance with the requirements of 20.2.50.12 NMAC.

(4) Owners and operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

D. Recordkeeping Requirements

(1) Owners and operators subject to 20.2.50.17 NMAC shall keep the following records for each manual liquids unloading:

(a) The identification number and location of the well;

(b) The date(s) the manual liquids unloading was performed;

(c) Wellhead pressure;

(d) Flow rate of the vented natural gas (to the extent feasible. If not feasible, the owner or operator shall use the maximum potential flow rate in the emission calculation);

(e) Duration of venting to the storage tank/atmosphere;

(f) A description of the management practices used to minimize release of VOC prior to and during the manual liquids unloading; and

(g) A calculation of the VOC emissions vented during the manual liquids unloading based on the duration, volume, and mass of VOC.

(2) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements

Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.18 STANDARDS FOR GLYCOL DEHYDRATORS

A. Applicability

(1) All new and existing glycol dehydrators with a potential to emit equal to or greater than 2 tpy of VOC and located at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor

stations are subject to the requirements of 20.2.50.18 NMAC.

B. Emission Standards

(1) Owners and operators of an existing glycol dehydrator constructed on or before the effective date of this Part with a potential to emit equal to or greater than 2 tpy of VOC shall have a minimum combined capture and control efficiency of 95 percent of VOC emissions from the still vent and flash tank, no later than one year after the effective date. If a combustion control device is used, the combustion control device shall have a minimum design combustion efficiency of 98 percent.

(2) Owners and operators of a new glycol dehydrator constructed after the effective date of this Part with a potential to emit equal to or greater than 2 tpy of VOC shall have a combined capture and control efficiency of 95 percent of VOC emissions from the still vent and flash tank upon startup. If a combustion control device is used, the combustion control device shall have a minimum design combustion efficiency of 98 percent.

(3) Owners and operators of a new or existing glycol dehydrator subject to control requirements under 20.2.50.18 NMAC shall comply with the following equipment requirements:

(a) The still vent and flash tank emissions shall be routed at all times to the reboiler firebox, condenser, combustion control device, fuel cell, to a process point that either recycles or recompresses the emissions or uses the emissions as fuel, or to a vapor recovery unit (VRU) that reinjects the VRU VOC emissions back into the process stream or natural gas gathering pipeline.

(b) If a VRU is used, it shall consist of a closed loop system of seals, ducts, and a compressor that will reinject the natural gas into the process stream or the natural gas gathering pipeline. The VRU shall be operational at least 95 percent of the time the facility is in operation, resulting in a minimum combined capture and control efficiency of 95 percent. The VRU shall be installed, operated, and maintained according to the manufacturer's specifications.

(c) The still vent and flash tank emissions shall not be vented to the atmosphere.

(d) Owners and operators of a glycol dehydrator shall install an Equipment Monitoring and Information Tracking Tag (EMITT) on each glycol dehydrator in accordance with 20.2.50.12 NMAC.

(4) Any new or existing glycol dehydrator subject to control requirements under 20.2.50.18 NMAC will become exempt from these requirements when its uncontrolled actual annual VOC emissions decreases to an amount less than 2 tpy.

(5) Owners and operators complying with the control requirements in 20.2.50.18.B(1) NMAC or 20.2.50.18.B(2) NMAC through use of a control device shall comply with the control device operational requirements in 20.2.50.15 NMAC.

C. Monitoring Requirements

(1) The owner or operator of a glycol dehydrator subject to control requirements in 20.2.50.18 NMAC shall conduct an annual extended gas analysis on the dehydrator inlet gas and calculate the uncontrolled VOC emissions (tpy) and controlled VOC emissions (tpy).

(2) The owner or operator of any glycol dehydrator subject to control requirements shall inspect the glycol dehydrator, including the reboiler and regenerator, and the

control equipment semi-annually to ensure it is operating as initially designed and in accordance with the manufacturer's recommended procedures.

(3) Owners and operators complying with the requirements in 20.2.50.18.B(1) NMAC or 20.2.50.18.B(2) NMAC through use of a control device shall comply with the monitoring requirements in 20.2.50.15 NMAC.

(4) Owners and operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

D. Recordkeeping Requirements

(1) Owners and operators subject to control requirements in 20.2.50.18 NMAC shall maintain records of the following for each glycol dehydrator, in accordance with 20.2.50.12 NMAC:

(a) The dehydrator's location and unique inventory control number or name;

(b) Glycol circulation rate, monthly natural gas throughput, and the date of the most recent throughput measurement;

(c) The data and methodology used to estimate the potential to emit of VOC (the method must be a Department approved calculation methodology);

(d) The controlled and uncontrolled VOC emissions (tpy);

(e) The location, type, make, model and unique identification number of any control equipment;

(f) The date and the results of all equipment inspections, including any maintenance or repairs needed to bring the glycol dehydrator into compliance; and

(g) Copies of the glycol dehydrator manufacturer's operation and maintenance recommendations.

(2) Owners and operators complying with the requirements in 20.2.50.18.B(1) NMAC or 20.2.50.18.B(2) NMAC through use of a control device shall comply with the recordkeeping requirements in 20.2.50.15 NMAC.

(3) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements.

(1) Owners and operators complying with the requirements in 20.2.50.18.B(1) NMAC or 20.2.50.18.B(2) NMAC through use of a control device shall comply with the reporting requirements in 20.2.50.15 NMAC.

(2) Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.19 STANDARDS FOR HEATERS

A. Applicability

(1) All new and existing natural gas-fired heater units with a rated heat input equal to or greater than 10 MMBtu/hr including, but not limited to, heater treaters, heated flash separator units, evaporator units, fractionation column heaters, and glycol dehydrator reboilers in use at wellhead sites, ~~tank batteries,~~ gathering and boosting sites, natural gas processing plants, and transmission compressor stations

are subject to the requirements of 20.2.50.19 NMAC.

B. Emission Standards

(1) In order to ensure compliance with good combustion engineering practices, the owner or operator of a natural gas-fired heater units shall ensure compliance with the emission limits in Table 1 of 20.2.50.19 NMAC.

Table 1 - Emission Standards for NO_x and CO

Date of Construction:	NO_x (ppmvd @ 3% O_2)	CO (ppmvd @ 3% O_2)
Constructed or reconstructed before the effective date of 20.2.50 NMAC	30	300
Constructed or reconstructed on or after the effective date of 20.2.50 NMAC	30	130
less than 3,785 (less than 1,000)	64 (2.5)	102 (4.0)
3,785 to less than 5,678 (1,000 to less than 1,500)	51 (2.0)	89 (3.5)
5,678 less than 9,464 (1,500 to less than 2,500)	38 (1.5)	76 (3.0)
9,464 or more (2,500 or more)	25 (1.0)	64 (2.5)

(i) Pressure test of the cargo tank's internal vapor valve as follows:

(A) After completing the tests under 20.2.50.20.C(3)(i) NMAC, use the procedures in Method 27 to repressurize the tank to 460 mm H_2O (18 in. H_2O), gauge. Close the tank's internal vapor valve(s), thereby isolating the vapor return line and manifold from the tank.

(B) Relieve the pressure in the vapor return line to atmospheric pressure, then reseal the line. After 5 minutes, record the gauge pressure in the vapor return line and manifold. The maximum allowable 5-minute pressure increase is 130 mm H_2O (5 in. H_2O).

(2) Owners or operators complying with the requirements in 20.2.50.20.B(1) NMAC through use of a control device shall comply with the monitoring requirements in 20.2.50.15 NMAC.

(3) Owners or operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

C. Recordkeeping Requirements

(1) For each liquid transfer operation, the owner or operator shall maintain records of:

(a) The tank's location and the tank's unique inventory control number or name and,

(b) The location, type, make, and model of any control equipment.

(2) Each owner or operator shall maintain records of the inspections required in

20.2.50.20.C NMAC. These records shall include the following:
(i) the time and date of the inspection;
~~(ii) the person conducting the inspection;~~
~~(iii)~~(ii) a notation that each of the checks required under 20.2.50.20.C NMAC were completed;
~~(iv)~~(iii) a description of any problems observed during the inspection; and
~~(v)~~(iv) a description and date of any repairs and corrective actions taken.

(3) Owners and operators shall create and maintain a calendar year record for each site summarizing, calculating, recording, and totaling the liquid loading operation liquids and associated VOC emissions. Each calendar year, the owners and operators shall create a company-wide record summarizing the liquid transfer total calculated emissions for the company.

(4) Owners and operators complying with the requirements in 20.2.50.20.B(1) NMAC through use of a control device shall comply with the recordkeeping requirements in 20.2.50.15 NMAC.

(5) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

D. Reporting Requirements

(1) Owners and operators complying with the requirements in 20.2.50.20.B(1) NMAC through use of a control device shall comply with the reporting requirements in 20.2.50.15 NMAC.

(2) Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.20 STANDARDS FOR PIG LAUNCHING AND RECEIVING

A. Applicability

(1) All new and existing pipeline pig launching and receiving operations located within the property boundary at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations are subject to the requirements of 20.2.50.21 NMAC.

B. Emission Standards

(1) The owner or operator of new and existing pipeline pig launching and receiving operations with a potential to emit equal to or greater than 1.0 tpy of VOC shall capture and reduce VOC emissions by at least 98%, beginning on the effective date of this Part.

(2) The owner or operator conducting the pig launching and receiving operations shall:

(a) Employ best management practices to minimize the liquids present in the pig receiver chamber and to prevent emissions from the pig receiver chamber to the atmosphere after receiving the pig in the receiving chamber and prior to opening the receiving chamber to the atmosphere;

(b) Employ methods to prevent emissions including, but not limited to, installing liquids ramps, installing liquid drains, routing high-pressure chambers to a low-pressure line or vessel, using ball valve type chambers, or

using multiple pig chambers;

(c) Recover and dispose of all receiver liquids in a manner that prevents emissions to the atmosphere; and

(d) Ensure that any material collected is returned to the process or disposed of in a manner compliant with the state law.

(3) Owners and operators of a pig launching and receiving operation shall install an Equipment Monitoring and Information Tracking Tag (EMITT) on each pig launcher and each pig receiver in accordance with 20.2.50.12 NMAC.

(4) Any existing pipeline pig launching and receiving operation subject to control requirements may become exempt from those requirements when its actual annual emissions of VOC decreases to an amount less than 0.5 tpy of VOC.

(5) Owners and operators complying with the control requirements in 20.2.50.21.B(2) NMAC through use of a control device shall comply with the control device operational requirements in 20.2.50.15 NMAC.

C. Monitoring Requirements

(1) The owner or operator of any pig launching and receiving equipment shall monitor the type and volume of liquids cleared.

(2) The owner or operator of any pig launching and receiving equipment subject to control requirements shall inspect the equipment for leaks using RM 21 or OGI with infrared cameras immediately prior to the commencement and immediately after the conclusion of each pig launching or receiving operation, and according to the requirements in 20.2.50.16 NMAC.

(3) Owners and operators complying with the requirements in 20.2.50.21.B(1) NMAC through use of a control device shall comply with the monitoring requirements in 20.2.50.15 NMAC.

(4) Owners and operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

D. Recordkeeping Requirements

(1) Owners and operators shall maintain the following records in accordance with 20.2.50.12.C NMAC for each pig launching and receiving operation or event:

(a) Records of each pigging operation including the date and time of the pigging operation, and the type and volume of liquids cleared;

(b) The data and methodology used to estimate the actual emissions to the atmosphere;

(c) The data and methodology used to estimate the potential to emit; and

(d) The type of control(s), location, make, model and, if applicable, the unique identification number of the control equipment.

(2) Owners and operators complying with the requirements in 20.2.50.21.B(1) NMAC through use of a control device shall comply with the recordkeeping requirements in 20.2.50.15 NMAC.

(3) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements

(1) Owners and operators complying with the requirements in 20.2.50.21.B(1) NMAC through use of a control device shall comply with the reporting

requirements in 20.2.50.15 NMAC.

(2) Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.21 STANDARDS FOR PNEUMATIC CONTROLLERS AND PUMPS

A. Applicability

(1) All new and existing natural gas-driven pneumatic controllers and pumps located at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations are subject to the requirements of 20.2.50.22 NMAC.

B. Emission Standards

(1) Natural gas-driven pneumatic controllers and natural gas-driven pneumatic pumps constructed on or after the effective date of this Part shall comply with the requirements of 20.2.50.22 NMAC upon startup.

(2) Natural gas-driven continuous bleed pneumatic controllers and natural gas-driven pneumatic pumps ~~-~~constructed before the effective date of this Part shall comply with the requirements of 20.2.50.22 NMAC within ~~one year~~three years of the effective date of this Part.

(3) Standards for natural gas-driven pneumatic controllers.

(a) Owners and operators of each pneumatic controller located at a natural gas processing plant shall ensure the pneumatic controller has a VOC emission rate of zero.

(b) Owners and operators of each pneumatic controller located at a wellhead site, tank battery, gathering and boosting site, or transmission compressor station with ~~access to~~ electrical grid power shall ensure the pneumatic controller has a VOC emission rate of zero.

(c) Owners and operators of each pneumatic controller located at a wellhead site, ~~tank battery,~~ gathering and boosting site, or transmission compressor station without ~~access to~~ electrical power shall ensure the pneumatic controller has a documented bleed rate of less than or equal to 6 standard cubic feet per hour.

(d) Pneumatic controllers with a bleed rate greater than 6 standard cubic feet per hour are permitted where the owner or operator has demonstrated that a higher bleed rate is required based on functional needs, including but not limited to response time, safety, and positive actuation.

(4) Standards for natural gas-driven pneumatic pumps.

(a) Owners and operators of each pneumatic pump located at a natural gas processing plant shall ensure the pneumatic pump has a VOC emission rate of zero.

(b) Owners and operators of each pneumatic pump located at a wellhead site~~, tank battery~~, gathering and boosting site, or transmission compressor station with ~~access to~~ electrical grid power shall ensure the pump has a VOC emission rate of zero.~~.~~

(c) Owners and operators of each pneumatic pump located at a wellhead site, ~~tank battery,~~ gathering and boosting site, or transmission compressor station without access to electrical power shall reduce VOC emissions from the pneumatic pump by 95% if it is technically feasible to route emissions to a

Commented [A15]: For intermittents (i.e., provisions for intermittents, air for facilities with only single controllers):

There is no minimum number of controllers for air if electricity, as a result, there is no determination regarding sufficient electricity on site (i.e., there should be an another inquiry added to determine whether the operator has enough electricity for an air compression system) and that capacity. This was a point of technical discussion addressed in the MAP and several valid technical concerns were raised.

Recommend a technical infeasibility consideration when facilities exceed electrical grid capacity for pneumatic controllers.

control device~~,~~ fuel cell, ~~-~~or process.

(d) If there is a control device available onsite, but it is unable to achieve a 95% emission reduction, and it is not technically feasible to route the pneumatic pump emissions to a fuel cell or process this section, the owner or operator shall route the pneumatic pump emissions to this control device.

C. Monitoring Requirements

(1) Owners and operators of pneumatic controllers or pumps with a natural gas bleed rate equal to zero are not subject to the requirements of this section.

(2) Owners and operators of pneumatic controllers with a natural gas bleed rate greater than zero shall on a monthly basis ~~scan each controller and, considering the EMITT specified design continuous or intermittent bleed rate,~~ conduct an audible, visual, and olfactory (AVO) inspection and shall also inspect each pneumatic controller, perform necessary maintenance (such as cleaning, tuning, and repairing leaking gaskets, tubing fittings, and seals; tuning to operate over a broader range of proportional band; eliminating unnecessary valve positioners), and maintain the pneumatic controller ~~according to manufacturer specifications~~ to ensure that the controller's natural gas emissions are minimized.

(3) Each ~~EMITT~~ pneumatic controller or ~~shall~~pump specifications shall be identified in the CMMS system ~~linked to a database allowing the state inspectors to~~, at a minimum, ~~identify~~include:

(a) unique ~~pneumatic controller and pneumatic pump~~ identification number;

(b) type of controller (continuous or intermittent);

(c) if continuous, design continuous bleed rate in standard cubic feet per hour;

(d) if intermittent, bleed volume per intermittent bleed in standard cubic feet; and

(e) design annual bleed in standard cubic feet per year.

(4) Owners and operators of natural gas-driven a pneumatic pump with a natural gas bleed rate greater than zero shall on a monthly ~~basis scan each pump or actuator and, considering the EMITT specified design pump rate or actuation volume~~, conduct an audible, visual, and olfactory (AVO) inspection and shall also inspect the pneumatic pump and perform necessary maintenance, and maintain the pneumatic pump according to manufacturer specifications to ensure that the pump's natural gas emissions are minimized.

(5) Owners and operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

D. Recordkeeping Requirements

(1) Owners and operators of pneumatic controllers, pumps with a natural gas bleed rate equal to zero are not subject to the requirements of this section.

(2) Owners and operators shall maintain an ~~electronic pneumatic controller~~ inspection log for each pneumatic controller with a natural gas bleed rate greater than zero at

each facility, including for each inspection:

(a) Unique pneumatic controller ID number;

(b) ~~EMITT scanned inspection~~Inspection dates;

(c) ~~Name of the inspector~~;

(d) AVO inspection results;

(e) Any AVO level discrepancy in continuous or intermittent bleed rate;

(f) Maintenance dates; and

(g) Maintenance activities.

(3) Owners and operators who determine that the use of a natural gas-driven pneumatic controller with a bleed rate greater than 6 standard cubic feet per hour is required shall maintain a record in the ~~EMITT~~ CMMS system ~~database of~~ each such pneumatic controller documenting why a bleed rate greater than 6 standard cubic feet per hour is required per the requirements in 20.2.50.22.B NMAC.

(4) Owners and operators shall maintain records in the ~~EMITT~~ CMMS system ~~database~~ of natural gas-driven pneumatic pumps with an emission rate greater than zero and their associated pump numbers at each facility, including:

(a) For natural gas-driven pneumatic pumps in operation less than 90 days per calendar year, records of the days of operation each calendar ~~year~~year.

(b) Records of control devices designed to achieve less than 95% emission reduction, including an evaluation or manufacturer specifications indicating the percentage reduction the control device is designed to achieve.

(c) Records of the engineering assessment ~~and certification by a qualified professional engineer~~ that routing pneumatic pump emissions to a control device, fuel cell, or process is technically infeasible.

(5) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements.

Owners and operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.22 STANDARDS FOR STORAGE TANKS

A. Applicability

(1) All new and existing hydrocarbon storage tanks with an uncontrolled potential to emit equal to or greater than 6~~2~~ tpy of VOC and located at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations are subject to regulation under 20.2.50.23 NMAC.

B. Emission Standards

(1) All existing hydrocarbon storage tanks with a potential to emit equal to or greater than 6~~2~~ tpy and less than 10 tpy of VOC shall have a combined capture and control of VOC emissions by at least 95 percent no later than one year after the effective date of this Part.

(2) All existing hydrocarbon storage tanks with a potential to emit equal to or greater than 10 tpy of VOC shall have a combined capture and control of VOC emissions

by at least 98 percent, no later than one year after the effective date of this Part.

(3) All new hydrocarbon storage tanks constructed after the effective date of this part with a potential to emit equal to or greater than 2 tpy and less than 10 tpy of VOC shall have a combined capture and control of VOC emissions by at least 95 percent upon startup.

(4) All new hydrocarbon storage tanks constructed after the effective date of this Part with a

potential to emit equal to or greater than 10 tpy of VOC shall have a combined capture and control and control of VOC emissions by at least 98 percent upon startup.

(5) Any new or existing storage tank subject to control requirements under 20.2.50.23 NMAC becomes exempt from those requirements when its uncontrolled actual annual VOC emissions decreases to less than 2 tpy.

(6) If air pollution control equipment is not installed by the applicable date specified in 20.2.50.23.B(1) through 20.2.50.23.B(4) NMAC, compliance with 20.2.50.23.B(1) through 20.2.50.23.B(4) NMAC may be demonstrated by shutting in all wells producing into that storage tank by that applicable date and so long as production does not resume from any such well until the air pollution control equipment is installed and operational.

(7) Owners and operators of an existing or new tank with a thief hatch shall install a control device on the thief hatch which allows the thief hatch to open sufficiently to relieve overpressure in the tank and to automatically close once the tank overpressure is relieved. The thief hatch shall be equipped with a manual lock-open safety device to ensure positive hatch opening during times of human ingress. The lock-open safety device will only be engaged during in the presence of owner or operator staff and during active ingress activities.

(8) Owners and operators of a new or existing hydrocarbon storage tank(s) shall ~~install an Equipment Monitoring and Information Tracking Tag (EMITT)~~document in CMMS system ~~on~~ each storage tank in accordance with 20.2.50.12 NMAC.

(9) Owners and operators complying with the control requirements in 20.2.50.23.B(1) NMAC through 20.2.50.23.B(4) NMAC through use of a control device shall comply with the control device operational requirements in 20.2.50.15 NMAC.

(10) After the compliance deadlines established in the rule, it is a violation to operate any tank not complying with the requirements of this section.

C. Monitoring Requirements

(1) The owner or operator of any storage tank subject to control requirements shall monitor the total monthly liquid throughput (barrels) and the upstream separator pressure (psig) on a monthly basis. ~~Any time the storage tank is unloaded less frequently than monthly, the throughput and separator pressure monitoring shall be conducted prior to the storage tank being unloaded~~.

(2) The owner or operator of any storage tank subject to control requirements shall conduct an auditory, visual, and olfactory (AVO) inspection on a ~~weekly~~ monthly basis. ~~Any time the storage tank is unloaded less frequently than weekly, the AVO inspections shall be conducted prior to the storage tank being unloaded.~~

(3) The owner or operator of any storage tank subject to control requirements shall

inspect the tanks monthly to ensure compliance with the requirements of 20.2.50.23 NMAC. Inspections shall include a check to ensure the tanks have no leaks, that all hatches are closed, the pressure relief valves are properly seated, and all vent lines are closed.

(4) Each monitoring or inspection shall ~~include the scanning of the EMITT~~by captures in the CMMS system ~~and the simultaneous entry of the required monitoring data~~ in accordance with the requirements of 20.2.50.12 NMAC.

(5) Owners and operators complying with the requirements in 20.2.50.23.B(1) NMAC through 20.2.50.23.B(4) NMAC through use of a control device shall comply with the monitoring requirements in 20.2.50.15 NMAC.

(6) Owners and operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

D. Recordkeeping Requirements

(1) Owners and operators subject to control requirements under 20.2.50.23 NMAC shall, on a monthly basis, maintain records in accordance with 20.2.50.12 NMAC for each storage tank of:

(a) The tank's location and unique inventory control number or name;

(b) Monthly liquid throughput and the most recent date of measurement;

(c) The documented ~~average~~ monthly upstream separator pressure;

(d) The data and methodology used to calculate the potential to emit of VOC (the calculation methodology must be a Department approved methodology); and ~~The controlled and uncontrolled VOC emissions (tpy); and~~

(e) The location, type, make, model and unique identification number of any control equipment.

~~(2) Records of liquid throughput required in 20.2.50.23.D(1) NMAC shall be verified by dated delivery receipts from the purchaser of the hydrocarbon liquids, or metered volumes of hydrocarbon liquids sent downstream, or other proof of transfer.~~

~~(3)~~(2) Records of the inspections required in 20.2.50.23.C NMAC shall include the time and date of the inspection, ~~the person conducting the inspection,~~ a notation that each check required under 20.2.50.23.C NMAC was completed, a description of any problems observed during the inspection, and a description and date of any corrective actions taken in accordance with 20.2.50.12 NMAC.

~~(4)~~(3) Owners and operators complying with the requirements in 20.2.50.23.B(1) NMAC through 20.2.50.23.B(4) NMAC through use of a control device shall comply with the recordkeeping requirements in 20.2.50.15 NMAC.

~~(5)~~(4) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements.

(1) Owners and operators complying with the requirements in 20.2.50.23.B(1) NMAC through 20.2.50.23.B(4) NMAC through use of a control device shall comply with the reporting requirements in 20.2.50.15 NMAC.

(2) Owners and operators shall comply with the reporting requirements in 20.2.50.12

NMAC.

20.2.50.23 STANDARDS FOR WORKOVERS

A. Applicability
   (1) All workovers performed at oil and natural gas wells are subject to the requirements of 20.2.50.24 NMAC for any workovers performed after the effective date of this Part.

B. Emission Standards
   (1) Owners and operators of oil or natural gas wells shall use the following best management practices during workovers to minimize emissions, consistent with well site conditions and good engineering practices:
      (a) Reduce wellhead pressure prior to blowdown to minimize the volume of natural gas vented;
      (b) Monitor manual venting in close proximity to the well or via remote telemetry; and
      (c) Route natural gas flow to the sales line or process, if possible.

C. Monitoring Requirements
   (1) Owners and operators subject to 20.2.50.24 NMAC shall monitor the following parameters during workovers:
      (a) Wellhead pressure;
      (b) Flow rate of the vented natural gas (to the extent feasible); and
      (c) Duration of venting to the atmosphere.
   (2) Owners and operators shall calculate the volume and mass of VOC vented during each workover.
   (3) Owners and operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

D. Recordkeeping Requirements
   (1) Owners and operators subject to 20.2.50.24 NMAC shall keep the following records for each workover:
      (a) The identification number and location of the well;
      (b) The date(s) the workover was performed;
      (c) Wellhead pressure;
      (d) Flow rate of the vented natural gas (to the extent feasible. If measurement of the flow rate is not feasible, the owner or operator shall use the maximum potential flow rate in the emission calculation);
      (e) Duration of venting to the atmosphere;
      (f) A description of the management practices used to minimize release of VOC prior to and during the workover; and
      (g) A calculation of the VOC emissions vented during the workover based on the duration, volume, and mass of VOC.
   (2) Owners and operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements
   (1) Owners and operators shall comply with the reporting requirements in 20.2.50.12

NMAC.

(2) If it is not feasible to prevent VOC emissions from being ~~emitted~~ vented to the atmosphere from any workover event, the owner or operator shall notify all residents by certified mail located within 0.25 miles of the well of the planned workover at least three (3) calendar days prior to the workover event.

~~20.2.50.24~~ STANDARDS FOR OIL AND NATURAL GAS STRIPPER WELL~~S~~ FACILITIES ~~AND FACILITIES WITH SITE-WIDE VOC POTENTIAL TO EMIT LESS THAN 15 TPY~~

~~A.~~F. Applicability

(1) Stripper wells facilities as~~,~~ defined in 20.2.50.8 as any oil ~~and natural gas~~ well producing less than ~~10~~ 15barrels of oil per day or any natural gas well producing less than ~~60~~ 250 thousand standard cubic feet of natural gas per day, or an individual well head site with PTE less than 25 tpy VOCs are subject to the requirements of 20.2.50.25 NMAC.

(2) Owners or operators of stripper well~~s~~ facilities shall comply with these requirements no later than ~~one~~ five years~~year~~ after the effective date of this Part.

~~(3) Facilities with a site-wide annual PTE of less than 15 tons per year of VOC are subject to the requirements of 20.2.50.25 NMAC.~~

~~(4) Owners or operators of facilities with a site-wide annual PTE of less than 15 tons per year of VOC shall comply with these requirements no later than one year after the effective date of this Part.~~

~~(5)~~(3) If at any time a facility identified in 20.2.50.25.A(1) or (3) NMAC exceeds the daily production limit or PTE threshold of ~~15~~ 25 tpy of VOC, the owner or operator shall conduct semi-annual LDAR monitoring as required by 20.2.50.16.C(2)(b) NMAC for a period of two years.

~~B.~~G. Emission Standards

(1) Owners or operators shall ensure that all equipment located at a stripper well facility ~~or low-PTE facility~~ shall be operated and maintained consistent with ~~with manufacturer specifications and~~ good engineering and maintenance practices. The owner or operator shall keep manufacturer specifications and maintenance practices on file and make them available upon request by the Department.

(2) Owners or operators of an oil or natural gas stripper well or individual facility with a site-wide PTE less than ~~15~~ 25 tpy of VOC shall, within the first calendar quarter of the year, use actual production volumes to calculate the VOC and NOx emissions from the stripper well site.

(3) Owners or operators of an oil or natural gas stripper well(s) or facility(s) with a site-wide PTE less than ~~15~~ 25 tpy of VOC shall maintain a database of company-wide calculated VOC and NOx emissions estimates for each site and must update the database annually.

~~C.~~H. Monitoring Requirements

(1) Owners or operators complying with 20.2.50.25 NMAC shall monitor the following for each stripper well ~~or~~ facility ~~with a site-wide PTE of VOC less than 15 tpy~~:

(a) the unique identifier of the stripper well or facility (API number and

name, as applicable);

(b) the UTM coordinates of the stripper well or facility and its county of location;

(c) the annual total well production rate in barrels of oil per year and natural gas production in thousand standard cubic feet per year; and

(d) Dates, duration, and VOC emission estimates of any venting or flaring event longer than eight (8) hours.

(2) ~~Owners or operators shall comply with the monitoring requirements in 20.2.50.12 NMAC~~.

~~D.~~I. Recordkeeping Requirements

(1) Owners or operators complying with 20.2.50.25 NMAC shall:

(a) maintain electronic records of the following for each stripper well and low-PTE facility:

(i) the unique identifier of the stripper well and low-PTE facility (number and name, as applicable);

(ii) the UTM coordinates of the stripper well and low-PTE facility and its county of location;

(iii) the total annual well production in barrels of oil per year and natural gas production in thousand standard cubic feet; and

(iv) Dates, duration, and VOC emission calculation of any venting or flaring event lasting longer than eight (8) hours, and the cause of the event.

(2) Within the first calendar quarter of the year, record the calculated total annual emissions of VOC and NOx from each stripper well site and low-PTE facility in tons, and the company-wide total VOC and NOx emissions from stripper wells and low-PTE facilities in tons. All venting and flaring emissions > 8 hours shall be included in the calculated total annual emissions.

~~(3) Within the first calendar quarter of the year, provide a description of the management practices used to minimize and prevent the release of VOC and NOx at each stripper well and low-PTE facility.~~

~~(4) Owners or operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC~~.

~~E.~~J. Reporting Requirements

Owners or operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

~~20.2.50.25~~20.2.50.24 STANDARDS FOR EVAPORATION PONDS

A. Applicability

(1) All new and existing oil and natural gas evaporation ponds with pond capacity equal to or greater than [TBD barrels] or a potential to emit greater than [10 lbs/day VOC] and located at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, transmission compressor stations, or not associated with a facility but located in San Juan, Lea, Eddy, Rio Arriba, Sandoval counties are subject to the requirements of 20.2.50.26 NMAC.

(2) Owners or operators of oil and natural gas evaporation ponds shall comply with

Commented [A16]: This could catch recycle ponds approved by NMOCD. It is very important to try and exclude those here if the state wants to continue to encourage the use of recycled water within the oil field.

We have recommended excluding recycling facilities permitted under the Produced Water Act from the definition of "evaporative pond." Another option would be to expressly exempt those facilities in this part here.

these requirements no later than 180 days after the effective date of this Part.

B. Emission Standards

(1) Owners or operators of an oil or natural gas evaporation pond shall use best management practices to minimize emissions of VOC, consistent with good engineering practices.

(2) Prior to unloading into a pond(s), all liquids shall be first loaded into a 20.2.50.23 NMAC compliant liquid storage tank designed to minimize subsequent VOC emissions from the pond.

(3) Owners or operators shall install an impermeable continuous barrier or cover over the entire surface area of the liquid, which prevents VOC emissions from being emitted to the atmosphere. Owners and operators shall ensure that VOC emissions are collected and routed to a control device for destruction.

Commented [A17]: May want to include-"or processed in some way that reduces the VOC content in the water prior to pond unloading."

Commented [A18]: How is an evaporation pond supposed to work if the liquid surface is covered? This is also not very feasible for larger ponds and increases the costs 2x, or more, at least.

C. Monitoring Requirements

(1) For each oil or natural gas evaporation pond, the owners or operators subject to 20.2.50.26 NMAC shall:

(a) on a monthly basis, perform an inspection to ensure that the barrier is an impermeable continuous barrier or cover that covers the entire surface area of liquid;

(b) on a monthly basis, ensure that all VOC emissions are being captured and routed to a control device; and

(c) monitor the monthly total and annual total oil and natural gas evaporation pond throughput in thousands of gallons of liquids.

(2) Owners or operators shall comply with the monitoring requirements in 20.2.50.12 NMAC.

D. Recordkeeping Requirements

(1) Owners or operators subject to 20.2.50.26 NMAC shall maintain electronic records of the following for each evaporation pond:

(a) the unique identifier of the evaporation pond (number and name, as applicable);

(b) the UTM coordinates of the evaporation pond site and its county of location;

(c) the results of the barrier or cover inspection, including the date, time, and name of the personnel performing the inspection;

(d) the results of the VOC capture and control device inspection, including the date, time, and name of the personnel performing the inspection; and

(e) the total calculated VOC emissions in tons per year.

(2) Owners or operators of an oil or natural gas evaporation pond shall, within the first calendar quarter of the year, record the calculated emission estimates of VOC from the evaporation pond in tons per year.

(3) Owners or operators of an oil or natural gas evaporation pond shall record a description of the management practices used to minimize release of VOC at the evaporation pond, and the company-wide total VOC emissions from evaporation ponds in tons per year.

(4) Owners or operators of an oil or natural gas evaporation pond shall, within the first calendar quarter of the year, use actual volumes of liquid loaded into each site's pond(s) to calculate total site-wide VOC emissions from all evaporation

ponds.

(5) Owners or operators of an oil or natural gas evaporation pond(s) shall maintain a database of company-wide calculated annual total VOC emissions estimates in tons per year from each pond.

(6) Owners or operators shall comply with the recordkeeping requirements in 20.2.50.12 NMAC.

E. Reporting Requirements

Owners or operators shall comply with the reporting requirements in 20.2.50.12 NMAC.

20.2.50.27 PROHIBITED ACTIVITIES AND CREDIBLE INFORMATION PRESUMPTIONS

A. Failure to comply with any of the emissions standards, recordkeeping, reporting, or other requirements of this Part within the timeframes specified shall constitute a violation of this Part subject to enforcement action under Section 74-2-12 of the Act.

~~B. If credible information obtained by the Department indicates that a source is not in compliance with any provision of this Part, the source shall be presumed to be in violation of this Part unless and until the owner or operator provides credible evidence or information demonstrating otherwise.~~

~~C.~~B. ~~If credible information provided to the Department by a member of the public indicates that a source is not in compliance with any provision of this Part, the source shall be presumed to be in violation of this Part unless and until the owner or operator provides credible evidence or information demonstrating otherwise.~~

20.2.50.28 ECONOMIC HARDSHIP AND PREMATURE EQUIPMENT ABANDONMENT EXCEPTIONS

A. An application may be filed with the Department for an exception or variance from the standards and requirements in this Part, when such standards and requirements will result in:

(1) economic hardship;

(2) a potential oil and gas lease expiration;

(3) premature abandonment of an oil or gas well; or

(4) requires the replacement of equipment or software prior to the expiration of the useful life of such equipment or software,

B. Applications filed for exceptions or variances under 20.2.50.28 must include:

(1) The name of the applicant, along with a valid mailing address, email address, and phone number;

(2) A description of the event or conditions justifying the exception or variance

Commented [A19]: The issues with this section are addressed in Marathon's comment letter. These issues could likely be addressed in a few different ways:

(1) NMED could specify certain types of credible information that it is willing to consider. This could be information similar to fly over surveys or other similar types of information which would not encourage individuals to try to physically go to well site equipment, resulting in safety concerns.

(2)NMED could create or reference a specific hearing process which allows for (1) cross examination of any accusations, due process, and evidentiary considerations.

As drafted, this looks like a very open-ended and does not require any sort of due process, which we understand is not the agency's intent. Courts have scrutinized EPA's credible evidence rules for these same types of issues. In any event, no violation or penalty order could issue based solely on third-party hearsay evidence under New Mexico law. Creating a more robust procedural requirement will help lower costs related to litigation involving frivolous claims for both the agency and industry.

Also, this rule may encourage third party activists to remove EMITT tags at well sites or tamper with equipment to cause violations. How can this issue be protected against? Industry's only option to create evidence would be to install expensive camera equipment at well sites, which is very costly and will likely be subject to theft.

application;

(3) The location of the impacted wells, equipment, and leases; and

(4) A detailed description of the proposed variance or exception.

C. The Department must in writing deny, approve the application as submitted, or approve the application in a manner which imposes different terms and conditions than what was requested in the application.

D. Applicants shall be given the opportunity to request a hearing or appeal the issuance of a denial or an approval which imposes different terms or conditions than what was requested in the application.

E. If the application pertains to a potential lease expiration or the premature abandonment of a oil or gas well, equipment, or software, the applicant may operate pursuant to the conditions that it has requested in the exception or variance application until a final order is issued by the Department and such operations shall not constitute a violation of this Part.

OCD DRAFT
July 20, 2020

EXHIBIT 2 – Redline of EMNRD Rule

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AN GAS
PART 27 VENTING AND FLARING OF NATURAL GAS

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

19.15.27.2 SCOPE: 19.15.27 NMAC applies to persons engaged in oil and gas development and production within New Mexico.
[19.15.27.2 NMAC – N, xx/xx/xx]

19.15.27.3 STATUTORY AUTHORITY: 19.15.27 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/xx]

19.15.27.4 DURATION: Permanent.
[19.15.27.4 NMAC – N, xx/xx/xx]

19.15.27.5 EFFECTIVE DATE: [DATE], unless a later date is cited at the end of a section.
[19.15.27.5 NMAC – N, xx/xx/xx]

19.15.27.6 OBJECTIVE: To regulate the venting and flaring of natural gas from wells and production equipment and facilities to prevent waste and protect correlative rights, public health and the environment.
[19.15.27.6 NMAC – N, xx/xx/xx]

19.15.27.7 DEFINITIONS: Definitions shall have the meaning specified in 19.15.2 NMAC except as specified below.

A. "ALARM" means advanced leak and repair monitoring, which may include but is not limited to remote leak detection systems, fly over surveys, well monitoring systems approved by the New Mexico Environment Department, and other advanced leak detection technology.

B. "Air Pollution Control Equipment" means air pollution control equipment as defined by the New Mexico Environment Department.

"C. **Average daily production"** has the same meaning as in Subsection A of 19.15.6.7 NMAC.

D~~C~~. **"AVO"** means audio, visual ~~or~~ and olfactory, which may include, but is not limited to, ALARM systems, remote leak detection, and well monitoring systems approved by the New Mexico Environment Department or the Division.

E. **"Beneficial Use"** means a use of oil, natural gas, or water for any and all rights and privileges necessary, incident to or convenient for operations permitted under an oil and gas lease, communitization agreement, or unit agreement.

F~~D~~. **"Completion operations"** means the period that begins with the initial perforation of the well in the completed interval and concludes on the earlier of 30 days after commencement of initial flowback~~-~~ or when permanent production equipment is in use at the well.

G~~E~~. **"Drilling ~~operations~~"** means the period that begins when a well is spud and concludes when casing and cementing has been completed and casing slips have been set to install tubing head in the well.

H~~F~~. **"Emergency"** means a sudden unexpected occurrence or an unforeseen combination of circumstances~~temporary, infrequent and unavoidable event~~ in which the loss of natural gas is uncontrollable or necessary.

~~**G.** "~~

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

I. **"Gas-to-oil ratio (GOR)"** for purposes of 19.15.27 NMAC means the ratio of natural gas to oil in the production stream expressed in standard cubic feet of natural gas per barrel of oil.

J. **"Initial flowback"** means the period during completion operations that begins with the onset of flowback and concludes when it is technically feasible for a separator to function.

K. **Major Emergency:** A venting or flaring event that is the result of an emergency: (1) that results in estimated volumes in excess of 500 MCF, or (2) a situation that creates a threat to public safety.

L. **Major Malfunction**: A venting or flaring event that is the result of a malfunction: (1) that results in estimated volumes in excess of 500 MCF, or (2) a situation that creates a threat to public safety.

M. **"Malfunction"** means any sudden and failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions."
~~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.~~

N~~L~~. **"N_2"** means nitrogen gas.

O~~M~~. **"Natural gas"** means a salable gaseous mixture of hydrocarbon compounds, primarily composed of methane, and includes both casinghead gas and gas as defined in 19.15.2 NMAC.

Commented [A1]: This definition matches the rights afforded under most oil and gas lease agreements, including the right of "free use" of gas given under the New Mexico Statutory lease forms.

Commented [A2]: Has the agency looked at how its orders (i.e., pooling order) reference the term completion or completions to see if there are any unintended consequences related to defining this term in the regulations? Stated another way, has the division determined if this definition will change or alter the deadlines for such operations contemplated under already issued orders?

Commented [A3]: The New Mexico Supreme Court has embraced a different definition of the term "drilling operations" in the context of leasehold and JOA interpretation disputes. Could this term be limited to just the word "drilling" to avoid discrepancies in the law?

Commented [A4]: Emergencies, however, have not historically qualified as waste under the Oil and Gas Act. Proposed for the agency's consideration is a definition more similar to what is found in other New Mexico statutes and regulations.

Commented [A5]: This definition would not include things such as a gas buster which would meet the definition here. For sake of clarity would suggest utilizing air pollution control equipment and deleting this definition.

Commented [A6]: The goal of adding this word is to properly consider non-saleable gas, such as H2S. We did not find an express exception in the proposed rule (as drafted) for non-salable H2S and Nitrogen, but other existing NMOCD regulatory requirements do likely require H2S to be combusted.

P~~N~~. **"Production operations"** means the period that begins on the earlier of 31 days following the commencement of initial flowback ~~or when permanent production equipment is in use at a well and~~ concludes when the well is ~~-~~plugged and abandoned.

Q. **"Salable"** means that hydrocarbons meet a specification that can be sold and transported pursuant to an applicable midstream, transportation, or purchase and sale agreement.

R~~O~~. **"Separation flowback"** means the period during completion operations that begins when it is technically feasible for a temporary separator to function and concludes on the earlier of 30 days after initial flowback begins or when permanent production equipment is in use at the well or production facility.

S~~P~~. **"Vent" or "Venting"** means the release of uncombusted salable natural gas to the atmosphere but does not include equipment leaks regulated by the New Mexico Environment Department.

[19.15.27.7 NMAC – N, xx/xx/xx]

19.15.27.8 VENTING AND FLARING OF NATURAL GAS:

A. Venting and flaring of natural gas during drilling, completion or production operations constitutes surface waste, as defined by the Oil and Gas Act, if the venting or flaring constitutes an unnecessary and excessive surface loss or destruction of gas without beneficial use. ~~and is prohibited except as authorized below~~ The beneficial use of gas is permitted and does not constitute a waste. Venting and flaring is prohibited except as authorized below.~~An operator has a general duty to maximize the recovery of natural gas and to minimize the release of natural gas to the atmosphere.~~

B. Venting and flaring during drilling ~~operations~~.

(1) If technically feasible, t~~T~~he operator shall capture or combust natural gas escaping from the well using best available control technologies.

(2) If flaring occurs during drilling, ~~A~~ air pollution control equipment~~flare stack~~ that is used shall ~~be located at a minimum of 100 feet from the nearest surface hole location and shall be enclosed and~~ equipped with an automatic ignition system or continuous pilot.

(3)T~~In an emergency or malfunction, t~~he operator may vent natural gas during drilling if gas capture is technically infeasible or in order ~~only~~ to avoid a risk of an immediate and substantial adverse impact on safety, public health or the environment.

(4) Operator, however, may flare or vent natural gas if flaring is required or permitted in accordance with federal or state law, rule, regulation, order, or permits~~-~~. If such flaring or venting is done in accordance with a law, rule, regulation, order or permit, it shall be exempted from the gas capture requirements contained within Part 19.15.27.9.

~~The operator shall~~

~~**(a)** notify the division of the venting or flaring as soon as possible by email, but no more than two hours following discovery of the emergency or malfunction;~~

~~**(b)** file a form C-129 no later than 24 hours after commencing to vent or flare pursuant to Subparagraph (4) of Subsection E of 19.15.27.8 NMAC;~~

~~**(c)** notify the division as soon as practicable after it stops venting or flaring; and~~

~~comply with the applicable requirement to report a release pursuant to 19.15.29 NMAC.~~

Commented [A7]: Our understanding is that leaks (via LDAR) is regulated by NMED.

Commented [A8]: In general, we recommend removing most of 19.15.27.8 and instead relying on the 98% gas capture requirements in 19.15.27.9. This will allow operators some flexibility to focus investments on innovative technology to better achieve gas capture.

Note that current oil prices are around $40/bbl for WTI. The Federal Reserve Bank of Dallas has recently found that "shut-in prices" in August of 2020 for the New Mexico Delaware Basin are around $32/bbl. The proposed rules will increase New Mexico operating costs by requiring retrofits, the installation of meters, and imposing additional reporting.

Commented [A9]: If it is not technically feasible to capture gas during drilling, should these volumes be included in the 98% gas capture requirement? Do these volumes qualify waste under the statutory definition for surface waste?

Commented [A10]: If this language is kept, we recommend that this deadline be aligned with EER reporting deadlines to the NMED, which are:
Initial: following business day after discovery
Final: 10 days following the event

Commented [A11]: If this content is kept in the rule, we recommend specifying how the communication must be made and documented.

Commented [A12]: This language, related to C-129 filings, either has inconsistences or less information than the C-129 requirements discussed below. I recommend having one section (below) that applies to C-129s.

C. Venting and flaring during completion operations.

(1) During initial flowback, the operator shall route flowback fluids into a completion or storage tank and commence operation of a separator when~~as soon as~~ it is technically feasible for a separator to function.

(2) During separation flowback, the operator shall capture and route recovered natural gas to a gas flowline or collection system, re-inject the natural gas~~it into the well~~ or beneficially use the natural gas~~it use on-site as a fuel source or for another purpose that a purchased fuel or raw material would serve~~.

(3) If flaring is necessary, t~~T~~he operator may route recovered natural gas to a flare~~ if routing or using the natural gas as described in Subparagraph (2) of Paragraph C of 19.15.27.8 NMAC poses a risk to safe operation or personnel safety~~, provided that the flare is equipped with an automatic igniter or continuous pilot.

(4) The operator may vent natural gas if gas capture is technically infeasible or ~~only~~ if capturing or flaring the natural gas poses a risk to safe operations or personnel safety~~, and venting is safer than capturing and or flaring~~.

(5) Operator, however, may flare or vent natural gas if flaring is required or permitted in accordance with federal or state law, rule, regulation, order, or permits. If such flaring or venting is done in accordance with a law, rule, regulation, order or permit, it shall be exempted from the gas capture requirements contained within Part 19.15.27.9.

D. Venting and flaring during production operations.

(1) During production operations, t~~T~~he operator shall not vent or flare natural gas except as authorized below in Subparagraph (2) of Subsection D of 19.15.27.8 NMAC.

(2) The operator may vent or flare natural gas during production operations:

(a) if flaring is required or permitted in accordance with federal or state law, rule, regulation, order, or a permit issued by a federal agency or New Mexico Environment Department and operator complies with the gas capture requirements contained in Part 19.15.27.9.

~~to the extent authorized by a valid federally enforceable air quality permit issued by the environment department;~~

(b) 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~~;

(c) to unload or clean-up a well to atmospheric pressure,

(i) if the operator allows the well to vent only so long as necessary to achieve a stabilized rate and pressure;

(ii) for liquids unloading by manual purging, when the operator remains present on-site until the end of unloading, takes all reasonable actions to achieve a stabilized rate and pressure at the earliest practical time and takes all reasonable actions to minimize venting to the maximum extent practicable;

(iii) for a well equipped with a plunger lift system or an automated control system, when the operator optimizes the operation of the system to minimize the venting of natural gas; or

(iv) during downhole well maintenance, if and only when the operator ~~uses a workover rig, swabbing rig, coiled tubing~~

Commented [A13]: It would helpful to have clarification as to if a C-129 is needed during completions in emergency situations, same as drilling. There is no specific reference in the draft rules.

Commented [A14]: If it is not technically feasible to capture gas during these operations, should these volumes be included in the 98% gas capture requirement? Are these volumes waste if they can't feasibly be captured?

~~unit or similar specialty equipment, and~~ minimizes the venting of natural gas to the extent consistent with safe operation and best management practices; and

(d) during the following activities to the extent authorized by applicable state or federal law, including any permits, notices and regulations, which regulat~~eing~~ the emission of hydrocarbons and volatile organic compounds:

(i) gauging or sampling of a storage tank or other low-pressure production vessel;

(ii) loading out liquids from a storage tank or other low-pressure production vessel to a transport vehicle;

(iii) scheduled repair and maintenance, including blowing down and depressurizing production equipment to perform repair and maintenance;

(iv) normal operation of a gas-activated pneumatic controller or pump;

(v) normal operation of a storage tank or other low-pressure production vessel, but not including venting from a thief hatch that has not been fully and timely closed or from a seal that has not been maintained on an established schedule;

(vi) a bradenhead test;

(vii) a packer leakage test; or

(viii) a production test that does not exceed 24 hours unless the division requires or approves a longer test period.

(3) The operator shall conduct an AVO inspection which can be completed using the~~in compliance with~~ the New Mexico Environment Department's LDAR requirements [enter CITE], or using AVO inspections at t~~. on t~~he frequency specified below to confirm that all production equipment is operating properly and there is no venting except as allowed by Paragraph (2) of Subsection D of 19.15.27.8 NMAC. The operator shall conduct the AVO inspection quarterly,~~-~~ or~~and shall~~:

~~**a)** conduct the AVO inspection weekly during the first year of production;~~

(a) If using an LDAR program approved the Environment Department, operator shall ~~**(b)** conduct the AVO inspection weekly on a well with an average daily production greater than 10 barrels of oil or 60,000 cubic feet of~~ make and keep a record of such ~~each AVO~~ inspections pursuant to the statutes, regulations and rules issued by the New Mexico Environment Department, and shall make such records available for inspection upon request by the Division. ~~for not less than five years and make such record available for inspection by the division upon request.~~

(be) If an operator is in compliance with the gas capture requirements contained in Section 19.15.27.9, then the operator shall only be required to perform AVO inspections semi-annually under this Part.

~~For venting or flaring during an emergency or malfunction pursuant to Subparagraph (b) of Paragraph (2) of Subsection D of 19.15.27.8 NMAC, the operator shall~~

Commented [A15]: 19.15.28.22 Section B subsection 3(e-g) says this is an acceptable form of venting? Can this language match the requirements contained in that Part?

Commented [A16]: NMED's draft rules allow for exemptions for facilities with a PTE of <15tpy of VOCs. Can there be a similar exemption in rule so there is clarity and consistancy?

Commented [A17]: We recommend creating an exemption for lower producing wells so that the rule doesn't result in the unnecessary forfeiture of real property rights.

Another option would be to better define what is required under AVO inspections. Is this similar to LDAR or merely someone on lease looking at the flare? Can this be accomplished through remote systems or advanced technology?

Commented [A18]: This would comport with OOOOa.

~~**(a)** notify the division of the venting or flaring by email as soon as possible, but no more than two hours following discovery of the venting or flaring;~~

~~**(b)** file a form C-129 no later than 24 hours after commencing to vent or flare;~~

~~**(c)** notify the division as soon as practicable after the cessation of venting and flaring; and~~

(5) **Performance standards for separation, storage tank and flare equipment.**

(a) The operator shall design a temporary or permanent separation or storage tank to minimize the natural gas flashing and vapor accumulation for equipment installed after the Effective Date of this Rule. Wells drilled prior to the Effective Date of this Rule shall be included in the gas capture requirements contained in Part 19.15.27.9.

(b) The operator shall equip a permanent storage tank associated with production operations that is installed after {effective date of rule} with an automatic gauging system to reduce the venting of natural gas.

(c) The operator shall combust all natural gas in air pollution control equipment~~a flare stack~~ designed for and operated at maximum efficiency.

(i) A flare stack installed after the Effective Date of this Rule ~~after May 31, 2021~~ shall be equipped with an automatic ignitor or continuous pilot.

~~**(ii)** A flare stack before June 1, 2021 shall be retrofitted with an automatic ignitor or continuous pilot no later than 18 months after {effective date of rule}~~

(d~~e~~) The operator shall inspect all flare stacks quarterly~~at least once per week~~ to confirm that flare stacks~~it~~ are~~is~~ being properly maintained and operated in conformance with ~~its~~ design, and shall make and keep a record of each inspection for not less than five years and make such records available for inspection by the division upon request.

E. Measurement and reporting of vented and flared natural gas.

(1) The operator shall measure, calculate or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion operations and production operations regardless of the reason or authorization for such venting and flaring.

(a) The operator shall install equipment to measure the volume of ~~vented and~~ flared natural gas using high pressure flaring equipment, from a well authorized by an APD issued after May 31, 2022~~1~~ that has an average daily production greater than 40~~10~~ barrels of oil or ~~6~~2500,000 cubic feet of natural gas.~~**(b)** Measurement equipment shall be designed in accordance with the accuracy ratings and design standards in 43 C.F.R. § 3175.20.~~

(b) Equipment leaks shall not be considered vented or flared volumes under the Part.

(c) Measurement 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 measurement equipment.

(d~~d~~) For a well that does not require measurement equipment, or in the event measurement equipment cannot be used to accurately measure the volume of vented or flared natural gas from certain equipment, the operator shall calculate or estimate the volume of vented and flared natural gas based API measurement standards or on the result of an annual GOR test for that well reported on form C-116.

Commented [A19]: We recommend that this requirement align with NMED EER reporting timelines (as noted above).

Commented [A20]: Can NMOCD allow for grandfathering of equipment if the operator is in compliance with the gas capture requirements?

Commented [A21]: Will on-site cameras or remote monitoring count under this provision? If there are no issues found, how should non-events be recorded?

Commented [A22]: According to the proposed 19.15.28.22 NMAC Section C subsection 5, pipeline operators are allowed to calculate where it is not practicable to meter. Can this same standard be applied to this Part of the proposed rules?

Commented [A23]: We recommend extending this date.

Commented [A24]: BLM has released new proposed rules that will be published in the Federal Register for Part 3175. Will this citation remain valid?

Commented [A25]: In some cases, it is not the best practice to install a meter on our flare lines for safety concerns as "Differential Pressure" metering inherently puts a restriction in a previously designed safety system. If there are safety concerns related to this requirement and previously designed safety systems, in this situation measurement standards or calculations would be a better option.

(e) The operator shall install additional measurement equipment whenever the division determines: (1) that the API measurement standards, calculations, estimates, or existing measurement equipment or GOR test is not sufficient to measure the volume of vented and flared natural gas, and (2) that accurate measurements can be obtained through such additional measurement equipment, ~~P~~provided that the division shall send written notice to the operator of any such requirements and that operator be given no less than thirty days to respond to such notification or request a hearing.

(2) The operator shall report the lost natural gas for each year~~month~~ on a volumetric ~~and percentage~~ basis on form C-115B. The Division shall allow amendments to the C-115 and C-115B to be filed for individual PUN codes.

Commented [A26]: Will the Division allow for amended information to be filed on a PUN basis rather than having to resubmit the entire C-115 report?

(a) To calculate the lost natural gas on a volumetric basis, the operator shall deduct the volume of natural gas sold, used for beneficial use, injected, vented or flared during an emergency or malfunction, and not suitable for transportation, from the natural gas produced.

~~**(b)** To calculate the lost natural gas on a percentage basis, the operator shall add the volume of natural gas sold, used for beneficial use, injected, vented or flared during an emergency or malfunction, and not suitable for transportation, and divide by sum by the total natural gas produced.~~

(3) The operator shall report the volume of vented and flared natural gas for each month in each category in this subparagraph on form C-115B, and state whether the reported volume was calculated, estimated or measured. The operator shall make and keep records of the measurements and estimates, including how the estimated volumes were calculated, for not less than five years and make such records available for inspection by the division upon request.

~~**(a)** emergency or malfunction;~~
~~**(b)** non-scheduled maintenance;~~
~~**(c)** equipment malfunction by operator;~~
~~**(d)** equipment malfunction by third party;~~
~~**(e)** drilling operations;~~
~~**(f)** completion operations;~~
~~**(g)** routine equipment repair and maintenance, including blowdown and depressurization;~~
~~**(h)** routine downhole maintenance, including operation of workover rigs, swabbing rigs, coiled tubing units and similar specialty equipment;~~
~~**(i)** gas beneficially used;~~
~~pilot gas for combustion devices;~~
~~**(j)** purge gas to test or fuel combustion devices;~~
~~**(k)** manual liquid unloading;~~
~~**(l)** bradenhead tests;~~
~~**(m)** packer leakage tests;~~
~~**(n)** uncontrolled storage tanks;~~
~~**(o)** insufficient pipeline availability or capacity;~~
~~**(p)** natural gas quality that is not suitable for transportation and processing because of a high percentage of N_2 or H_2S;~~

~~**(q)** venting in excess of the design specifications of pneumatic controllers and pumps as a result of malfunction or improper or infrequent maintenance;~~

~~**(r)** commencing on January 1, 2022, venting as a result of normal operation of pneumatic controllers and pumps,, except that~~

~~**(i)** in November 2021, the operator shall report the volume of vented natural gas that it reported to a state or federal agency, as revised to include data from pneumatic controllers and pumps in use during 2021 that were not included in the 2020 report; and~~

~~**(ii)***provided that* an operator who vents or flares less than 500,000 cubic feet per year of natural gas is exempted from this subparagraph;~~

~~**(s)** thief hatches that are not properly closed or maintained; and~~

~~**(t)** other volumes not described above.~~

~~**(4)** The operator shall report any venting or flaring that results from an emergency as soon as practicable. This report may be made through a phone call or email to the agency.~~

(4~~5~~) The operator shall notify the division of any major emergency, major malfunction or a period of venting and flaring that exceeds eight consecutive hours in any 24 hour period as soon as practicable by phone call or email, provided that such reporting shall occur before 12 hours after such event(s) are first discovered. A ~~and of all venting or flaring attributed to emergency or malfunction of any duration by submitting a~~ form C-129 shall be filed no later than~~-~~ 24 hours after the first date on which the venting or flaring event occurred, or on the next business day if such event occurs on a weekend or holiday~~72~~48~~24 hours after the commencement of venting and flaring, provided that if the event occurs on a Saturday, Sunday, or recognized holiday, such report will be due on the following workday~~. For all other venting and flaring that are the result of an emergency or malfunction, operator shall file a C-129 with the division fifteen (15) days after discovery of the event.

(a) The operator's form C-129 shall provide and certify the accuracy of the following information:

- **(i)** operator's name;
- **(ii)** name and type of facility;
- **(iii)** equipment involved;
- **(iv)** compositional analysis of the vented and flared natural gas if the natural gas is vented or flared because the quality that is not suitable for transportation and processing because of a high percentage of N_2 or H_2S;
- **(v)** date and time that venting or flaring occurred;
- **(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.

(b) At the division's request, the operator shall provide additional information by the specified date and a certification of the accuracy of the information.

Commented [A27]: It would be a significant burden and costly to provide this information or to prove that an operator can qualify for this exemption, which will make it very difficult to use/qualify for.

Commented [A28]: This is also impossible to accurately quantify.

Commented [A29]: Software is not currently being used by operators which accommodates reporting for the specified categories. Is there a way to streamline the categories into fewer buckets? Also what happens when 2 or more different categories apply?

We have recommended 5 different buckets of information in our comment letter, which we recommend creating a form for. We also recommend keeping these requirements more general in the rule to give some flexibility if form changes are needed.

Commented [A30]: Question: For every leak we potentially find on a quarterly LDAR would a separate set of reporting (C-129 forms) be required? In general, operators will not have documentation of when a leak started. This may result in a lot of reports, which is a problem under the current C-129 system.

Commented [A31]: Catching a sample from tanks or flare line could be tricky due to the low pressure environment. We suggest adding verbiage for accepting compositional analysis from simulations. Or, create a system to use compositional analysis from a particular area.

(5) The filing of a C-129 under this Part shall satisfy the requirement to file a C-141 report for any release of vented or flared gas, provided that operator provide the division with all information and attachments required for a C-141 filing.~~(5)The operator shall report the vented and flared natural gas volumes on royalty statements or check stubs issued to royalty owners in fee and state oil and gas leases on a volumetric and percentage basis to all royalty owners in the mineral estate, being produced by the well on a monthly basis, and keep such reports for not less than five years and make such records available for inspection by the division upon request.~~

~~**(6)** Upon the environment department's request, the operator shall promptly provide a copy of any form filed pursuant to 20.2.27 NMAC.~~

[19.15.27.8 NMAC – N, xx/xx/xx]

19.15.27.9 STATEWIDE NATURAL GAS CAPTURE REQUIREMENTS:

A. Statewide natural gas capture requirements. Commencing January 1, 2022, the operator shall reduce the annual volume of vented and flared natural gas resulting from ~~the total sum of its drilling, completion operations, and~~ production operations within the state ~~on a statewide basis~~ in order to capture ninety-eight percent of the salable natural gas produced from its wells no later December 31, 2026. The division shall calculate and publish each operator's baseline natural gas capture rate based on the operator's 2021 annually reported volumetric ~~monthly~~ data of salable natural gas and lost natural gas for each year~~month~~ on a volumetric ~~and percentage~~ basis on form C-115B. Unless and until a 98% gas capture rate is achieved by the operator, i~~I~~n each calendar year between January 1, 2022 and December 31, 2026, the operator shall increase the percentage of natural gas captured based on the following formula: (2021 baseline loss rate) divided by five.

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

Baseline Natural Gas Capture Rate	Minimum Required Annual Natural Gas Capture Percentage Increase
90-98%	0-1.6%
80-89%	>1.6-3.6%
70-79%	>3.6-5.6%
0-69%	>5.6-20%

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

(3) ~~An~~ If operator that acquires one or more wells from another operator that alter the operator's Baseline Natural Gas Capture Rate~~s~~, the operator shall submit an amended statewide plan to the Division or the operator may choose to comply with acquiree's plan for the well or wells that are acquired. ~~its statewide natural gas capture requirements no later than December 1, 2026 unless the division approves a later date.~~

B. Accounting. No later than 45 days after January 1, 2022 and each year thereafter, the operator shall submit an annual report to the Division certifying compliance with the statewide gas capture requirements in subparts A and C.

Commented [A32]: ONRR's electronic reporting does not allow this information to be submitted in the C-115B categories proposed in the draft. How will this work for federal minerals? Will the NMOCD accept ONRR reports and reporting standards?

Commented [A33]: We recommend deleting this requirement. Royalty owners have separate contracts with operators which govern the payment of royalties and other New Mexico statutes govern the payment of royalty proceeds to these owners.

What if a royalty owner does not agree to allow their payment information to be reviewed by NMOCD (documents subject to IPRA)? This information is can be subject to confidentiality agreements or requirements.

Commented [A34]: How will approvals work?

Commented [A35]: An acquiree's plan may not be executable by the acquiring company. As drafted, the rule would likely impede certain acreage trades and divestitures. These proposed edits are recommended to give acquiring companies the ability to move

C. Credits and Exclusions. The operator's volume of vented and flared natural gas shall be counted as produced natural gas and excluded from the volume of natural gas sold or used for beneficial use in the calculation of its statewide natural gas capture requirements, except for the following credits which may be obtained and applied by the operator towards its 98% gas capture threshold in the year in which they are earned:~~.~~

(1) The volume of natural gas sold, used for beneficial use, injected, vented or flared during an emergency or malfunction, and not suitable for transportation, from the natural gas produced shall not be included in the calculation of the operator's gas capture threshold.

(2) The operator may exclude from the volume of produced natural gas the volume of vented and flared natural gas from a pneumatic pump or controller that is properly operated.

~~**(2)** Subject to the division's approval, the operator may exclude natural gas from the volume of produced natural gas, specifically Subparagraph (p) of Paragraph (3) of Subsection E of 19.15.27.8 NMAC, provided that the operator identified the volume of natural gas, the reasons that the operator vented or flared the natural gas rather than capturing it and any other relevant information requested by the division.~~

~~**(3)** Subject to the division's approval, the operator may exclude natural gas that is beneficially used or injected from the volume of produced natural gas, specifically~~ ~~**(4)** The operator may exclude natural gas from the volume of produced natural gas, specifically Subparagraph (r) of Paragraph (3) of Subsection E of 19.15.27.8 NMAC., provided that the operator identified the volume of vented natural gas, the reasons that the operator vented the natural gas rather than capturing it and any other relevant information requested by the division.~~

(3~~5~~4) The operator may obtain a~~a~~ credit of up to 10 % against its reported volume of lost natural gas by using a division approved- ALARM technology to monitor, discover, report, isolate and make repairs to prevent leaks of natural gas. To obtain a credit, the operator shall

(a) use ALARM technology at least two times per calendar year to obtain a credit of 5%;

(b) to obtain an additional credit of 5%, operator shall make the initial discovery using the ALARM technology; and

~~**(c)**~~ isolate the leak of natural gas from its own well within 48 hours of discovery and make the repair within 15 days of discovery.

(4~~5~~) The operator may use ~~a~~ credits against its reported volume of lost natural gas loss no more than once in any 24~~13~~ month period following the division's approval of such credit.

(5~~6~~) Additional credits may be obtained as follows:~~The credit shall be determined as follows:~~

~~**(a)** a credit of thirty percent of the volume of natural gas discovered and isolated within 48 hours of discovery and timely repaired if the leak occurs at the operator's well or production facilities;~~

(a) an additional credit of ten percent if the operator uses ALARM technology no less than four times per year; and

Commented [A36]: Deletions are being recommended because we are recommending changes to the C-115B requirements. If these exceptions are kept in the rule, the following comments provide input on the proposed exceptions made by the Division.

Commented [A37]: (p) states: "natural gas quality that is not suitable for transportation and processing because of a high percentage of N_2 or H_2S." This gas typically can't be sold or used, It seems odd that this sort of flaring would count against gas capture percentages without obtaining approval from the Division.

Commented [A38]: (a) allows for flaring in the event of an emergency. Based on the definition of surface waste in the Oil and Gas Act, shouldn't there be exemptions for all venting and flaring events that are necessary and not excessive? Not just emergencies?

Commented [A39]: (r) relates to the normal operation of pneumatic pumps. Calculating gas emitted would be onerous and burdensome, as would reporting. Would an operator need to justify normal operations of pneumatics? This would require a large C-129 submissions for each pneumatic pump each month?

Commented [A40]: Should the operator obtain credit for properly monitoring, even if a leak is not discovered? This would incentivize more flyovers.

Commented [A41]: Would this be another/separate annual report? How will approvals work?

Commented [A42]: How is this calculated? It is probably more efficient for the Division to assign a percent.

Commented [A43]: Can this be different types of ALARM technology? For example, if an operator employs 2 advanced leak inspections, with a system approved by NMED, and 2 flyovers does that count as 4 ALARM surveys?

(b) an additional credit of ten percent if the operator uses ALARM technology and, as a result of such use, provides credible information to an unaffiliated operator and the division that the unaffiliated operator's well has a leak of natural gas within five business days of discovery.

(6~~7~~) To obtain a credit, the operator shall submit an application to the division describing

(a) the ALARM technology;

(b) the date of monitoring, discovery, isolation and repair, if required;

~~**(c)** the estimated volume of the natural gas lost and isolated after the date of discover~~

~~**(d)**~~ a summary of the actions the operator took to isolate and repair the leak, if repairs were required;

(e) ~~visual~~ documentation showing use of ALARM technology ~~of the discovery and isolation~~;

(f) if applicable, a certification that the operator did not know or have reason to know of the leak of natural gas before the discovery using ALARM technology;

(g) any leaks timely reported which were found using the ALARM technology which are isolated and repaired according to this part shall not be subject to enforcement or civil penalties when reported to the Division.

(7~~8~~) Credits shall be used only if approved by the division, and only by the operator, and cannot be traded or used by another operator.

D. Violation of natural gas capture requirement. The division may pursue any action authorized by law against an operator that does not meet a statewide natural gas capture requirement, including to curtail an allowable~~production allowance~~, withhold or deny a drilling permit, suspend or revoke an authorization to transport or assess a civil penalty.

E. Natural gas management plan.

(1) Operators who have obtained at least a 98% gas capture rate under Part 19.15.27.9 are exempt from this subsection and are not required to submit a natural gas management plan.

(2~~1~~) After May 31, 2021, the operator shall file a natural gas management plan~~. with each APD.~~ The operator may file a single natural gas management plan for multiple wells drilled from a single well pad or that will be connected to a central delivery point. These plans can be designated as confidential by the operator and such confidentiality shall be maintained by the division.

(3~~2~~) The natural gas management plan shall describe the actions that the operator will take at each well to meet its statewide natural gas capture requirements, reduce waste, eliminate venting and flaring of natural gas to the greatest extent possible and maximize the efficient, safe and economic recovery of ~~the state's~~ oil and natural gas, and include the following information for each well:

(a) operator's name;

(b) well name(s), ~~API number~~, and location(s)~~ and footage~~;

(c) estimated drilling, completion and anticipated first production date;

Commented [A44]: This information is subject to confidentiality agreements/provisions and other operator information is not disclosed to competitors.

Commented [A45]: Since good monitoring is being obtained through the use of ALARM Technology, can there be an exclusion from enforcement by NMED & NMOCD for leaks found and timely repaired?

Commented [A46]: Could the Natural Gas Management Plan be a general plan (i.e. for an entire county for the applicant) and then add each pad as an appendix to the plan? Similar to SPCC plans. This would decrease burden on regulatory dept.

Commented [A47]: Incentives like this would encourage operators to obtain an established 98% gas capture rate sooner vs. later.

Commented [A48]: This language is confusing. Is the agency seeking information on State Trust Minerals?

Commented [A49]: API numbers are not assigned until after the APD is issued by the Division.

Commented [A50]: The Division's orders and long-standing practices have recognized that footages often change prior to drilling.

(d) anticipated natural gas volume production in units of MCFD annually for the first three years of production;

(e) existing natural gas gathering system contracted or anticipated to contract to gather the natural gas, including

(i) natural gas gatherer's name;

(ii) name and location of the natural gas gathering system;

(iii) approximate distance in feet of pipeline required to connect to the natural gas gathering system;

(iv) name and location of the anticipated natural gas processing plant contracted or anticipated to contract to process the natural gas;

(v) if available and able to be disclosed, maximum daily capacity of the natural gas pipeline and compressors;

(vi) if available and able to be disclosed, the current throughput of the natural gas pipeline at the time the plan is submitted and compressors;

(vii) if available and able to be disclosed, the anticipated daily capacity of the natural gas pipeline and compressors on the date of first sale; and

~~**(viii)** anticipated throughput of natural gas pipeline and compressors on the date of fireliability of the natural gathering system, including the average annual system downtime; [[Do we have access to this info~~

(x) if available and able to be disclosed, other issues and expansion plans affecting the gathering of natural gas in the general area;

~~**(f)** detailed map depicting each existing, planned and anticipated natural gas gathering system in the general area, including~~

~~**(i)** natural gas gatherer's name;~~

~~**(ii)** gathering pipelines;~~

(f) a flowback strategy, including

(i) temporary equipment to be used during flowback to reduce the venting of natural gas, including sand traps and settling tanks; and

(ii) measures to be used to flare natural gas if such natural gas cannot be routed immediately and directly to a sales line;

(g) options for the beneficial use of natural gas that cannot be connected to a natural gas gathering system; and if the operator determines, based on the available information at the time of submittal, that a natural gas gathering system will not be available or will not have capacity on the date of first production from the well to transport one hundred percent of the anticipated volume of natural gas produced, the operator shall submit a venting and flaring plan, with the natural gas management plan, containing a detailed analysis of the potential alternative uses for the natural gas until a gathering system is available that describes how the operator will avoid venting and flaring natural gas from the well including

(i) power generation on lease;

(ii) power generation for grid;

(iii) compression on lease;

(iv) liquids removal on lease;

(v) reinjection for underground storage;

(vi) reinjection for temporary storage;

(vii) reinjection for enhanced oil recovery; and

Commented [A51]: This information may not be available during the time of APD submission.

Commented [A52]: Midstream and purchasing agreements typically contain confidentiality provisions that may cause concerns with disclosing this information publically.

Commented [A53]: This creates a substantial administrative burden on operators and it is unclear how this relates to the prevention of methane emissions?

(viii) other alternative uses ~~approved by the division~~.

(4~~3~~) After the operator submits the natural gas management plan, if the natural gas gathering system becomes unavailable or will not have capacity to transport one hundred percent of the natural gas production from the well, ~~no later than 30 days after becoming aware of such information,~~ the operator shall submit ~~for the division's approval~~ a revised venting and flaring plan to the division containing the information specified above in Paragraph (2) of Subsection E of 19.15.27.9 NMAC.

(5~~4~~) The operator shall certify the following statements:

(a) the operator communicated with one or more operators of natural gas gathering systems in the general area about transporting natural gas from the well;

(b) the operator provided each operator of a natural gas gathering system in the general area with the location; dates of drilling, completion and anticipated first production; and anticipated volume of natural gas production in units of MCFD for the first three years of production of the well; and

(c) the operator determined that there is or will be

(i) a natural gas gathering system in the general area with sufficient capacity to transport natural gas on the date of anticipated first production of the well; or

(ii) a natural gas gathering system in the general area with sufficient capacity to transport natural gas during the anticipated productive life of the well.

(6~~5~~) The operator shall include a certification from each operator of a natural gas gathering system in the general area stating that the information submitted is accurate based on information available at the time of the submission; and that

~~**(i)** the operator complied with Subparagraphs (a) and (b) of Paragraph (4) of Subsection D of 19.15.27.9 NMAC; and~~

~~**(ii)**~~ the operator of the natural gas gathering system has not disagreed with any statements regarding natural gas gathering systems included within the plan. ~~concurs in the operator's determination in Items (i) or (ii) of Subparagraph (c) of Paragraph (4) of Subsection D of 19.15.27.9 NMAC.~~

(7~~6~~) If the operator does not comply with the plan submission requirements contained in this Part, ~~make the certifications or submit an adequate venting and flaring plan, or if the division determines that the operator will not have adequate natural gas takeaway capacity at the time a well will be spud,~~ the division may ~~:~~

~~**(a)**~~ deny an ~~the~~ APD for wells included within the area covered by the plan.~~; or~~

~~**(b)** conditionally approve the APD.~~

[19.15.27.9 NMAC – N, xx/xx/xx]

Commented [A54]: Beneficial use of gas is a contractual right allowed under oil and gas leases. Separate approval has not been required by NMOCD (which is not a party to oil and gas leases) to beneficially use gas on-lease.

If the Division is concerned about a particular use, could you state: in accordance with applicable orders, rules and regulations. I would leave this general and not state Division rules/regs because BLM may have different requirements for on-lease gas uses.

Commented [A55]: Is further approval necessary if the operator is subject to the 98% gas capture requirement?

Commented [A56]: This language essentially would eliminate discretion for operator plans to maintain the 98% gas capture requirement. If the goal is flexibility, then could the Division require compliance with plan submissions and certifications requirements?
Another option would be to allow operators to certify that they have takeaway capacity in place within 10 days of the spud date, and provide for a shorter certification form when the certification can be made.

Commented [A57]: We may support conditional approvals. However, we had a lot of questions as to what a conditional approval would look like. How does conditional approval potentially impact operations for the operator? We would also like to know what the differences between an approval and conditional approval for APDs from NMOCD?

OCD DRAFT
July 20, 2020

Clean Version of EXHIBIT 2 – Redline of EMNRD Rule

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AN GAS
PART 27 VENTING AND FLARING OF NATURAL GAS

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

19.15.27.2 SCOPE: 19.15.27 NMAC applies to persons engaged in oil and gas development and production within New Mexico.
[19.15.27.2 NMAC – N, xx/xx/xx]

19.15.27.3 STATUTORY AUTHORITY: 19.15.27 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/xx]

19.15.27.4 DURATION: Permanent.
[19.15.27.4 NMAC – N, xx/xx/xx]

19.15.27.5 EFFECTIVE DATE: [DATE], unless a later date is cited at the end of a section.
[19.15.27.5 NMAC – N, xx/xx/xx]

19.15.27.6 OBJECTIVE: To regulate the venting and flaring of natural gas from wells and production equipment and facilities to prevent waste and protect correlative rights, public health and the environment.
[19.15.27.6 NMAC – N, xx/xx/xx]

19.15.27.7 DEFINITIONS: Definitions shall have the meaning specified in 19.15.2 NMAC except as specified below.

A. "ALARM" means advanced leak and repair monitoring, which may include but is not limited to remote leak detection systems, fly over surveys, well monitoring systems approved by the New Mexico Environment Department, and other advanced leak detection technology.

B. "Air Pollution Control Equipment" means air pollution control equipment as defined by the New Mexico Environment Department.

C. Average daily production" has the same meaning as in Subsection A of 19.15.6.7 NMAC.

D. **"AVO"** means audio, visual and olfactory, which may include, but is not limited to, ALARM systems, remote leak detection, and well monitoring systems approved by the New Mexico Environment Department or the Division.

E. **"Beneficial Use"** means a use of oil, natural gas, or water for any and all rights and privileges necessary, incident to or convenient for operations permitted under an oil and gas lease, communitization agreement, or unit agreement.

F. **"Completion operations"** means the period that begins with the initial perforation of the well in the completed interval and concludes on the earlier of 30 days after commencement of initial flowback or when permanent production equipment is in use at the well.

G. **"Drilling"** means the period that begins when a well is spud and concludes when casing and cementing has been completed and casing slips have been set to install tubing head in the well.

H. **"Emergency"** means a sudden unexpected occurrence or an unforeseen combination of circumstances in which the loss of natural gas is uncontrollable or necessary.

I. **"Gas-to-oil ratio (GOR)"** for purposes of 19.15.27 NMAC means the ratio of natural gas to oil in the production stream expressed in standard cubic feet of natural gas per barrel of oil.

J. **"Initial flowback"** means the period during completion operations that begins with the onset of flowback and concludes when it is technically feasible for a separator to function.

K. **Major Emergency:** A venting or flaring event that is the result of an emergency: (1) that results in estimated volumes in excess of 500 MCF, or (2) a situation that creates a threat to public safety.

L. **Major Malfunction**: A venting or flaring event that is the result of a malfunction: (1) that results in estimated volumes in excess of 500 MCF, or (2) a situation that creates a threat to public safety.

M. **"Malfunction"** means any sudden and failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions."

N. **"N_2"** means nitrogen gas.

O. **"Natural gas"** means a salable gaseous mixture of hydrocarbon compounds, primarily composed of methane, and includes both casinghead gas and gas as defined in 19.15.2 NMAC.

P. **"Production operations"** means the period that begins on the earlier of 31 days following the commencement of initial flowback concludes when the well is plugged and abandoned.

Q. **"Salable"** means that hydrocarbons meet a specification that can be sold and transported pursuant to an applicable midstream, transportation, or purchase and sale agreement.

Commented [A1]: This definition matches the rights afforded under most oil and gas lease agreements, including the right of "free use" of gas given under the New Mexico Statutory lease forms.

Commented [A2]: Has the agency looked at how its orders (i.e., pooling order) reference the term completion or completions to see if there are any unintended consequences related to defining this term in the regulations? Stated another way, has the division determined if this definition will change or alter the deadlines for such operations contemplated under already issued orders?

Commented [A3]: The New Mexico Supreme Court has embraced a different definition of the term "drilling operations" in the context of leasehold and JOA interpretation disputes. Could this term be limited to just the word "drilling" to avoid discrepancies in the law?

Commented [A4]: Emergencies, however, have not historically qualified as waste under the Oil and Gas Act. Proposed for the agency's consideration is a definition more similar to what is found in other New Mexico statutes and regulations.

Commented [A5]: This definition would not include things such as a gas buster which would meet the definition here. For sake of clarity would suggest utilizing air pollution control equipment and deleting this definition.

Commented [A6]: The goal of adding this word is to properly consider non-saleable gas, such as H2S. We did not find an express exception in the proposed rule (as drafted) for non-salable H2S and Nitrogen, but other existing NMOCD regulatory requirements do likely require H2S to be combusted.

R. **"Separation flowback"** means the period during completion operations that begins when it is technically feasible for a temporary separator to function and concludes on the earlier of 30 days after initial flowback begins or when permanent production equipment is in use at the well or production facility.

S. **"Vent" or "Venting"** means the release of uncombusted salable natural gas to the atmosphere but does not include equipment leaks regulated by the New Mexico Environment Department.

[19.15.27.7 NMAC – N, xx/xx/xx]

19.15.27.8 VENTING AND FLARING OF NATURAL GAS:

A. Venting and flaring of natural gas during drilling, completion or production operations constitutes surface waste, as defined by the Oil and Gas Act, if the venting or flaring constitutes an unnecessary and excessive surface loss or destruction of gas without beneficial use. The beneficial use of gas is permitted and does not constitute a waste. Venting and flaring is prohibited except as authorized below.

B. **Venting and flaring during drilling.**

(1) If technically feasible, the operator shall capture or combust natural gas escaping from the well using best available control technologies.

(2) If flaring occurs during drilling, air pollution control equipment that is used shall equipped with an automatic ignition system or continuous pilot.

(3) The operator may vent natural gas during drilling if gas capture is technically infeasible or in order to avoid a risk of an immediate and substantial adverse impact on safety, public health or the environment.

(4) Operator, however, may flare or vent natural gas if flaring is required or permitted in accordance with federal or state law, rule, regulation, order, or permits. If such flaring or venting is done in accordance with a law, rule, regulation, order or permit, it shall be exempted from the gas capture requirements contained within Part 19.15.27.9.

C. **Venting and flaring during completion operations.**

(1) During initial flowback, the operator shall route flowback fluids into a completion or storage tank and commence operation of a separator when it is technically feasible for a separator to function.

(2) During separation flowback, the operator shall capture and route recovered natural gas to a gas flowline or collection system, re-inject the natural gas or beneficially use the natural gas.

(3) If flaring is necessary, the operator may route recovered natural gas to a flare, provided that the flare is equipped with an automatic igniter or continuous pilot.

(4) The operator may vent natural gas if gas capture is technically infeasible or if capturing or flaring the natural gas poses a risk to safe operations or personnel safety.

(5) Operator, however, may flare or vent natural gas if flaring is required or permitted in accordance with federal or state law, rule, regulation, order, or permits. If such flaring or venting is done in accordance with a law, rule, regulation, order or permit, it shall be exempted from the gas capture requirements contained within Part 19.15.27.9.

D. **Venting and flaring during production operations.**

Commented [A7]: Our understanding is that leaks (via LDAR) is regulated by NMED.

Commented [A8]: In general, we recommend removing most of 19.15.27.8 and instead relying on the 98% gas capture requirements in 19.15.27.9. This will allow operators some flexibility to focus investments on innovative technology to better achieve gas capture.

Note that current oil prices are around $40/bbl for WTI. The Federal Reserve Bank of Dallas has recently found that "shut-in prices" in August of 2020 for the New Mexico Delaware Basin are around $32/bbl. The proposed rules will increase New Mexico operating costs by requiring retrofits, the installation of meters, and imposing additional reporting.

Commented [A9]: If it is not technically feasible to capture gas during drilling, should these volumes be included in the 98% gas capture requirement? Do these volumes qualify waste under the statutory definition for surface waste?

Commented [A10]: If this language is kept, we recommend that this deadline be aligned with EER reporting deadlines to the NMED, which are:
Initial: following business day after discovery
Final: 10 days following the event

Commented [A11]: If this content is kept in the rule, we recommend specifying how the communication must be made and documented.

Commented [A12]: This language, related to C-129 filings, either has inconsistences or less information than the C-129 requirements discussed below. I recommend having one section (below) that applies to C-129s.

Commented [A13]: It would helpful to have clarification as to if a C-129 is needed during completions in emergency situations, same as drilling. There is no specific reference in the draft rules.

Commented [A14]: If it is not technically feasible to capture gas during these operations, should these volumes be included in the 98% gas capture requirement? Are these volumes waste if they can't feasibly be captured?

(1) During production operations, the operator shall not vent or flare natural gas except as authorized below in Subparagraph (2) of Subsection D of 19.15.27.8 NMAC.

(2) The operator may vent or flare natural gas during production operations:

(a) if flaring is required or permitted in accordance with federal or state law, rule, regulation, order, or a permit issued by a federal agency or New Mexico Environment Department and operator complies with the gas capture requirements contained in Part 19.15.27.9.

(b) during an emergency or malfunction;

(c) to unload or clean-up a well to atmospheric pressure,

(i) if the operator allows the well to vent only so long as necessary to achieve a stabilized rate and pressure;

(ii) for liquids unloading by manual purging, when the operator remains present on-site until the end of unloading, takes all reasonable actions to achieve a stabilized rate and pressure at the earliest practical time and takes all reasonable actions to minimize venting to the maximum extent practicable;

(iii) for a well equipped with a plunger lift system or an automated control system, when the operator optimizes the operation of the system to minimize the venting of natural gas; or

(iv) during downhole well maintenance, if and only when the operator minimizes the venting of natural gas to the extent consistent with safe operation and best management practices; and

(d) during the following activities to the extent authorized by applicable state or federal law, including any permits, notices and regulations, which regulate the emission of hydrocarbons and volatile organic compounds:

(i) gauging or sampling of a storage tank or other low-pressure production vessel;

(ii) loading out liquids from a storage tank or other low-pressure production vessel to a transport vehicle;

(iii) scheduled repair and maintenance, including blowing down and depressurizing production equipment to perform repair and maintenance;

(iv) normal operation of a gas-activated pneumatic controller or pump;

(v) normal operation of a storage tank or other low-pressure production vessel, but not including venting from a thief hatch that has not been fully and timely closed or from a seal that has not been maintained on an established schedule;

(vi) a bradenhead test;

(vii) a packer leakage test; or

Commented [A15]: 19.15.28.22 Section B subsection 3(e-g) says this is an acceptable form of venting? Can this language match the requirements contained in that Part?

(viii) a production test that does not exceed 24 hours unless the division requires or approves a longer test period.

(3) The operator shall conduct an AVO inspection which can be completed using the the New Mexico Environment Department's LDAR requirements [enter CITE], or using AVO inspections at the frequency specified below to confirm that all production equipment is operating properly and there is no venting except as allowed by Paragraph (2) of Subsection D of 19.15.27.8 NMAC. The operator shall conduct the AVO inspection quarterly, or:

(a) If using an LDAR program approved the Environment Department, operator shall make and keep a record of such inspections pursuant to the statutes, regulations and rules issued by the New Mexico Environment Department, and shall make such records available for inspection upon request by the Division.

(b) If an operator is in compliance with the gas capture requirements contained in Section 19.15.27.9, then the operator shall only be required to perform AVO inspections semi-annually under this Part.

(**5**) **Performance standards for separation, storage tank and flare equipment.**

(a) The operator shall design a temporary or permanent separation or storage tank to minimize the natural gas flashing and vapor accumulation for equipment installed after the Effective Date of this Rule. Wells drilled prior to the Effective Date of this Rule shall be included in the gas capture requirements contained in Part 19.15.27.9.

(b) The operator shall equip a permanent storage tank associated with production operations that is installed after {effective date of rule} with an automatic gauging system to reduce the venting of natural gas.

(c) The operator shall combust all natural gas in air pollution control equipment designed for and operated at maximum efficiency.

(i) A flare stack installed after the Effective Date of this Rule shall be equipped with an automatic ignitor or continuous pilot.

(d) The operator shall inspect all flare stacks quarterly to confirm that flare stacks are being properly maintained and operated in conformance with design, and shall make and keep a record of each inspection for not less than five years and make such records available for inspection by the division upon request.

E. Measurement and reporting of vented and flared natural gas.

(1) The operator shall measure, calculate or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion operations and production operations regardless of the reason or authorization for such venting and flaring.

(a) The operator shall install equipment to measure the volume of flared natural gas using high pressure flaring equipment, from a well authorized by an APD issued after May 31, 2022 that has an average daily production greater than 40 barrels of oil or 250,000 cubic feet of natural gas.

(b) Equipment leaks shall not be considered vented or flared volumes under the Part.

(c) Measurement 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 measurement equipment.

Commented [A16]: NMED's draft rules allow for exemptions for facilities with a PTE of <15tpy of VOCs. Can there be a similar exemption in rule so there is clarity and consistancy?

Commented [A17]: We recommend creating an exemption for lower producing wells so that the rule doesn't result in the unnecessary forfeiture of real property rights.

Another option would be to better define what is required under AVO inspections. Is this similar to LDAR or merely someone on lease looking at the flare? Can this be accomplished through remote systems or advanced technology?

Commented [A18]: This would comport with OOOOa.

Commented [A19]: We recommend that this requirement align with NMED EER reporting timelines (as noted above).

Commented [A20]: Can NMOCD allow for grandfathering of equipment if the operator is in compliance with the gas capture requirements?

Commented [A21]: Will on-site cameras or remote monitoring count under this provision? If there are no issues found, how should non-events be recorded?

Commented [A22]: According to the proposed 19.15.28.22 NMAC Section C subsection 5, pipeline operators are allowed to calculate where it is not practicable to meter. Can this same standard be applied to this Part of the proposed rules?

Commented [A23]: We recommend extending this date.

Commented [A24]: BLM has released new proposed rules that will be published in the Federal Register for Part 3175. Will this citation remain valid?

Commented [A25]: In some cases, it is not the best practice to install a meter on our flare lines for safety concerns as "Differential Pressure" metering inherently puts a restriction in a previously designed safety system. If there are safety concerns related to this requirement and previously designed safety systems, in this situation measurement standards or calculations would be a better option.

(d) For a well that does not require measurement equipment, or in the event measurement equipment cannot be used to accurately measure the volume of vented or flared natural gas from certain equipment, the operator shall calculate or estimate the volume of vented and flared natural gas based API measurement standards or on the result of an annual GOR test for that well reported on form C-116.

(e) The operator shall install additional measurement equipment whenever the division determines: (1) that the API measurement standards, calculations, estimates, or existing measurement equipment or GOR test is not sufficient to measure the volume of vented and flared natural gas, and (2) that accurate measurements can be obtained through such additional measurement equipment, provided that the division shall send written notice to the operator of any such requirements and that operator be given no less than thirty days to respond to such notification or request a hearing.

(2) The operator shall report the lost natural gas for each year on a volumetric basis on form C-115B. The Division shall allow amendments to the C-115 and C-115B to be filed for individual PUN codes.

Commented [A26]: Will the Division allow for amended information to be filed on a PUN basis rather than having to resubmit the entire C-115 report?

(a) To calculate the lost natural gas on a volumetric basis, the operator shall deduct the volume of natural gas sold, used for beneficial use, injected, vented or flared during an emergency or malfunction, and not suitable for transportation, from the natural gas produced.

(3) The operator shall report the volume of vented and flared natural gas for each month in each category in this subparagraph on form C-115B, and state whether the reported volume was calculated, estimated or measured. The operator shall make and keep records of the measurements and estimates, including how the estimated volumes were calculated, for not less than five years and make such records available for inspection by the division upon request.

(4) The operator shall notify the division of any major emergency, major malfunction or a period of venting and flaring that exceeds eight consecutive hours in any 24 hour period as soon as practicable by phone call or email, provided that such reporting shall occur before 12 hours after such event(s) are first discovered. A form C-129 shall be filed no later than 24 hours after the first date on which the venting or flaring event occurred, or on the next business day if such event occurs on a weekend or holiday. For all other venting and flaring that are the result of an emergency or malfunction, operator shall file a C-129 with the division fifteen (15) days after discovery of the event.

(a) The operator's form C-129 shall provide and certify the accuracy of the following information:

(i) operator's name;
(ii) name and type of facility;
(iii) equipment involved;
(iv) compositional analysis of the vented and flared natural gas if the natural gas is vented or flared because the quality that is not suitable for transportation and processing because of a high percentage of N_2 or H_2S;
(v) date and time that venting or flaring occurred;
(vi) measured or estimated volume of vented or flared natural gas;

Commented [A27]: Catching a sample from tanks or flare line could be tricky due to the low pressure environment. We suggest adding verbiage for accepting compositional analysis from simulations. Or, create a system to use compositional analysis from a particular area.

(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.

(b) At the division's request, the operator shall provide additional information by the specified date and a certification of the accuracy of the information.

(5) The filing of a C-129 under this Part shall satisfy the requirement to file a C-141 report for any release of vented or flared gas, provided that operator provide the division with all information and attachments required for a C-141 filing.
[19.15.27.8 NMAC – N, xx/xx/xx]

19.15.27.9 STATEWIDE NATURAL GAS CAPTURE REQUIREMENTS:

A. Statewide natural gas capture requirements. Commencing January 1, 2022, the operator shall reduce the annual volume of vented and flared natural gas resulting from production operations within the state in order to capture ninety-eight percent of the salable natural gas produced from its wells no later December 31, 2026. The division shall calculate and publish each operator's baseline natural gas capture rate based on the operator's 2021 annually reported volumetric data of salable natural gas and lost natural gas for each year on a volumetric basis on form C-115B. Unless and until a 98% gas capture rate is achieved by the operator, in each calendar year between January 1, 2022 and December 31, 2026, the operator shall increase the percentage of natural gas captured based on the following formula: (2021 baseline loss rate) divided by five.

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

Baseline Natural Gas Capture Rate	Minimum Required Annual Natural Gas Capture Percentage Increase
90-98%	0-1.6%
80-89%	>1.6-3.6%
70-79%	>3.6-5.6%
0-69%	>5.6-20%

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

(3) If operator that acquires one or more wells from another operator that alter the operator's Baseline Natural Gas Capture Rate, the operator shall submit an amended statewide plan to the Division or the operator may choose to comply with acquiree's plan for the well or wells that are acquired.

B. Accounting. No later than 45 days after January 1, 2022 and each year thereafter, the operator shall submit an annual report to the Division certifying compliance with the statewide gas capture requirements in subparts A and C.

C. Credits and Exclusions. The operator's volume of vented and flared natural gas shall be counted as produced natural gas and excluded from the volume of natural gas sold or

Commented [A28]: We recommend deleting this requirement. Royalty owners have separate contracts with operators which govern the payment of royalties and other New Mexico statutes govern the payment of royalty proceeds to these owners.

What if a royalty owner does not agree to allow their payment information to be reviewed by NMOCD (documents subject to IPRA)? This information is can be subject to confidentiality agreements or requirements.

Commented [A29]: How will approvals work?

Commented [A30]: An acquiree's plan may not be executable by the acquiring company. As drafted, the rule would likely impede certain acreage trades and divestitures. These proposed edits are recommended to give acquiring companies the ability to move

Commented [A31]: Deletions are being recommended because we are recommending changes to the C-115B requirements. If these exceptions are kept in the rule, the following comments provide input on the proposed exceptions made by the Division.

used for beneficial use in the calculation of its statewide natural gas capture requirements, except for the following credits which may be obtained and applied by the operator towards its 98% gas capture threshold in the year in which they are earned:

(1) The volume of natural gas sold, used for beneficial use, injected, vented or flared during an emergency or malfunction, and not suitable for transportation, from the natural gas produced shall not be included in the calculation of the operator's gas capture threshold.

(2) The operator may exclude from the volume of produced natural gas the volume of vented and flared natural gas from a pneumatic pump or controller that is properly operated.

(3) The operator may obtain a credit of up to 10 % against its reported volume of lost natural gas by using a division approved- ALARM technology to monitor, discover, report, isolate and make repairs to prevent leaks of natural gas. To obtain a credit, the operator shall

(a) use ALARM technology at least two times per calendar year to obtain a credit of 5%;

(b) to obtain an additional credit of 5%, operator shall make the initial discovery using the ALARM technology; and isolate the leak of natural gas from its own well within 48 hours of discovery and make the repair within 15 days of discovery.

(4) The operator may use credits against its reported volume of lost natural gas loss no more than once in any 24 month period following the division's approval of such credit.

(5) Additional credits may be obtained as follows:

(a) an additional credit of ten percent if the operator uses ALARM technology no less than four times per year; and

(b) an additional credit of ten percent if the operator uses ALARM technology and, as a result of such use, provides credible information to an unaffiliated operator and the division that the unaffiliated operator's well has a leak of natural gas within five business days of discovery.

(6) To obtain a credit, the operator shall submit an application to the division describing

(a) the ALARM technology;

(b) the date of monitoring, discovery, isolation and repair, if required;

(d) a summary of the actions the operator took to isolate and repair the leak, if repairs were required;

(e) documentation showing use of ALARM technology ;

(f) if applicable, a certification that the operator did not know or have reason to know of the leak of natural gas before the discovery using ALARM technology;

(g) any leaks timely reported which were found using the ALARM technology which are isolated and repaired according to this part shall not be subject to enforcement or civil penalties when reported to the Division.

(7) Credits shall be used only if approved by the division, and only by the operator, and cannot be traded or used by another operator.

Commented [A32]: Should the operator obtain credit for properly monitoring, even if a leak is not discovered? This would incentivize more flyovers.

Commented [A33]: Would this be another/separate annual report? How will approvals work?

Commented [A34]: How is this calculated? It is probably more efficient for the Division to assign a percent.

Commented [A35]: Can this be different types of ALARM technology? For example, if an operator employs 2 advanced leak inspections, with a system approved by NMED, and 2 flyovers does that count as 4 ALARM surveys?

Commented [A36]: This information is subject to confidentiality agreements/provisions and other operator information is not disclosed to competitors.

Commented [A37]: Since good monitoring is being obtained through the use of ALARM Technology, can there be an exclusion from enforcement by NMED & NMOCD for leaks found and timely repaired?

D. Violation of natural gas capture requirement. The division may pursue any action authorized by law against an operator that does not meet a statewide natural gas capture requirement, including to curtail an allowable, withhold or deny a drilling permit, suspend or revoke an authorization to transport or assess a civil penalty.

E. Natural gas management plan.

(1) Operators who have obtained at least a 98% gas capture rate under Part 19.15.27.9 are exempt from this subsection and are not required to submit a natural gas management plan.

(2) After May 31, 2021, the operator shall file a natural gas management plan. The operator may file a single natural gas management plan for multiple wells drilled from a single well pad or that will be connected to a central delivery point. These plans can be designated as confidential by the operator and such confidentiality shall be maintained by the division.

(3) The natural gas management plan shall describe the actions that the operator will take at each well to meet its statewide natural gas capture requirements, reduce waste, eliminate venting and flaring of natural gas to the greatest extent possible and maximize the efficient, safe and economic recovery of oil and natural gas, and include the following information for each well:

(a) operator's name;

(b) well name(s), [, and location(s);

(c) estimated drilling, completion and anticipated first production date;

(d) anticipated natural gas volume production in units of MCFD annually for the first three years of production;

(e) existing natural gas gathering system contracted or anticipated to contract to gather the natural gas, including

(i) natural gas gatherer's name;

(ii) name and location of the natural gas gathering system;

(iii) approximate distance in feet of pipeline required to connect to the natural gas gathering system;

(iv) name and location of the anticipated natural gas processing plant contracted or anticipated to contract to process the natural gas;

(v) if available and able to be disclosed, maximum daily capacity of the natural gas pipeline and compressors;

(vi) if available and able to be disclosed, the current throughput of the natural gas pipeline at the time the plan is submitted and compressors;

(vii) if available and able to be disclosed, the anticipated daily capacity of the natural gas pipeline and compressors on the date of first sale; and

(x) if available and able to be disclosed, other issues and expansion plans affecting the gathering of natural gas in the general area;

(f) a flowback strategy, including

(i) temporary equipment to be used during flowback to reduce the venting of natural gas, including sand traps and settling tanks; and

(ii) measures to be used to flare natural gas if such natural gas cannot be routed immediately and directly to a sales line;

Commented [A38]: Could the Natural Gas Management Plan be a general plan (i.e. for an entire county for the applicant) and then add each pad as an appendix to the plan? Similar to SPCC plans. This would decrease burden on regulatory dept.

Commented [A39]: Incentives like this would encourage operators to obtain an established 98% gas capture rate sooner vs. later.

Commented [A40]: This language is confusing. Is the agency seeking information on State Trust Minerals?

Commented [A41]: API numbers are not assigned until after the APD is issued by the Division.

Commented [A42]: The Division's orders and long-standing practices have recognized that footages often change prior to drilling.

Commented [A43]: This information may not be available during the time of APD submission.

Commented [A44]: Midstream and purchasing agreements typically contain confidentiality provisions that may cause concerns with disclosing this information publically.

Commented [A45]: This creates a substantial administrative burden on operators and it is unclear how this relates to the prevention of methane emissions?

(g) options for the beneficial use of natural gas that cannot be connected to a natural gas gathering system; and if the operator determines, based on the available information at the time of submittal, that a natural gas gathering system will not be available or will not have capacity on the date of first production from the well to transport one hundred percent of the anticipated volume of natural gas produced, the operator shall submit a venting and flaring plan, with the natural gas management plan, containing a detailed analysis of the potential alternative uses for the natural gas until a gathering system is available that describes how the operator will avoid venting and flaring natural gas from the well including

(i) power generation on lease;
(ii) power generation for grid;
(iii) compression on lease;
(iv) liquids removal on lease;
(v) reinjection for underground storage;
(vi) reinjection for temporary storage;
(vii) reinjection for enhanced oil recovery; and
(viii) other alternative uses.

(4) After the operator submits the natural gas management plan, if the natural gas gathering system becomes unavailable or will not have capacity to transport one hundred percent of the natural gas production from the well, the operator shall submit a revised venting and flaring plan to the division containing the information specified above in Paragraph (2) of Subsection E of 19.15.27.9 NMAC.

(5) The operator shall certify the following statements:

(a) the operator communicated with one or more operators of natural gas gathering systems in the general area about transporting natural gas from the well;

(b) the operator provided each operator of a natural gas gathering system in the general area with the location; dates of drilling, completion and anticipated first production; and anticipated volume of natural gas production in units of MCFD for the first three years of production of the well; and

(c) the operator determined that there is or will be

(i) a natural gas gathering system in the general area with sufficient capacity to transport natural gas on the date of anticipated first production of the well; or

(ii) a natural gas gathering system in the general area with sufficient capacity to transport natural gas during the anticipated productive life of the well.

(6) The operator shall include a certification from each operator of a natural gas gathering system in the general area stating that the information submitted is accurate based on information available at the time of the submission; and that

the operator of the natural gas gathering system has not disagreed with any statements regarding natural gas gathering systems included within the plan.

(7) If the operator does not comply with the plan submission requirements contained in this Part, the division may deny an APD for wells included within the area covered by the plan.

[19.15.27.9 NMAC – N, xx/xx/xx]

Commented [A46]: Beneficial use of gas is a contractual right allowed under oil and gas leases. Separate approval has not been required by NMOCD (which is not a party to oil and gas leases) to beneficially use gas on-lease.

If the Division is concerned about a particular use, could you state: in accordance with applicable orders, rules and regulations. I would leave this general and not state Division rules/regs because BLM may have different requirements for on-lease gas uses.

Commented [A47]: Is further approval necessary if the operator is subject to the 98% gas capture requirement?

Commented [A48]: This language essentially would eliminate discretion for operator plans to maintain the 98% gas capture requirement. If the goal is flexibility, then could the Division require compliance with plan submissions and certifications requirements?
Another option would be to allow operators to certify that they have takeaway capacity in place within 10 days of the spud date, and provide for a shorter certification form when the certification can be made.

Commented [A49]: We may support conditional approvals. However, we had a lot of questions as to what a conditional approval would look like. How does conditional approval potentially impact operations for the operator? We would also like to know what the differences between an approval and conditional approval for APDs from NMOCD?

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September 16, 2020

New Mexico Energy, Minerals, and Natural Resources Department
Attn: Tiffany Polak
1190 St. Francis Dr.
Santa Fe, NM 87505

New Mexico Environment Department
Attn: Liz Bisbey-Kuehn
1190 St. Francis Dr.
Santa Fe, NM 87505

Re: ***20.2.50 Proposed Oil and Natural Gas Regulation for Ozone Precursors Rule and 19.15.27 Rulemaking for Venting and Flaring of Natural Gas and; 19.15.28***

Dear Ms. Polak and Ms. Bisbey-Kuehn:

Marathon Oil is an independent E&P company, based in Houston, Texas. We focus on U.S. unconventional resource plays and are active in the Eagle Ford, Bakken, STACK/SCOOP, and Permian basins. Marathon genuinely appreciates your strong leadership and the State of New Mexico's efforts to address potential future climate impacts. In particular, Marathon appreciates the opportunity to provide comments regarding:

1. The New Mexico Environment Department's (NMED) draft rule to establish emissions standards for volatile organic compounds (VOC) and nitrogen oxides (NOx) for oil and gas production and processing sources (referenced herein as the "NMED Rule"); and

2. The Oil Conservation Division of the Energy, Minerals, and Natural Resources Department's (EMNRD) draft rule addressing a phased approach to limiting emissions and reducing waste (referred to herein as the "EMNRD Rule").

This comment letter provides comprehensive set of comments to both draft rules. Attached to this letter are proposed redlines to the NMED Rule (attached as **Exhibit 1**) and the EMNRD Rule (attached as **Exhibit 2**).

Introduction

Marathon appreciates that in early 2019, NMED and EMNRD were charged with creating new Methane Rules under the Executive Order on Addressing Climate Change and Energy Waste Prevention of Gov. Michelle Lujan

Grisham. It is our recollection that each agency announced that the draft rules would:

1. Achieve measurable results;
2. Create regulatory certainty;
3. Promote technology innovation; and
4. Ensure compliance mechanisms.

Marathon suggests the below changes to the drafts in an effort to provide constructive input aimed at helping the agencies achieve these goals. Marathon generally supports New Mexico's initiative to address the potential future impacts of climate change. That being said, Marathon does have some comments regarding both draft rules and proposes the below comments and attached draft redline changes for your consideration.

I. GENERAL COMMENTS, APPLICABLE TO BOTH RULES

1.01 Consider New Mexico Fiscal Budget Impacts: New Mexico depends on oil and gas revenues to fund a large portion of the State's budget. In the event the rules impose significant additional development costs on operators, there could be an impact (at an industry-wide level) on development within the State. Given the projected economic conditions for the state and the nation, any regulatory action that might affect New Mexico funding should proceed with a comprehensive fiscal analysis. Consequently, Marathon recommends that the State conduct an independent fiscal analysis, so that negative budgetary impacts can be considered and avoided (to the fullest extent possible). We also recommend considering proposed edits from stakeholders that aim to reduce economic burdens while still achieving emissions reductions. This will help the State achieve environmental benefits while still encouraging development and protecting the State's economy.

1.02 Consider Cost Impacts: Marathon estimates that the proposed rules, as drafted, will impose significant cost impacts. The following estimates are based on an initial evaluation of the draft rules and are subject to change as further analysis is conducted.

Equipment Costs: Initial cost estimates show that the equipment replacement costs may equal, on average, approximately $50,000/per pad.[1]

Operating Expenses: In addition to equipment costs and expenses, operators expect to incur increased operating expenses. These costs are driven by the need to engage additional contractors and employees to satisfy the proposed the additional reporting, monitoring and recording keeping requirements in both rules. Marathon estimates that it may incur the following operating expenses under the draft rules:

- Weekly AVOs: $1.2 million annually.
- Quarterly LDAR: $370,000 annually.
- Quarterly Method 22: $9k annually
- Monthly "Tier I inspections": $200k annually.

Reporting Expenses: Additional staff or contractors will need to be engaged to comply with the proposed reporting requirements. These costs are estimated to range between $160,000 - $480,000 annually.

Software Expenses: The draft rules also impose certain requirements that appear to require the implementation of new software systems for EMITT Monitoring and royalty owner statements. Additional software costs can be very

[1] This assumes metering is required even at non-major sources. Some savings, however, can be obtained if API measurement standards or calculations can be utilized by operators under the EMNRD Rule.

expensive and will be over $1 million.

EMITT Tags & Implementation Expenses: The below shows sample estimated costs associated with the proposed EMITT system. Marathon estimates that implementation and annual costs associated with this system will be over $1 million:

- EMITT data gathering and setup: Estimated at a minimum of $125 per hour.
- EMITT database maintenance: Annual database maintenance can be estimated at 4 hours per week or 208 hours per year. Using the estimate of $125 per hour, it would cost an operator approximately $26,000 per year for maintenance.
- EMITT onsite monitoring costs: 25 wellhead sites that have 18 EMITT tags is estimated to cost an operator approximately $86,250. These costs do not include other costs such as OGI camera costs (purchase $85,000, vendor is $200/hour), tag printing cost, or travel time between wellhead sites. The costs associated to monitor 25 wellhead sites with 100 EMITT tags is estimated to be over $480,000.
- EMITT set up – placing tags: Using the previous example of 25 wellhead sites, each with 18 EMITT tags, it is estimated that it will cost an operator more than $56,000 to set up EMITT. Whereas, 25 well head sites with 100 EMITT could cost an operator approximately $312,500.
- Additional Personnel: Additional personnel will be needed to manage the EMITT system as proposed, which is estimated between $160,000 - $320,000 annually.

We are still analyzing the full financial impact of the rules and may need to update cost impacts accordingly. Marathon, however, did want to provide some cost information to the agencies, which has previously been requested.

Recommendations: We recommend that the agencies focus on making reasonable edits to the portions of the draft rules that impose the greatest economic burden on industry. This should include adjustments to rule provisions related to:

1. Equipment replacements at existing facilities;
2. Duplicative or unnecessary monitoring, reporting, and record keeping requirements;[2]
3. The development of software solutions to implement EMITT and Royalty Owner Reports;
4. The installation and maintenance of EMITT tags; and
5. Meter installations at existing facilities (particularly on low-pressure equipment where metering is not accurate).[3]

Many of these concerns can be addressed by simply making reasonable edits to the drafts, which will still allow the agencies to achieve significant emissions reductions. The below recommendations and attached proposed edits aim to suggest some potential alternatives.

1.03 Consider Leasehold Impacts: To the extent operating expenses are significantly increased under the rules, the more likely it is that the rules could result in lease expirations for many leaseholders – extinguishing real property interests for working interest owners, overriding royalty owners and royalty owners. Additionally,

[2] Marathon is not advocating that all reporting or monitoring be eliminated; instead, we believe that reasonable adjustments can be made to streamline the reporting and monitoring that has been proposed.

[3] Marathon recognizes that EMNRD may recognize API measurement standards and allow for other types of calculations in lieu of requiring that meters be installed. This would significantly reduce the burdens associated with the proposed measurement requirements. Marathon, however, recommends that express language be put in the rules to acknowledge the acceptance of such measurement standards and calculations.

premature abandonment of wells could occur, resulting in the stranding of reserves. These concerns give rise to potential legal claims and concerns. Typically, agency rules create an exception or variance process to alleviate these types of concerns.

Recommendations:

a. Consider implementing an exception and variance procedure for economic hardship, premature abandonment, and lease expiration issues. A proposed procedure is included in Marathon's redlines to the NMED Rules contained in Exhibit 1.
b. The draft NMED Rule imposes a production limit and potential to emit limit that does not currently align with existing regulatory or permitting thresholds. It is reasonable to request that thresholds align between emission management programs and permits within the agencies.

1.04 Streamline Reporting to Create Transparency: The Proposed Rules require some unnecessary and duplicative reporting, which creates a lack of transparency for the public, royalty owners and other stakeholders. These requirements incentivize investment in reporting and record keeping services, not gas capture and emissions reductions innovations. *A portion* of the proposed reporting and record keeping requirements are summarized below:

Weekly Recordkeeping • Documented leak inspections required by NMED • Documented AVO inspections required by NMOCD	**Annual Reports** • Annual gas capture report with NMOCD
Monthly Reports • Documented inspections of equipment subject to control or monitoring requirements • C-115B reports for NMOCD, classifying both by volume and percentage gas produced into 20 different categories, as designated by the Division • Submission of statements to royalty owners showing publically reported C-115B information	**Event-Based Reports** • C-129 reports to approve venting or flaring events • C-141 reports to report releases of vented and flared volumes • Excess emissions reports with NMED • Natural Gas Management Plans, prior to submitting APDs with NMOCD

It is has been particularly helpful for Marathon (and other operators) to review the cumulative reporting requirements for a single, hypothetical event under both Rules and how we understand that reporting will likely work. In an example of a sample flaring event of >500 MCF due to high line pressure for a duration of nine (9) hours, Marathon believes that it may need to file all of the following reports for that single event:

Sample Reporting For This Single Event Under Draft Rules:

NMOCD

- Notification within 2 hours
- C-141 notification within 24 hours
- C-129 report within 24 hours (if the event lasted several days, would multiple C-129s be

required?)
- Final C-141 within 15 days
- Notification, as soon as possible, when event ceases
- Monthly C-115 & C-115B
- Royalty owner notification

NMED
- Initial report by next business day
- Final report 10 days from end date and end time
- Affirmative defense within 30 days from final report submittal

It is difficult for operators and other third-party stakeholders to know which of the above reports to reference when looking for flaring or emissions information.

Recommendations:

a. Create one shared report for the volumes needed that is submitted to both NMED and NMOCD once a month for flaring and venting events, and require any major events to be reported to the agencies as soon as practicable, but no later than 8 hours after the event begins.
b. Alternatively, if more than one report is needed by the agencies, Marathon recommends creating a streamlined reporting process as follows:
    - **Major, non-routine events:** Initial email notification within 24 hours of discovery of a major, non-routine event
        - C-141 would need to be submitted within 15 days of discovery of event, therefore, and we recommend no requirement to file C-129 in this situation.
    - **For all other events**: Operator files C-129 within 15 days, and this C-129 filing would satisfy any C-141 requirements.
    - **Production Reports:** Volumes reported monthly under V and F codes on C-115
    - **Keep and maintain end-of-year records for NMED's inspection and use.**
    - **File an annual (could be quarterly) C-115B**
        - We, however, recommend streamlining the accounting categories for the C-115B to only reflect flaring volumes which qualify as surface waste under the Oil and Gas Act (i.e. prohibited flaring events), and volumes needed to determine the operator's basis for the 98% gas capture requirement.

c. Alternatively, another reporting alternative for EMNRD reports would include something similar to the following:
    - **Create Definitions in the EMRD Rule for the following:**
        - Major Emergency: A venting or flaring event that is the result of an emergency:
            - A. results in estimated volumes in excess of 500 MCF, or
            - B. a situation that creates a threat to public safety.
        - Major Malfunction: A venting or flaring event that is the result of a malfunction:
            - A. results in estimated volumes in excess of 500 MCF, or
            - B. a situation that creates a threat to public safety.
    - **Create a Section within draft 19.15.27.8 for Drilling & Production Operations Reports, which provides something similar to:**
        - **Subsection (a):** Verbal report to the Division of a major Emergency or major Malfunction as soon as reasonably practicable but no longer than 12 hours after discovery of the event by the operator.
        - **Subsection (b):** Require reporting of the above (a) major Emergency or major Malfunction on a C-129 within 24hrs of discovery of the venting or flaring event, or

if this deadline falls on a weekend or holiday reporting shall be due on the next business day.

- **Subsection (c):** Require reporting of the C-129 for any non-major emergencies or non-major malfunctions is within 15 days of discovery.
- **Subsection (d):** Allow the C-129 filings to include any information that would otherwise be required within a C-141 filing and state that filing the C-129 with such attachments will satisfy any necessary C-141 filing requirements.

- **Form C-115B contained in 19.15.27.8.E Measurement**
  - **Subsection (3)** *General venting and Flaring reporting by type on C-115B*
    - *Consider modifying the C-115 form. Consider allowing that the C-115B forms be filed on a less-frequent basis (semi-annually, or annually).*
    - *State that C-115B filings will be posted by the Division online and include these filings in the electronic well files.*
  - **Proposed C-115B Categories:**

Proposed Category	Explanation
Beneficial Use	This includes any gas use for the benefit of leasehold operations, in accordance with lease language.
Necessary HP Flare & Vent	This would include vented and flared volumes, as allowed by OCD Rules.
Unnecessary HP Flare & Vent	This would include prohibited flaring and venting.
Estimated low pressure volumes	All low pressure estimates and calculations.
Testing & Maintenance	This would be separate to make sure to continue to encourage testing and maintenance so as to not penalize companies who engage in these activities by making such activities count against a gas capture requirement.

1.05 Eliminate Some Confusion Regarding Regulatory Jurisdiction: NMED and NMOCD attempt to regulate many of the same issues in the draft rules in different ways. This creates some duplicative (and perhaps unnecessary) regulatory burdens, confusion, and a lack of certainty both for oil and gas operators and third-party stakeholders. Also, Marathon has some confusion regarding how the draft NMED Rule will interact with existing permit requirements. Some issues that need to be addressed in the proposed rules include:

a. How the ozone precursor rules will tie to the existing air permits under 20.2.72 NMAC and Notice of Intents under 20.2.73.200 NMAC, as well as how this new rule will impact a facilities potential to emit (PTE) calculations if at all.
b. The 15 ton per year (tpy) threshold identified in these new rules does not align with current permitting thresholds, but rather instills different requirements midway between tpy limits of existing authorizations.
c. Coordination between NMED's LDAR requirements and EMNRD's weekly AVO requirements.

Marathon attempts in its proposed redlines to align some of these issues to more effectively fit into the existing regulations that are not being modified as part of this process. We understand that both agencies are continuing to work together and are working on edits to the rules. Marathon encourages and appreciates these agency efforts.

Recommendations:

a. We recommend that each agency review the others draft rules for areas of overlap and streamline the rules so that one agency governs each piece of equipment, monitoring event, and reporting obligation.
b. The agencies could enter into a Memorandum of Understanding or create a regulatory mechanism within

the rules to share this information. This could be accomplished by adding cross-referencing language to the draft regulatory requirements that states something like: *"compliance with [INSERT Rule] shall satisfy this Part."*

c. Streamline reporting of particular issues (i.e., flare monitoring, leaks, etc.) to only one agency. This will help parties identify the applicable issues, compliance, and reporting obligations for such equipment. This type of regulatory system provides clarity, and with only one repository for equipment data individuals will be able to more-easily access the information needed to analyze and understand the emissions impacts of that equipment within the State.

1.06 Incentivize Innovation: The Proposed Rules are very prescriptive in nature, and are primarily based on command and control policy-type standards. For example, NMOCD's Proposed Section 19.15.27.8 contains numerous requirements prohibiting most venting and flaring activities; the agency, however, then sets an aggressive gas capture percentage of 98% in Proposed Section 19.15.27.9 (which is a performance-based standard). If the result is the same – 98% gas capture – regardless of the prescriptive requirements, it is unclear how the additional prescriptive requirements help avoid waste. Instead, such requirements (unintentionally) increase costs. In contrast, if the agency were to rely on the 98% gas capture standard and provide operators with flexibility to satisfy this standard, then the agency would likely see operators employ a wider variety of gas capture technology. This is because operators would likely have more flexability (from a regulatory standpoint) to focus on such efforts without the need to seek agency approval prior to implementation, allowing New Mexico to be at the forefront of innovation within the United Sates.

Recommendation: Use performance-based standards and eliminate control and command-based standards that are aimed at achieving the same result as the performance standard.

1.07 Leave Room for the Ability to Shut-In Wells: Given the onerous requirements proposed in the draft rules and the short compliance timelines, operators will likely need to shut-in certain wells. During times of shut-in, there should be the ability to forego required monitoring and record keeping as the facility is not in operation with no potential to emit to the atmosphere.

Recommendation: Marathon recommends that shut-in wells be expressly exempted from the rules in order to allow production to cease without causing the forfeitures of oil and gas leases. Shutting-in wells stops production, eliminating the PTE or the potential for venting and flaring.

II. SPECIFIC COMMENTS TO NMED'S RULE

In mid-2019, the NMED announced that it would seek to create new rules pursuant to the Air Quality Control Act, through an application filed with the Environmental Improvement Board (EIB), which requires the EIB to consider: *public interest*, including the social and economic value of the sources of emissions; *energy*, environmental, and *economic impacts*; *efforts by sources to reduce emissions prior to the effective date of the rule*; and *the remaining useful life of existing sources*. (Emphasis added). The following recommended changes are proposed in line with the elements that the EIB is asked to consider at hearing, and are aimed at reducing the impact of the draft NMED rule on energy resources, economic impacts and unduly shorting the remaining useful life of equipment and software currently in use.

2.01 Provide Reasonable Alternatives to EMITT: Marathon supports the goal of sharing data with NMED and would like to find a good mechanism to instill public confidence in industry monitoring, inspection and maintenance activities. As proposed, however, the EMITT system creates several significant challenges for industry

members.

Outline of Concerns:

a. Lack of current software in place that works with tagging equipment.
b. As proposed, the requirements will cause premature replacement of existing operating software that can otherwise be used to effectively track inspections and monitoring.
c. Operators who have used tagging systems have reported that their experience is that tags fall off, corrode, and are painted over, causing a significant time investment to monitor tags.
d. Operators would have to tag thousands of pieces of equipment, which is a huge undertaking to both install and monitor.
e. Some equipment is too small to be tagged (e.g., pneumatic controllers).
f. Each operator's system will be unique so very hard to see how an inspector could access each operator's database.
g. It is not clear whether these efforts would have any direct impact on emissions.

Recommendation: In lieu of requiring EMITT, Marathon recommends that NMED give operators an alternative option to utilize their current computerized maintenance management systems to track inspections and maintenance. This information has the ability to be audited by the agency and could be made available upon request, using cloud computing (if preferable). This would eliminate the economic burdens associated with the EMITT proposal, but still allow for data and information to be readily obtainable and publicly posted. This would also help avoid the premature abandonment of the current computerized maintenance management systems.

2.02 Create Alternatives to Retrofitting Existing Wells: Significant costs will be required to equip existing wells in compliance with NMED and NMOCD's Proposed Rules. NMED's Rule allows for some exclusions under the stripper well definition, but many wells *will still require* retrofitting or equipment replacements. This may result in economic hardship, lease expirations and premature abandonment for oil and gas companies hit hardest by 2020 market conditions.

Recommendations:

a. Marathon recommends that NMED create a process in which operators can establish that existing equipment results in a sufficient PTE. We would like to set up a meeting to discuss potential alternatives with the agency.
b. We also recommend that deminimis operating time or emission thresholds sources be allowed to be established for equipment that is infrequently operated or that has inherent lower emissions in lieu of equipment replacements.
c. Finally, we recommend that NMED create an application process to address economic hardship and premature abandonment concerns. A proposal is outlined in the attached redlines in Exhibit 1.

Specific Equipment Concerns:

a. **Equipment Leak Monitoring:** Marathon supports the additional equipment leak monitoring at high producing facilities, where equipment leaks could add noticeably to emissions. Currently, however, the cumulative effects of the draft thresholds will result in targeting very low levels of emissions and will require a substantial time and manpower burden. These burdens will far outweigh any perceived benefits. It is estimated that industry members with substantial Permian positions could have nearly 22 inspections to conduct per workday.

   Recommendations:

   i. Aligning equipment leak monitoring thresholds with existing federal requirements will allow industry to streamline requirements into existing management programs at new facilities and will

allow for better cost-benefit methane reduction strategies.

ii. NMED could increase the TPY thresholds, particularly for existing equipment to provide for less onerous inspection requirements or allow for an off-ramp or less burdensome inspections for locations once it is established that there is a low probability of leaks occurring.

b. **Storage Tanks:** Marathon supports the additional hydrocarbon storage tank controls at high producing facilities. As written, however, the draft NMED Rule is unclear if the intent is to target hydrocarbon storage and/or produced water tanks. Additionally, with a 2 TPY threshold, there will be insufficient gas available in the vent gas to keep the flare pilot lit, and this may result in operators needing to bring additional gas onsite to maintain flare pilot lights for tanks control devices. The new threshold identified in the regulation is 1/3 of that under existing federal regulations and it is anticipated to be below the threshold to properly operate the devices that would result in 95-98% capture and control. Additionally, the addition of control devices (if feasible) could result in lower producing wells to become uneconomic. Targeting these small emissions will cause a shift of focus from larger emitting sources with greater methane reduction opportunities.

Recommendation: Aligning storage tank applicability to existing federal requirements of 6 tpy and focus on hydrocarbon storage tanks will allow for best methane reduction opportunity with higher benefit.

c. **Evaporative Ponds:** Marathon has concerns regarding the evaporative pond requirements and NMOCD's regulatory requirements for recycling facilities approved under 19.15.34 NMAC. As proposed, the NMED Rule would significantly increase the costs associated with recycling operations aimed at reusing produced water for in-field oil and gas development activities. This contradicts the intent of the Produced Water Act.

Recommendations:

i. We recommend that the NMED Rule either completely exempt produced water recycling facilities permitted by the NMOCD or pursuant to the Produced Water Act.

ii. Alternatively, the NMED Rule could specifically define "evaporative ponds" as something similar to the following:

"Evaporative Pond" shall mean evaporation ponds which are either (i) not permitted by the New Mexico Oil Conservation Division, or (ii) ponds which are located within a Surface Waste Management Facility permitted under Part 19.15.36 NMAC. For the purposes of this Part, recycling, storage, treatment and reuse equipment utilized pursuant to NMSA 1978, § 70-13-1, et seq. shall not qualify as an Evaporative Pond.

2.03 Consider the Regulations Aimed at Governing Vendor Owned Equipment: Several items of equipment proposed to be regulated under the NMED rule are not owned or maintained by the oil and gas operator. We are proposing edits to the regulations which reflect that the equipment owners should be the properly regulated entities, as certain items are beyond the oil and gas operator's ability to control and maintain.

Recommendation: Review the draft rules and consider whether the operator, or a third-party, is the entity who can ensure compliance. If the operator does not actually control the equipment, requiring operator compliance may create unnecessary shut-ins when responsible operators cannot get their vendors (who own and maintain the actual equipment) to timely comply.

2.04 Consider Extending Compliance Timelines and/or the Effective Date: The one-year timeline inserted into numerous provisions of the draft NMED Rule is too short to secure new equipment and retrofit

facilities.

Recommendation: Extend this timeline to ensure adequate time to order, obtain, and install equipment and metering required by new requirements considering the anticipated supply and demand impacts within the State of New Mexico.

2.05 Create Reasonable Timelines for Repairs and Reporting: The repair deadlines are unreasonably short. NMED proposes a mere seven-day deadline to make repairs. This time limit is less than 1/4 what is allowed under OOOOa and imposes significant burdens on industry. Additionally, what if there are insufficient services within the Permian Basin to provide the repair services? Seven days to order and obtain some pieces of equipment in the Permian is very difficult, if not impossible.

Recommendation: Existing OOOOa timelines are supported nationwide and are achievable within the State of New Mexico. The expansion of the AVO, Method 21and OGI inspections to additional facilities, including locations that pre-date current regulations under OOOOa will put additional burdens not only on operators, but also on the service providers. It is estimated that for some operators, the current average repair time is 21 days from discovery using both internal and external resources to manage the program. The current rules will nearly double the number of facilities that require monitoring, and thus we expect that with existing resources within the State of New Mexico the timeline is unachievable. Currently, there are not enough service providers or employees working in industry to meet this short timeline. As a result, a more reasonable approach would be to allow for timelines that match the OOOOa requirements.

2.06 Better Define NMED's Proposed Use of "Credible" Information in Enforcement: The term "credible evidence" is not defined in NMED's rule. As drafted, this provision of the NMED Proposed Rule raises significant legal questions. New Mexico agencies cannot rely on unverified hearsay complaints brought by the public to be used as the sole basis for civil enforcement. If a fine or penalty were to be issued in such circumstances, valid legal concerns would arise including but not limited to violations of due process, the improper delegation of the agency's duties, and non-compliance with the New Mexico residuum rule. *See, e.g., City of Las Cruces v. Rodriguez*, No. 32,904, 2014 WL 5866773, at *6 (N.M. Ct. App. Oct. 16, 2014) (quoting *Titus v. City of Albuquerque*, 2011–NMCA–038, ¶ 43, 149 N.M. 556, 252 P.3d 780) ("The imposition of a monetary fine is a sufficient property interest to support a procedural due process claim and therefore requires imposition of the legal residuum rule.").

As you are aware, New Mexico appellate courts have found that due process (which at a minimum must include the opportunity for cross-examination) needs to be afforded in administrative actions resulting in monetary fines and penalties. Likewise, the residuum rule applies, which requires admissible, non-hearsay evidence to be the foundation of the agency's orders. This means that a hearing process with an opportunity for cross-examination will likely be required for each accusation asserted under the rule that qualifies as "credible information." Marathon is also concerned that this draft provision will encourage those who are opposed to oil and gas development to trespass onto oil and gas sites to obtain evidence. Inspectors, pumpers and those authorized to be on site receive training, have personal protective equipment and monitors to ensure safety on site. Operators are trained on intrinsically safe devices, where to go in case of emergency, how to determine abnormal operating conditions and on tripping and similar hazards. If left unaltered, we believe that this rule will encourage members of the public to enter areas where they could intentionally or unintentionally cause significant risk to themselves or others.

Recommendations:

a. We recommend that the draft rule allow for NMED to properly vet information so that frivolous complaints do not entangle both industry and the agency in unnecessary hearings or litigation.

b. Adopt a definition for "credible information" which outlines that the information must be legally credible.

This definition should also require the submitted to run emissions calculations for the agency's review that can withstand agency scrutiny. In Exhibit 1, Marathon proposes something similar to:

> *"Credible Information" means information of the type that would qualify as admissible evidence in proceeding before a New Mexico Court, and that is validated by the submitter against requirements contained in either this Part or applicable permits, rules or orders issued by the Department; provided that the submitter must also calculate alleged emissions estimates and make a threshold showing of the alleged violation, and the Department, in its discretion, must independently find the submitted information to be credible.*

c. The proposed rules should comport with or incorporate by reference existing agency hearing and due process procedures. For example, NMED currently has a regulation that outlines enforcement standards (NMAC 20.2.72.218).

d. Other states have developed criteria for how evidence is collected by the general public. We recommend coordination with the Texas Commission on Environmental Quality on their use of credible information.

e. We also recommend that the Department consider additional protections for operators from repetitious claims that were previously proven false. Members of the public could intentionally waste NMED and operator resources by repeatedly making allegations.

f. Additionally, we recommend that NMED consider the impact that frivolous claims asserted under this rule will likely have on both the agency and industry. If promulgated this language will result in the pursuit of numerous frivolous claims by entities who oppose oil and gas development within the State of New Mexico. This will not only impact industry, but it will also place significant burdens on the agency – which will have to satisfy New Mexico's due process requirements and hold hearings. These concerns may weigh in favor of eliminating these provisions from the draft Rule or creating express parameters as to what will be accepted as credible information.

III. SPECIFIC COMMENTS TO EMRND'S DRAFT RULE

During the public outreach sessions, EMNRD indicated that it would promulgate its rules using its existing jurisdiction under the Oil and Gas Act and that it is seeking to govern Methane to the extent venting, flaring or other operations result in a Waste of Resources. The agency also acknowledged that the Oil and Gas Act is a long-standing law, written in 1935, and amended to prevent waste and protect correlative rights. The below recommendations are aimed at focusing on concerns related to reducing overall waste (both underground, in the form of lower total recovery from New Mexico reservoirs, and surface waste), protecting correlative rights, and reducing economic hardships on operators while still maximizing emissions reductions and the capture of salable gas.

3.01 Consider Reasonable Alternatives to Equipment Installations and Retrofits: Significant costs will be required to equip old vertical wells in compliance with NMOCD's Proposed Rules. This may cause industry members to drill fewer wells in New Mexico and the premature abandonment of older well sites – resulting in stranded reserves and waste. The main equipment cost impacts imposed by the draft EMNRD Rule relate to:

1. Flare Equipment/Installation Retrofits; and
2. Meter installations when API measurement calculations can be used.

As stated above, the NMED rules are also requiring a number of retrofits/equipment replacements. Our initial

estimates indicate that, in total, both rules will increase costs by approximately $50,000 per pad.

Recommendations:

a. **Flare Equipment:**
   i. Marathon recommends that the Rules not require modification of older equipment and instead focus on the 98% gas capture target for each operator; this will effectively result in the same overall result – 98% gas capture.
   ii. Marathon also recommends that NMOCD defer to or incorporate by reference flare requirements already instituted under NMED's permitting programs (such as GCP permits). This will help ensure alignment between both agencies.
   iii. Alternatively, the agency should create a process that allows operators to submit exception applications when increased costs will result in well shut-ins. This process would provide a mechanism for the agency to weigh underground waste and lease expiration issues, alongside existing equipment specifications and monitoring plans. Marathon has proposed an exception/variance request process in its proposed red line changes to the NMED Rule, in Exhibit 1, that could easily be modified and used in the EMNRD Rule.

b. **Meter installations:** Marathon recommends that NMOCD adopt or expressly allow the use of API measurement standards and calculations in lieu of requiring meter installations in its rule.

3.02 Consider Reasonable Alternatives to Weekly AVO Inspections: The weekly AVO requirements contained in the Draft EMNRD Rule create disincentives for operators to work with NMED for the approval of advanced LDAR technology or monitoring systems, such as real time remote monitoring and flyover surveys. This is because the weekly AVO inspections are labor intensive and costly. If required by NMOCD, these weekly in-person inspections will incentivize the primary use of in-person LDAR monitoring.

Recommendations:

a. We recommend that NMOCD defer to or incorporate rules that mirror the LDAR provisions of the NMED Rule.
b. Marathon also recommends that the agency consider allowing inspections to be conducted a semi-annual basis, particularly if an operator is in compliance with the gas capture requirements contained in the EMRND Rule in draft 19.15.27.9.
c. If the AVO requirements are kept in the EMRND Rule, we recommend better defining what will qualify as an AVO inspection. Can this include technology, aerial surveys, drones, or other advanced systems? Also quarterly inspections would better align with other existing requirements.

3.03 Consider the Value of the Proposed Reporting Requirements for Low Pressure Natural Gas Volumes: Gas cannot accurately be measured unless it has sufficient motive force, such as gas routed to a high-pressure flare. Low pressure systems typically operate in "breathing fashion" and have very low flow rates making metering these flows impractical if not impossible. Additionally, introduction of a potentially restrictive device in a relieving system can introduce safety concerns. As a result, gas volumes emitted from certain pieces equipment or during certain operations need to be estimated because they can't be measured.

Low pressure emissions typically consist of very low volumes. It is also unclear under the Oil and Gas Act whether these volumes would even qualify as "underground waste" or "surface waste." In most cases the equipment being used is needed for the production process. For example, in a situation involving pad site with 40 pneumatic devices and typical low pressure gas volumes, approximately 10 MCF/day would likely be emitted.[4] Assuming a current

[4] This volume is more accurately measured as MSCFD (standardized volume which is very close to MCFD); however, for ease of calculation and based on the assumption that there may be more familiarity with MCFD, these volumes are stated as MCFD for the purpose of this example.

natural gas price of approximately $2.44/MCF and a royalty rate of 12.5%, this would result in a relatively small royalty amount of approximately $3.05. This potential royalty savings is easily surpassed by the costs operators would be required to pay in order to estimate these low pressure volumes on a monthly basis and generate monthly statements for royalty owners, which is estimated to cost more than $1 million for one operator.[5]

Recommendations:

a. Remove the requirements to "measure" or estimate volumes from low-pressure sources.
b. Make the C-115B data publicly available for royalty owners to access online and remove the requirement that reports be generated and sent monthly to royalty owners.

3.04 Limit Gas Capture Requirements and Prohibitions to Saleable Gas: Operators should not be expected to include non-salable gas within their 98% gas capture threshold. Non-saleable gas includes H2S, and gas with high nitrogen composition.

H2S: There are a number of oil wells in New Mexico that have produced significant amounts of both oil and H2S. By including H2S within the 98% gas capture requirements, oil reserves will become stranded and unable to be produced in manner that allows for both production and compliance with the gas capture thresholds. Additionally, Rule 19.15.11.11.D NMAC requires H2S gas to be flared.

Nitrogen: During completion operations, gas that is initially produced has a high nitrogen content and is not salable. These gas volumes likely need to be flared, as they cannot be sold. Gas is not typically produced during drilling operations; however, when gas is generated during drilling, operators are not able to capture this gas and test its composition. This gas is not able to be sold due to these conditions.

Recommendations:

a. We recommend updating the definition for "natural gas" to state something like:
   "Natural gas" *means a* <u>*salable*</u> *gaseous mixture of hydrocarbon compounds, primarily composed of methane, and includes both casinghead gas and gas as defined in 19.15.2 NMAC.*
b. We also recommend inserting a definition for "salable," that states something like:
   "Salable" means that hydrocarbons meet a specification that can be sold and transported pursuant to an applicable midstream, transportation, or purchase and sale agreement.
c. If NMOCD alternatively wants to address this another way, we generally recommend that non-salable gas be expressly exempted from the venting and flaring prohibitions contained in the EMRND Rule and not be included within the 98% gas capture threshold.

3.05 Stripper Well Exemptions & Extending Compliance Timelines: There are no exemptions in the draft EMNRD rule for marginal or stripper wells. This may result in legal claims and concerns for certain leasehold interests maintained by vertical well production. Additionally, many of the requirements contained in the EMNRD Rule appear to become effective immediately or soon after the rule is adopted.

Recommendations:

a. It is recommended that stripper wells be exempted, other than from reporting requirements, for many of these requirements.
b. Alternatively, we recommend extending the effective date for the requirements for wells covered by the stripper well and PTE exemptions contained in the NMED Rule.
c. We recommend that the agency create economic hardship exceptions to allow for longer implementation

[5] This is, in-part, based on requiring the categories proposed in the C-115 filings to be provided to all royalty owners on royalty owners statements or check stubs, which would require software solutions for operators.

deadlines for lower producing wells. This would help protect leasehold interests and correlative rights.

d. We also recommend that EMNRD consider extending the effective date timelines, to allow operators with sufficient time to come into compliance with the rule and to order, obtain, and install equipment and create necessary software solutions for the C-115B reporting requirements and monthly royalty statements.

3.06 Make Report Submission Deadlines End on "The Next Business Day": For major reporting events, Marathon understands that a verbal or email notification may be preferable for the agency. When physical reports are required, however, many employees (both within the agency and industry) will not be at their desks during nighttime hours, on the weekends or during holidays.

Recommendation: Consider the reporting requirements stated in days and hours be extended to the "next business day." Operators can often have employees working in different states and time zones, and likely need input from several employees prior to the submission of agency forms.

3.07 Define Beneficial Use: Oil and gas leases, including leases issued by the State of New Mexico allow for the lessee to beneficially use gas for the benefit of operations related to the oil and gas lease. The right to use gas beneficially in lease operations is a contractual right, which should not be impaired or potentially limited by implication via state regulation.

As drafted the EMNRD Rule could potentially be used to limit the term "beneficial use" to the sub-set of uses listed in the sections related to Natural Gas Management Plans. The concept of "beneficial use", however, is a broad concept under New Mexico law. For federal leases, the concept of "beneficial use" is defined under NTL-4A, case law issued by the Interior Board of Land Appeals (IBLA), and the BLM's more recent regulations in 43 C.F.R. §§ 3178.3 – 3178.5, to include the use of gas on-lease for the benefit of leasehold operations. *See Plains Exploration and Production Co.*, 178 IBLA 327 (Jan. 5, 2010) (providing an overview of the concept of beneficial use under NTL-4A and historical MMS regulations). Under New Mexico law, State Land Office leases specifically afford "any and all rights and privileges necessary, incident to or convenient for the economical operation of said land, for oil and gas, with right for such purposes *to the free use of oil, gas, casing-head gas* or water from said lands." *See* NMSA 1978, § 19-10-4.2 (emphasis added). The New Mexico Supreme Court has construed New Mexico State Land Office leases to give the lessee the right "to the free use of oil and gas produced *from* the leased premises, *regardless of where the use occurred*, so long as the oil and gas was being used to further the economical operations of said land." *Id.* ¶ 40. Similarly, many fee/private lease agreement contain broad free use clauses or generally afford a contractual right to beneficially use gas in leasehold operations. As specified, these concepts relate to how gas can be utilized in leasehold operations and such use, by its very nature, indicates that the gas is being used and not wasted. Thus, these uses do not constitute waste and are part of the rights contracted for in the oil and gas lease.

Recommendation: We recommend adopting a definition in the rules for "beneficial use" which should broadly include the right of a working interest owner to use products derived from a leased property, including natural gas, in the operation of the lease. We also recommend just simply referring to "beneficial use" in the Natural Gas Management Plan, without providing examples or requiring agency approval of specific types of beneficial use. This will help ensure the lessee rights under oil and gas leases are not unduly impaired.

3.08 Consider Edits to the Natural Gas Management Plan Requirements: Marathon does not oppose submitting a more detailed gas management plan than what is currently required by the agency. That being said, we see some legal hurdles to providing the information proposed in the Draft EMNRD Rule. Existing gas gathering and purchase agreements are robust contracts, which typically contain detailed confidentiality provisions related to the gas gatherer's information, which require information provided by the gas gathering company to be kept confidential for a specified period. Operators will likely breach these agreements, or potentially be subject to

liability, if they publicly disclose the following:

- current throughput of the natural gas pipeline and compressors;
- anticipated daily capacity of the natural gas pipeline and compressors on the date of first sale;
- anticipated throughput of natural gas pipeline and compressors on the date of first sale;
- reliability of the natural gathering system; and
- other issues and expansion plans affecting the gathering of natural gas in the general area[.]

Additionally, Marathon would like to propose some changes to this subsection to help streamline this reporting burden and recommends exceptions for operators who have achieved the 98% gas capture rate.

Recommendations:

a. If an operator has a committed gas take away, allow the operator to simply certify that take away is in place and provide basic information, without filing a detailed report.
b. Allow operators to file a natural gas management plan for an area covering multiple well sites, and so that operators could potentially file one or two natural gas management plans per year.
c. Remove the above-listed provisions from the regulations or include language which states that information may be provided if available and not covered by a confidentiality provision.
d. Create an exemption from these requirements for operators who are compliant with the gas capture requirements contained in draft rule 19.15.27.9.

In sum, Marathon supports the State's efforts to achieve methane emissions reductions and we greatly thank NMED and EMNRD for considering Marathon's suggestions and proposals. Additionally, we would be happy to discuss any of the above recommendations or the attached draft redlines.

Sincerely,

/s/ Jennifer L. Bradfute

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