From:	Erik Schlenker-Goodrich
To:	WasteRule, EMNRD, EMNRD
Cc:	Thomas Singer
Subject:	[EXT] Re: WELC et al. Waste Rule Comments
Date:	Wednesday, September 16, 2020 5:03:09 PM
Attachments:	WELC_OCDmethanewasterulecomments_FINAL_091620.pdf

Apologies, Tiffany & the Rule Drafting Team: please use the ***ATTACHED VERSION*** of the WELC et al. comments as they contain the correct redline suggestions we made regarding the draft rule.

Let me know if you have any questions.

Best,
Erik

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From: Erik Schlenker-Goodrich <eriksg@westernlaw.org>
Date: Wednesday, September 16, 2020 at 4:44 PM
To: <EMNRD.WasteRule@state.nm.us>
Cc: Thomas Singer <singer@westernlaw.org>
Subject: WELC et al. Waste Rule Comments

Dear Deputy Director Polak and Members of the Rule Drafting Team:

Please find attached the comments of WELC et al. regarding the draft OCD methane waste rule. Please let me know if you have any questions.

Sincerely,
Erik

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WESTERN ENVIRONMENTAL LAW CENTER

September 16, 2020

Tiffany Polak
Deputy Director, Oil Conservation Division
Energy Minerals and Natural Resources Department
Submitted via email: EMNRD.WasteRule@state.nm.us

Dear Deputy Director Polak and Members of the Rule Drafting Team:

Please find attached the recommendations and comments of the undersigned groups regarding the draft methane waste rule.

We urge OCD to act with vision and ambition to prevent methane waste. Indeed, rules to cut methane waste from oil and gas production are merely a first step in a longer path to address a host of chronic and serious problems arising from oil and gas development in New Mexico and the climate crisis.

As we prepared these comments, wildfires raged across more than five million acres of California, Oregon, and Washington state, glaciers shattered and disintegrated from Greenland's largest remaining ice shelf, and hurricanes spun across the Atlantic Ocean and Gulf of Mexico, with Hurricane Sally risking catastrophic and life-threatening flooding. The climate crisis is not simply a speculative, future possibility, but a lived reality that harms our shared natural heritage, communities, and societal resilience and contributes to persistent environmental injustice. The window of opportunity to address that crisis commensurate to its scale is closing, and OCD, consistent with its legal authorities, should act in full recognition of this sobering reality.

If you have any questions, please contact Dr. Thomas Singer, singer@westernlaw.org, with the Western Environmental Law Center. We appreciate your hard work on this draft rule and your consideration of our comments.

Sincerely,

Erik Schlenker-Goodrich
Executive Director

Dr. Thomas Singer
Senior Policy Advisor

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CONSERVATION AND COMMUNITY GROUP COMMENTS REGARDING DRAFT OCD METHANE WASTE RULE

I. INTRODUCTION

We appreciate the opportunity to submit the following comments regarding the Oil Conservation Division's ("OCD's) draft natural gas waste rules. While the draft rules propose a workable framework to reduce waste, we strongly recommend changes with the constructive intent to strengthen the rule in accord with the New Mexico Oil and Gas Act's mandate to, amongst other things, prevent "the unnecessary or excessive surface loss or destruction without beneficial use" of natural gas.[1]

New Mexico regulators, industry operators, and the public have been fully aware of the serious methane pollution and waste caused by oil and gas development since at least 2007, when the Environmental Improvement Board promulgated a rule (repealed in 2011 during the administration of Governor Martinez) to track greenhouse gas pollution, and the state found that huge volumes of methane were being released by oil and gas operations. The chronic and serious problem of methane pollution and waste not only reduces royalties for New Mexico's cash-strapped state and local governments and the public services those royalties support, but exacerbates the unfolding climate crisis and contributes to serious and chronic community-level air quality, public health, and environmental justice impacts.

Based on OCD's own data, there is wide variation in the venting and flaring practices of oil and gas producers. Some operators vent substantial volumes of gas while others vent little or none. Some operators flare large percentages of their gas production while others flare a very small share. And several operators have flared gas from oil wells for years on end while others have been able to capture and market gas production as soon as oil wells are completed.[2] This variation suggests that the volume of venting and flaring reflects deliberate management decisions based on bottom-line operator considerations that do not necessarily advance the public interest or conform to the Oil and Gas Act's mandate to prevent waste.

[1] NMSA, 70-2-3(B).
[2] Western Environmental Law Center, *Flaring in the Oilfield - A Closer Look* (August 2020) (available at https://westernlaw.org/wp-content/uploads/2020/08/2020.08.05-WELC-NM-Flaring-Report.pdf).

The Oil and Gas Act, by virtue of establishing a mandate to prevent waste, does not tolerate this market failure. Accordingly, OCD should, by rule, design visionary and ambitious standards that protect the interests of New Mexicans in the prevention of waste, including the beneficial use of the state's resources, a fair return in the form of royalty and tax revenues, a healthy environment, and a livable climate. The best industry performers have demonstrated that it is reasonable and feasible to conform to such standards. OCD should build on the work of these operators by setting a robust, level playing field upon which all operators can be held to account and to advance the public interest. Our comments point to constructive ways to improve the agency's draft rule to achieve these ends.

II. TECHNICAL RECOMMENDATIONS AND COMMENTS

A. CORE AND CROSS-CUTTING RECOMMENDATIONS

We commend OCD for drafting a rule that provides a good and workable starting point to prevent waste. We particularly appreciate OCD's reporting framework, requirements that operators must flare rather than vent in most circumstances, a firm schedule without exceptions for achieving gas capture targets, and pioneering efforts to control waste from gathering operations. We also appreciate how the rule's individual elements can operate in a mutually-reinforcing fashion, in particular the natural gas management plan and gas capture requirements. With our proposed recommendations, we think OCD's rule can rightly be described as a nationally-leading waste prevention rule, which will spark stronger and more effective protections against methane emissions and waste at the federal level and in other states.

To strengthen the draft rule, we recommend the inclusion of a handful of essential elements and adjustments to strengthen existing elements. Chief among them, we urge OCD to modify its draft rule to expand prohibitions on natural gas venting, prevent routine flaring from proposed new development, ratchet down flaring from existing development in an equitable manner that protects communities, and address other issues identified below.

To summarize, we recommend the following essential actions to strengthen OCD's draft rule:

- Restructure 19.15.27.8 and 19.15.28.22 NMAC to require that, subject to the specific enumerated exceptions, operators must flare rather than vent any natural gas that is

released, regardless of whether in the drilling, completion, re-completion, or production phase of upstream operations, or in midstream gathering systems.

- Prohibit routine flaring from new oil and gas wells by mandating that oil and gas operators, as a precondition for approval of a new drilling permit, demonstrate how all natural gas from new wells will be captured for sale, field use or re-injection, thereby avoiding routine flaring. We further recommend requiring that the operator must follow the plan or an approved revised version to remain in compliance, improving the plan's informational and analytical requirements, and expanding the natural gas management planning concept to operator requests to adjust the well spacing and density of pools.

- Strengthen the requirements for completions and recompletions to plug loopholes and ensure that operators actually deploy and use reduced emissions completion equipment to avoid flaring the very large quantities of gas produced during flowback.

- Strengthen 19.15.27.9 NMAC by requiring compliance with the 98% natural gas capture requirement on either a county-wide or formation-wide basis, whichever is more stringent, rather than a state-wide basis. By requiring a more granular geographic lens, OCD would better reduce air pollution associated with natural gas waste, mitigate local public health and environmental justice impacts, and avoid creating incentives for gaming compliance or limiting increased capture activities geographically.

- Provide that compliance with the natural gas capture requirement set by 19.15.27.9 NMAC is a precondition for OCD approval of a request to drill a new well. An operator should not be granted approval for new facilities that would exacerbate ongoing noncompliance and steer capital expenditures towards new drilling and away from compliance efforts.

- Set a gas capture threshold of 90% as a new precondition, effective in 2022, for obtaining approvals for pooling applications, special pool orders, adjustments to the spacing or density of a pool, or new drilling permits. This recommendation would ensure that operators that are wasting the highest percentages of their natural gas production in New Mexico are incentivized to direct capital expenditures towards compliance with OCD's rule.

- Include the very substantial volumes of gas flared from controlled tanks in reporting requirements and in determining compliance with the natural gas capture requirement.

- Require that operators prepare a natural gas management plan when submitting a pooling application, seeking a special pool order, or otherwise seeking an adjustment to the spacing or density of a pool. Well spacing and density determinations set the pattern of development across a pool, and better planning at this stage is needed to guide APD-level action to prevent waste and help the public engage with oil and gas development decisions.

- Tighten the natural gas capture requirement for natural gas gathering systems in 19.15.28.23 NMAC if the average capture rate of gathering system operators exceeds the 98% requirement proposed by the draft rule.

These core and cross-cutting recommendations, as well as additional recommendations and comments, are detailed below Sections II.B through II.E.

In addition, we have proposed specific changes to OCD's draft rules, which are appended at the end of these comments. Recommended inclusions are identified in blue underline. Recommended deletions are identified in ~~red strikethrough~~.

B. 19.15.27.8 NMAC Comments

1. OCD Should Prohibit Venting Except in Limited Situations

We urge OCD to revise its draft rule to flatly prohibit the venting and routine flaring of natural gas. However, where natural gas cannot be captured for sale or use, operators should flare rather than vent natural gas to protect on-site safety and mitigate public health, air quality, climate, and environmental justice impacts. Venting should only be permitted in the following narrow, situation-specific circumstances:

- In an emergency or malfunction as defined in the regulations when the loss of gas is uncontrollable or venting is necessary for safety;

- When the gas is vented through normal operation of a natural gas-activated pneumatic controller or pump;

- When the gas is vented from a storage vessel, provided that applicable regulations do not require flaring;

- When the gas is vented during downhole well maintenance or liquids unloading activities performed in compliance with OCD's applicable regulations**;**

- When the gas is vented through a leak, provided that the operator is in full compliance with all regulations related to leak detection and avoidance;

- When the gas venting is necessary to allow scheduled non-routine facility and pipeline maintenance to be performed, except in the case of non-emergency blowdowns, where the gas must be flared; or

- when a release of gas is unavoidable and flaring is prohibited by federal, State, local or Tribal law, regulation or enforceable permit term.[3]

2. OCD Should Require Flaring in Lieu of Venting Through Inclusion of a New Overarching Subsection B

To follow through on our recommendation above that venting should be prohibited except in narrow, situation-specific circumstances, we recommend that OCD add a section up front in 19.15.27.8 that requires flaring in lieu of venting, except in specifically listed situations.

To do this, we recommend that OCD move and consolidate the substance of paragraphs 19.15.27.8(D)(1) and (2) NMAC into a new subsection 19.15.27.8(B) NMAC (renumbering the section as a whole and including appropriate cross-references in subsections C, D, and E accordingly). This new subsection would require that operators always (i.e., during drilling, completions, recompletions, and production) flare in lieu of venting, except in defined situations, and then specify each of the situations when venting may be allowed as identified immediately above in Section II.B.1 of our comments.

We recommend that OCD also adopt our recommendation to allow venting only, inter alia, when flaring is prohibited by federal, State, local or Tribal law, regulation or enforceable permit

[3] *See* BLM, Waste Prevention Rule, 81 Fed. Reg. 83008, 83082 (Nov. 18, 2016); 43 CFR 3179.6.

term *in lieu of* the exemption provided by 19.15.27.8(D)(2)(a) NMAC of the draft rule. That section of the draft rule would provide an exemption allowing venting when "authorized by a valid federally enforceable air quality permit issued by the environment department." As we detail further below, existing air quality permits were, however, issued without accounting for the climate impacts of vented gas. Further, air quality permits should not preempt OCD rules, and our recommendation to allow venting where flaring is prohibited by an air permit covers all situations in which air quality considerations embodied in a permit should outweigh the general requirement to flare in lieu of venting.

With respect to allowing venting from the "normal operation" of a pneumatic controller or storage tank as proposed in 19.15.27.8(D)(2)(d)(iv), (v) NMAC of the draft rule, we recommend inserting in those subparagraphs "in compliance with all applicable laws and regulations." We have reflected this recommendation in our proposed inclusion of a new Subsection B, specifically 19.15.27.8(B)(3)(c), (d) NMAC of our redlined text of the rule. This makes it clear that the pneumatic controller or storage tank itself must be in compliance with applicable requirements, such as replacement requirements. While the language in 19.15.27.8(D)(2)(d)(iv) and (v) NMAC of the draft rule appears to have the same intent, that language strikes us as less clear, as it references regulation of emissions, not the use of the equipment itself.

We also generally recommend, for subsections B through D of 19.15.27.8 NMAC, that OCD define the scope of the subsection in the rule text itself, not just in the header. For example, OCD should include an initial paragraph in each subsection stating: "An operator shall comply with the requirements of this section, as well as all other applicable requirements, during [drilling operations] (for the subsection on drilling) or [completion and re-completion operations] (for the subsection on completions) or [production operations] (for the subsection on production). This may not be necessary as a matter of New Mexico law, but in federal administrative law, the titles of statutory sections are not held to be legally binding. This recommendation is reflected in our redlined text of the rule.

3. 19.15.27.8 NMAC Completion and Re-completion Operations

We strongly support requirements to reduce venting and flaring from completion and recompletion operations. We are concerned, however, that reduced emission completion requirements ("RECs") are absent from OCD's draft rule. Hence, the rule as drafted would continue to allow large quantities of gas to be vented directly to the atmosphere, with all of the resulting harms to human health and the environment from methane and related releases and

loss of state revenues. Regardless of air quality enforcement issues, RECs are a long-standing, proven solution for preventing waste from completions and recompletions that OCD should require in its rule.

EPA rules adopted for gas wells in 2011 and extended to oil wells in 2016 require the use of REC equipment for completions and recompletions. The requirement for so-called "green completions" has been widely and appropriately acclaimed as a major advance in reducing the significant volumes of methane emissions associated with uncontrolled emissions during the completion process for hydraulically fractured or refractured wells. Unfortunately, over the past few years some operators have exploited ambiguities in the EPA regulatory text to avoid diligently employing the use of REC equipment to reduce emissions in line with the text and spirit of the EPA rules. In particular, extensive anecdotal evidence indicates that operators in NM are not using REC equipment as a standard, required, and prudent practice.

Specifically, there are issues with the EPA regulatory text regarding "separators" and with what was intended to be a narrow exception to address rare situations of infeasibility. A recent technical amendment to the EPA regulations helpfully clarifies the meaning of "separator" and adds a requirement that a separator be available for use during the entire flowback process.[4] The recent amendments do not, however, otherwise tighten the regulations as needed to ensure that the regulations fulfill the intent to require operators to deploy and use REC equipment for every completion and recompletion operation. OCD has the opportunity now to address this significant source of methane waste in New Mexico, and to do so in a way that allows OCD to enforce the requirements. We urge you to seize this opportunity and ensure that operators are not allowed to vent gas during completions.

For over two decades, industry has used REC equipment to handle initial flowback from hydraulically fractured wells and capture the gas. Natural gas producers developed and deployed this equipment at a time when gas was more valuable and they could recover their costs through sales. Since 2012, hydraulically fractured natural gas wells have been required to use it by law, with hydraulically fractured oil wells added in 2016. REC equipment is designed to be temporary and easily moved from well-site to well-site. It normally includes filters such as plugs, sandcatchers, and one or more attached separators, and it is designed for the pressures and volumes associated with initial flowback. Where well pressures are too low for REC

[4] *See* 85 Fed. Reg. 57,398, 57,439 (Sept. 15, 2020) (40 C.F.R. § 60.5375a(a)(1)(i), (iii))

equipment to function properly, the pressure going into the REC equipment is boosted with compressors.

EPA regulations provide an exemption if it is "technically infeasible" for a separator to function, but this exemption is not necessary and has been subject to abuse, substantially undermining the effectiveness of the requirement. The whole point of REC equipment is to allow gas capture during the entire flowback process, and if equipment is not able to accomplish that, it should not be considered REC equipment. The operator should be responsible for obtaining REC equipment adequate for the particular job, and if it is not adequate, either the equipment is insufficient or the operator may be using a fracking technique that is not compatible with the equipment deployed. Either way, these factors are under the *operator's* control. If there is a problem, the burden should be on the operator to address it, not shifted, through exceptions, onto the public's shoulders through increased air quality and health impacts as well as lost revenues.

Thus, we strongly urge OCD not to include an open-ended exemption for "technical infeasibility." We are skeptical that there are in fact normal flowback situations (absent emergencies, which are already exempted from the proposed venting prohibitions) that REC equipment cannot be acquired to address and that operators cannot avoid through their choice of fracking techniques. But if such normal flowback situations exist, OCD should require industry to specifically identify them before making an attempt to draft regulatory exemptions. If OCD decides to include any such exemption, we urge OCD to do so only if it can be drafted in a way that it cannot be used as a loophole to evade the intent of the regulation to require the use of REC equipment and avoid the venting of gas.

A second problem with the EPA regulations is that the text has sometimes been misread to claim that the use of the terms "initial flowback" and "separation flowback" allows venting up until the point that the flowback gas is clean enough for a permanent onsite separator to function. As these separators are generally not designed to handle flowback gas, this interpretation allows venting throughout the flowback period. This is a blatant misreading of the text and intent of the EPA regulations, and EPA has just finalized amended text to disallow this interpretation. EPA has added: "The separator may be a production separator, but the production separator also must be designed to accommodate flowback."[5] It is critical that any

[5] *See* 85 Fed. Reg. 57,439 (Sept. 15, 2020) (40 C.F.R. § 60.5375a(a)(1)(i)).

rule reference to a "separator" during completion operations make clear that a separator is part of the REC equipment and hence designed to accommodate the volumes and pressures associated with initial flowback. If OCD allows use of a permanent separator during the flowback period, it must be contingent upon the use of a separator capable of handling the flowback, in conjunction with the REC equipment, when the flowback begins.

In summary, there is no circumstance in which an operator should be able to avoid routing the initial flowback through REC equipment. The "flowback period" begins at the initiation of flowback and extends until well completion or recompletion is terminated and a (permanent) separator is connected to the wellhead. In practical terms, this means that the OCD rule should be structured to prohibit *any* venting during flowback.

The rules should also include a requirement that the operator have REC equipment onsite and connected prior to initiation of flowback and use that equipment to capture gas throughout the entire flowback period. A requirement to have the equipment onsite and connected is relatively easy to verify and enforce, and it reduces the incentive for operators to avoid the REC requirements overall (EPA's recent amendments also added language to require that the separator be available and ready for use during the entire flowback period).

This is consistent with the approach of other jurisdictions, which have recognized that venting during any stage of the completion/recompletion process is neither technically necessary nor hugely costly to avoid. For example, the Colorado Air Pollution Control Division has proposed to require control of at least 95% of emissions during the entire flowback period:

> Owners or operators of a well with flowback that begins on or after May 1, 2021, must collect and control emissions from each flowback vessel on and after the date flowback after drill-out is routed to the flowback vessel by routing emissions to and operating air pollution control equipment that achieves a hydrocarbon control efficiency of at least 95%. If a combustion device is used, it must have a design destruction efficiency of at least 98% for hydrocarbons. VI.D.1.a.(i) Owners or operators must use enclosed flowback vessels.

Similarly, Canada's federal rules provide that "Hydrocarbon gas associated with flowback at a well at an upstream oil and gas facility must not be vented during flowback but must instead be captured and routed to hydrocarbon gas conservation equipment or hydrocarbon gas

destruction equipment."[6] The only exception to this venting prohibition is "if all the gas associated with blowback at the well does not have sufficient heating value to sustain combustion." We understand that this exemption is intended to address the flowback when nitrogen is used as the fracking material, but the exemption is overbroad. When nitrogen is used as the fracking material, the gas is not initially suitable for sales and it may be difficult to achieve sustained combustion. Operators can readily address the combustion issue, however, by providing sufficient additional combustible gas to sustain combustion.

Colorado and Canadian regulators recognize that venting is not necessary during initial or subsequent flowback from hydraulically fractured wells, and technology to control it is affordable and available, and we urge OCD to be no less protective of New Mexico.

In addition to prohibiting venting, OCD's completion rules should also require operators to avoid flaring except as may be necessary in a few specific situations as part of the operation of the REC equipment. For example, we recognize that when nitrogen is used for fracking, the flowback gas may require flaring as an integral part of the REC process and equipment, while still allowing delivery of the remainder of the gas to the sales line, other beneficial use, or reinjection. Thus, OCD could allow for flaring during flowback, but only where it is an integral and necessary part of the REC process. As a general matter, the operator should be required to capture and route to a sales line, beneficially use, or re-inject the gas.

We urge OCD to require, by rule, that operators not only deploy and connect REC equipment prior to flowback and use it upon initiation of flowback, but also capture, use, or re-inject the gas from the initiation of flowback until the well completion or recompletion is terminated and a separator is connected to the wellhead.

Consistent with our recommendation for an overarching requirement applying to drilling, completions, recompletions and production operations to flare rather than vent except in specifically identified circumstances, we recommend deleting paragraph 19.15.27.8(C)(4) NMAC, which provides a less precise and less protective requirement to flare rather than vent during completions and recompletions.

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[6] Government of Canada, *Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds (Upstream Oil and Gas Sector)* (SOR/2018-66), § 11(2) (online at:https://laws-lois.justice.gc.ca/eng/regulations/SOR-2018-66/page-2.html).

In addition, we recommend that OCD add "and re-completions" wherever completions are referenced (or define "completions" up front to include re-completions) to clarify that the requirements for completions also apply to re-completions.

4. 19.15.27.8 NMAC Production Operations

We commend OCD for recognizing that it is critical to ensure that flares remain lit and combust as much of the emitted gas as possible, using standard flare technology, but the regulatory requirements need to be clearer and stronger to achieve this purpose. The standards should require all new flares, and all existing flares after a brief retrofit period, to have an automatic ignitor or continuous pilot light and reduce methane and VOC emissions by at least 98%. Additionally, we recommend that OCD consider following the lead of Colorado and BLM by requiring auto-igniters specifically, rather than deeming pilot lights to be sufficient.[7]

Recent research has documented that unlit and venting flares have become a huge source of methane emissions.[8] In addition, properly sized flares with an automatic ignitor are now standard across the industry and required by other jurisdictions, such as BLM.[9] Further, replacing or retrofitting flares to add an automatic ignitor is highly cost-effective to reduce emissions of VOCs and methane, better protecting the climate, the public, and neighboring properties.[10]

As of the effective date of the rule, OCD should require that any new flares installed have an automatic ignitor, as BLM required four years ago.[11] In addition, OCD should ensure that the flares are actually effective at eliminating the gas emissions. Several states require flares to meet a destruction removal efficiency of 98% in applications where they are being used to

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[7] *See* 5 CCR 1001-9.I.C.1.e and 1001-9.II.B.2.d; 43 U.S.C. § 3179.3 (providing that "automatic ignition system means an automatic ignitor *and, where needed to ensure continuous combustion, a continuous pilot flame"* (emphasis added)).

[8] Groundbreaking data is a wake-up call in the Permian, call to action for New Mexico, EDF Blog, April 8, 2020. Available at http://blogs.edf.org/energyexchange/2020/04/08/groundbreaking-data-is-a-wake-up-call-in-the-permian-call-to-action-for-newmexico/

[9] *See* 43 CFR 31.79.6(c), 3178.3 (definition of "automatic ignition").

[10] In 2014, the Colorado Department of Public Health and Environment (CDPHE) estimated the cost-effectiveness of reducing VOC emissions by retrofitting certain existing flares with auto-igniters at $302 per ton. *See* 2014 CDPHE Cost Analysis at pp. 30-32 (document on file with WELC and CATF and available upon request). Note that CDPHE did not provide an estimate of cost per ton of methane, but given the very low VOC abatement cost, it would certainly also be low.

[11] *See* 43 CFR 31.79.6(c), 3178.3 (definition of "automatic ignition").

control VOC and methane emissions, and we urge OCD also to include this requirement for flares used under these rules.[12]

With respect to existing flares, all operators should replace or retrofit such flares to meet the same requirements within 60 days of the effective date of this rule, as was also the case with the BLM rule. The rules should be no different for operators of lower producing wells. The flares at such wells are just as likely to blow out as flares at any other well. In fact, the quantities of gas vented from such an event may be even higher at lower producing wells, given that OCD has proposed to allow them to conduct AVO inspections less frequently than at other wells (though we recommend below that OCD provide provide for weekly AVO inspections at all wells), which could allow the unlit flare to vent for a substantially longer period. In all situations, the flare stack should be right-sized to account for the flow of natural gas into the stack, maintained, and, if appropriate (e.g., it wears out) replaced, to ensure conformance with the rules. We emphasize these points because NGO partners, when they have arrived on production sites with optical gas imaging equipment, have witnessed workers rushing to light unlit flares which may be a product, in part, of improperly sized flares and lack of maintenance that degrades the integrity and functionality of the flare stack.

Further, as written, by not requiring an auto-igniter be installed until an operator replaces a flare--no matter how long in the future that may be--the rule incentivizes operators to keep existing flares in place as long as possible, potentially exacerbating the problems described above. It is critical that OCD require auto-igniters - or at a minimum, pilot lights, for all flares by a date certain.

As alluded to above, we also recommend that OCD provide for weekly AVO inspections of all production operations. The current rule provides a less frequent AVO inspection rate for low-producing wells. However, EDF studies and other research demonstrates low producing wells

[12] *See, e.g.*, 5 CCR 1001-9.II.D (requiring 98% destruction efficiency for a dehydrator if a combustion device is used as a control); Wyoming Permitting Guidance at 19 (establishing presumptive BACT for dehydrators as controlling all "VOC and HAP emissions from dehydration unit process vents . . . by at least 98%); North Dakota May 2011 Bakken Permitting Guidance at 19 (allowing an "enclosed, smokeless combustion device or flare that is designed and operated to reduce the mass content of VOC and total HAP emissions in the vapors vented to the device by at least 98% by weight" as control for dehydrators), available at: https://deq.nd.gov/publications/AQ/policy/PC/20110502_OilGas_Permitting_Guidance.pdf.

can be significant emitters[13] and that there is not a relationship between emissions and production.[14] In addition, as EDF notes in its comments to OCD, filed separately, low-producing wells disproportionately occur in areas with vulnerable and disadvantaged communities. Accordingly, OCD should set a standardized, weekly AVO inspection rate for all wells.

5. OCD Should Strike the 19.15.27.8(D)(2)(a) NMAC Venting Prohibition Exception

OCD, in 19.15.27.8(D)(2)(a) NMAC of the draft rule, proposes that, during production operations, "the operator may vent or flare natural gas … to the extent authorized by a valid federally enforceable air quality permit issued by the environment department." This provision should be stricken for the following reasons:

- The provision, as drafted, is unnecessary. NMED and OCD are separate agencies, with separate legal authorities, responsibilities, and permitting regimes, and it is unclear why OCD's rules need to reference NMED's permitting regime.

- The provision, as written, is overly vague and unbounded, encompassing air quality permits issued prior to the Environment Department's likely promulgation, by the Environmental Improvement Board, of new ozone rules. This would allow old NMED permits to override OCD's anticipated waste rule requirements--i.e., old NMED permits issued without consideration of updated information and concerns, such as the climate impacts of the venting or flaring, and consequent pollution control requirements.

- OCD's rules should be additive to, rather than subordinate it to, the Environment Department's rules, and vice versa. Each agency has an independent statutory duty: NMED protects air quality and OCD prevents waste. Each duty must be satisfied, not avoided because another agency's authorities may result in different constraints (or lack of constraints) on a particular activity, here oil and gas operations. Yet the provision as drafted suggests that whatever rules OCD may have to prohibit venting or flaring, an

[13] See Jacob A. Deighton, *et. al*. Measurements show that marginal wells are a disproportionate source of methane relative to production (Aug. 2020);
[14] Anna Robertson et al. New Mexico Permian Basin Measured Well Pad Methane Emissions are a Factor of 5 – 9 Times Higher Than US EPA Estimates. Environmental Science & Technology (accepted). Measurements were taken in 2018.

operator may disregard those rules if an Environment Department-issued air quality permit does not prohibit them.

- The Environment Department's draft rules contain loopholes that, according to the Environmental Defense Fund, would leave upwards of 95% of oil and gas wells in the San Juan Basin, and upwards of 87% of wells in the Permian Basin, unregulated.[15]

For the very same reasons, we also recommend striking identical language provided for gathering systems at 19.15.28.22(B)(1) NMAC of the draft rule.

6. OCD Should Provide for Public Notice in the Event of Emergencies or Malfunctions that Risk Public Health or Safety

OCD has proposed strong and detailed reporting requirements, which we emphatically support, and which should give OCD and the public a much greater understanding of the cause, quantity, location, and duration of venting and flaring activity. Nonetheless, there are homes, schools, and businesses that are close to oil and gas wells and infrastructure and remain at risk from these operations. Indeed, EDF analysis shows that over 58,000 vulnerable people, including children, live within 1 mile of oil and gas wells in the San Juan Basin, and just under 58,000 vulnerable people, including children, live within 1 mile of oil and gas wells in the Permian Basin.[16] Subsequent analysis, included in EDF's comments to the Environment Department regarding its draft ozone rule, show that the problem is significant at a ½ mile distance from oil and gas wells. Specifically, 57,000 vulnerable people live within ½ mile of oil and gas wells in the San Juan Basin, and 28,000 vulnerable people live within ½ mile of oil and gas wells in the Permian Basin.

When pollution spikes because of an emergency or a malfunction, people living and working nearby deserve and need to know in real-time so they can minimize their exposures. Most of the information reported to OCD is necessarily provided after the fact, and families living next

[15] Environmental Advocate Warns Legislators of Loopholes in Draft Methane Rules, Farmington Daily Times (Sept. 5, 2020) (available at: https://www.daily-times.com/story/news/local/2020/09/05/new-mexico-water-natural-resources-committee-methane-gas-regulations/5706388002/ (last visited Sept. 11, 2020).

[16] *See* Jon Goldstein, Environmental Defense Fund, *Reducing Oil and Gas Pollution in New Mexico*, Presentation to the New Mexico Water and Natural Resources Committee (Sept. 3, 2020) (available at: https://www.nmlegis.gov/Committee/Handouts_List?CommitteeCode=WNR&Date=9/3/2020)

to oil wells cannot be expected to monitor the OCD website on an hourly basis. Thus, we recommend that the rule, in 19.15.27.8(B)(1) NMAC, which consolidates the emergency and malfunction provisions of OCD's initial draft rule, provide that operators must directly notify members of the public living, working, or otherwise located within two miles of operations that, due to an emergency or malfunction, present a public health or safety risk.

7. Measurement and Reporting of Vented and Flared Natural Gas.

We support OCD's proposal to expand the requirements for measurement and reporting to provide that operators must identify the reasons why they vent and flare and the volumes associated with each cause. Over time, we believe this will enable the agency to fine-tune its compliance and enforcement activities to focus on the most significant sources of venting and flaring. We recommend several changes to clarify and strengthen these requirements.

First, in 19.15.27.8(E)(1) NMAC as drafted, we recommend striking "or authorization" since OCD is proposing to drop the requirement for pre-approval of flaring and change the purpose of the Form C-129 from authorizing exemptions from the no-flare rule to simply reporting on venting and flaring events.

Second, in 19.15.27.8(E)(3) NMAC as drafted, OCD should clarify and specify that vented and flared volumes for each category should be reported separately.

Third, and critically, in 19.15.27.8(E)(3) NMAC as drafted, OCD should include flared and vented gas from *controlled* tanks in the list of volumes of vented and flared gas to be reported, not just venting from uncontrolled tanks as was proposed. While controlling gas emissions from tanks through flaring is vastly preferable to venting it, the gas lost through such flaring is still wasted, and operators have the option to avoid this waste by capturing and routing the gas to the sales line, using it onsite, or re-injecting it. Relatively new technologies are available to facilitate capture of gas for sales or process. For example, catalytic systems are available to remove oxygen that can contaminate gas recovered from tanks, so that it can be injected into gathering pipelines without contaminating the gas in those pipelines.[17]

Under the structure of the proposed rule, requiring flared gas from controlled tanks to be reported also appropriately requires operators to take this flaring into account in calculating

[17] *See, e.g.,* https://www.ecovaporrs.com/zero2-solutions/.

compliance with the natural gas capture requirements. This is especially important given the large volume of flaring from controlled tanks. In the Permian Basin as a whole (both Texas and New Mexico), operators subject to EPA's greenhouse gas reporting rules reported emitting 1,390,000 tons of CO_2 from enclosed combustors or flares for tanks in 2018.[18] These emissions are smaller than, but of similar scale to, the 6,020,000 tons of reported CO_2 emissions in 2018 from flaring of associated gas from oil wells, comprising roughly 19% of the total emissions reported from flaring in the Permian.[19] Operators should not be given a free pass for this large volume of flaring and waste, but should be required to include it along with the other flaring that they must reduce.

Fourth, OCD should require that operators more precisely specify the reasons for venting and flaring associated gas and the volumes vented or flared. Currently, 19.15.27.8(E)(3)(o) NMAC, as drafted, establishes a single category for "insufficient pipeline availability or capacity." This language does not capture the specific reasons articulated by operators during the MAP process and in Form C-129s for venting and flaring associated gas.[20] We suggest that OCD establish four subcategories to address this dynamic: (1) lack of connection to well; (2) lack of sufficient well pressure; (3) third-party or midstream upset conditions or curtailment; and (4) an open-ended category for additional reasons.

Fifth, we recommend clarifying the requirements of the revised Form C-129, formerly used by operators to obtain prior approval for an exemption to the no-flare rule. The revised form requests several items of information in an open-ended manner that will make subsequent review or analysis of C-129 information difficult or impossible given the large number of forms we expect to be submitted. Providing operators a choice of pre-specified responses reduces reporting effort for operators, as well as improving information quality and usability. Specifically, we recommend the following:

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[18] EPA Subpart W, https://oaspub.epa.gov/enviro/AD_HOC_TABLE_COLUMN_SELECT_V2.retrieval_list. EF_W_ATM_STG_TANKS_CALC1OR2: "Large" tanks (throughput of 10 barrels or more per day. CO_2 emissions from Tanks with Flaring for basin 430 (Permian). EF_W_ATM_STG_TANKS_CALC3: "Small" tanks (throughput of less than 10 barrels perday. CO_2 emissions from Tanks with Flares for basin 430 (Permian). EF_W_ASSOCIATED_NG_UNITS: Data for associated gas venting and flaring. Associated Gas Flaring CO_2 for basin 430 (Permian).

[19] *Id.*

[20] Western Environmental Law Center, *Flaring in the Oilfield - A Closer Look* (August 2020) (available at https://westernlaw.org/wp-content/uploads/2020/08/2020.08.05-WELC-NM-Flaring-Report.pdf).

- For 19.15.27.8(E)(4)(a)(vii) NMAC as drafted, "cause and nature of venting or flaring," we recommend requiring the operator to identify the category in (E)(3) that caused or was the source of the event.

- For (E)(4)(viii), "steps taken to limit the duration and magnitude of venting or flaring," the rule should incorporate subcategories for the most common steps rather than remain a textual description; e.g.: (1) well shut in, (2) production curtailed, (3) work expedited, (4) upset condition resolved, etc.

- For (E)(ix), "corrective actions taken to eliminate the cause and recurrence of venting and flaring," the language should similarly be replaced with categories for the most common corrective actions; e.g.: (1) well connected to sales line, (2) compression installed, (3) equipment replaced, (4) maintenance procedures or schedule revised, etc.

- We strongly recommend the addition of a new subsection (E)(4)(x) to provide OCD and the public with information about the frequency with which the operators report venting or flaring events at their facilities. This information is critical to identifying when short-term or occasional venting or flaring has turned into routine flaring.

Sixth, the integrity and effectiveness of the capture requirement as a mechanism to reduce venting and flaring will depend on accurate reporting. To ensure that Operators are reporting accurate data in accord with 19.15.27.8.E(3) NMAC, we recommend that OCD include a requirement for operators to provide annual independent third-party verification for their Form 115B reporting. There is related precedent for this in California and Massachusetts, with support from The Climate Registry. The verification process typically involves an independent review and understanding of the data management systems and calculation methodologies used by reporting entities to track, quantify, and report gas volumes. The California and Massachusetts programs cover oil and gas greenhouse gas emissions under a mandatory GHG reporting program, and currently under the CA program there are 28 companies offering verification services that have been accredited and 207 accredited verifiers. Reporting of vented and flared waste volumes appears quite comparable to reporting of GHG emissions and we believe that verification providers active in this field, including several well-known names, are well-positioned to provide high-quality services to New Mexico oil and gas operators.

In the past, under the prior administration, there were significant problems with reporting of venting and flaring by Operators, and these problems have persisted. For 2019, according to

OCD statistics, only 75 companies reported any venting or flaring volumes out of a total of approximately 400 operators reporting oil or gas production statewide (although almost all of the state's major oil producers were reporting). This is absurd, underscoring the fact that reporting non-compliance is an acute and chronic problem. In a 2017 Notice to Operators, OCD:

> determined that not all Operators are following the requirement to report flared and vented volumes. Out of 603 well Operators active in the state, only 51 Operators are reporting volumes using the 'V' and 'F' code. It is very important that all Operators in New Mexico report flared and vented volumes since part of the evaluation will help determine any policy or requirements setting goals for reduction of flared gas. We urge all companies to work with their operations and production accounting groups to ensure proper production reporting.[21]

Anomalies in 2019 reporting suggest continuing problems. Several companies among the top oil producers in 2019 reported strikingly small volumes of flared gas. Among the top 20 producers, most reported flaring well over 1 Bcf of gas in 2019. However, a small group reported a tiny fraction of these amounts. In particular, five major operators reported minuscule volumes in comparison to other companies producing comparable amounts of oil. And several major oil producers did not report any flaring at all in 2019. While this may have reflected a commitment on the part of these companies to engage in minimal or no flaring, it is also quite possible that they were less than rigorous in complying with OCD's venting and flaring reporting requirements.

Given continuing challenges with reporting, we strongly recommend that OCD adopt a third-party verification program in the rule and then consult with standards-setting bodies, verification providers, and New Mexico stakeholders to establish reporting protocols for the new Form 115B and design a simple verification program that could be instituted through a Notice to Operators.

Under California's greenhouse gas reporting program, reporting entities must obtain third party verification services to verify their emissions reports.[22] The verification period is annual to match annual GHG reporting. For OCD, verification could be required annually as part of the annual capture percentage calculation accounting process. The cost of verification is borne by

[21] Western Environmental Law Center, *Flaring in the Oilfield - A Closer Look* (August 2020) (available at https://westernlaw.org/wp-content/uploads/2020/08/2020.08.05-WELC-NM-Flaring-Report.pdf).
[22] Details of the CA program available at https://ww2.arb.ca.gov/verification.

reporting entities, which contract for verification services. California accredits verification service providers and individual verifiers, including specific criteria for oil and gas systems specialists. The California verification process requires verifiers to document their verification plan, execute the plan, and produce a verification report with an opportunity for verifiers and reporters to resolve differences before the final report is filed with the state. Reporters have the ability to appeal to the state if agreement cannot be reached. Verification reports include findings about the validity of reported emissions, material misstatements, and nonconformance with reporting requirements. In a telephone conversation with officials from the California program, it was noted that costs for reporters with relatively fewer facilities have been in the mid-four figures range and those with more substantial operations in the six-figure range.

Although GHG reporting in Massachusetts is annual, the state only requires verification every three years.[23] The rationale noted by the state for establishing a verification program includes providing the most accurate and complete data possible for emissions inventory and planning processes, better consistency of reporting across all facilities, consistency with other reporting jurisdictions, as well as improving the credibility of the program and demonstrating a commitment to addressing climate change to the public and stakeholders.[24] The state has established a standard Verification Statement that must be certified by the verifier and submitted along with a report.[25] Based on a reporter survey conducted for a 2014 program review, over 90% of reporters costs were in the $2500 - $10,000 range, and were paid for by the reporting entity.[26]

The Climate Registry ("TCR") also requires independent third-party verification.[27] The TCR was established in 2007 to design and operate voluntary and mandatory greenhouse gas reporting programs globally and assist organizations in measuring, reporting and verifying the carbon in their operations in order to manage and reduce it. TCR also consults with governments nationally and internationally on all aspects of GHG measurement, reporting, and verification.

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[23] MA verification rule available at https://www.mass.gov/doc/310-cmr-700-air-pollution-control-regulations/download. See p. 482 for verification requirements.
[24] Massachusetts Greenhouse Gas Reporting Program: 2014 Verification Review September, 2015, available at: https://www.mass.gov/doc/draft-verification-review-document-public-comment-accepted-until-october-9-2015/download.
[25] MA Verification Statement Form available at: https://www.mass.gov/files/documents/2016/08/xw/ghgvrst.doc.
[26] *Id*.
[27] The Climate Registry verification protocol is available at https://www.theclimateregistry.org/wp-content/uploads/2019/10/GVP-2-1-Updates-and-Clarifications-October-2019.pdf.

In 2009-2010, TCR's Oil & Gas Production Protocol was developed in collaboration with the New Mexico Environment Department, the California Air Resources Board, and the Western Regional Air Partnership to establish calculation methodologies for GHG reporting by oil and gas operators, including venting and flaring.

We also recommend that OCD accommodate information technology trends in the oil and gas industry related to the collection and management of production and emissions data. For example, operators with advanced Supervisory Control and Data Acquisition ("SCADA") systems are currently able to provide unadjusted data directly to independent verifiers who would be able to use independent aerial or other data to confirm the accuracy of data provided by operators. Requirements adopted by OCD should provide for technology-driven changes that could substantially reduce the costs of reporting and verification.

Finally, we emphasize the importance of strict conflict of interest standards to ensure the independence of verifiers. California has established such standards to limit business relationships between reporters and verifiers that could create conflicts of interest.[28] California has also set a 6-year limit on reporters retaining the same verifier to promote independence.

C. OCD SHOULD STRENGTHEN THE 98% NATURAL GAS CAPTURE REQUIREMENT FOR UPSTREAM PRODUCTION

1. OCD Should Apply the Natural Gas Capture Requirement on Either a County-Wide or Formation-Wide Basis, Whichever is More Stringent

We commend OCD for adopting a requirement to phase down aggregate gas flaring over time. Flaring *is* waste. We strongly urge OCD, however, to determine an operator's compliance with the natural gas capture requirements on a far more granular geographic basis rather than, as proposed, on a state-wide basis. In our redline of the draft comments, we have used, as a default, a county-wide geographic basis. Regardless, we recommend that OCD adopt as granular an approach as it deems feasible from an administrative and waste prevention perspective, with primary consideration given to either a county-wide or formation-wide

[28] Verification service providers are banned from business relationships with: (1) entities directly benefiting from oil and gas production; (2) entities wholly or partially owned directly or indirectly by Operators, oilfield service providers, or midstream operators; (3) oil field services providers that generate sales from oil and gas construction or maintenance activities; and (4) entities that perform consulting, accounting, legal, engineering, or human resources services for Operators.

approach, whichever is more stringent. We also considered a pool-wide approach, but after some research, determined that there were simply too many overall pools within the state to make a pool-wide approach administratively feasible. Fundamentally, there are multiple reasons why the proposed state-wide approach included in the draft rule is problematic and should be revised.

First, a state-wide approach raises serious air quality, public health, and environmental justice concerns. Allowing operators to average their flaring across the entire state does nothing to ensure that vulnerable communities obtain some relief from the health-harming air pollution, noise, and light pollution caused by natural gas venting, flaring, and leaks. Requiring capture rates to be averaged across much smaller geographic areas would by no means remedy all air quality, public health, and environmental justice impacts, but it would make it far more likely that more communities will benefit, in some measure, from OCD's rules relative to the status quo. Of note, OCD has authority to consider these factors. The Oil and Gas Act, in addition to the mandate to prevent "surface waste," NMSA, § 70-2-3(B), also specifically provides that OCD has the authority "to require wells to be drilled, operated and produced in such manner as to *prevent injury to neighboring* leases or *properties*." NMSA, § 70-2-12(B)(7) (emphasis added).

Second, it is important to recognize that natural gas wells, in contrast to many oil wells, are planned and operated to capture and sell as much natural gas as possible. The natural gas well operators' goal is to maximize their natural gas production and profits. In contrast, many oil well operators' goal is to maximize only their oil production and profits, leaving their natural gas to be treated as a waste product. As a consequence, reported flaring rates for natural gas wells in the San Juan Basin are near zero -- compared with flaring rates at oil wells in the Permian Basin, with many operators reporting flaring rates from above 5% to upwards of 75%.

Requiring operators to meet a 98% capture requirement across all of their wells may thus serve to dilute the capture requirement for oil wells owned by operators who also own gas wells. About half of the gas produced in New Mexico is produced from gas wells,[29] so the state could achieve a statewide gas capture rate from all wells of 98% while only capturing 96% of gas from oil wells -- a requirement that is weaker than the BLM rule, which required 98% capture

[29] Based on OCD data available at: https://wwwapps.emnrd.state.nm.us/ocd/ocdpermitting/Reporting/Production/ProductionInjectionSummaryReport.aspx.

specifically for associated gas from oil wells beginning in 2026.[30] The proposed approach gives a potentially significant advantage to operators that own both oil and gas wells in the State. Even if few operators own both types of wells currently, that has not been the case historically, and OCD should avoid creating an incentive for operators to acquire gas wells to game the natural gas capture requirement. Arguably, this could also be addressed by setting separate gas capture requirements for oil and natural gas, though that would not necessarily address the public health, air quality, and environmental justice concerns we note above. The straightforward approach is the one we suggest here: narrow the geographical domain over which operators must capture 98% of their gas.

We also recommend inserting, in 19.15.27.9(A) NMAC, "at minimum" prior to both identifying the specific capture requirement and the reference to "increase the percentage of natural gas captured in each pool based on the following formula" to clarify that operators may (and should be encouraged) to capture more than the precise amounts specified.

2. OCD Should Strike 19.15.27.9(A)(3) NMAC Regarding Acquisitions

We strongly recommend that OCD strike section 19.15.27.9(A)(3) NMAC, which provides special treatment for operators that acquire other operators whose wells are not in compliance with natural gas capture requirements. Such operators should address noncompliance issues through asset sale or transfer negotiations and agreements. The public, through OCD's rules, should not have to carry the burden for such noncompliance, whether that burden entails further natural gas waste or air quality, public health, and environmental justice impacts. That is, the market should price the assets accordingly or the operator acquiring new well assets that are out of compliance with the natural gas capture requirement should carry that burden.

If OCD decides to retain this provision, it must establish strong sideboards. For example, OCD should specify that it applies only to acquisitions (1) made after December 1, 2026; (2) made by acquiring operators who are in compliance with the capture requirement prior to the acquisition; and (3) for wells not in compliance with the capture requirements; and that the rule (4) allow at most 60 days for the acquiring operator to bring all of its wells into compliance; (5) provides that the acquiring operator does not waive any liabilities for pre-acquisition

[30] Note that the BLM rule did allow a deduction of 750 Mcf/month/oil well to cover flaring from emergencies etc., but this is comparable to OCD's proposal to exclude from the calculation the volume of natural gas vented or flared during emergencies, vented from pneumatic controllers and pumps, and flared due to high levels of N2 or H2S. *See* 43 CFR 3179.7(c)(2) and proposed 19.15.27.8 D(3).

violations; and (6) disallows any new APD approvals until the acquired wells are in compliance with the capture requirement. As drafted, this provision sets up an unbounded loophole that could easily be abused, particularly under a future administration that did not strongly support these requirements.

3. OCD Should Require that Operators Capture at last 90% of Natural Gas as of December 31, 2021 as a Precondition of Obtaining Approval for Pooling Applications, Special Pool Orders, Well Spacing or Density Adjustments, and APDs

Operators should not receive approvals for new oil and gas production infrastructure until they comply with a base rate of natural gas capture. In part, this is because the rule hinges off the use of 2021 data as the baseline for determining the required annual improvement in subsequent years. This risks creating a perverse incentive, because operators that waste more in 2021 will be subject to less stringent capture requirements in each of the following four years. To reduce waste, mitigate this perverse incentive, and incentivize waste prevention action by operators that are wasting a significant percentage of natural gas, the rule should provide that operators must capture at least 90% of their produced gas as of December 31, 2021 as a precondition of obtaining approvals for new oil and gas production infrastructure, specifically pooling applications, special pool orders, well spacing or density adjustments, and APDs.

A recent report from Western Environmental Law Center demonstrates that only seven of the top 25 oil producers flared more than 20% of their produced gas in 2019.[31] As the vast majority of operators are already achieving a capture percentage of 90% or greater, there is no excuse for any operator to capture any less than that after the effective date of the rule.

4. Exclusions from Accounting

We do not see the necessity for the specific exclusions listed in 19.15.27.9(B)(1)-(3) NMAC of the draft rule. The quantities of gas identified for exclusion should be covered by the 2% of natural gas that is not required to be captured under the Department's proposed approach (in contrast, these would be reasonable exclusions if OCD required 100% capture). If OCD retains

[31] Western Environmental Law Center, *Flaring in the Oilfield - A Closer Look* (August 2020) (available at https://westernlaw.org/wp-content/uploads/2020/08/2020.08.05-WELC-NM-Flaring-Report.pdf).

these exclusions, however, OCD should limit them to those listed and retain the specific reporting requirements that OCD has provided. Experience in North Dakota shows how broadly defined categories of exemptions, exacerbated by poor reporting and verification requirements, severely weakened the State's nominal capture requirement percentages.[32]

5. ALARM

We appreciate OCD's creativity and thoughtfulness in working to provide incentives for the oil and gas industry to deploy highly advanced leak detection technologies and practices. Nevertheless, we are concerned that the Advanced Leak And Repair Monitoring ("ALARM") provisions established by 19.15.27.9(B)(4)-(8) NMAC are either unlikely to successfully drive much deployment of advanced leak detection and repair or, though less likely, might even meaningfully weaken the natural gas capture requirement. To address this dynamic, we make two recommendations.

First, ALARM must be defined in a manner that makes it clear that it is precisely what it is supposed to mean: technology and methods more advanced than use of hand-held infrared cameras or application of EPA's Method 21. OCD could consider defining ALARM as methods and technologies that are not in common use in the industry and are not required by law or regulation.

Second, we note that the incentive OCD has proposed to provide to operators could potentially result in a net environmental harm, at least in the near term, by weakening the gas capture requirement for the operator deploying ALARM. We do not view this as a highly significant concern because it appears that the leak volumes involved are likely to be quite small in most cases, given the 15 day deadline for repairs. It appears more likely that the incentive would be insufficient to encourage deployment of ALARM by operators that were not already planning to use it. Regardless, the principle of weakening an environmental standard to encourage deployment of advanced technology sets up a less than optimal incentive system and is not something we support. It would be more appropriate to relax other monitoring requirements for an operator deploying ALARM, rather than relaxing the performance standard itself, as this tradeoff recognizes the operator's investment in ALARM and merely substitutes one form of

[32] *See Conservation Group Comments Regarding U.S. Bureau of Land Management Proposed Rescission of the 2016 Methane Waste Rule*, pp. 68-77 (April 23, 2018) (detailing concerns), available at: https://www.catf.us/wp-content/uploads/2018/09/CATF_Filing_BLMOilsGasDrilling_CitizenGroupComments.pdf.

required monitoring for another. A monitoring relaxation may be more difficult to effectuate here, given that most of the leak detection and repair requirements applicable to operators are contained in NMED's regulations, not OCD's. Nonetheless, there does not appear to be any technical reason why the rules of the two agencies cannot interact, and we urge the agencies to work together to design an appropriate and effective incentive system that, at minimum, holds the environment harmless.

6. OCD Should Not Issue New Drilling Permits to Operators That Are Not In Compliance With the Natural Gas Capture Requirement

OCD should provide that compliance with the natural gas capture requirement provided by 19.15.27.9(A) NMAC is a precondition for obtaining new drilling permit approvals. The principle animating this recommendation is simple: when you are in a hole, stop digging. Our recommendation would provide operators with an incentive to comply with gas capture requirements and ensure that limited operator capital and operating expenditures are not devoted to drilling new wells at the expense of preventing waste at existing wells.

We emphasize, assuming that OCD applies the percentage-based natural gas capture requirements on a more granular geographic basis than state-wide, that OCD should require that operators be in compliance with gas capture requirements *everywhere* within the state as a precondition to receiving new APDs *anywhere* in the state. Absent this constraint, OCD's rules would create a perverse incentive for operators to invest in capture infrastructure or alternatives only in areas where they are drilling new wells, rather than investing in preventing waste in mature producing areas where new wells are not contemplated and where gas capture requirements are not being met. Put differently, operators should not be entitled to expand their operations *anywhere* in the state until they comply with the rules *everywhere* in the state.

7. OCD Should Consider Using 2020 Gas Capture Rates as a Baseline to Determine an Operator's Interim (2022-2026) Gas Capture Requirements

While we generally support the "ramp-down" approach provided by 19.15.27.9(A) NMAC's gas capture requirement, as drafted, we are concerned that using 2021 as the baseline year to determine the required gas capture percentages in the future years (2022-2026) creates a significant incentive to waste gas in 2021. Simply put, the more gas operators flare next year,

the less stringent their required gas capture percentages will be in each of the next five succeeding years. This may well not be a purely theoretical concern: permit applications in the Permian have increased in recent weeks, setting the stage for another drilling boom and gas glut in future months if demand and prices rebound.[33] This could easily increase waste for many operators in 2021. Incentivizing waste in 2021 via the Proposed Rule's structure might just make the situation worse.

We urge OCD to use waste rates from 2020 as the baseline for calculation of required gas capture rates for 2022-2026. We recognize that, given issues with reporting of waste (which the proposed rule will do much to address), OCD has concerns with using waste volumes reported under the currently applicable rules as the baseline for this purpose. We would be happy to discuss appropriate ways for OCD to respond to that concern, while still using 2020 as the baseline year for setting interim gas capture requirements.

D. OCD SHOULD STRENGTHEN NATURAL GAS MANAGEMENT PLANS PROVIDED FOR BY 19.15.27.9 NMAC OF THE DRAFT RULE

1. Natural Gas Management Plans Should Function as Tool to Prevent Routine Flaring from New and Recompleted Oil and Gas Wells

We very much appreciate and support OCD's inclusion of a natural gas management planning requirement in the proposed rule, 19.15.27.9(D) NMAC. Effective front-end planning is an essential complement to technology-based methane waste prevention or reduction solutions. But the end goal of planning is not that operators consider capturing gas from new oil wells. The goal here should be that operators plan development knowing that they *must* capture the gas from new oil wells. Accordingly, the OCD rule should aim to end routine flaring from new and recompleted oil wells.

We are far beyond the point where routine flaring of associated gas should be tolerated in New Mexico as an acceptable business practice. As the World Bank's *Zero Routine Flaring by 2030 Initiative* explains, "routine flaring" is "flaring that occurs during the normal production of oil, and in the absence of sufficient facilities to utilize the gas on-site, dispatch it to a market, or re-

[33] See, e.g., https://www.reuters.com/article/us-usa-shale-permits-election-focus/u-s-shale-producers-race-for-federal-permits-ahead-of-presidential-election-idUSKBN25Z0KV.

inject it."[34] Operators in the Permian Basin, in particular, are well aware of this dynamic.[35] Indeed, in 2019, operators flared over 30 Bcf, which would have supplied enough gas to meet the home heating and cooking needs of 80% of New Mexico households for the year.[36] And while flaring has dropped along with production during the pandemic, the current numbers are expected to increase with any recovery. At the same time, many Permian Basin oil producers are already capturing most of their associated natural gas for sale and use, in large part by lining up adequate takeaway capacity through close coordination with midstream operators.

Unlike flaring during emergencies, avoiding future routine flaring is entirely within industry's control and is a matter of planning and timing the development of new oil wells. The natural gas industry does not conduct routine flaring because the industry is designed to capture and sell gas. The oil industry is also fully capable, without extraordinary expense, of capturing rather than flaring gas. The differences in flaring rates between operators underscores that flaring is avoidable, where operators choose to avoid it.[37]

To address this dynamic, we recommend that these waste prevention rules require each operator, in the natural gas plan, to demonstrate to OCD and the public how the operator will prevent routine flaring for new wells or recompletions of existing wells, and that the rules make such a demonstration a precondition of obtaining drilling approvals. The operator would have the flexibility to decide *how* to avoid routine flaring. Options include committing to obtain firm, contracted takeaway capacity at new wells or recompletions before they begin producing, or, where gathering or processing capacity is limited, to employ alternative options to avoid flaring such as revised drilling schedules, well shut-ins or production curtailments in the vicinity of the new well, on-site fuel use, electricity generation, compression and trucking, or reinjection. The plan, once approved by OCD, would bind the operator (and be enforceable by OCD) unless and until the operator seeks and obtains OCD's approval for an amended gas management plan.

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[34] World Bank, *Zero Routine Flaring by 2030* (online at: https://www.worldbank.org/en/programs/zero-routine-flaring-by-2030#7).

[35] "Secret Recording Bares Views of Oil Executives On Methane Burn-Offs", The New York Times, September 13, 2020. Available at https://www.nytimes.com/2020/09/12/climate/methane-natural-gas-flaring.html?searchResultPosition=5

[36] Based on OCD reports of volumes flared and US Energy Information Administration data on the volume of gas consumed by residential customers in New Mexico (https://www.eia.gov/dnav/ng/ng_cons_sum_a_EPG0_vrs_mmcf_a.htm).

[37] Flaring in the Oilfield - A Closer Look

We note that action by New Mexico to prohibit routine flaring would be in good company and help advance the vision and ambition of global efforts. The World Bank's Initiative, referenced above and launched in 2015, "brings together governments, oil companies, and development institutions who recognize [routine flaring] is unsustainable from a resource management and environmental perspective, and who agree to cooperate to eliminate routine flaring no later than 2030." Oil companies that endorse the Initiative commit themselves to "develop new oil fields they operate according to plans that incorporate sustainable utilization or conservation of the field's associated gas without routine flaring. Oil companies with routine flaring at existing oil fields they operate will seek to implement economically viable solutions to eliminate this legacy flaring as soon as possible, and no later than 2030."[38] Thirty-nine oil companies have endorsed the initiative, including BP, Shell and Occidental.[39] The Zero Routine Flaring by 2030 underscores that many of the largest international oil companies themselves recognize the practice is both unsustainable and unacceptable to the public, and they are willing to end it now in new fields and phase it out as soon as possible in existing fields. Several are already doing so, including EOG, Oxy, Chevron, Pioneer, and Parsley, according to a recent study by global oil and gas consultancy GaffneyCline.[40]

Similarly, major investors are calling on regulators to prohibit routine flaring. As *Bloomberg* reported earlier this month, investors managing more than $2 trillion urged the Texas Railroad Commission to ban routine flaring by 2025.[41] And the Texas Methane and Flaring Coalition, consisting of seven state trade associations and over 40 Texas operators, has stated that "The Coalition agrees we should strive to end routine flaring."[42]

In the absence of any mechanism to prevent routine flaring at new wells, OCD would effectively condone the perpetuation of an industry business model that is based on planned waste and

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[38] *Id.*

[39] World Bank, *Zero Routine Flaring by 2030* (online at: https://www.worldbank.org/en/programs/zero-routine-flaring-by-2030#4).

[40] Tackling Flaring: Learnings from the Leading Permian Operators, GaffneyCline, June 2020 at 5. Available at https://www.gaffneycline.com/sites/g/files/cozyhq681/files/2020-06/Tackling%20Flaring_Final.pdf

[41] Bloomberg, *Investment Giants Urge Texas to End Most Natural Gas Flaring* (Sept. 4, 2020) (online at: https://www.bloomberg.com/news/articles/2020-09-04/investment-giants-urge-texas-to-end-most-flaring-of-natural-gas?sref=JN1HDH2Z).

[42] Texas Methane and Flaring Coalition, *Flaring Recommendations and Best Practices*, 2 (June 16, 2020) (online at: https://texasmethaneflaringcoalition.org/texas-methane-flaring-coalition-announces-new-flaring-recommendations-best-practices/).

pollution and is contrary to the public interest. This, in turn, would effectively subsidize operators who utilize this model, with the costs of that subsidy paid for by the public in the form of lost natural gas royalties, adverse climate impacts, and harmful air quality and public health impacts--impacts disproportionately borne, in New Mexico, by Indigeneous, Hispanic, Latino, and other environmental justice communities. Put simply, routine flaring serves private interests at the expense of the public interest.

Our recommendation complements the draft rule's other elements, in particular the natural gas capture requirement provided by 19.15.27.9(A) NMAC. In effect, natural gas management plans would operate as the regulatory tool to end routine flaring from new wells, while the natural gas capture requirement would act as the regulatory tool to ratchet down routine flaring from existing wells and non-routine flaring from new wells.

As proposed, however, the natural gas management planning requirement fails to end routine flaring from new wells, and hence continues to allow excessive waste. At present, 19.15.27.9(D) NMAC provides that natural gas management plans must only "describe the actions that the operator will take at each well" to prevent waste, and where there is insufficient gathering capacity include an analysis of "how the operator will avoid venting and flaring," but does not require that the plan in fact avoid routine flaring or that the operator actually take the actions described. This is far too nebulous and permissive. OCD's rule will *not* be seen as a nationally-leading rule unless it ends routine flaring, at least from new wells and recompletions.

Fundamentally, our recommendations would establish a clear mandate and expectation: operators cannot develop new wells or recomplete existing wells without a firm plan to capture all of the gas produced and thereby prevent routine flaring. Our recommended approach puts the burden on the operator (while providing the operator with flexibility) to use its engineering and technical know-how to end routine flaring *before* the operator can add to the flaring and waste problem by obtaining approvals to drill a new or recomplete an existing well. And by putting the burden on the operator (and providing that an APD will not be approved absent a natural gas management plan that avoids routine flaring and compliance with capture targets), it minimizes the administrative and enforcement burden on OCD.

Finally, we applaud OCD for including enhanced informational requirements for upstream gas management planning that will help midstream companies better estimate aggregate future production and plan system expansions, and for adopting pioneering planning requirements for

gathering system operators that will help producers identify existing or planned takeaway capacity.

2. Natural Gas Management Plans Should Be Required as a Condition of Requests to Increase Well Spacing or Density Decisions

OCD should require that operators develop a natural gas management plan when establishing or seeking changes to well spacing and density determinations for a given pool. The New Mexico Oil and Gas Act specifically contemplates that surface waste of natural gas may be caused by the "manner of spacing." NMSA, § 70-2-3(B). The risk of waste caused by the "manner of spacing" reflects the common sense logic that well spacing and density determinations for oil and gas pools operate to set the pattern of development for that pool and underlie an operator's planning and investment strategies, including decisions regarding when, where, and how new oil and gas wells will be drilled and providing a scale perspective lacking at the APD level, where OCD and the operator's focus is on a specific well. Planning for action to prevent waste at the pool level, when making well density and spacing decisions, addresses the need and opportunity to better synchronize oil and gas infrastructure across upstream and midstream sectors and inject waste prevention into an operator's investment choices. It also helps to proactively avoid conflicts with neighboring properties, including both the people who occupy these properties and those properties' uses and values.

Developing a pool-level natural gas management plan also creates opportunities to identify and create operational efficiencies of scale. Once developed, a pool-level natural gas management plan provides a foundation for OCD and operators to assess APD-level actions and for upstream operators to better coordinate with midstream operators. This should work to streamline APD level decisionmaking while providing heightened certainty for the OCD, operators, and the public.

Accordingly, we recommend that OCD include a new section requiring, when new well spacing or density determinations are sought, pool-level natural gas management plans, inserting that new section just before the APD-level natural gas management plans requirement. This section largely mirrors the requirement, with our recommended changes, for APD-level natural gas management plans, with certain modifications to account for the pool, rather than APD, level.

Acknowledging that circumstances and conditions may change between the point a pool-level natural gas management plan is approved and when an APD is proposed, operators would be

offered the flexibility, whether through a proposed modification of the pool-level plan or in their APD-level plan, to refine and adjust how they will satisfy their duty to prevent waste, in particular the mandate to prevent routine flaring.

3. Other Recommendations Regarding Natural Gas Management Plans

In addition to mandating that natural gas management plans be applied to the pool level and be used as a tool to prevent routine flaring, we recommend several additional elements to strengthen natural gas management planning.

First, we recommend that operators explain how they will mitigate the prospect that a new well may knock off existing, older wells owned by that operator that are connected to the same natural gas gathering and compression system, thus causing new flaring at those other wells. We think this dynamic can and should be avoided, by requiring that operators endeavor to manage all of their wells in a given system to prevent routine flaring from any of the wells, whether new or existing, under their control that are connected to the same gathering and compression system. Mitigation options that an operator could identify in the gas capture plan and then employ to prevent new, routine flaring due to pressure differentials (whether from the operator's new well or the operator's existing, older wells) include adding compression at lower pressure wells, shutting in wells pending sufficient gathering and compression capacity, or curtailing production pending an expansion of permanent compression capacity or line capacity.

Second, we recommend that natural gas management plans identify how the operator intends to avoid or minimize surface impacts of oil and gas infrastructure, such as by adjusting the location, timing, or sequencing of construction activities or operations or avoiding duplicative infrastructure. By proactively avoiding or minimizing such impacts, the operator can avoid or mitigate negative impacts to neighboring properties and thereby avoid challenges to well construction and operations and even increase the likelihood that gas capture infrastructure can be put in place in a timely and expeditious fashion.[43]

[43] *See* NMSA, § 70-2-12(B)(7) (providing OCD with authority "to require wells to be drilled, operated and produced in such manner as *to prevent injury to neighboring* leases or *properties*" (emphasis added)).

Third, we recommend that natural gas management plans identify the location of residences, schools, businesses, hospitals, or public facilities within two miles of the proposed well.[44] Identifying these places can provide information to both the operator and OCD to avoid or minimize impacts and also understand what neighboring properties should be notified of an emergency or malfunction that risks public health or safety.

Fourth, we recommend that an operator explain any changed circumstances, conditions, or waste reduction actions from the point a pool-level natural gas management plan is approved in accord with 19.15.27.9(D) NMAC as we propose to the point an operator proposes an APD. Even as a pool-level natural gas management plan will help optimize effective waste prevention operations across an entire pool and help ease the burden of APD-level natural gas management planning, we assume an operator may refine its approach to prevent routine flaring and other waste, or that circumstances and conditions may change. In this situation, an operator should be afforded the flexibility to deviate from the pool-level natural gas management plan so long as it explains why it is doing so, obtains OCD approval for any changes, and otherwise complies with surface waste prevention rules.

Fifth, where multiple wells or recompletions are contemplated from a single well pad or will be connected to a central delivery point, operators should be obliged to develop a natural gas management plan that accounts for all of the wells and recompletions. It makes little sense for operators to piecemeal the natural gas management plans given the inter-relationship of these wells and OCD review capacities. And, by doing so, both operators and OCD will have a better sense of scale and perspective to optimize action to prevent waste.

E. GATHERING SYSTEMS

1. Venting and Flaring Recommendations

Consistent with our comments on venting and flaring from drilling, completion and recompletion, and production operations, we recommend that the venting and flaring provisions for natural gas gathering systems explicitly require capturing and returning gas to the gathering system where possible, or flaring in lieu of venting, except in narrow, situation-specific circumstances.

[44] *See* NMSA, § 70-2-12(B)(7) (providing OCD with authority "to require wells to be drilled, operated and produced in such manner as *to prevent injury to neighboring* leases or *properties*" (emphasis added)).

Of the situations listed in subsection 19.15.28.22(B) NMAC, we suggest deleting "(h) a blowdown to repair a gathering pipeline," since in 19.15.28.19(B)(8) and (9) NMAC, OCD requires operators to flare, not vent, during blowdown in the course of scheduled maintenance, and to make every attempt possible to flare, not vent, during unscheduled maintenance.

In addition, as to the remainder of the situations currently listed in 19.15.28.22(B) NMAC, we note that OCD may decide that it is reasonable to include exemptions for the following activities or situations:

- During pigging or purging, but only where it is not technically feasible to capture or reroute the gas back into the pipeline or to use a portable flare;

- From a leak, but only if the operator is in full compliance with all applicable requirements related to leak detection and repair, whether required by OCD or NMED rules; and

- When a release of gas is uncontrollable and flaring is prohibited by Federal, State, local or Tribal law, regulation, or enforceable permit term.

As discussed in our recommendations for the venting restrictions during drilling, completion and recompletion, and production activities and for the same reasons, we recommend that OCD adopt the substance of the third bullet above in lieu of the exemption for venting provided by 19.15.28.22(B)(1) NMAC of the draft rule (i.e., "authorized by a valid federally enforceable air quality permit issued by the environment department"). Existing air quality permits were issued without accounting for the climate impacts of vented gas, air quality permits should not be allowed to preempt valid OCD regulatory requirements, and allowing venting where flaring is prohibited by an air permit covers the universe of situations in which air quality considerations embodied in a permit should outweigh the general requirement to flare in lieu of venting.

With respect to 19.15.28.22(B)(3) NMAC of the draft rule, which allows venting from specified equipment and activities, we recommend adding a phrase such as "from equipment and activities in compliance with all applicable laws and regulations and" after "during the following activities." This makes it clear that equipment such as the pneumatic controller or storage tank itself must be in compliance with applicable requirements, such as replacement requirements, not just that such equipment is allowed to vent. While the language in current paragraph (B)(3)

appears to have the same intent, that language is slightly less clear as it references regulation of emissions, not the use of the equipment itself.

2. Inclusion of Flaring and Venting from Controlled Tanks

As we recommended above for drilling, completion and production activities, the requirements for reporting venting and flaring from gathering systems in 19.15.28.22(C)(7) NMAC should also include flared and vented gas from *controlled* tanks in the list of volumes of vented and flared gas to be reported, not just venting from uncontrolled tanks as was proposed. While controlling gas emissions from tanks through flaring is vastly preferable to venting it, the gas lost through such flaring is still wasted, and operators have the option to avoid this waste by capturing and routing the gas back to the gathering system, using it onsite, or re-injecting it. Relatively new technologies are available to facilitate capture of gas for sales or process. For example, catalytic systems are available to remove oxygen that can contaminate gas recovered from tanks, so that it can be injected into gathering pipelines without contaminating the gas in those pipelines.[45]

Under the structure of the proposed regulations, requiring flared gas from controlled tanks to be reported also appropriately requires operators to take this flaring into account in calculating compliance with the natural gas capture requirements. This is especially important given the large volume of flaring from controlled tanks at gathering facilities. Permian natural gas gatherers (in both Texas and New Mexico) reported emitting over 710,000 metric tons of CO_2 from flaring/incinerating gas from tanks at those facilities 2018 - 35% of the total reported CO_2 emissions from flaring at those facilities.[46]

3. Notification of Venting or Flaring Events

As we recommended for upstream operations, we also recommend clarifying the requirements of the revised Form C-129 for operators of natural gas gathering systems. The draft rule proposes several items of information in an open-ended manner that will make subsequent review or analysis of C-129 information difficult or impossible given the potentially large number of these forms submitted. Providing operators a set of options from which to select

[45] *See, e.g.,* https://www.ecovaporrs.com/zero2-solutions/.
[46] EPA Subpart W, https://oaspub.epa.gov/enviro/AD_HOC_TABLE_COLUMN_SELECT_V2.retrieval_list. EF_W_EMISSIONS_SOURCE_GHG: CO_2 emissions from Atmospheric Storage Tanks for basin 430 (Permian).

both facilitates information analysis by OCD and the public, and reduces the reporting effort for operators. Specifically:

- For 19.15.28.22(C) NMAC, we recommend that reporting of (C)(8)(a)(vii), "cause and nature of venting and flaring," use the categories established in (C)(7) so that they can be aggregated, analyzed, and compared.

- For (C)(8)(a)(viii), "steps taken to limit the duration and magnitude of venting or flaring," OCD should incorporate subcategories for the most common steps for gathering systems so that they can be compiled and analyzed numerically rather than remain a textual description.

- For (C)(8)(a)(ix), "corrective actions taken to eliminate the cause and recurrence of venting and flaring," OCD should use categories for the most common corrective actions such as "(1) gas rerouted to pipeline, (2) temporary flare installed, (3) rod packing replaced, (4) wet seals replaced with dry seals, etc."

- Finally, a new subsection (C)(8)(a)(x) should be added to provide OCD and the public with information about the frequency with which the gathering system operators report venting or flaring events at their facilities. This information is critical to identifying when short-term or occasional venting or flaring has turned into routine flaring.

4. Gathering System Gas Capture Requirement

We commend OCD for applying natural gas capture requirements to gathering systems in addition to wells. As OCD recognizes, gathering systems also unnecessarily vent and flare substantial quantities of gas, which can be reduced through appropriate regulatory requirements and better planning. However, we do not support OCD's proposed 98% capture rate for gathering systems because it is simply far too high for this segment of the industry.

Unlike oil wells, the sole purpose of gathering lines is to transport natural gas from the wellhead to a processing plant. Maintenance and repair activities and leaks should not necessitate a loss of anywhere near 2% of the gas transported.

We recommend, first, that OCD set the capture requirement at more granular level, namely for each gathering system. We make this recommendation for largely the same reasons we

recommend for upstream operators; that is,to better account for air quality, public health, and environmental justice concerns, and to maximize opportunities to prevent or at least reduce waste from all oil and gas infrastructure.

Second, we recommend that OCD specify the required gas capture percentage requirement based on the data received during the first year of reporting requirements. Initially,the rule would set the gas capture requirement at 98% by 2026, which would operate as a floor, but the rule should specify that the capture requirement would be automatically tightened to be equal to the industry's average capture rate per Btu of gas transported through gathering systems if that average is higher than 98%, based on the reported data, and would apply the year after it is published by OCD. For example, for 2022, the 2026 requirement would be 98%. But if reported data for 2021 shows an average capture rate of 99%, OCD would publish that new rate and set a new capture schedule. This structure should require virtually no administrative discretion and thus not necessitate a new rulemaking.

5. Maintenance, Replacement and Repair for Gathering Systems and Reporting to Affected Upstream Operators

We strongly support several key elements of OCD's proposed provisions for maintenance, replacement and repair of gathering systems and reporting to affected upstream operators. In particular, we appreciate the requirement that an operator must flare in lieu of venting gas during a scheduled blowdown in the course of maintenance, repair, or replacement. We note, however, that another option, which is preferable to flaring, is for the operator to reroute the gas around the section to be blown down and to route the gas back to the pipeline. At minimum, during a blowdown the operator should be allowed to reroute and reinject the gas, in lieu of flaring it, in the course of gathering system maintenance, repair or replacement, whether scheduled or unscheduled.

We also strongly support OCD's proposed requirements in section 19.15.28.19(C) NMAC that gathering system operators notify producers in advance, as specified by OCD, of scheduled or the need for unscheduled maintenance, replacement or repair. These requirements are important to help operators timely implement means of avoiding flaring gas during the maintenance, replacement or repair activities.

6. Gas Capture Planning for Gathering Systems

We appreciate the application of gas capture planning to gathering systems. We recommend changes to provide that:

- The purpose of gas management planning for gathering systems is to prevent routine flaring, comply with natural gas capture requirements, reduce waste, eliminate venting and flaring of natural gas to the greatest extent possible, maximize the efficient, safe, and economic recovery of the state's oil and natural gas, and avoid or minimize the surface impacts of oil and gas infrastructure.

- Plans include information on the location of all residences, schools, businesses, hospitals, or public facilities that are lawfully occupied or licensed in accord with federal, tribal, or state law within two miles of the proposed well; and

- Plans address how the gatherer will manage pressure increases in the gathering system from increased volumes and higher pressures from new wells that could lead to current production being under-pressured relative to the anticipated pressure in the relevant segment of the gathering system. The gatherer should also be required to document that the affected producers have been notified of the issue, and given sufficient lead time for either the gatherer or the producer to get compression in place or implement other solutions so that the wells can continue accessing the gathering system.

- Gathering system operators should be required to, as part of the planning process, to solicit input from all residences, schools, businesses, hospitals, or public facilities that are lawfully occupied or licensed in accord with federal, tribal, or state law within two miles of the proposed well.

- Prior to submission to the the division the operator shall make the natural gas management plan available to the public for review for at least 30 days, providing all comments to the division as well as to the operator itself. Further, the operator shall, at least 30 days prior to submission to the division, provide specific notice of the natural gas management plan and make that plan available to all federal, tribal, state, and local government entities with responsibilities within and two miles beyond the external boundaries of the APD.

- Once approved, the operator shall implement the natural gas management plan, including any conditions required by the division, unless and until the operator submits

a modified plan meeting the requirements of this section and that plan is approved by the division except, in the event of an emergency or malfunction, as necessary to protect safety, public health, or the environment.

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OCD DRAFT
July 20, 2020

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 7 FORMS AND REPORTS

19.15.7.1 ISSUING AGENCY: Energy, Minerals and Natural Resources Department, Oil Conservation Division.
[19.15.7.1 NMAC - Rp, 19.15.13.1 NMAC, 12/1/2008]

19.15.7.2 SCOPE: 19.15.7 NMAC applies to persons or entities engaged in oil and gas development and production within New Mexico.
[19.15.7.2 NMAC - Rp, 19.15.13.2 NMAC, 12/1/2008]

19.15.7.3 STATUTORY AUTHORITY: 19.15.7 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.
[19.15.7.3 NMAC - Rp, 19.15.13.3 NMAC, 12/1/2008]

19.15.7.4 DURATION: Permanent.
[19.15.7.4 NMAC - Rp, 19.15.13.4 NMAC, 12/1/2008]

19.15.7.5 EFFECTIVE DATE: December 1, 2008, unless a later date is cited at the end of a section.
[19.15.7.5 NMAC - Rp, 19.15.13.5 NMAC, 12/1/2008]

19.15.7.6 OBJECTIVE: To provide for the filing of reports to enable the division to carry out its statutory mandates under the Oil and Gas Act.
[19.15.7.6 NMAC - Rp, 19.15.13.6 NMAC, 12/1/2008]

19.15.7.7 DEFINITIONS: [RESERVED]
[See 19.15.2.7 NMAC for definitions.]

19.15.7.8 GENERAL:

A. Where to file reports. Unless otherwise specifically provided for in a division rule or order, the operator shall file forms and reports 19.15.7 NMAC requires with the appropriate division district office as provided in 19.15.2.17 NMAC and 19.15.7.10 NMAC.

B. Additional data. 19.15.7 NMAC does not limit or restrict the division's authority to require the furnishing of additional reports, data or other information relative to the production, transportation, storing, refining, processing or handling of oil, gas or products in the state as may appear to the division to be necessary or desirable, either generally or specifically, for the prevention of waste and the conservation of the state's natural resources.

C. Books and records. A producer, injector, transporter, storer, refiner, gasoline or extraction plant operator, treating plant operator and initial purchaser of gas within the state shall make and keep appropriate books and records for a period of not less than five years, covering operations in New Mexico, in order to make and substantiate the reports the division requires.

D. Written notices, requests, permits and reports. A person required to file notices, requests, permits or reports shall use the forms listed below for the purpose shown in accordance with the instructions printed on the form and the rule covering the form's use or special order pertaining to its use:

(1) form C-101 - application for permit to drill, deepen or plug back;
(2) form C-102 - well location and acreage dedication plat;
(3) form C-103 - sundry notices and reports on wells;
(4) form C-104 - request for allowable and authorization to transport oil and gas;
(5) form C-105 - well completion or recompletion report and log;
(6) form C-106 - notice of intention to utilize automatic custody transfer equipment;
(7) form C-107 - application for multiple completion;
(8) form C-107-A - application for downhole commingling;
(9) form C-107-B - application for surface commingling (diverse ownership);
(10) form C-108 - application to dispose of salt water by injection into a porous formation;
(11) form C-109 - application for discovery allowable and creation of a new pool;

(12) form C-111 - gas transporter's monthly report (sheet 1 and sheet 2);
(13) form C-112 - transporter's and storer's monthly report;
(14) form C-112-A - receipts continuation sheet;
(15) form C-112-B - deliveries continuation sheet;
(16) form C-113 - refiner's monthly report (sheet 1 and sheet 2);
(17) form C-115 - operator's monthly report;
(18) form C-115B – volume of vented and flared natural gas;
(19) form C-115-EDP - operator's monthly report (electronic data processing);
(20) form C-116 - gas-oil ratio tests;
(21) form C-117-A - tank cleaning, sediment oil removal, transportation of miscellaneous hydrocarbons and disposal permit;
(22) form C-117-B - monthly sediment oil disposal statement;
(23) form C-118 - treating plant operator's monthly report (sheet 1 and sheet 2);
(24) form C-120-A - monthly water disposal report;
(25) form C-121 - oil purchaser's nomination;
(26) form C-121-A - purchaser's gas nomination;
(27) form C-122 - multi-point and one point back pressure test for gas wells;
(28) form C-122-A - gas well test data sheet-San Juan basin (initial deliverability test, blue paper; annual deliverability test, white);
(29) form C-122-B - initial potential test data sheet;
(30) form C-122-C - deliverability test report;
(31) form C-122-D - worksheet for calculation of static column wellhead pressure (P_w);
(32) form C-122-E - worksheet for stepwise calculation of (surface) (subsurface) pressure (P_c and P_w);
(33) form C-122-F - worksheet for calculation of wellhead pressures (P_c or P_w) from known bottom hole pressure (P_f or P_s);
(34) form C-122-G - worksheet for calculation of static column pressure at gas liquid interface;
(35) form C-123 - request for the creation of a new pool;
(36) form C-124 - reservoir pressure report;
(37) form C-125 - gas well shut-in pressure report;
(38) form C-126 - permit to transport recovered load oil;
(39) form C-127 - request for allowable change;
(40) form C-129 – report of vented or flared natural gas;
(41) form C-130 - notice of disconnection;
(42) form C-131-A - monthly gas storage report;
(43) form C-131-B - annual LPG storage report;
(44) form C-133 - authorization to move produced water exhibit "A";
(45) form C-134 - application for exception to division order R-8952, 19.15.18.18 NMAC or 19.15.36 NMAC;
(46) form C-135 - gas well connection, reconnection or disconnection notice;
(47) form C-136 - application for approval to use an alternate gas measurement method;
(48) form C-137 - application for waste management facility;
(49) form C-137-EZ - registration/final closure report for small landfarm;
(50) form C-138 - request for approval to accept solid waste;
(51) form C-139 - application for qualification of production restoration project and certification of approval;
(52) form C-140 - application for qualification of well workover project and certification of approval;
(53) form C-141 - release notification and corrective action;
(54) form C-144 - pit, closed-loop system, below-grade tank or proposed alternative method permit or closure plan application;
(55) form C-145 - change of operator; and
(56) form C-146 - change of operator name.

[19.15.7.8 NMAC - Rp, 19.15.13.1100 NMAC, 12/1/2008]

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19.15.7.9 FORMS UPON REQUEST: The division's forms for written notices, requests and reports it requires are available on the division's website. The division shall furnish paper copies upon request.
[19.15.7.9 NMAC - Rp, 19.15.1.16 NMAC, 12/1/2008]

19.15.7.10 WHERE TO FILE REPORTS AND FORMS: A person required to file a report or form shall file the report or form with the division in the number and at the time specified on the form or report or by the applicable section in 19.15.7 NMAC. An operator shall file plugging bonds directly with the division's Santa Fe office.
[19.15.7.10 NMAC - Rp, 19.15.15.1302 NMAC, 12/1/2008]

19.15.7.11 UNITED STATES GOVERNMENT LEASES: For wells located on land that the United States or a native american nation, tribe or pueblo owns, an operator shall file applications for permit to drill, deepen or plug back, BLM form no. 3160-3; sundry notices and reports on wells, BLM form no. 3160-5; and well completion or recompletion report and log, BLM form no. 3160-4 with the BLM in lieu of filing the corresponding division forms with the division. All such forms are, however, subject to division approval in the same manner and to the same extent as the corresponding division forms.
[19.15.7.11 NMAC - Rp, 19.15.1.14 NMAC, 12/1/2008]

19.15.7.12 APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK (Form C-101): Form C-101 is the form an operator uses to apply for a permit to drill, deepen, re-enter or plug a well back to a different pool or complete or re-complete a well in an additional pool.
[19.15.13.12 NMAC - Rp, 19.15.13.1101 NMAC, 12/1/2008]

19.15.7.13 WELL LOCATION AND ACREAGE DEDICATION PLAT (Form C-102):

A. Form C-102 is a dual purpose form the operator uses to show the well's exact location and the acreage dedicated to the well. The form is also used to show the ownership and status of each lease contained within the dedicated acreage. When there is more than one working interest or royalty owner on a given lease, designation of the majority owner et al. is sufficient.

B. An operator shall fill out and certify the information required on form C-102 except the well location on the plat. A professional surveyor, registered in the state of New Mexico, or surveyor approved by the division, shall plot and certify the well location on the plat from the section's outer boundaries.

C. An operator shall file amended form C-102 in the event there is a change in the information the operator previously submitted. The operator does not need to provide certification of the well location when filing amended form C-102.
[19.15.13.13 NMAC - Rp, 19.15.13.1102 NMAC, 12/1/2008]

19.15.7.14 SUNDRY NOTICES AND REPORTS ON WELLS (Form C-103): Form C-103 is a dual purpose form the operator files with the appropriate division district office to obtain division approval prior to commencing certain operations and to report various completed operations.

A. Form C-103 as a notice of intention.

(1) An operator shall file form C-103 and obtain the division's approval prior to:

(a) effecting a change of plans from those the division previously approved on form C-101 or form C-103;

(b) altering a drilling well's casing program or pulling casing or otherwise altering an existing well's casing installation;

(c) making multiple completions in a well;

(d) placing a well in approved temporary abandonment;

(e) plugging and abandoning a well;

(f) performing remedial work on a well that, when completed, will affect the well's original status (this includes making new perforations in existing wells or squeezing old perforations in existing wells, but does not apply to new wells in the process of being completed nor to old wells being deepened or plugged back to another zone when the division has authorized the recompletion by an approved form C-101, application for permit to drill, re-enter, deepen plug back or add a zone, nor to acidizing, fracturing or cleaning out previously completed wells, nor to installing artificial lift equipment); or

(g) downhole commingling in wells, within pools or areas that the division has established as pre-approved pools or areas.

(2) In the case of well plugging operations, the notice of intention shall include a detailed statement of the proposed work including plans for shooting and pulling casing; plans for mudding, including the mud's weight; plans for cementing, including number of sacks of cement and depths of plugs; restoration and remediation of the location; and the time and date of the proposed plugging operations. The operator shall file a complete log of the well on form C-105 with the notice of intention to plug the well, if the operator has not previously filed the log (see 19.15.7.16 NMAC); the division shall not release the financial assurance until the operator complies with this requirement.

B. Form C-103 as a subsequent report.

(1) The operator shall file form C-103 as a subsequent report of operations in accordance with 19.15.7.14 NMAC as applicable to the particular operation being reported.

(2) The operator shall use form C-103 in reporting such completed operations as:

(a) commencement of drilling operations;
(b) casing and cement test;
(c) altering a well's casing installation;
(d) work to secure approved temporary abandonment;
(e) plugging and abandonment;
(f) plugging back or deepening within the same pool;
(g) remedial work;
(h) installation of artificial lifting equipment; or
(i) other operations that affect the well's original status but that are not specifically covered in 19.15.7.14 NMAC.

C. Report of commencement of drilling operations. Within 10 days following the commencement of drilling operations, the operator shall file a report of commencement on form C-103. The report shall indicate the hour and the date the operator spudded the well.

D. Report of results of test of casing and cement job; report of casing alteration. The operator shall file a report of casing and cement test within 10 days following the setting of each string of casing or liner. The operator shall file the report on form C-103 and include a detailed description of the test method employed and the results obtained by the test and any other pertinent information 19.15.16.10 NMAC requires. The report shall also indicate the top of the cement and the means by which the operator determined the top. It shall also indicate any changes from the casing program previously authorized for the well.

E. Report of temporary abandonment. The operator shall file a notice of work to secure approved temporary abandonment within 30 days following the work's completion. The report shall present a detailed account of the work done on the well, including location and type of plugs used, if any, and status of surface and downhole equipment and any other pertinent information relative to the well's overall status.

F. Report on plugging of well.

(1) The operator shall file a report of plugging operations within 30 days following completion of plugging operations on a well. The operator shall file the report on form C-103, which shall include the date the operator began plugging operations and the date the operator completed the work, a detailed account of the manner in which the operator performed the work including the depths and lengths of the various plugs set, the nature and quantities of materials employed in the plugging operations including the weight of the mud used, the size and depth of all casing left in the hole and any other pertinent information. (See 19.15.25 NMAC regarding plugging operations.)

(2) The division shall not approve a plugging report until the operator demonstrates compliance with Subsection B of 19.15.25.10 NMAC. The operator shall contact the appropriate division district office when the operator has restored the location in order to arrange for a division representative's inspection of the plugged well and the location.

G. Report of remedial work. The operator shall file a report of remedial work performed on a well within 30 days following the work's completion. The operator shall file the report on form C-103 and present a detailed account of the work done and the manner in which the operator performed the work; the daily production of oil, gas and water both prior to and after the remedial operation; the size and depth of shots; the quantity and type of crude, chemical or other materials the operator employed in the operation; and any other pertinent information. Among the remedial work an operator shall report on form C-103 are the following:

(1) report on shooting, fluid fracturing or chemical treatment of a previously completed well;

(2) report of squeeze job;
(3) report on setting of liner or packer;
(4) report of installation of pumping equipment or gas lift facilities; or
(5) report of any other remedial operations that are not specifically covered herein.

H. Report on deepening or plugging back within the same pool. An operator shall file a report of deepening or plugging back within 30 days following completion of the operations on a well. The operator shall file the report on form C-103 and present a detailed account of work done and the manner in which the operator performed the work. If the operator recompletes the well in the same pool, the operator shall also report the daily production of oil, gas and water both prior to and after recompletion. If the well is recompleted in another pool, the operator shall file forms C-101, C-102, C-104 and C-105 in accordance with 19.15.7.12 NMAC, 19.15.7.13 NMAC, 19.15.7.15 NMAC and 19.15.7.16 NMAC.

I. Other reports on wells. The operator shall submit reports on other operations that affect the well's original status but that are not specifically covered in 19.15.7.14 NMAC to the division on form C-103 10 days following the operation's completion.
[19.15.7.14 NMAC - Rp, 19.15.13.1103 NMAC, 12/1/2008]

19.15.7.15 REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND GAS (Form C-104): An operator shall file with the division a complete form C-104 to request the division assign an allowable to a newly completed or re-completed well or a well completed in an additional pool or issue an operator authorization to transport oil or gas from the well.
[19.15.7.15 NMAC - Rp, 19.15.13.1104 NMAC, 12/1/2008]

19.15.7.16 WELL COMPLETION OR RECOMPLETION REPORT AND LOG (Form C-105):

A. Within 45 days following the completion or recompletion of a well, the operator shall file form C-105 with the appropriate division district office accompanied by a summary of special tests conducted on the well, including drill stem tests. In addition, the operator shall file a copy of electrical and radio-activity logs run on the well with form C-105. If the division does not receive form C-105 with attached logs and summaries within the specified 45-day period, the division shall withhold the allowable for the well until the operator has complied with 19.15.7.16 NMAC.

B. In the case of a dry hole, a complete record of the well on form C-105 with the attachments listed in Subsection A of 19.15.7.16 NMAC shall accompany the notice of intention to plug the well, unless previously filed. The division shall not approve the plugging report or release the bond the operator has complied with 19.15.7.16 NMAC.

C. The division shall not keep form C-105 and accompanying attachments confidential unless the well's owner requests in writing that the division keep it confidential. Upon such request, the division shall keep these data confidential for 90 days from the date of the well's completion, provided, however, that the report, logs and other attached data may, when pertinent, be introduced in a public hearing before division examiners, the commission or in a court of law, regardless of the request that they be kept confidential.
[19.15.7.16 NMAC - Rp, 19.15.13.1105 NMAC, 12/1/2008; A, 9/26/2017]

19.15.7.17 NOTICE OF INTENTION TO UTILIZE AUTOMATIC CUSTODY TRANSFER EQUIPMENT (Form C-106): An operator intending to use an ACT system shall file form C-106, when applicable, in accordance with Subsection A of 19.15.18.15 NMAC.
[19.15.7.17 NMAC - Rp, 19.15.13.1106 NMAC, 12/1/2008]

19.15.7.18 APPLICATION FOR MULTIPLE COMPLETION (Form C-107): An operator shall file form C-107, when applicable, in accordance with Subsection A of 19.15.16.15 NMAC.
[19.15.7.18 NMAC - Rp, 19.15.13.1107 NMAC, 12/1/2008]

19.15.7.19 APPLICATION FOR AUTHORIZATION TO INJECT (Form C-108): An operator shall file form C-108 in accordance with Subsection B of 19.15.26.8 NMAC.
[19.15.7.19 NMAC - Rp, 19.15.13.1108 NMAC, 12/1/2008]

19.15.7.20 APPLICATION FOR DISCOVERY ALLOWABLE AND CREATION OF A NEW POOL (Form C-109): An operator shall file form C-109, when applicable, in accordance with 19.15.20.16 NMAC.

[19.15.7.20 NMAC - Rp, 19.15.13.1109 NMAC, 12/1/2008]

19.15.7.21 GAS TRANSPORTER'S MONTHLY REPORT (Form C-111):

A. An operator shall complete and maintain for the division's inspection, form C-111 monthly in accordance with Subsections B, C and D of 19.15.7.21 NMAC. The transporter shall itemize information on sheet no. 2 of form C-111 by pool, by operator and by lease, in alphabetical order.

B. An operator of a gas gathering system, gas transportation system, recycling system, fuel system, gas lift system, gas drilling operation, etc. shall complete and maintain for division inspection form C-111 each month. The form shall cover gas, casinghead gas and carbon dioxide gas taken into a system during the preceding month and shall show the gas' source and its disposition.

C. An operator of a gasoline plant, cycling plant or other plant at which gasoline, butane, propane, kerosene, oil or other products are extracted from gas within the state shall complete and maintain for the division's inspection form C-111 each month. The form shall cover gas, casinghead gas and carbon dioxide gas the plant has taken during the preceding month and shall show the gas' source and its disposition. If an operator owns more than one plant in a given division district, the operator shall file sheet no. 1 of form C-111 for each plant. In preparing sheet no. 2, the operator shall consolidate requisitions for plants in the district, itemized in the order described in the Subsection A of 19.15.7.21 NMAC.

D. Where a producer takes gas and uses it for any of the above uses, the producer shall complete and maintain for division inspection form C-111 itemizing such gas. The producer shall also include this gas on form C-115. The producer shall also include gas used on the lease from which it was produced for consumption in lease houses, treaters, compressors, combustion engines and other similar equipment, or gas that is flared, on the form C-115 but shall not include it on form C-111.

[19.15.7.21 NMAC - Rp, 19.15.13.1111 NMAC, 12/1/2008]

19.15.7.22 TRANSPORTER'S AND STORER'S MONTHLY REPORT (Form C-112): A transporter or storer of oil and liquid hydrocarbons within the state shall complete and maintain for division inspection for each calendar month a form C-112 containing complete information and data indicated by the form respecting stocks of oil and liquid hydrocarbons on hand and receipts and deliveries of oil and liquid hydrocarbons by pipeline and trucks within the state, and receipts and deliveries from leases to storers or refiners; between transporters within the state; between storers and refiners within the state.

[19.15.7.22 NMAC - Rp, 19.15.13.1112 NMAC, 12/1/2008]

19.15.7.23 REFINER'S MONTHLY REPORT (Form C-113): A refiner of oil within the state shall file for each calendar month form C-113 containing the information and data indicated by the form respecting oil and products involved in the refiner's operation during each month. The refiner shall file the completed form C-113 for each month and postmark it on or before the 15th day of the next succeeding month.

[19.15.7.23 NMAC - Rp, 19.15.13.1113 NMAC, 12/1/2008]

19.15.7.24 OPERATOR'S MONTHLY REPORT (Form C-115):

A. An operator shall file a form C-115 for each non-plugged well completion for which the division has approved a form C-104 and for each secondary or other enhanced recovery project or pressure maintenance project injection well or other injection well within the state, setting forth complete information and data indicated on the forms in the order, format and style the director prescribes. The operator shall estimate oil production from wells producing into common storage as accurately as possible on the basis of periodic tests.

B. An operator shall file the reports 19.15.7.24 NMAC requires form C-115 using the division's web-based online application no later than the 30th day of the month following the month of production. An operator may apply to the division for exemption from the electronic filing requirement based upon a demonstration that such requirement would be an economic or other hardship.

C. If an operator fails to file a form C-115 that the division accepts, the division shall, within 30 days of the appropriate filing date, notify the operator by electronic mail or letter of its intent to cancel the operator's authorization to transport or inject if the operator does not file an acceptable and complete form C-115. The notice shall inform the operator of the right to request a hearing pursuant to 19.15.4.8 NMAC. If the operator does not either file an acceptable and complete form C-115 or request a hearing on the proposed cancellation within 60 days of the original due date of the form C-115, the division may cancel the operator's authority to transport from or inject into all wells it operates.

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[19.15.7.24 NMAC - Rp, 19.15.13.1115 NMAC, 12/1/2008; A, 11/14/2017]

19.15.7.25 VENTED AND FLARED NATURAL GAS (Form C-115B):

A. An operator shall file form C-115B in accordance with 19.15.27 NMAC and 19.15.28 NMAC.

B. An operator shall file form C-115B using the division's web-based online application no later than the 30th day of the month following the month in which venting or flaring occurred. An operator may apply to the division for exemption from the electronic filing requirement based upon a demonstration that such requirement would be an economic or other hardship.

[19.15.7 NMAC – X, xx/xx/xxxx]

19.15.7.26 GAS-OIL RATIO TESTS (Form C-116): An operator shall make and report gas-oil ratio tests on form C-116 as prescribed in 19.15.18.8 NMAC and applicable special pool orders. The operator shall file the form C-116.

[19.15.7.25 NMAC - Rp, 19.15.13.1116 NMAC, 12/1/2008]

19.15.7.27 TANK CLEANING, SEDIMENT OIL REMOVAL, TRANSPORTATION OF MISCELLANEOUS HYDROCARBONS AND DISPOSAL PERMIT (Form C-117-A) AND MONTHLY SEDIMENT OIL DISPOSAL STATEMENT (Form C-117-B):

A. An operator shall file form C-117-A with the appropriate division district office in accordance with Subsections B, C and H of 19.15.18.17 NMAC.

B. An operator shall file form C-117-B with the division's Santa Fe office and the appropriate division district office in accordance with Subsection D of 19.15.18.17 NMAC.

[19.15.7.26 NMAC - Rp, 19.15.13.1117 NMAC, 12/1/2008]

19.15.7.28 TREATING PLANT OPERATOR'S MONTHLY REPORT (Form C-118): A treating plant operator shall file on a monthly basis form C-118 with the appropriate division district office. The form C-118 shall contain all the information the form requires. Column 1 of sheet 1-A of form C-118 entitled permit number, references form C-117-A, for each lot of oil the operator picked up for processing.

[19.15.7.27 NMAC - Rp, 19.15.13.1118 NMAC, 12/1/2008]

19.15.7.29 MONTHLY WATER DISPOSAL REPORT (Form C-120-A): An operator of a salt water disposal system shall report its operations on form C-120-A. The operator shall file form C-120-A in duplicate, with one copy to the division's Santa Fe office and one copy to the appropriate division district office, and shall postmark the form no later than the 15th day of the second succeeding month.

[19.15.7.28 NMAC - Rp, 19.15.13.1120 NMAC, 12/1/2008]

19.15.7.39 PURCHASER'S NOMINATION FORMS (Form C-121 and Form C-121-A):

A. Unless the director requests otherwise, a person expecting to purchase oil from producing wells in New Mexico during the second and third succeeding two months shall file form C-121 with the division's Santa Fe office not later than the 20th day of each odd-numbered month. As an example, nominations submitted by the 20th day of July shall indicate the amount of oil the purchaser desires to purchase daily during September and October

B. The person shall file form C-121-A with the division's Santa Fe office by the first day of the month during which the division will consider at the gas allowable hearing the nominations for the purchase of gas from producing wells in New Mexico during the succeeding month. As an example, purchaser's nominations to take gas from a pool during the month of August would be considered by the division at a hearing during July, and should be submitted to the Santa Fe office of the division by July 1.

C. In addition to the monthly gas nominations, the purchaser shall file 12-month nominations in accordance with the appropriate special pool orders.

[19.15.7.29 NMAC - Rp, 19.15.13.1121 NMAC, 12/1/2008]

19.15.7.31 MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL (Form C-122):

A. Gas well test data sheet - San Juan basin (form C-122-A)

B. Initial potential test data sheet (form C-122-B)

C. Deliverability test report (form C-122-C)

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D. Worksheet for calculation of static column wellhead pressure (P_w) (form C- 122-D)

E. Worksheet for stepwise calculation of (surface) (subsurface) pressure (P_c & P_w) (P_f & P_s) (form C-122-E)

F. Worksheet for calculation of wellhead pressures (P_c or P_w) from known bottom hole pressure (P_f or P_s) (form C-122-F)

G. Worksheet for calculation of status column pressure at gas liquid interface (form C-122-G). The operator shall file the forms listed in Subsections A through F of 19.15.7.30 NMAC with the appropriate division district office in accordance with the provisions of the *manual for back-pressure testing of natural gas wells or gas well testing manual for northwest New Mexico*, 19.15.19.8 NMAC and applicable special pool orders and proration orders.

[19.15.7.30 NMAC - Rp, 19.15.13.1122 NMAC, 12/1/2008]

19.15.7.32 REQUEST FOR THE CREATION OF A NEW POOL (Form C-123): The appropriate division district office shall provide the operator of a well that requires the creation of a pool written instructions regarding the filing of form C-123.

[19.15.7.31 NMAC - Rp, 19.15.13.1123 NMAC, 12/1/2008]

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19.15.7.33 RESERVOIR PRESSURE REPORT (Form C-124):

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A. An operator shall file form C-124 to report bottom hole pressures as required under the provisions of 19.15.18.9 NMAC and applicable special pool orders.

B. An operator shall state the name of the pool; the pool datum, if established; the name of the operator and lease; the well number; the wellhead elevation above sea level; the date of the test; the total time the well was shut in prior to the test, the subsurface temperature in degrees fahrenheit at the test depth; the depth in feet at which the operator made the subsurface pressure test; the observed pressure in psi gauge corrected for calibration and temperature; the corrected pressure computed from applying to the observed pressure the appropriate correction for difference in test depth and reservoir datum plane; and any other information required on form C-124.

[19.15.7.32 NMAC - Rp, 19.15.13.1124 NMAC and 19.15.5.302 NMAC, 12/1/2008]

19.15.7.34 GAS WELL SHUT-IN PRESSURE TESTS (Form C-125): An operator shall file form C-125 to report shut-in pressure tests on gas wells as required under the provisions of special pool orders.

[19.15.7.33 NMAC - Rp, 19.15.13.1125 NMAC, 12/1/2008]

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19.15.7.35 PERMIT TO TRANSPORT RECOVERED LOAD OIL (Form C-126): An applicant to transport recovered load oil shall file form C-126 with the appropriate division district office in conformance with 19.15.20.15 NMAC.

[19.15.7.34 NMAC - Rp, 19.15.13.1126 NMAC, 12/1/2008]

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19.15.7.36 REQUEST FOR ALLOWABLE CHANGE (Form C-127): An oil producer shall file form C-127 with the appropriate division district office not later than the 10th day of the month preceding the month for which an oil producer is requesting oil well allowable changes.

[19.15.7.35 NMAC - Rp, 19.15.13.1127 NMAC, 12/1/2008]

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19.15.7.37 FORMS REQUIRED ON FEDERAL PUBLIC LAND:

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A. An operator shall use federal forms in lieu of state forms when filing application for permit to drill, deepen or plug back and sundry notices and reports on wells and well completion or recompletion report and log for wells on federal public lands in New Mexico. However, the operator shall submit two extra copies of each of the forms to the BLM, which, upon approval, will transmit the forms to the division. An operator of a well on federal public land shall use the following BLM forms in lieu of division forms:

BLM Form No.	Title of Form (Same for both agencies)	Form No.
3160-3 (Nov. 1993)	Application for Permit to Drill, Deepen or Plug Back	C-101
3160-5 (Nov. 1983)	Sundry Notices and Reports on Wells	C-103
3160-4 (Nov. 1983)	Well Completion or Recompletion Report and Log	C-105

B. The above forms as the BLM may revise are the only forms that an operator may file in place of

division forms.

C. After a well is completed and ready for pipeline connection, the operator shall file form C-104 along with a copy of form C-105 or BLM form No. 3160-4, whichever is applicable, with the division on wells drilled in the state, regardless of land status. Further, the operator shall file production reports using division forms; the division will not accept federal forms for reporting production.

D. An operator's failure to comply with 19.15.7.36 NMAC shall result in the division's cancellation of form C-104 for the affected well or wells.

[19.15.7.36 NMAC - Rp, 19.15.13.1128 NMAC, 12/1/2008]

19.15.7.38 REPORT OF VENTED OR FLARED NATURAL GAS (Form C-129): An operator shall file form C-129 when applicable, in accordance with 19.15.18.12 NMAC 19.15.27 NMAC and 19.15.28 NMAC.

[19.15.7.37 NMAC - Rp, 19.15.13.1129 NMAC, 12/1/2008]

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19.15.7.39 NOTICE OF DISCONNECTION (Form C-130):

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A. An operator shall file form C-130 with the division as provided in 19.15.19.13 NMAC.

B. An operator shall state to the best of its knowledge the reasons for disconnecting a gas well from gas transportation facilities.

C. The division shall furnish the New Mexico public regulation commission with a form C-130 indicating that a disconnected gas well may or will be reconnected to a gas transportation facility for ultimate distribution to consumers outside of the state.

[19.15.7.38 NMAC - Rp, 19.15.13.1130 NMAC, 12/1/2008]

19.15.7.40 MONTHLY GAS STORAGE REPORT (Form C-131-A); ANNUAL LPG STORAGE REPORT (Form C-131-B):

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A. An operator of an underground gas storage project shall report its operation monthly on form C-131-A. The operator shall file form C-131-A with the division's Santa Fe office with a copy to the appropriate division district office and shall postmark it not later than the 24th day of the next succeeding month.

B. An operator of underground liquefied petroleum gas storage projects approved by the division shall report its operations annually on form C-131-B.

[19.15.7.39 NMAC - Rp, 19.15.13.1131 NMAC, 12/1/2008]

19.15.7.41 AUTHORIZATION TO MOVE PRODUCED WATER:

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A. A transporter of produced water shall obtain the division's approval of form C-133 in accordance with 19.15.34 NMAC prior to transportation.

B. Approval of a single form C-133 is valid for leases the transporter serves.

[19.15.7.40 NMAC - Rp, 19.15.13.1133 NMAC, 12/1/2008]

19.15.7.42 GAS WELL CONNECTION, RECONNECTION OR DISCONNECTION NOTICE: A gas transporter accepting gas for delivery from a wellhead or central point of delivery shall notify the division within 30 days of a new connection or reconnection to or disconnection from the gathering or transportation system by filing form C-135 with the appropriate division district office.

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[19.15.7.41 NMAC - Rp, 19.15.13.1135 NMAC, 12/1/2008]

19.15.7.43 APPLICATION FOR APPROVAL TO USE AN ALTERNATE GAS MEASUREMENT METHOD (Form C-136):

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A. An operator shall use form C-136 to request and obtain division approval for use of an alternate procedure for measuring gas production from a well that is not capable of producing more than 15 MCFD (Paragraph (1) of Subsection B of 19.15.19.9 NMAC) or for a well that has a producing capacity of 100 MCFD or less and is on a multi-well lease (Paragraph (2) of Subsection B of 19.15.19.9 NMAC).

B. An operator shall fill out the applicable information required on form C-136 with the required supplemental information attached, and file it with the appropriate division district office.

[19.15.7.42 NMAC - Rp, 19.15.13.1136 NMAC, 12/1/2008]

19.15.7.44 APPLICATION FOR PRODUCTION RESTORATION PROJECT (C-139):

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A. An operator shall use the division's web-based online application to apply for the production

restoration tax incentive.

B. An operator shall enter a user identification number and password that it has obtained from the division and select the well for which the operator is requesting the production restoration tax incentive. The operator shall then enter the date it began the production restoration, the date the well returned to production and the process the operator used to return the well to production. The operator shall certify that the information is complete and correct.

[19.15.7.43 NMAC - Rp, Paragraph (5) of Subsection D of 19.15.1.31 NMAC, 12/1/2008]

19.15.7.45 APPLICATION FOR WELL WORKOVER PROJECT (C-140):

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A. An operator shall use the division's web-based online application to apply for the well workover tax incentive.

B. An operator shall enter a user identification number and password that it has obtained from the division and select the well for which the operator is requesting the well workover tax incentive. The operator shall enter the date that it commenced the well workover and the date it completed the well workover. The operator shall attach a description of the workover procedure it performed to increase production and a production curve or data tabulation showing at least 12 months of production prior to the well workover and at least three months of production following the well workover to reflect a positive production increase.

[19.15.7.44 NMAC - Rp, Paragraph (6) of Subsection D of 19.15.1.32 NMAC, 12/1/2008]

HISTORY of 19.15.7 NMAC:

History of Repealed Material: 19.15.1 NMAC, General Provisions (filed 04/27/2001); 19.15.13 NMAC, Reports (filed 06/17/2004) and 19.15.15 NMAC, Pits, Closed-Loop Systems, Below-Grade Tanks and Sumps (filed 5/30/2008) repealed 12/1/08.

NMAC History:

Those applicable portions of 19.15.1 NMAC, General Provisions (Sections 14, 16, those applicable portions of 31 and 32 (filed 04/27/2001); 19.15.13 NMAC, Reports (Sections 1-6; 1100, 1101-1109, 1111-1113; 1115-1118, 1120-1131; 1133; and 1135) (filed 06/17/2004); and 19.15.15 NMAC, Pits, Closed-Loop Systems, Below-Grade Tanks and Sumps (Section 1302) (filed 5/30/2008) were all replaced by 19.15.7 NMAC, Forms and Reports, effective 12/1/08.

OCD DRAFT
July 20, 2020

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 18 PRODUCTION OPERATING PRACTICES

19.15.18.1 ISSUING AGENCY: Energy, Minerals and Natural Resources Department, Oil Conservation Division.
[19.15.18.1 NMAC - N, 12/1/2008]

19.15.18.2 SCOPE: 19.15.18 NMAC applies to persons engaged in oil and gas development and production within New Mexico.
[19.15.18.2 NMAC - N, 12/1/2008]

19.15.18.3 STATUTORY AUTHORITY: 19.15.18 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.
[19.15.18.3 NMAC - N, 12/1/2008]

Deleted: NMSA 1978,

19.15.18.4 DURATION: Permanent.
[19.15.18.4 NMAC - N, 12/1/2008]

19.15.18.5 EFFECTIVE DATE: December 1, 2008, unless a later date is cited at the end of a section.
[19.15.18.5 NMAC - N, 12/1/2008]

19.15.18.6 OBJECTIVE: To regulate the production of oil and gas wells within the state in order to prevent waste, protect correlative rights and protect public health and the environment.
[19.15.18.6 NMAC - N, 12/1/2008]

19.15.18.7 DEFINITIONS: "Drip" means a liquid hydrocarbon incidentally accumulating in a gas gathering or transportation system.
[19.15.2.7 NMAC - Rp, Subsection A of 19.15.5.314 NMAC, 12/1/2008]

19.15.18.8 GAS-OIL RATIO AND PRODUCTION TESTS:

A. An operator shall take a gas-oil ratio test no sooner than 20 days nor later than 30 days following the completion or recompletion of each oil well, if:

(1) the well is a wildcat, or

(2) the well is located in a pool that is not exempt from 19.15.18.8 NMAC's requirements.

B. Provisions of 19.15.18.8 NMAC that are applicable to the pool shall govern wells completed within one mile of the outer boundary of a defined oil pool producing from the same formation. The operator shall report the test results to the division on form C-116 within 10 days following the test's completion. The gas-oil ratio the operator reports shall become effective for proration purposes on the first day of the calendar month following the date they are reported.

C. Each operator shall take an annual gas-oil ratio test of each producing oil well, located within a pool not exempted from the requirements of 19.15.18.8 NMAC, during a period the division prescribes. The division shall establish a gas-oil ratio survey schedule setting forth the period in which operators are to take gas-oil ratio tests for each pool where the division requires a test. The gas-oil ratio test shall be a test the division designates, made by the method and in the manner the division in its discretion may prescribe from time to time.

D. An operator shall file the results of gas-oil ratio tests taken during survey periods with the division on form C-116 not later than the 10th of the month following the close of the survey period for the pool in which the well is located. The gas-oil ratios thus reported shall become effective for proration purposes on the first day of the second month following the survey period's close. Unless the operator files form C-116 within the required time limit, the division shall not assign a further allowable to the affected well until the operator file form C-116.

E. In the case of special tests taken between regular gas-oil ratio surveys, the gas-oil ratio becomes effective for proration purposes upon the date the division receives form C-116 reporting the test results. A special test does not exempt a well from the regular survey.

F. During a gas-oil ratio test, an operator shall not produce a well at a rate exceeding the top proration unit allowable for the pool in which it is located by more than twenty-five percent.

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G. The director may exempt such pools as the director deems proper from the gas-oil ratio test requirements of 19.15.18.8 NMAC. The exemption shall be by division order directed to the operators in the pool being exempted.

H. The director may require annual productivity tests of oil wells in pools exempt from gas-oil ratio tests, during a period the division prescribes. The division shall establish an oil well productivity survey schedule setting forth the period in which productivity tests are to be taken for each pool where the division requires the tests.

I. An operator shall file the results of productivity tests taken during survey periods with the division on form C-116 (with the word "exempt" inserted in the column normally used for reporting gas production) not later than the 10th of the month following the close of the survey period for the pool in which the well is located. Unless the operator files form C-116 within the required time limit, the division shall not assign further allowables to the affected well until the operator files form C-116.

J. In the case of special productivity tests taken between regular test survey periods, which result in a change of allowable assigned to the well, the allowable change shall become effective upon the date the division receives form C-116. A special test does not exempt a well from the regular survey.

K. During the productivity test, an operator shall not produce a well at a rate exceeding the top proration unit allowable for the pool in which it is located by more than twenty-five percent.
[19.15.18.8 NMAC - Rp, 19.15.5.301 NMAC, 12/1/2008]

19.15.18.9 BOTTOM HOLE PRESSURE TESTS: The operator shall make a bottom hole pressure test on the discovery well of a new pool and shall report the results of the test to the division within 30 days after the discovery well's completion. On or before December 1 of each calendar year the division shall designate the months in which operators shall take bottom hole pressure tests in designated pools. The division shall include in the designated list the required shut-in pressure time and datum of tests to be taken in each pool. In the event a newly discovered pool is not included in the division's list, the division shall issue a supplementary bottom hole pressure schedule. Tests the division designates shall only apply to flowing wells in each pool. A person qualified by both training and experience to make such test shall make the test with an approved bottom hole pressure instrument that is calibrated against an approved dead-weight tester at intervals frequent enough to ensure its accuracy within one percent. Unless the division otherwise designates, all wells shall remain completely shut in for at least 24 hours prior to the test. In the event the division does not establish a definite datum the operator shall obtain the bottom hole determination as close as possible to the mid-point of the reservoir's productive sand. The operator shall report the test results to the division on form C-124, which shall contain the information required by Subsection B of 19.15.7.32 NMAC.
[19.15.18.9 NMAC - Rp, 19.15.5.302 NMAC, 12/1/2008]

19.15.18.10 CONTROL OF MULTIPLE COMPLETED WELLS: The operator shall at all times operate, produce and maintain multiple completed wells that the division has authorized in a manner to ensure the complete segregation of the various common sources of supply. The division may require the operator take tests the division deems necessary to determine the effectiveness of segregation of the different common sources of supply.
[19.15.18.10 NMAC - Rp, 19.15.5.304 NMAC, 12/1/2008]

19.15.18.11 [RESERVED]
19.15.18.12 [RESERVED]
19.15.18.12 OPERATION AT BELOW ATMOSPHERIC PRESSURE:

A. An operator may use vacuum pumps, gathering system compressors or other devices to operate a well or gathering system at below atmospheric pressure only if that operator has:

(1) executed a written agreement with the operator of the downstream gathering system or pipeline to which the well or gathering system so operated is immediately connected allowing operation of the well or gathering system at below atmospheric pressure; and

(2) filed a sundry notice in the appropriate division district office for each well operated at below atmospheric pressure or served by a gathering system operated at below atmospheric pressure, within 90 days before beginning operation at below atmospheric pressure, notifying the division that the well or gathering system serving the well is being operated at below atmospheric pressure.

B. A gathering system operator may use vacuum pumps, gathering system compressors or other devices to operate a gathering system at below atmospheric pressure, or may accept gas originating from a well operated at below atmospheric pressure or that has been carried by an upstream gathering system operated at below

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Deleted: **METERED CASINGHEAD GAS:** The owner of a lease is not required to measure the exact amount of casinghead gas the owner produces and uses for fuel purposes in the lease's development and normal operation. The owner of the lease shall meter and report casinghead gas produced and sold or transported away from a lease, except small amounts of flare gas, in cubic feet monthly to the division. The owner of the lease may calculate the amount of casinghead gas sold in small quantities for use in the field upon a basis generally acceptable in the industry, or upon a basis approved by the division in lieu of meter measurements.
[19.15.18.11 NMAC - Rp, 19.15.5.305 NMAC, 12/1/2008]

Deleted: **CASINGHEAD GAS:**
A. An operator shall not flare or vent casinghead gas produced from a well after 60 days following the well's completion.
B. An operator seeking an exception to Subsection A of 19.15.18.12 NMAC shall file an application for an exception on form C-129 with the appropriate division district office. The district supervisor may grant an exception when the flaring or venting casinghead gas appears reasonably necessary to protect correlative rights, prevent waste or prevent undue hardships on the applicant. The district supervisor shall either grant the exception within 10 days after the application's receipt or refer it to the director who shall advertise the matter for public hearing if the applicant desires a hearing.
C. The division shall suspend the allowable assigned to the well if the operator flares or vents gas from a well in violation of 19.15.18.12 NMAC.
D. No extraction plant processing gas in the state shall flare or vent casinghead gas unless flaring or venting is made necessary by mechanical difficulty of a very limited temporary nature or unless the gas flared or vented is of no commercial value.
E. In the event of a more prolonged mechanical difficulty or in the event of plant shut-downs or curtailment because of scheduled or non-scheduled maintenance or testing operations or other reasons, or in the event a plant is unable to accept, process and market all of the casinghead gas produced by wells connected to its system, the plant operator shall notify the division as soon as possible of the full details of the shut-down or curtailment, following which the division shall take such action as is necessary to reduce the total flow of gas to the plant.
F. Pending connection of a well to a gas-gathering facility, or when a well has been excepted from the provisions of Subsection A of 19.15.18.12 NMAC, the operator shall burn all gas produced and not used, and report the estimated volume on form C-115.
G. The provisions of Subsection A of 19.15.18.12 NMAC do not apply to wells completed prior to January 1, 1971, in pools that had no gas-gathering facilities on that date, provided however the provisions shall apply to all wells in such a pool 60 days after the date of first casinghead gas connection in the pool.
[19.15.18.12 NMAC - Rp, 19.15.5.306 NMAC, 12/1/2008]

atmospheric pressure, only if that operator has executed a written agreement with the operator of the downstream gathering system or pipeline to which the gathering system is immediately connected allowing delivery of gas from a well or gathering system that has been operated at below atmospheric pressure into the downstream gathering system or pipeline.
[19.15.18.13 NMAC - Rp, 19.15.5.307 NMAC, 12/1/2008]

19.15.18.13 SALT OR SULPHUR WATER: An operator shall report monthly on form C-115 the amount of water produced with the oil and gas from each well.
[19.15.18.14 NMAC - Rp, 19.15.5.308 NMAC, 12/1/2008]

19.15.18.14 AUTOMATIC CUSTODY TRANSFER EQUIPMENT:

A. Oil shall be received and measured in facilities of an approved design. The facilities shall permit the testing of each well at reasonable intervals and may be comprised of manually gauged, closed stock tanks for which the operator of the ACT system has prepared proper strapping tables, or of ACT equipment. The division shall permit ACT equipment's use only after the operator complies with the following. The operator shall file with the division form C-106 and receive approval for use of the ACT equipment prior to transferring oil through the ACT system. The carrier shall not accept delivery of oil through the ACT system until the division has approved form C-106.

B. The operator of the ACT system shall submit form C-106 to the appropriate division district office, which is accompanied by the following:

(1) plat of the lease showing all wells that the any well operator will produce into the ACT system;

(2) schematic diagram of the ACT equipment, showing on the diagram all major components such as surge tanks and their capacity, extra storage tanks and their capacity, transfer pumps, monitors, reroute valves, treaters, samplers, strainers, air and gas eliminators, back pressure valves and metering devices (indicating type and capacity, *i.e.* whether automatic measuring tank, positive volume metering chamber, weir-type measuring vessel or positive displacement meter); the schematic diagram shall also show means employed to prove the measuring device's accuracy; and

(3) letter from transporter agreeing to utilization of ACT system as shown on schematic diagram.

C. The division shall not approve form C-106 unless the operator of the ACT system will install and operate the ACT system in compliance with the following requirements.

(1) Provision is made for accurate determination and recording of uncorrected volume and applicable temperature, or of temperature corrected volume. The system's overall accuracy shall equal or surpass manual methods.

(2) Provision is made for representative sampling of the oil transferred for determination of API gravity and BS&W content.

(3) Provision is made if required by either the oil's producer or the transporter to give adequate assurance that the ACT system runs only merchantable oil.

(4) Provision is made for set-stop counters to stop the flow of oil through the ACT system at or prior to the time the allowable has been run. Counters shall provide non-reset totalizers that are visible for inspection at all times.

(5) Necessary controls and equipment are enclosed and sealed, or otherwise arranged to provide assurance against, or evidence of, accidental or purposeful mismeasurement resulting from tampering.

(6) The ACT system's components are properly sized to ensure operation within the range of their established ratings. All system components that require periodic calibration or inspection for proof of continued accuracy are readily accessible; the frequency and methods of the calibration or inspection shall be as set forth in Paragraph (12) of Subsection C of 19.15.18.15 NMAC.

(7) The control and recording system includes adequate fail-safe features that provide assurance against mismeasurement in the event of power failure, or the failure of the ACT system's component parts.

(8) The ACT system and allied facilities include fail-safe equipment as may be necessary, including high level switches in the surge tank or overflow storage tank that, in the event of power failure or malfunction of the ACT or other equipment, will shut down artificially lifted wells connected to the ACT system and will shut in flowing wells at the well-head or at the header manifold, in which latter case the operator of the

ACT system shall pressure test all flowlines to at least 1½ times the maximum well-head shut-in pressure prior to the ACT system's initial use and every two years thereafter.

(9) As an alternative to the requirements of Paragraph (8) of Subsection C of 19.15.18.15 NMAC the producer shall provide and at all times maintain a minimum of available storage capacity above the normal high working level of the surge tank to receive and hold the amount of oil that may be produced during maximum unattended time of lease operation.

(10) In all ACT systems employing automatic measuring tanks, weir-type measuring vessels, positive volume metering chambers or any other volume measuring container, the container and allied components shall be properly calibrated prior to initial use and shall be operated, maintained and inspected as necessary to ensure against incrustation, changes in clingage factors, valve leakage or other leakage and improper action of floats, level detectors, etc.

(11) In ACT systems employing positive displacement meters, the meter and allied components shall be properly calibrated prior to initial use and shall be operated, maintained and inspected as necessary to ensure against oil mismeasurement.

(12) The operator of the ACT system shall check the measuring and recording devices of ACT systems for accuracy at least once each month unless it has obtained an exception to such determination from the division. Where applicable, the operator of the ACT system shall use API standard 1101, Measurement of Petroleum Hydrocarbons by Positive Displacement Meter. Meters may be proved against master meters, portable prover tanks or prover tanks permanently installed on the lease. If the operator of the ACT system uses permanently installed prover tanks, the distance between the opening and closing levels and the provision for determining the opening and closing readings shall be sufficient to detect variations of 5/100 of one percent. The operator of the ACT system shall file reports of determination on the division form entitled "meter test report" or on another acceptable form in duplicate with the appropriate division district office.

(13) To obtain an exception to the requirement in Paragraph (12) of Subsection C of 19.15.18.15 NMAC that all measuring and recording devices be checked for accuracy once each month, either the producer or transporter may file a request with the director setting forth facts pertinent to the exception. The application shall include a history of the average factors previously obtained, both tabulated and plotted on a graph of factors versus time, showing that the particular installation has experienced no erratic drift. The applicant shall also furnish evidence that the other interested party has agreed to the exception. The director may then set the frequency for determination of the system's accuracy at the interval which the director deems prudent.

D. The division may revoke its approval of an ACT system's form C-106 if the system's operator fails to operate it in compliance with 19.15.18.15 NMAC.

[19.15.18.15 NMAC - Rp, 19.15.5.309 NMAC, 12/1/2008]

19.15.18.15 TANKS, OIL TANKS, FIRE WALLS AND TANK IDENTIFICATION:

A. No person shall store or retain oil in earthen reservoirs or in open receptacles. Dikes or fire walls are not required except an operator shall erect and maintain fire walls around permanent oil tanks or tank batteries that are within the corporate limits of a city, town or village, or where such tanks are closer than 150 feet to a producing oil or gas well or 500 feet to a highway or inhabited dwelling or closer than 1000 feet to a school or church, or where the tanks are so located that the division deems them an objectional hazard. Where fire walls are required, fire walls shall form a reservoir having a capacity one-third larger than the capacity of the enclosed tank or tanks.

B. The operator shall identify oil tanks, tank batteries, ACT systems, tanks used for salt water collection or disposal and tanks used for sediment oil treatment or storage by a sign posted on or not more than 50 feet from the tank, tank battery or system. The sign shall be of durable construction and the operator shall keep the lettering on the sign in a legible condition; the lettering shall be large enough to be legible under normal conditions at a distance of 50 feet and the sign shall identify the operator's name, the name of the lease being served by the tank or system, if any, and the location of the tank or system by unit letter, section, township and range.

[19.15.18.16 NMAC - Rp, 19.15.5.310 NMAC, 12/1/2008]

19.15.18.16 SEDIMENT OIL, TANK CLEANING AND TRANSPORTATION OF MISCELLANEOUS HYDROCARBONS:

A. No person shall clean a tank of sediment oil or remove sediment oil from a lease without the appropriate division district office's prior approval. The lease operator or the company contracted or otherwise authorized to perform the tank cleaning may receive authorization for tank cleaning by obtaining division approval

on form C-117-A. No operator, contractor or other party shall clean a tank of sediment oil or remove sediment oil from a lease without an approved copy of form C-117-A at the site.

B. No person shall destroy sediment oil without the appropriate division district office's approval of an application to destroy the sediment oil on form C-117-A. Unless a person receiving an authorization to destroy sediment oil utilizes the authorization to destroy sediment oil within 10 days after division approval of the form C-117-A the authorization is automatically revoked. However, the district supervisor may approve one 10 day extension for good cause shown.

C. A person, other than a treating plant operator, who cleans a tank of sediment oil and removes sediment oil from a lease shall file form C-117-B with the division setting out all information the form requires.

D. A person taking possession of or disposing of sediment oil shall test a representative sample of sediment oil in a manner designed to accurately estimate the percentage of good oil expected to be recovered from the sediment oil. The person shall perform the test prior to transport and prior to commingling with sediment oil from other leases or sources and record the results on form C-117-A. The division recommends the standard centrifugal tests prescribed by API publication Sediment and Water, Sect: 4: Determination of Sediment and Water in Crude Oil by the Centrifuge Method (Field Procedure), MPMS 10.4. The person may use other test procedures if the procedures reliably predict the percentage of good oil to be recovered from sediment oil.

E. A person taking possession of or disposing of sediment oil shall report sediment oil removed from storage on form C-115 together with the form C-117-A permit number.

F. Except in an emergency, no person shall deliver miscellaneous hydrocarbons to a treating plant or other facility until that person has obtained division approval on form C-117-A.

G. Whenever an emergency exists that requires delivery of miscellaneous hydrocarbons to a treating plant or other facilities prior to approval of form C-117-A, the transporter of the hydrocarbons shall notify the supervisor of the appropriate division district office of the emergency's nature and extent on the first working day following the emergency and shall file form C-117-A within two working days following the emergency. For prolonged emergencies, the district supervisor may authorize the extended movement of miscellaneous hydrocarbons to a treating plant or other facilities during the emergency period and shall approve a form C-117-A filed subsequent to the emergency's conclusion covering the entire volume of miscellaneous hydrocarbons transported.

[19.15.18.17 NMAC - Rp, 19.15.5.311 NMAC, 12/1/2008]

19.15.18.17 EMULSION, BASIC SEDIMENTS AND TANK BOTTOMS: The operator shall operate wells producing oil in a manner that reduces as much as practicable the formation of emulsion and basic sediments. No person shall allow these substances and tank bottoms to pollute fresh waters or cause surface damage.

[19.15.18.18 NMAC - Rp, 19.15.5.313 NMAC, 12/1/2008]

19.15.18.18 GATHERING, TRANSPORTING AND SALE OF DRIP:

A. The waste of drip is prohibited when it is economically feasible to salvage the drip.

B. A person may move and sell drip, provided it complies with 19.15.18.19 NMAC.

C. A person shall not transport or sell drip until the gas transporter files form C-104 designating the drip transporter authorized to remove the drip from its gas gathering or transportation system.

D. Each month, a person transporting drip within the state shall complete and maintain for division inspection form C-112, showing the amount, source and disposition of drip handled during the reporting period, and such other reports as the division may require.

E. Prior to commencement of operations, every person transporting drip directly from a gas gathering or transportation system shall file with the division plats drawn to scale, locating and identifying each drip trap that the person is authorized to service.

F. A person transporting drip directly from a gas gathering or transportation system shall keep a record of daily acquisitions from each drip trap that the person is authorized to service and make the records available at all reasonable times for inspection by the division or its authorized representatives.

G. A gas transporter shall, on or before the first day of November of each year, file with the division maps of its entire gas gathering and transportation systems, locating and identifying on the map each drip trap in the systems, the maps to be accompanied by a report, on a division-prescribed form, showing the disposition being made of the drip from each of the drip traps.

[19.15.18.19 NMAC - Rp, 19.15.5.314 NMAC, 12/1/2008]

OCD DRAFT
July 20, 2020

HISTORY of 19.15.18 NMAC:

History of Repealed Material: 19.15.5 NMAC, Oil Production Operating Practices (filed 04/27/2000) repealed 12/1/2008.

NMAC History:
Those applicable portions of 19.15.5 NMAC, Oil Production Operating Practices Sections 301, 302, 304 - 311, 313 & 314) (filed 04/27/2000) were replaced by 19.15.18 NMAC, Production Operating Practices, effective 12/1/2008.

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July 20, 2020

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 19 NATURAL GAS PRODUCTION OPERATING PRACTICE

19.15.19.1 ISSUING AGENCY: Energy, Minerals and Natural Resources Department, Oil Conservation Division.
[19.15.19.1 NMAC - Rp, 19.15.6.1 NMAC, 12/1/2008]

19.15.19.2 SCOPE: 19.15.19 NMAC applies to persons engaged in gas development and production within New Mexico.
[19.15.19.2 NMAC - Rp, 19.15.6.2 NMAC, 12/1/2008]

19.15.19.3 STATUTORY AUTHORITY: 19.15.19 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.
[19.15.19.3 NMAC - Rp, 19.15.6.3 NMAC, 12/1/2008]

Deleted: NMSA 1978,

19.15.19.4 DURATION: Permanent.
[19.15.19.4 NMAC - Rp, 19.15.6.4 NMAC, 12/1/2008]

19.15.19.5 EFFECTIVE DATE: December 1, 2008, unless a later date is cited at the end of a section.
[19.15.19.5 NMAC - Rp, 19.15.6.5 NMAC, 12/1/2008]

19.15.19.6 OBJECTIVE: To regulate the gas production within the state in order to prevent waste, protect correlative rights and protect public health and the environment.
[19.15.19.6 NMAC - Rp, 19.15.6.6 NMAC, 12/1/2008]

19.15.19.7 DEFINITIONS: [RESERVED]
[See 19.15.2.7 NMAC for definitions.]

19.15.19.8 METHOD OF DETERMINING GAS WELL POTENTIAL:

A. An operator shall conduct tests to determine the daily open flow potential volumes of gas wells from which gas is being used or marketed. The operator shall report the tests on division-prescribed forms within 60 days after

(1) the date of the well's initial connection to a gas transportation facility; and

(2) the date of reconnection following workover.

B. To establish comparable open flow capacity, the operator shall test wells in accordance with the division's Manual for back-pressure testing of natural gas wells. If the division approves the alternate method for testing, the operator shall test all wells producing from a common source of supply in a uniform and comparable manner.

C. The operator of a gas well that is not connected to a gas gathering facility shall test the well within 30 days following a christmas tree's installation. The operator shall take the tests in accordance with the procedure for testing unconnected gas well contained in the division's *manual for back-pressure testing of natural gas wells*. The operator shall report the tests on form C-122 in compliance with 19.15.7.31 NMAC and file it within 10 days following the test's completion.
[19.15.19.8 NMAC - Rp, 19.15.6.401 NMAC, 12/1/2008]

19.15.19.9 GAS FROM GAS WELLS TO BE MEASURED:

A. The transporter of gas produced shall account for the gas by metering or other division-approved method and report it to the division. The owner or operator of the gas transportation facility shall report gas produced from a gas well and delivered to a gas transportation facility. The well operator shall report gas produced from a gas well and required to be reported by 19.15.19.9 NMAC that is not delivered to and reported by a gas transportation facility.

B. An operator may apply to the district supervisor, using form C-136, for approval of one of the following procedures for measuring gas.

(1) In the event a well is not capable of producing more than 15 MCFD, a measurement

method agreed upon by the operator and transporter whereby the parties establish by annual test the producing rate of the well under normal operating conditions and apply that rate to the period of time the well is in a producing status. If the well is capable of producing greater than five MCFD, the transporter shall attach a device to the line that determines the actual time period that the well is flowing.

(2) An operator may produce a well that has a producing capacity of 100 MCFD or less and that is on a multi-well lease without the well being separately metered when the gas is measured using a lease meter at a CPD. The lease's ownership shall be common throughout including working interest, royalty and overriding royalty ownership.

(3) If normal operating conditions change, either party may request a new well test, the cost of which the party requesting the new well test shall bear unless the parties otherwise agree.

C. The operator and transporter shall report the well volumes on forms C-115 and C-111 based upon the approved method of measurement and, in the case of a CPD, upon the method of allocation of production to individual wells the district supervisor approves.
[19.15.19.9 NMAC - Rp, 19.15.6.403 NMAC, 12/1/2008]

[RESERVED]

Deleted: 19.15.19.10 GAS UTILIZATION: After the completion of a gas well, the operator shall not permit gas from the well to escape to the air, use the gas expansively in engines or pumps and then vent or use the gas to gas-lift wells unless all gas produced is processed in a gasoline plant or beneficially used thereafter without waste.¶
[19.15.19.10 NMAC - Rp, 19.15.6.404 NMAC, 12/1/2008]

19.15.19.11 STORAGE GAS: With the exception of the requirement to meter and report monthly the amount of gas injected and the amount of gas withdrawn from storage, in the absence of waste 19.15.19 NMAC shall not apply to gas being injected into or removed from storage. (See 19.15.7.40 NMAC)
[19.15.19.11 NMAC - Rp, 19.15.6.405 NMAC, 12/1/2008]

19.15.19.12 CARBON DIOXIDE: The rules relating to gas, gas wells and gas reservoirs including those provisions relating to well locations, acreage dedication requirements, casing and cementing requirements and measuring and reporting of production also apply to carbon dioxide gas, carbon dioxide wells and carbon dioxide reservoirs.
[19.15.19.12 NMAC - Rp, 19.15.6.406 NMAC, 12/1/2008]

19.15.19.13 DISCONNECTION OF GAS WELLS: The operator shall report gas wells that are disconnected from intrastate gas transportation facilities to the division within 30 days of the date of disconnection. The operator shall file the notice on form C-130 in compliance with 19.15.7.39 NMAC.
[19.15.19.13 NMAC - Rp, 19.15.6.407 NMAC, 12/1/2008]

HISTORY of 19.15.19 NMAC:

History of Repealed Material: 19.15.6 NMAC, Natural Gas Production Operating Practice (filed 11/29/2001) repealed 12/1/2008.

NMAC History:
Those applicable portions of 19.15.6 NMAC, Natural Gas Production Operating Practice (Sections 401, and 403 - 407) (filed 11/29/2001) were replaced by 19.15.19 NMAC, Natural Gas Production Operating Practice, effective 12/1/2008.

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July 20, 2020

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 19 NATURAL GAS PRODUCTION OPERATING PRACTICE

19.15.19.1 ISSUING AGENCY: Energy, Minerals and Natural Resources Department, Oil Conservation Division.
[19.15.19.1 NMAC - Rp, 19.15.6.1 NMAC, 12/1/2008]

19.15.19.2 SCOPE: 19.15.19 NMAC applies to persons engaged in gas development and production within New Mexico.
[19.15.19.2 NMAC - Rp, 19.15.6.2 NMAC, 12/1/2008]

19.15.19.3 STATUTORY AUTHORITY: 19.15.19 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.
[19.15.19.3 NMAC - Rp, 19.15.6.3 NMAC, 12/1/2008]

Deleted: NMSA 1978,

19.15.19.4 DURATION: Permanent.
[19.15.19.4 NMAC - Rp, 19.15.6.4 NMAC, 12/1/2008]

19.15.19.5 EFFECTIVE DATE: December 1, 2008, unless a later date is cited at the end of a section.
[19.15.19.5 NMAC - Rp, 19.15.6.5 NMAC, 12/1/2008]

19.15.19.6 OBJECTIVE: To regulate the gas production within the state in order to prevent waste, protect correlative rights and protect public health and the environment.
[19.15.19.6 NMAC - Rp, 19.15.6.6 NMAC, 12/1/2008]

19.15.19.7 DEFINITIONS: [RESERVED]
[See 19.15.2.7 NMAC for definitions.]

19.15.19.8 METHOD OF DETERMINING GAS WELL POTENTIAL:

A. An operator shall conduct tests to determine the daily open flow potential volumes of gas wells from which gas is being used or marketed. The operator shall report the tests on division-prescribed forms within 60 days after

(1) the date of the well's initial connection to a gas transportation facility; and

(2) the date of reconnection following workover.

B. To establish comparable open flow capacity, the operator shall test wells in accordance with the division's Manual for back-pressure testing of natural gas wells. If the division approves the alternate method for testing, the operator shall test all wells producing from a common source of supply in a uniform and comparable manner.

C. The operator of a gas well that is not connected to a gas gathering facility shall test the well within 30 days following a christmas tree's installation. The operator shall take the tests in accordance with the procedure for testing unconnected gas well contained in the division's *manual for back-pressure testing of natural gas wells*. The operator shall report the tests on form C-122 in compliance with 19.15.7.31 NMAC and file it within 10 days following the test's completion.
[19.15.19.8 NMAC - Rp, 19.15.6.401 NMAC, 12/1/2008]

19.15.19.9 GAS FROM GAS WELLS TO BE MEASURED:

A. The transporter of gas produced shall account for the gas by metering or other division-approved method and report it to the division. The owner or operator of the gas transportation facility shall report gas produced from a gas well and delivered to a gas transportation facility. The well operator shall report gas produced from a gas well and required to be reported by 19.15.19.9 NMAC that is not delivered to and reported by a gas transportation facility.

B. An operator may apply to the district supervisor, using form C-136, for approval of one of the following procedures for measuring gas.

(1) In the event a well is not capable of producing more than 15 MCFD, a measurement

method agreed upon by the operator and transporter whereby the parties establish by annual test the producing rate of the well under normal operating conditions and apply that rate to the period of time the well is in a producing status. If the well is capable of producing greater than five MCFD, the transporter shall attach a device to the line that determines the actual time period that the well is flowing.

(2) An operator may produce a well that has a producing capacity of 100 MCFD or less and that is on a multi-well lease without the well being separately metered when the gas is measured using a lease meter at a CPD. The lease's ownership shall be common throughout including working interest, royalty and overriding royalty ownership.

(3) If normal operating conditions change, either party may request a new well test, the cost of which the party requesting the new well test shall bear unless the parties otherwise agree.

C. The operator and transporter shall report the well volumes on forms C-115 and C-111 based upon the approved method of measurement and, in the case of a CPD, upon the method of allocation of production to individual wells the district supervisor approves.
[19.15.19.9 NMAC - Rp, 19.15.6.403 NMAC, 12/1/2008]

[RESERVED]

Deleted: 19.15.19.10 GAS UTILIZATION: After the completion of a gas well, the operator shall not permit gas from the well to escape to the air, use the gas expansively in engines or pumps and then vent or use the gas to gas-lift wells unless all gas produced is processed in a gasoline plant or beneficially used thereafter without waste.
[19.15.19.10 NMAC - Rp, 19.15.6.404 NMAC, 12/1/2008]

19.15.19.11 STORAGE GAS: With the exception of the requirement to meter and report monthly the amount of gas injected and the amount of gas withdrawn from storage, in the absence of waste 19.15.19 NMAC shall not apply to gas being injected into or removed from storage. (See 19.15.7.40 NMAC)
[19.15.19.11 NMAC - Rp, 19.15.6.405 NMAC, 12/1/2008]

19.15.19.12 CARBON DIOXIDE: The rules relating to gas, gas wells and gas reservoirs including those provisions relating to well locations, acreage dedication requirements, casing and cementing requirements and measuring and reporting of production also apply to carbon dioxide gas, carbon dioxide wells and carbon dioxide reservoirs.
[19.15.19.12 NMAC - Rp, 19.15.6.406 NMAC, 12/1/2008]

19.15.19.13 DISCONNECTION OF GAS WELLS: The operator shall report gas wells that are disconnected from intrastate gas transportation facilities to the division within 30 days of the date of disconnection. The operator shall file the notice on form C-130 in compliance with 19.15.7.39 NMAC.
[19.15.19.13 NMAC - Rp, 19.15.6.407 NMAC, 12/1/2008]

HISTORY of 19.15.19 NMAC:

History of Repealed Material: 19.15.6 NMAC, Natural Gas Production Operating Practice (filed 11/29/2001) repealed 12/1/2008.

NMAC History:
Those applicable portions of 19.15.6 NMAC, Natural Gas Production Operating Practice (Sections 401, and 403 - 407) (filed 11/29/2001) were replaced by 19.15.19 NMAC, Natural Gas Production Operating Practice, effective 12/1/2008.

OCD DRAFT
July 20, 2020

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 methods and technologies that are not in common use in the industry and are not required by law or regulation.

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

C. "AVO" means audio, visual or olfactory.

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.

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.

F. "Emergency" means a temporary, infrequent and unavoidable event in which the loss of natural gas is uncontrollable or necessary to avoid a risk of an immediate and substantial

adverse impact on safety, public health or the environment, but does not include an event arising from or related to:

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

(2) the operator's failure to limit production when the production rate exceeds the capacity of the related equipment or natural gas gathering system as defined in 19.15.28 NMAC, or exceeds the sales contract volume of natural gas;

(3) scheduled maintenance;

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

(5) two or more emergencies experienced by the operator within the preceding 60 days, unless the division determines the operator could not have reasonably anticipated the current event and it was beyond the operator's control.

G. **"Flare stack"** means an appropriately designed stack equipped with a burner used for the combustion and disposal of natural gas.

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

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

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

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.

O. **"Reduced emissions completion equipment"** means a collection of temporary equipment, including at minimum filters, containment vessels, and one or more separators, deployed during a fracturing or refracturing operation allowing gas flowback during well completion or recompletion to be captured, cleaned and routed to the sales line or collection system, re-injected into the well or another well, used as an onsite fuel source, or used for another useful purpose that a purchased fuel or raw material would serve, with no direct release to the atmosphere.

P. **"Routine flaring"** means the use of flaring during normal oil production operations in the absence of sufficient facilities or amenable geology to re-inject the produced gas, utilize it on-site, or dispatch it to a market.

Q~~O~~. **"Separation flowback"** means the period during completion operations that

begins when it is technically feasible for a 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.

R~~O~~. "Vent" or "Venting" means the release of uncombusted natural gas to the atmosphere.

[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 waste and 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 all operations.

The operator must flare rather than vent any gas that is released except:

(1) 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, provided that 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) make all reasonable efforts to immediately notify members of the public residing, working, or otherwise within two miles of the location of the operations following discovery of the emergency or malfunction that presents a risk to public health or safety;

(c) file a form C-129 no later than 24 hours after commencing to vent or flare pursuant to Subparagraph (5) of Subsection E of 19.15.27.8 NMAC;

(d) notify the division and members of the public residing, working, or otherwise within one-half mile of the drilling location as soon as practicable after it stops venting or flaring; and

(e) comply with the applicable requirement to report a release pursuant to 19.15.29 NMAC.

(2) to unload or clean-up a well to atmospheric pressure:

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

(b) for liquids unloading by manual purging, if:

(i) prior to manual purging, the operator has first used any means of creating differential pressure to attempt to unload the liquids without emitting and has considered other methods for liquids unloading including using velocity tubing, foaming agents, wellhead compression and a plunger lift system;

(ii) the operator remains present on-site until the end of unloading and takes all reasonable actions to achieve a stabilized rate and pressure at the earliest practical time and minimizes venting to the maximum extent practicable; and

(iii) use of a vapor recovery unit to combust the gas that would otherwise be vented from manual purging is technically infeasible because the vented gas does not have sufficient heating value to sustain combustion;

(c) 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

(d) during downhole well maintenance, if and only when the operator uses a workover rig, swabbing rig, coiled tubing unit, or similar specialty equipment, and minimizes the venting of natural gas to the extent consistent with safe operation and best management practices; and

(3) from equipment and activities in compliance with and to the extent authorized by applicable state or federal law regulating the emission of hydrocarbons and volatile organic compounds:

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

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

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

(d) 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;

(e) a bradenhead test;

(f) a packer leakage test;

(g) a production test that does not exceed 24 hours unless the division requires or approves a longer test period; and

(h) during maintenance activities such as depressuring and pigging, but not including scheduled blowdowns, where it is not technically feasible to reroute the gas back into the gas line, otherwise beneficially use the gas, or use a portable flare to combust the gas;

(4) from a leak, provided that the operator is in full compliance with all applicable requirements related to leak detection and repair pursuant to [cite OCD and NMED regs]

(5) when a release of gas is uncontrollable and flaring is prohibited by Federal, State, local or Tribal law, regulation, or enforceable permit term.

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

(1) The operator shall comply with the requirements of this section, as well as all other applicable requirements, during drilling operations.

(2~~1~~) The operator shall capture or combust natural gas escaping from the well using best available control technologies.

(3~~2~~) A flare stack shall be located, maintained, and, if appropriate, replaced at a minimum of 100 feet from the nearest surface hole location, sized properly to account for the flow of natural gas into the stack, and be enclosed and equipped with an automatic ignition system or continuous pilot and have a destruction removal efficiency of at least 98%.

~~**(3)** In an emergency or malfunction, the operator may vent natural gas to avoid a risk of an immediate and substantial adverse impact on safety, public health or the environment. 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~~

~~**(d)** comply with the applicable requirement to report a release pursuant to 19.15.29 NMAC.~~

D~~C~~. Venting and flaring during completion and re-completion operations.

(1) An operator shall comply with the requirements of this section, as well as all other applicable requirements, during completion and re-completion operations.

(2) Prior to initiating flowback, the operator shall locate reduced emissions completion equipment onsite and connect it to the wellhead.

(3) Beginning upon initiation of flowback, the operator shall capture and route recovered natural gas and fluids to reduced emissions completion equipment, including to one or more well completion vessels or storage vessels and separators. The operator shall immediately commence operation of the reduced emissions completion equipment.

~~**(3)** The 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~~2~~) ~~During separation flowback, t~~The operator shall capture and route recovered natural gas to a sales ~~gas flow~~line or collection system, re-inject it into the well, or use it on-site as a fuel source or for another purpose that a purchased fuel or raw material would serve.

(5) If formation pressure is inadequate for reduced emissions completion equipment to function, the operator shall use gas compression equipment to boost the pressure.

(6~~3~~) The operator may route recovered natural gas to a flare only where flaring is an integral and necessary part of the operation of the reduced emission completion equipment, where the remainder of the flowback gas is routed to one or more of the uses specified ~~if routing or using the natural gas as described~~ in Subparagraph (4~~2~~) of Paragraph D~~C~~ of 19.15.27.8 NMAC ~~poses a risk to safe operation or personnel safety~~, and provided that the flare is properly sized and equipped with an automatic igniter or continuous pilot and has a destruction removal efficiency of at least 98%.

E~~D~~. Venting and flaring during production operations.

(1) An operator shall comply with the requirements of this section, as well as all other applicable requirements, during production operations.

(2~~1~~) The operator shall not vent ~~or flare~~ natural gas except as authorized above ~~below~~ in Subsection B~~D~~ of 19.15.27.8 NMAC.

~~**(2)** The operator may vent or flare natural gas~~

~~**(a)** 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 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 regulating 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 weekly to confirm that all production equipment is operating properly and there is no venting except as allowed by Subsection B~~D~~ of 19.15.27.8 NMAC. ~~The operator shall~~

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

~~**(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 natural gas;~~

~~**(c)** conduct the AVO inspection once per calendar month, with at least 20 calendar days between inspections, on a well with an average daily production equal to or less than 10 barrels of oil or 60,000 cubic feet of natural gas; and~~

~~**(d)** make and keep a record of each AVO inspection for not less than five years and make such record available for inspection by the division upon request.~~

~~**(4)** 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~~

~~**(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~~

~~**(d)** comply with the applicable requirement to report a release pursuant to 19.15.29 NMAC.~~

(4~~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.

(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) All natural gas combusted by the operator shall be combusted in a vapor recovery unit or flare stack properly sized and designed for and operated at maximum efficiency.

(i) A flare stack installed on or after {effective date of rule} ~~May 31, 2021~~ shall be equipped with an automatic ignitor or continuous pilot and have a destruction removal efficiency of at least 98%.

(ii) A flare stack installed before {effective date of rule} ~~June 1, 2021~~ shall be retrofitted with an automatic ignitor or continuous pilot and to ensure a destruction removal efficiency of at least 98% no later than 60 days ~~18 months~~ after {effective date of rule}.

(d) A flare stack located at a well spud after {effective date of rule} shall be adequately anchored and located at least 100 feet from the well and storage tanks.

(e) The operator shall inspect a flare stack at least once per week to confirm that it 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 the volume of natural gas that is vented, flared, or beneficially used during drilling, completion, and production operations regardless of the reason ~~or authorization~~ for such venting or ~~and~~ flaring.

(a) The operator shall install equipment to measure the volume of vented and flared natural gas from a well authorized by an APD issued after May 31, 2021 that has an average daily production greater than 10 barrels of oil or 60,000 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.

(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) For a well that does not require measurement equipment, the operator shall estimate the volume of vented and flared natural gas based 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 that the existing measurement equipment or GOR test is not

sufficient to measure the volume of vented and flared natural gas.

(2) The operator shall report the lost natural gas for each month on a volumetric and percentage basis on form C-115B.

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

(3) The operator shall separately report the volume of vented gas and the volume of flared natural gas for each month in each category in this subparagraph on form C-115B, and state whether the reported volume was 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. The categories are

(a) emergency;
(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) 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) controlled storage tanks;
(p~~o~~) ~~insufficient pipeline availability or capacity~~ associated gas due to:
(i) well not connected to sales line;
(ii) insufficient well pressure for gas to enter sales line;
(iii) midstream upset or curtailment; or
(iv) other specified reasons.
(q~~p~~) natural gas quality that is not suitable for transportation and processing because of a high percentage of N_2 or H_2S;
(r~~q~~) venting in excess of the design specifications of pneumatic controllers and pumps as a result of malfunction or improper or infrequent maintenance;
(s~~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) an operator who vents or flares less than 500,000 cubic feet per year of natural gas is exempted from this subparagraph;

(ts) thief hatches that are not properly closed or maintained; and

(ut) other not described above.

(4) No less than annually, the operator shall submit to the division certification of an independent, third-party verification of the vented and flared volumes reported in 19.15.27.8(E)(3). Further:

(a) the operator shall obtain verification services at their own expense and the verification shall be conducted according to generally-accepted verification protocols for greenhouse gas reporting programs;

(b) verification reports shall be submitted to the division directly by the third-party verifier;

(c) verification reports shall include findings regarding the validity of reported emissions, material misstatements, and nonconformance with reporting protocols and requirements, and operators may appeal the findings to the division if agreement to resolve problems found cannot be reached between the operator and the verifier;

(d) the operator shall not obtain verification services from any entity: directly benefiting from oil and gas production; wholly or partially owned directly or indirectly by the operator; providing oilfield services to the operator; generating sales from oil and gas construction or maintenance activities; or performing consulting, accounting, legal, engineering, or human resources services for the operator; and

(e) the operator shall not retain the same verification services provider for a period exceeding 6 years.

(54) The operator shall notify the division of: any period of venting or and flaring that exceeds eight hours in any 24 hour period; and of all venting or flaring attributed to emergency or malfunction of any duration; any period of venting from manual well purging events with a cumulative duration exceeding 24 hours during any month; and any period of venting from manual well purging from a well with an estimated volume of gas vented greater than 75,000 standard cubic feet during any month by submitting a form C-129 no later than 24 hours after the commencement of venting or and flaring.

(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 or facilities;

(iii) equipment from which venting or flaring occurs, using the categories provided by 19.15.27.8(E)(3) NMAC;

(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) dates and period of time during which venting or flaring began and ended;

(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.

(x) number of C-129s submitted for this facility during the previous 12 months;

(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 operator shall report the vented and flared natural gas 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. Drilling, completion and recompletion, and production ~~Statewide~~ natural gas capture requirements. Commencing January 1, 2022, the operator shall, in addition to the provisions of 19.15.27.8 NMAC, reduce the annual volume of vented and flared natural gas on a countywide basis in order to capture a minimum of ninety-eight percent of the natural gas produced from its wells in each county in which the operator operates no later December 31, 2026. The division shall calculate and publish no later than March 1, 2022 each operator's baseline natural gas capture rate based on the operator's 2021 monthly data reported on form C-115B. In each calendar year between January 1, 2022 and December 31, 2026, the operator shall, at a minimum, increase the percentage of natural gas captured in each county 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 in the baseline year, the operator shall develop and submit to the division for approval a plan to meet the minimum required annual capture percentage increase.

(3) Notwithstanding the gas capture requirement set by Subsection A of 19.15.27.9 NMAC, an operator must capture at least ninety percent of the natural gas produced from its wells by no later than December 31, 2021 as a precondition of obtaining approval for a

pooling application, a special pool order, adjustment to the well spacing or density of a pool, or APD.

~~**(3)** An operator that acquires one or more wells from another operator shall comply with 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 a report certifying compliance with the countywide ~~statewide~~ gas capture requirements. 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 countywide ~~statewide~~ natural gas capture requirements, except for the following.

(1) The operator may exclude from the volume of produced natural gas the volume of vented and flared natural gas pursuant to Subparagraph (a) of Paragraph (3) of Subsection E of 19.15.27.8 NMAC for which the operator timely filed, and the division approved, a form C-129.

(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 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.

(4) The operator may obtain a credit 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;

(b) 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.

(5) The operator may use a credit against its reported volume of lost natural gas loss no more than once in any 13 month period following the division's approval of such credit.

(6) 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;

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

(c) 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.

(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;

(c) the estimated volume of the natural gas lost and isolated after the date of discovery;

(d) a summary of the actions the operator took to isolate and repair the leak;

(e) visual documentation of the discovery and isolation;

(f) 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) if applicable, the dates of each use of the ALARM technology; and

(h) if applicable, a copy of the information provided to the unaffiliated operator.

(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.

C. Violation of natural gas capture requirement. As a precondition of obtaining approval for a pooling application, a special pool order, adjustment to the well spacing or density of a pool, or APD, an operator must be in compliance with the natural gas capture requirement. Further, ~~T~~the division may pursue any action authorized by law against an operator that does not meet a countywide ~~statewide~~ natural gas capture requirement, including to curtail a production allowance~~, withhold or deny a drilling permit,~~ suspend or revoke an authorization to transport, or assess a civil penalty.

D. Natural gas management plan for oil and gas pools.

(1) After May 31, 2021, an operator that submits a pooling application, seeks a special pool order, or otherwise seeks to adjust the spacing or density of a pool shall, with their request, file a pool-wide natural gas management plan that describes how the operator will prevent routine flaring from new wells and infrastructure, comply with natural gas capture requirements, maximize the efficient, safe, and economic recovery of the state's oil and natural gas, and avoid or minimize the surface impacts of oil and gas infrastructure.

(2) The pool-wide natural gas management plan shall describe the specific actions that operators of a given pool will take to prevent routine flaring from new wells and infrastructure, comply with natural gas capture requirements, maximize the efficient, safe, and economic recovery of the state's oil and natural gas, and avoid or minimize the surface impacts of oil and gas infrastructure, and include the following information in their application or request:

(a) existing natural gas gathering system capacity contracted or anticipated to contract to gather the natural gas from the pool;

(b) existing processing capacity contracted or anticipated to contract to process natural gas from the pool;

(c) any gaps in existing gathering system or processing capacity necessary to transport, process, and market one-hundred percent of the anticipated volume of natural gas produced from the pool and information regarding known or reasonably foreseeable plans to fill those gaps; and

(d) location of all residences, schools, businesses, hospitals, or public

facilities that are lawfully occupied or licensed in accord with federal, tribal, or state law within the pool and within two miles of the external boundary of the pool.

(3) Prior to submission to the commission or the division, the operator shall make the pool-wide natural gas management plan available to the public for review for at least 60 days, providing all comments to the division. Further, the operator shall, at least 60 days prior to submission to the commission or the division, provide specific notice of the pool-wide natural gas management plan to all federal, tribal, state, and local government entities with responsibilities within and two miles beyond the external boundaries of the pool.

(4) Once approved, the operator shall comply with the pool-wide natural gas management plan. The operator may deviate from the pool-wide natural gas management plan only if approved by the division through approval of a new or modified pool-wide natural gas management plan prepared in accord with this subsection, through approval of an APD natural gas management plan completed pursuant to 19.15.27.9(E) NMAC or, in the event of an emergency, to protect safety, public health, or the environment.

E~~D~~. Natural gas management plan for APDs.

(1) After May 31, 2021, the operator shall file a natural gas management plan with each APD that describes how the operator will prevent routine flaring, comply with natural gas capture requirements, reduce waste, eliminate venting and flaring of natural gas to the greatest extent possible, maximize the efficient, safe, and economic recovery of the state's oil and natural gas, and avoid or minimize the surface impacts of oil and gas infrastructure The operator shall ~~may~~ file a single APD natural gas management plan for multiple wells or recompletions drilled from a single well pad or that will be connected to a central delivery point when those multiple wells or recompletions are to be completed concurrently or are reasonably foreseeable.

(2) The APD natural gas management plan shall describe the specific actions that the operator will take at each well or wells to avoid any routine flaring, comply with ~~its statewide~~ natural gas capture requirements, reduce waste, eliminate venting and flaring of natural gas to the greatest extent possible, maximize the efficient, safe, and economic recovery of the state's oil and natural gas, and avoid or minimize the surface impacts of oil and gas infrastructure. Where a pool-wide natural gas management plan has been completed in accord with 19.15.27.9(D) NMAC for the pool in which the well or wells are to be drilled, the APD natural gas management plan for the well or wells shall incorporate relevant information from the pool-wide plan by reference, explain how the plan for the new well or wells implements and is consistent with the pool-wide plan, and provide specific detail regarding any changed circumstances or conditions requiring deviations from the pool-wide plan. The natural gas management plan for the well or wells, shall ~~and~~ include the following information:

(a) operator's name;

(b) name, API number, location and footage;

(c) 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) name, API number, location, footage, and natural gas volume production of operator's existing wells that either are connected or are anticipated to connect to the existing natural gas gathering system contracted or anticipated to contract to gather the natural gas from the well or wells included in the APD;

(f~~e~~) the existing natural gas gathering system contracted or anticipated to contract to gather the natural gas beginning on the date of the start of production from the well, including:

(i) natural gas gatherer's name;

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

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

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

(v) maximum daily capacity of the natural gas pipeline and compressors;

(vi) current throughput of the natural gas pipeline and compressors;

(vii) anticipated daily capacity of the natural gas pipeline and compressors on the date of first sale;

(viii) anticipated throughput of natural gas pipeline and compressors on the date of first sale;

(ix) reliability of the natural gathering system, including the average annual system downtime; and

(x) other issues and expansion plans affecting the gathering of natural gas in the general area;

(g~~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;

(iii) approximate route of gathering pipeline connecting or anticipated to connect the well to the natural gas gathering system;

(iv) reliability of the natural gas gathering system, including the average annual system downtime; ~~and~~

(v) name and location of the natural gas processing plant receiving or anticipated to receive natural gas from the natural gas gathering system;

(vi) location of all residences, schools, businesses, hospitals, or public facilities that are lawfully occupied or licensed in accord with federal, tribal, or state law within two miles of the proposed well; and

(h~~g~~) detailed flowback strategy, including

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

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

(ii~~h~~) a detailed plan ~~options~~ for the beneficial use of natural gas that cannot be sold ~~connected to a natural gas gathering system~~,~~;~~ if the operator determines, based on the available information at the time of submittal, that a natural gas gathering system may ~~will~~ not be available or may ~~will~~ not have capacity on the date of first production from the well or subsequently 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~~ through one or more of the following methods:

(a~~i~~) power generation on lease;
(b~~ii~~) power generation for grid;
(c~~iii~~) compression on lease;
(d~~iv~~) liquids removal on lease;
(e~~v~~) reinjection for underground storage;
(f~~vi~~) reinjection for temporary storage;
(g~~vii~~) reinjection for storage or enhanced oil recovery; and
(h~~viii~~) other alternative uses approved by the division.

(i) actions to mitigate venting or flaring from existing wells owned by the operator indirectly caused by high pressures from the new well or wells subject to the APD and that are or will be connected to the natural gas gathering system contracted or anticipated to contract to gather the natural gas once production begins;

(j) an explanation regarding any changed circumstances, conditions, or waste reduction actions relative to a natural gas management plan covering the pool in which the well is located and approved in accord with 19.15.27.9(D) NMAC.

(3) After the operator either submits or receives approval of the APD natural gas management plan, if the natural gas gathering system becomes unavailable or will not have capacity to transport one hundred percent of the 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~~D~~ of 19.15.27.9 NMAC. The operator shall not commence or continue either drilling or completion activities unless and until the division approves the revised plan.

(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 or wells;

(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 production volumes of the operator's existing wells potentially but not currently served by the gathering system; ~~and~~

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

(i) a natural gas gathering system in the general area with sufficient capacity given current and anticipated volumes from other wells to transport one-hundred percent of the anticipated volume of 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 given current and anticipated volumes from other wells to transport one-hundred percent of the anticipated volume of natural gas during the anticipated productive life of the well;

(d) the operator provided notice to and solicited input from all residences, schools, businesses, hospitals, or public facilities that are lawfully occupied or licensed in accord with federal, tribal, or state law within two miles of the proposed well.

(5) The operator shall include a certification from each operator of a natural gas gathering system in the general area stating 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 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.

(6) Prior to submission to the commission or the division, the operator shall make the APD natural gas management plan available to the public for review for at least 30 days, with all comments directed to the operator and division. Further, the operator shall, at least 30 days prior to submission to the commission or the division, provide specific notice of the APD natural gas management plan and make that plan available to all federal, tribal, state, and local government entities with responsibilities within and two miles beyond the external boundaries of the APD.

(7) The division shall review each APD natural gas management plan to ensure compliance with 19.15.27.9(E) NMAC. Where a natural gas management does not, as submitted, comply with 19.15.27.9(E) NMAC, the division shall either deny the APD or approve the APD subject to conditions to provide for compliance with 19.15.27.9(E) NMAC. ~~If the operator does not 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 the APD; or~~

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

(8) Once approved, the operator shall implement the natural gas management plan, including any conditions required by the division, unless and until the operator submits a modified plan meeting the requirements of this section and that plan is approved by the division except, in the event of an emergency or malfunction, as necessary to protect safety, public health, or the environment. If the operator deviates from the APD natural gas management plan, or there are changed circumstances or conditions resulting in unnecessary or undue surface waste of natural gas, the division may, in addition to other authorized penalties, order the operator to cease operations, comply with conditions on future operations, or shut-in the well.

[19.15.27.9 NMAC – N, xx/xx/xx]

OCD DRAFT
July 20, 2020

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 28 NATURAL GAS GATHERING SYSTEMS

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

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

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

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

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

19.15.28.6 OBJECTIVE: To regulate the natural gas gathering systems to prevent waste and protect correlative rights, public health and the environment.
[19.15.28.6 NMAC – N, xx/xx/xx]

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

A. **"ALARM"** means advanced leak and repair monitoring.

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

C. **"CP"** means cathodic protection.

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

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

(2) the operator's failure to limit gathering when the volume exceeds the capacity of the transmission or distribution system;

(3) scheduled maintenance;

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

(5) two or more emergencies experienced by the operator within the preceding 60 days, unless the division determines the operator could not have reasonably anticipated the current event and it was beyond the operator's control.

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

F. **"Flare stack"** means an appropriately designed stack equipped with a burner used for the combustion and disposal of natural gas.

G. **"Gathering pipeline"** means a pipeline that gathers natural gas from the custody transfer point to the connection point with a natural gas processing plant or transmission or distribution system.

H. **"GIS"** means geographic information system.

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

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

K. **"MAOP"** means maximum allowable operating pressure.

L. **"Natural gas"** means a gaseous mixture of hydrocarbon compounds, primarily composed of methane, and includes both casinghead gas and gas as defined in 9.15.2.7 NMAC.

M. **"Natural gas gathering system"** means the gathering pipelines and associated facilities that compress, dehydrate or treat natural gas from the custody transfer point to the connection point with a natural gas processing plant or transmission or distribution system.

N. **"New gathering pipeline"** means a gathering pipeline installed after {effective date of rule}.

O. **"Vent" or "Venting"** means the release of uncombusted natural gas to the atmosphere.

[19.15.28.7 NMAC – N, xx/xx/xx]

19.15.28.8 **RECORDS:** For the life of a new gathering pipeline, the operator shall maintain a record of the route, materials, design criteria, technical standards, MAOP, installation, pressure and other integrity tests, documentation, inspections, maintenance, repairs, corrosion control and cover and marking; transfer the records to a subsequent operator; and make such records available for inspection by the division upon request.

[19.15.28.8 NMAC – N, xx/xx/xx]

19.15.28.9 **MATERIALS:** The operator shall use pipe materials and components for a new gathering pipeline that are

A. able to maintain structural integrity under the MAOP and other operating conditions, including temperature;

B. compatible with the natural gas to be transported; and

C. satisfy the current API standard.

[19.15.28.9 NMAC – N, xx/xx/xx]

19.15.28.10 **DESIGN:** The operator shall design each component of a new gathering pipeline to

A. prevent failure by minimizing internal and external corrosion and the effect of transported fluids;

B. withstand MAOP and other internal loadings without impairment;

C. withstand anticipated external pressures and loads that may be imposed after installation;

D. allow for maintenance, periodic cleaning, integrity testing and other technology-based inspection tools; and

E. have adequate controls and protective equipment to prevent operation above the MAOP.

[19.15.28.10 NMAC – N, xx/xx/xx]

19.15.28.11 CONSTRUCTION:

A. The operator shall construct a new gathering pipeline in accordance with recognized and generally accepted industry practices.

B. The operator shall not install a new gathering pipeline or other component unless it has been visually inspected at the site of installation to ensure that it is not damaged.

[19.15.28.11 NMAC – N, xx/xx/xx]

19.15.28.12 COVER:

A. The operator shall place at least 30" of cover in normal soil and 18" of cover in consolidated rock over a new gathering pipeline.

B. The operator shall provide additional appropriate cover and protective measures at rail, road and water crossings of a new gathering pipeline.

C. The operator may request a variance from a requirement of 19.15.28.12 NMAC. The variance request shall include:

(1) a statement explaining the need for a variance; and

(2) a written demonstration that the variance will provide equal or better protection of public health and the environment.

D. The division shall approve, approve with conditions, or deny the variance within 60 days of receipt. If the division denies the variance, it shall provide the operator with the reasons for denial. If 60 days have lapsed without a response from the division, then the variance is deemed denied.

[19.15.28.12 NMAC – N, xx/xx/xx]

19.15.28.13 LOCATION AND MARKING:

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

(1) for a new gathering pipeline, no later than 90 days after putting the gathering pipeline into service;

(2) for a natural gas gathering system, no later than May 31, 2020 or 90 days after putting the natural gas gathering system into service; or

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

B. The operator shall file with the division an updated GIS digitally formatted as-built map of its gathering pipeline and natural gas gathering system not less than annually.

C. The operator shall install and maintain markers that identify the location of a new gathering pipeline when crossing a public right-of-way or utility easement, except that markers shall be placed in a manner to reduce the possibility of damage or interference with surface use if practicable and the surface owner grants permission.

D. For each new gathering pipeline that transports natural gas containing a hydrogen sulfide concentration equal to or greater than 100 ppm, the operator shall install and maintain markers that conform with the current ANSI standard Z535.1-2002 (Safety Color Code). The markers shall be readily readable and contain the words "poison gas" and other information sufficient to warn the public of the potential hazard. The operator shall prominently post the markers at locations, including entrance points and road crossings, sufficient to warn the public of the potential hazard.
[19.15.28.13 NMAC – N, xx/xx/xx]

19.15.28.14 INSPECTION:
A. The operator shall retain a certified third-party inspector who shall inspect a new gathering pipeline with an outside diameter of 8" or greater before placing the gathering pipeline into service.
B. The operator shall maintain a record of the inspection, including the certification of the inspector and the inspector's certification that the gathering pipeline was constructed as prescribed by the manufacturer's specifications and in accordance with 19.15.28 NMAC.
[19.15.28.14 NMAC – N, xx/xx/xx]

19.15.28.15 PRESSURE TESTS: Before the operator places into service a new gathering pipeline, the operator shall establish the MAOP, which shall not exceed eighty percent of the internal pressure rating for the gathering pipeline, using the current API recommended practice.
[19.15.28.15 NMAC – N, xx/xx/xx]

19.15.28.16 START-UP NOTIFICATION: After the operator inspects and pressure tests a new gathering pipeline, and no later than 30 days before the operator intends to place the gathering pipeline into service, the operator shall notify the division in writing.
[19.15.28.16 NMAC – N, xx/xx/xx]

19.15.28.17 CORROSION CONTROL:
A. The operator shall electronically inspect the coating of a new gathering pipeline to be used in underground service prior to construction using a coating deficiency detector, such as scratch, bubble or "holiday", to check for faults not observable by visual examination. The operator shall operate the detector in accordance with the manufacturer's specifications and at a voltage level appropriate for the electrical characteristics of the gathering pipeline.
B. During construction, the operator shall coat all joints, fittings and tie-ins with materials compatible with the coating on the gathering pipeline, which shall
(1) be designed to mitigate corrosion;
(2) have sufficient adhesion to the metal surface to prevent under-film migration of moisture;
(3) be sufficiently ductile to resist cracking;
(4) have enough strength to resist damage due to handling and soil stress;
(5) support any supplemental CP system; and
(6) if the coating is an insulating type, have low moisture absorption and provide high electrical resistance.
C. The operator shall install a CP system on a new gathering pipeline that meets or

exceeds the minimum criteria set forth in the National Association of Corrosion Engineers SP0169-2013, Control of External Corrosion on Underground or Submerged Metallic Piping Systems, 2013 Edition, including

(1) sufficient current to protect the gathering pipeline and distribute the current to achieve the selected CP criteria;

(2) minimization of stray current on neighboring underground structures;

(3) a design life commensurate with the required life of the gathering pipeline;

(4) adequate allowance for anticipated changes to current requirements over the design life of the CP system;

(5) location of anodes, cable, test station and other equipment to minimize the possibility of disturbance or damage; and

(6) sufficient monitoring to test and evaluate the effectiveness of the CP system.

[19.15.28.17 NMAC – N, xx/xx/xx]

19.15.28.18 CP MONITORING AND INTEGRITY MANAGEMENT FOR NEW AND EXISTING GATHERING PIPELINES:

A. The operator shall test a new or existing gathering pipeline for adequate CP every two years.

B. The operator shall inspect the rectifier or other impressed current power source for proper operation each calendar quarter with at least 60 days between inspections.

C. The operator shall electrically check additional components for proper performance each calendar quarter with at least 60 days between inspections.

D. The operator shall promptly correct abnormal internal corrosion, including increasing pigging, using corrosion inhibitors, coating the gathering pipeline with an appropriate material such as epoxy paint or other plastic liner or implementing a combination of these actions.

[19.15.28.18 NMAC – N, xx/xx/xx]

19.15.28.19 MAINTENANCE, REPLACEMENT AND REPAIR FOR NEW AND EXISTING NATURAL GAS GATHERING SYSTEMS:

A. Maintenance.

(1) The operator shall take reasonable actions to prevent the failure and leakage and minimize corrosion of a new or existing natural gas gathering system.

(2) If the operator discovers a condition that could adversely affect the safe and proper operation of a natural gas gathering system, the operator shall correct the condition as soon as possible, provided however that the operator shall cease the operation of the natural gas gathering system or segment of gathering pipeline if the condition presents an immediate hazard to persons or property until the condition is corrected.

(3) When the operator discovers a condition that affects the integrity of a natural gas gathering system, it shall immediately investigate, report and correct the condition and report and remediate any releases in accordance with Subsection C of 19.15.28.22 NMAC.

(4) The operator shall take reasonable precautions to prevent the unintentional release of natural gas during maintenance of a natural gas gathering system.

(5) During a blowdown in the course of scheduled maintenance of a natural

gas gathering system, the operator shall route the natural gas back into the line downstream, otherwise beneficially use the natural gas, or flare the natural gas using a portable flare stack which complies with the flare stack standards in Paragraph (45) of Subsection ED of 19.15.27.8 NMAC.

(6) During a blowdown of a gathering pipeline in the course of unscheduled maintenance of a natural gas gathering system, the operator shall make every attempt possible to reroute, beneficially use, or flare the natural gas during blowdown of a gathering pipeline using a portable flare stack that complies with the flare stack standards in Paragraph (5) of Subsection D of 19.15.27.8 NMAC.

B. Replacement or repair.

(1) The operator shall replace or repair a component in a new or existing natural gas gathering system in a safe manner that prevents injury to persons or damage to equipment or property.

(2) The operator shall not use any pipe, valve or fitting to replace or repair a new or existing gathering pipeline unless the component meets the construction requirements of 19.15.28.11 NMAC.

(3) The operator shall not replace or repair any pipe, valve or fitting on a new or existing gathering pipeline unless the replacement or repair is designed to the MAOP.

(4) The operator shall verify the integrity of any replaced or repaired segment of a new or existing gathering pipeline by using a smart pig or other division-approved method before returning the gathering pipeline to service.

(5) The operator shall conduct a replacement or repair in accordance with the manufacturer's specifications or an applicable technical standard.

(6) The operator shall replace or repair each segment of pipe, valve or fitting that leaks or is unsafe before returning a gathering pipeline to service.

(7) While conducting a repair, the operator shall take reasonable precautions to prevent the unintentional release of natural gas during replacement and repair of a new or existing natural gas gathering system.

(8) During scheduled replacement or repair of a new or existing natural gas gathering system, the operator shall flare the natural gas during blowdown using a portable flare stack which complies with the flare stack standards in Paragraph (5) of Subsection D of 19.15.27.8 NMAC.

(9) During unscheduled replacement or repair of a new or existing natural gas gathering system, the operator shall make every attempt possible to flare the natural gas during blowdown using a portable flare stack which complies with the flare stack standards in Paragraph (5) of Subsection D of 19.15.27.8 NMAC.

C. Reporting to affected upstream operators.

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

(2) As soon as possible but no more than 24 hours after discovery of the need for unscheduled maintenance, replacement or repair, the operator shall provide written notification to upstream operators whose natural gas is gathered by the system of the date and expected duration that the system will not gather natural gas.

(3) The operator shall make and keep a record of each notification for not less than five years and make such records available for inspection by the division upon request.
[19.15.28.19 NMAC – N, xx/xx/xx]

19.15.28.20 INTEGRITY MANAGEMENT PROGRAM FOR NEW AND EXISTING GATHERING PIPELINES: The operator shall implement one of the following integrity management programs for new and existing gathering pipelines.

A. An annual pressure test. When performing the annual pressure test the operator shall ensure

(1) the MAOP is maintained for a minimum of 30 minutes after reaching MAOP;

(2) the gathering pipeline does not leak;

(3) the pressure loss does not exceed ten percent; and

(4) the pressure is stable for the last five minutes of the pressure test.

B. Continuous pressure monitoring. If using continuous pressure monitoring the operator shall ensure

(1) pressure data is monitored continuously, i.e., 24 hours per day and seven days a week, and the monitoring can detect a suspected or actual failure of integrity or pressure anomaly;

(2) the gathering pipeline can be shut-in for repairs immediately upon the detection of a suspected or actual failure of integrity or pressure anomaly either through automation or a documented, manual process; and

(3) the continuous monitoring program is documented annually, including a suspected or actual integrity failure or pressure anomaly, and a detailed description of the operator's actions to correct such failure or anomaly.

C. Smart pigging conducted every three years. If using smart pigging, the operator shall

(1) use a smart pig that is capable of measuring flowline wall thickness and flowline defects that could affect integrity, including the measurement of metal loss; and

(2) if the operator does not have a geodatabase file of the flowline, use a smart pig that has GPS capabilities to the extent such capabilities do not materially compromise the ability of the smart pig to conduct the integrity test.
[19.15.28.20 NMAC – N, xx/xx/xx]

19.15.28.21 INSPECTION STANDARDS FOR NEW AND EXISTING GATHERING PIPELINES: The operator shall perform an annual instrument monitoring of the entire length of a new and existing gathering pipeline using an AVO technique, ALARM technology, or other valid method to detect a failure of integrity, leak or release, such as stress vegetation or soil discoloration. The operator shall record and report to the division the date and time of the monitoring, the method and technology used and the name of the employee(s) who conducted the monitoring. If the operator uses ALARM technology to detect and isolate a leak within 48 hours and repair within 15 days of discovery, the operator may obtain a credit against its reported volume of lost natural gas pursuant to Paragraph (3) of Subsection B of 19.15.28.23 NMAC.
[19.15.28.21 NMAC – N, xx/xx/xx]

OCD DRAFT
July 20, 2020

19.15.28.22 VENTING AND FLARING OF NATURAL GAS FROM NATURAL GAS GATHERING SYSTEMS:

A. Venting and flaring of natural gas from a natural gas gathering system constitutes waste and is prohibited except as authorized below in Subsection B of 19.15.28.22 and 19.15.28.23 NMAC. An operator has a general duty to maximize the gathering of natural gas and to minimize the release of natural gas to the atmosphere.

B. The ~~an~~ operator of a natural gas gathering system must flare rather than vent any gas that is released ~~shall not vent or flare natural gas~~, except:

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

(1~~2~~) during an emergency or malfunction, but only to avoid a risk of an immediate and substantial adverse impact on safety, public health or the environment;

(2~~3~~) during the following activities, from equipment and activities in compliance with and to the extent authorized by applicable state and federal laws regulating the emission of hydrocarbons and volatile organic compounds:

(a) scheduled repair and maintenance, including ~~blowing down and~~ depressurizing equipment to perform repair and maintenances, but not a gathering system pipeline blowdown;

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

(c) normal operation of a dehydration unit;

(d) normal operation of a compressor or compressor engine;

(e) 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;

(f) gauging or sampling of storage tanks or other low-pressure vessels;

(g) loading out liquids from a storage tank or other low-pressure vessels to transport vehicles;

~~**(h)** a blowdown to repair a gathering pipeline;~~

(h~~i~~) pigging a gathering pipeline; and

(i~~j~~) purging a gathering pipeline.

(3) from a leak, provided that the operator is in full compliance with all applicable requirements related to leak detection and repair provided for by state or federal law;

(4) when a release of gas is uncontrollable and flaring is prohibited by Federal, State, local or Tribal law, regulation, or enforceable permit term.

(5~~4~~) And provided that ~~T~~the operator shall conduct a weekly AVO inspection to confirm that all equipment is operating properly and there is no venting except as allowed in Subsection B of 19.15.28.22 NMAC.

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

(1) The operator shall measure the volume of natural gas that is vented, flared or beneficially used by the natural gas gathering system regardless of the reason ~~or authorization~~ for such venting and flaring.

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

(3) Measuring equipment shall be designed in accordance with the accuracy

ratings and design standards in 43 C.F.R. § 3175.29.

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

(5) For an event for which metering is not practicable the operator may estimate the volume of vented and flared natural gas.

(6) The operator shall report the lost natural gas for each month on a volumetric and percentage basis on form C-115B.

(a) To calculate the lost natural gas on a volumetric basis, the operator shall deduct the volume of natural gas delivered, used for beneficial use and vented or flared during an emergency, from the volume of natural gas gathered.

(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 and vented or flared during an emergency, and divide by the total volume of natural gas gathered.

(7) The operator shall report separately the volume of vented natural gas and the volume of flared natural gas for each month in each category in Paragraph (7) of Subsection C of 19.15.28.22 NMAC on form C-115B. 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. The categories are

(a) emergency;
(b) non-scheduled maintenance;
(c) equipment malfunction by operator;
(d) equipment malfunction by third party;
(e) routine equipment repair and maintenance, including blowdown;
(f) pilot gas for combustion devices;
(g) purge gas to test or fuel combustion devices;
(h) gathering pipeline blowdown;
(i) gathering pipeline purging;
(j) gathering pipeline pigging;
(k) uncontrolled storage tanks;
(l) controlled storage tanks;
(m~~l~~) venting in excess of the design specifications of pneumatic controllers and pumps as a result of malfunction or improper or infrequent maintenance;
(n~~m~~) commencing on January 1, 2022, venting as a result of normal operation of pneumatic controllers and pumps, except that 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;
(o~~n~~) thief hatches that are not properly closed or maintained; and
(p~~o~~) other not described above.

(8) The operator shall notify the division for any period of venting or flaring that exceeds eight hours and of all venting and flaring attributed to emergency or malfunction of any duration by submitting a form C-129 no later than 24 hours after the commencement of venting and flaring.

(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) analysis of vented and flared natural gas;
(v) date and time that venting or flaring occurred;
(vi) the measured or estimated volume of vented or flared natural gas;
(vii) cause and nature of venting or flaring, using the categories identified in 19.15.28.22(C)(7)(a) - (o) NMAC;
(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, including the routing of gas to pipeline, installation of a temporary flare, replacement rod packing replaced, replacement of wet seals replaced with dry seals, or other; and.
(x) number of C-129s submitted for this facility during the previous 12 months.

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

(8) Upon the environment department's request, the operator shall promptly provide a copy of any form filed pursuant to 20.2.28 NMAC.

D. Performance standards for storage tank and flare equipment.

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

(b) All natural gas combusted by the operator shall be combusted in a vapor recovery unit or flare stack designed for and operated at maximum efficiency.

(i) A flare stack installed on or after {effective date of rule} shall be equipped with an automatic ignitor or continuous pilot and have a destruction removal efficiency of at least 98%.

(ii) A flare stack installed before {effective date of rule shall be retrofitted with an automatic ignitor or continuous pilot and to ensure a destruction removal efficiency of at least 98% no later than {effective date of rule}.

(c) A flare stack shall be located at least 100 feet from storage tanks.

(d) The operator shall inspect a flare stack at least once per week to confirm that it 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.

[19.15.28.22 NMAC – N, xx/xx/xx]

19.15.28.23 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 from each gathering system under its control ~~on a statewide basis~~ in order to capture a minimum of ninety-eight percent of the natural gas gathered by December 31, 2026, provided that if the average capture rate per Btu of gas transported through gathering systems statewide, as calculated by the division, is higher than ninety-eight percent as of December 31, 2021, the operator shall reduce the annual volume of vented and flared natural gas to capture a minimum of that average, statewide rate by December 31, 2026. The division shall calculate and publish no later than March 1, 2022, the average capture rate per Btu of gas transported through gathering systems statewide and each operator's baseline gas capture rate based on the operator's 2021 monthly data reported on form C-115B. In each calendar year between January 1, 2022 and December 31, 2026, the operator shall, at a minimum, increase the percentage of natural gas captured by each system under the operator's control 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 loss capture rates and the initial 98% capture requirement.

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 operator that acquires a natural gas gathering system from another operator shall comply with its statewide natural gas capture requirements no later than December 1, 2026, unless the division approves a later date.

B. Accounting. The operator's volume of vented and flared natural gas shall be counted as gathered natural gas and excluded from the volume of natural gas delivered or used for beneficial use in the calculation of its statewide natural gas capture requirements, except for the following

(1) No later than 45 days after January 1, 2022 and each year thereafter, the operator shall submit a report certifying compliance with the statewide gas capture requirements. The operator may exclude from the volume of produced natural gas the volume of vented and flared natural gas pursuant to Subparagraph (a) of Paragraph (7) of Subsection C of 19.15.28.22 NMAC for which the operator timely filed, and the division approved, a form C-129.

(2) Subject to the division's approval, the operator may exclude natural gas that is beneficially used from the volume of produced natural gas, specifically Subparagraph (m) of Paragraph (7) of Subsection C of 19.15.28.22 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) The operator may obtain a credit 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;

(b) make the initial discovery using the ALARM technology; and

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

(4) The operator may use a credit against its reported volume of lost natural gas no more than once in any 13-month period following the division's approval of such credit.

(5) The credits 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 natural gas gathering system;

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

(c) an additional credit of ten percent credit 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 natural gas gathering system 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;

(c) the estimated volume of the natural gas lost and isolated after the date of discovery;

(d) a summary of the actions the operator took to isolate and repair the leak;

(e) visual documentation of the discovery and isolation;

(f) 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) if applicable, the dates of each use of the ALARM technology; and

(h) if applicable, a copy of the information provided to the unaffiliated operator.

(7) A credit shall be used only if approved by the division, and only by the operator, and cannot be traded or used by another operator.

C. 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.

D. Natural gas management plan.

(1) For a natural gas gathering system placed into service after {effective date of rule}, the operator shall file a natural gas management plan no later than 90 days prior to the date that the natural gas gathering system is placed into service. For a natural gas gathering system placed into service before {effective date of rule}, the operator shall file a natural gas management plan no later than May 31, 2020. The operator shall update the natural gas management plan to reflect any changes in the natural gas gathering system on the annual

anniversary date of its first filing of the natural gas management plan.

(2) The natural gas management plan shall describe the specific actions that the operator will take for each natural gas gathering system to prevent routine flaring, 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, avoid or minimize the surface impacts gathering system infrastructure, and include the following information for each natural gas gathering system

(a) operator's name;

(b) name and list of the gatherer's facilities located within the natural gas gathering system, length of gathering pipelines and a GIS digitally formatted as-built map of the gathering pipeline and associated components of the natural gas gathering system and any planned expansions of the gathering system;

(c) current and anticipated volume of natural gas gathered at each custody transfer in units of MCFD within the natural gas gathering system for the next three years; ~~and~~

(d) description of the transmission or distribution system to which the natural gas gathering system is connected~~.~~;

(e) actions the operator will take to manage pressure increases in the gathering system from increased volumes and higher pressures from new wells that could lead to current production being under-pressured relative to the anticipated pressure in the relevant segment of the gathering system; and

(f) location of all residences, schools, businesses, hospitals, or public facilities that are lawfully occupied or licensed in accord with federal, tribal, or state law within two miles of the gathering system.

(3) The gathering system operator shall notify operators of wells connected to the gathering system of the gathering system natural gas management plan actions that the gathering system operator intends to manage pressure increases in the gathering system from increased volumes and higher pressures from new wells that could lead to current production being under-pressured relative to the anticipated pressure in the relevant segment of the gathering system, providing sufficient lead time for either the gatherer system operator or the well operator to get compression in place or to implement other solutions so that the wells can continue accessing the gathering system.

(4) Prior to submission to the commission or the division, the operator shall make the gathering system natural gas management plan available to the public for review for at least 30 days, with all comments directed to the operator and division. Further, the operator shall, at least 30 days prior to submission to the commission or the division, provide specific notice of the gathering system natural gas management plan and make that plan available to all federal, tribal, state, and local government entities with responsibilities within and two miles beyond the external boundaries of the APD as well as all operators of wells connected to the gathering system.

(5) The division shall review each APD natural gas management plan to ensure compliance with 19.15.28.23(D) NMAC. Where a natural gas management does not, as submitted, comply with 19.15.28.23(D) NMAC, the division shall either deny approvals for the gathering system or approve the gathering system subject to conditions to provide for compliance with 19.15.28.23(D) NMAC.

(6) Once approved, the operator shall implement the gathering system natural gas management plan, including any conditions required by the division, unless and until the operator submits a modified plan meeting the requirements of this section and that plan is approved by the division except, in the event of an emergency or malfunction, as necessary to protect safety, public health, or the environment.
[19.15.28.23 NMAC – N, xx/xx/xx]

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