

**INFORMATION/BRIEFING MEMORANDUM  
FOR THE ASSISTANT SECRETARY – LAND AND MINERALS MANAGEMENT**

**DATE:** May 12, 2017

**FROM:** Michael D. Nedd, Acting Director – Bureau of Land Management (BLM)

**SUBJECT:** Venting & Flaring Rule – Suspending Compliance Dates and Revising the Requirements

The purpose of this memo is to outline the next steps and timeline for revising the Venting & Flaring Rule before many of the burdensome requirements become operative in January 2018.

**BACKGROUND**

*Summary of the Final Rule:* The “Venting & Flaring Rule” (the Rule) is entitled *Waste Prevention, Production Subject to Royalties, and Resource Conservation*, which replaced the requirements related to venting, flaring, and royalty-free use of gas contained in the 1979 Notice to Lessees and Operators of Onshore Federal and Indian Oil and Gas Leases, Royalty or Compensation for Oil and Gas Lost (NTL-4A). Recently, 12 percent of operators have reported flared gas from oil well production. The Rule is codified at new 43 CFR subparts 3178 and 3179 and became effective on January 17, 2017.

*Statutory Authority and Regulatory History:* The Mineral Leasing Act of 1920 (MLA) (30 U.S.C. §§ 188–287) subjects federal oil and gas leases to the condition that lessees will “use all reasonable precautions to prevent waste of oil and gas developed in the land . . . .” 30 U.S.C. § 225. Further, the MLA requires lessees to exercise “reasonable diligence, skill, and care” in their operations and requires lessees to observe “such rules for the health and safety of the miners and for the prevention of undue waste as may be prescribed by [the] Secretary [of the Interior].” 30 U.S.C. § 187. The Federal Oil and Gas Royalty Management Act (FOGRMA) makes lessees liable for royalty payments on oil or gas lost or wasted from a lease site when such loss or waste is due to negligence or the failure to comply with applicable rules or regulations. 30 U.S.C. § 1756. Both the MLA and FOGRMA authorize the Secretary of the Interior to prescribe rules and regulations necessary to carry out the purposes of those statutes. 30 U.S.C. § 189; 30 U.S.C. § 1751.

Before promulgation of the Rule, the Bureau of Land Management (BLM) regulated the venting, flaring, and beneficial use of gas pursuant to NTL-4A, which placed limits on the venting and flaring of gas and defined when gas was “unavoidably lost” and therefore not subject to royalties. The Rule included many regulatory changes, including emissions-focused requirements that did not appear in NTL-4A. Industry groups and a number of states have asserted that these requirements are more appropriately within the jurisdiction of the Administrator of the Environmental Protection Agency and the states under the Clean Air Act (CAA).

## DISCUSSION

On May 10, the Senate voted against overturning the Rule using the Congressional Review Act. As such, the Rule will continue in effect unless/until the BLM rescinds or replaces it through the rulemaking process outlined below, or it is overturned in pending litigation. Any new rule that the BLM promulgates would likely be challenged in court with an estimated litigation cost of \$100,000. If the new rulemaking is overturned in litigation, NTL-4A would come back into effect.

Although the Rule went into effect in January 2017, many of its more onerous requirements are not yet operative. Although operators are not yet obligated to comply with these requirements, they will need to expend time and resources to prepare for compliance dates (Attachment 1). Presently, the Rule requires operators to submit a waste minimization plan with their applications for permits to drill (APDs), imposes restrictions on venting, and clarifies when lost gas is “avoidably lost” and therefore subject to royalties. Operators must comply with the Rule’s flaring restrictions (or “capture percentage” requirements), equipment upgrade/replacement requirements, and leak detection and repair (LDAR) requirements beginning on January 17, 2018 (see Attachment 1).

The BLM expects industry’s annual compliance costs from 2017 to 2026 to be between \$114 and \$279 million, with first year compliance costs estimated to be \$113 million, with \$84 million of that cost being LDAR.

## NEXT STEPS

The BLM proposes a dual-faceted approach, which would limit the compliance costs posed to Industry while the BLM revises the Rule:

1. **Delay some or all of the compliance deadlines for 1 year (or some other reasonable period of time) while the BLM revises the Rule.** The BLM is concerned that it will not be able to finalize a revised Rule before the Industry will assume burdensome compliance costs. Although the compliance deadline for most of the requirements is January 2018, operators will likely assume costs in advance of that deadline. The BLM may postpone the compliance dates through notice-and-comment rulemaking, which the BLM estimates would take about 6 months to promulgate a final rule (tentative estimate).
2. **Revise/Replace the current Rule.** The BLM would move forward with policy actions (see Attachment 2 for detail) to curb waste and to address the following.
  - Encouraging beneficial use of oil or gas on lease;
  - Regulating flaring of unmarketable gas from oil wells;
  - Conserving unsold gas by reinjection;
  - Improving ROW timelines and removing obstacles to timely approval for pipeline infrastructure; and
  - Recognizing existing State/tribal policy/rules, such as those in North Dakota, Wyoming, Utah, New Mexico, Colorado, and Montana.

The BLM estimates that it could publish a proposed rule by October 31, 2017, and a final rule by May 31, 2018 (see Attachment 3). Publishing an Advance Notice of Proposed Rulemaking is optional and would add 3 months to this process.

#### **ATTACHMENTS**

1. Compliance Dates for the Waste Prevention Rule
2. Options for Revising the Waste Prevention Rule
3. Rulemaking Schedules for Concurrent Efforts
4. Table 1: Waste Prevention Rule Requirements and Alternatives

## Attachment 1: Compliance Dates for the Waste Prevention Rule

The following table summarizes the compliance dates for the requirements of the Rule.

<b>Citation</b>	<b>Summary</b>	<b>Compliance Date</b>
3162.3-1(j)	Requires operators to submit a waste minimization plan with their an Application for Permit to Drill	January 17, 2017
Subpart 3178	Updates royalty-free use requirements	January 17, 2017
3179.4, 3179.5	Defines when the loss of oil or gas is “avoidable” and therefore royalty bearing	January 17, 2017
3179.6	Requires operators to flare gas that is not captured rather than vent it, except in certain circumstances	January 17, 2017
3179.7	Requires operators to capture a certain percentage of the gas they produce	<b>January 17, 2018</b>
3179.9	Requires measurement of flared gas	<b>January 17, 2018</b>
3179.101 – 3179.105	Limits and requires disposal of, gas lost during well drilling, well completion and related operations, initial production testing, subsequent well tests, and emergencies	January 17, 2017
3179.201, 3179.202	Requires operators to upgrade to lower-emission pneumatic equipment	<b>January 17, 2018</b>
3179.203	Requires operators to route tank vapors from covered storage vessels to sales line or to flare	<b>January 17, 2018</b>
3179.204	Requires minimizing gas losses from downhole well maintenance and liquids unloading	January 17, 2017
3179.301 – 3179.305	Requires increased leak detection and repair requirements	<p><b>January 17, 2018</b> for sites that have begun production prior to January 17, 2017</p> <p><b>60 days after beginning production</b> for sites that begin production after January 17, 2017</p> <p><b>60 days after</b> an out-of-service site is brought back into service and re-pressurized</p>

## Attachment 2: Options for Revising the Waste Prevention Rule

### Background

Executive Order 13783, “Promoting Energy Independence and Economic Growth” (March 28, 2017), directs the Secretary of the Interior to review the Bureau of Land Management’s (BLM) final rule entitled “Waste Prevention, Production Subject to Royalties, and Resource Conservation” (effective January 17, 2017) for consistency with the policy set forth in the order: “to promote clean and safe development of our Nation’s vast energy resources, while at the same time avoiding regulatory burdens that unnecessarily encumber energy production, constrain economic growth, and prevent job creation.” Secretary’s Order No. 3349 (March 29, 2017) directed the BLM Director to conduct the review required by Executive Order 13783 by April 19, 2017.

The BLM assembled the team that developed the original Waste Prevention Rule. The team reviewed the BLM’s Waste Prevention Rule-related requirements and identified potential policy alternatives that might achieve the goals of waste prevention while reducing the regulatory burdens imposed by the rule.

### Summary of Policy Options

The BLM review team has identified overarching policies that would alleviate the regulatory burden posed by the Waste Prevention Rule. In addition, we list specific policy alternatives to the rule’s requirements in Table 1 (pages 7-10).

Approaches to reduce general regulatory burden:

1. Rescind BLM requirements that create regulatory overlap with or duplicate EPA regulations and state regulations. Although the BLM crafted the Waste Prevention Rule’s requirements to avoid regulatory overlap and offer opportunities to sync regulations with states, one approach would be to defer to the existing EPA and state regulations.
2. Replace direct regulation with market-oriented strategies. Many provisions in the Waste Prevention Rule require operators to make investments in order to reduce the loss of gas. An alternative approach would be to evaluate those gas losses and assess royalty when the losses are avoidable, but stop short of requiring further operator action, equipment replacement, or installations.
3. Reduce administrative and compliance burdens by:
  - a. Identifying categories of operations to be exempt from requirements, thereby reducing the administrative burden of requesting and reviewing exemption applications for operations that are likely to receive approval (e.g. marginal wells).
  - b. Removing and/or streamlining reporting requirements.

**Attachment 3: Rulemaking Schedules for Concurrent Efforts**

<b>Activity</b>	<b>Description</b>	<b>Timing (Tentative) – Rulemaking to Suspend Rule Implementation</b>	<b>Timing – Rulemaking to Revise/Replace Rule</b>
Advance Notice of Proposed Rulemaking (ANPR)	OPTIONAL. The BLM would solicit input from the public on whether, and how, NTL-4A should be revised.	N/A	1 month to publish 2 months for public comment
Notice of Proposed Rulemaking (NPR)	The BLM would develop a NPR based on previous rule experiences or comments received from ANPR process. The Office of Management and Budget (OMB) needs to review and clear the proposal.	2 month to draft NPR ~1 month OMB review	3 months to draft NPR 3 months for OMB review
NPR comment period	The NPR is published in the Federal Register for notice-and-comment period.	1 month	2 months
Comment review/ Drafting final rule	The BLM reviews the comments and revises the rule in light of those comments. The BLM sends the revised/final rule to OMB for review.	1 month review/drafting 1 month OMB review	2 months review/drafting 3 months OMB review
Final rule is published	The BLM publishes the final rule in the Federal Register	After publishing, 1 month until effective	After publishing, 2 months until effective
Total time to publish		~6 months	13 months (for NPR) 16 months (including ANPR)
Total cost		~\$0.75 million	\$1.2 – 2.1 million

**Table 1: Waste Prevention Rule Requirements and Alternatives**

Section	Summary of Current Requirements (Waste Prevention Rule, Jan 2017)	Alternative Policies/ Rationale
Royalty Provisions 3103.3-1	Allows BLM to specify a royalty rate higher than 12.5% for new competitive leases. Although the MLA sets 12.5% as a floor for competitive lease royalties, the prior regulation had set 12.5% as the ceiling. (This provision allows the BLM to increase royalty rates and is not specific to leases that vent or flare gas).	No identified alternatives. This provision is important programmatically, because it allows BLM to close 2 GAO recommendations. Ultimately, the Administration’s policy direction may dictate whether to retain or rescind.
Waste Management Plan 3162.3-1	Requires the operator to submit with its APD a Waste Management Plan containing information about expected completion dates, production rates, gas composition, and decline curves. Requires a certification of contact with midstream company and information about the capacity of the pipeline to which it plans to connect or extensive detail about pipelines within a 20 mile radius if it has not identified a pipeline to connect.	(1) Retain the operator certification that it contacted a midstream company, but rescind the rest. The certification demonstrates the operator’s due diligence in seeking a market for gas.  (2) Potential to add a checklist of items that the operator should consider, including commingling with other leases to avoid flaring.
Royalty Free Use 3178.1 to 3178.10	Updates the beneficial use provisions of NTL-4A..	No identified alternatives. This section, with the use of “royalty free” terminology, clarifies issues that have arisen during litigation and implementation of NTL-4A.
Purpose, Scope, Definitions 3179.1 to 3179.3	Among other things, defines the new concepts addressed by the rule.	Expect to make conforming changes.
Avoidable Loss, Production Subject to Royalty 3179.4 to 3179.5	Defines “avoidably lost” and “unavoidably lost” gas (and oil) and circumstances under which royalty is due.	Expect to make conforming changes.
Venting Prohibition 3179.6	Prohibits the venting or flaring of gas-well gas except when unavoidably lost. Requires the operator to flare, rather than vent, any gas not captured except when flaring is technically infeasible, under emergency conditions, or when the gas comes from specified equipment or circumstances. Requires all flares or combustion devices to have auto-ignition systems.	No identified alternatives. This section is consistent with past policy and CDM implementation guidance. Expect to make conforming changes regarding the specified equipment or circumstances outlined in (b).
Gas Capture (Associated Gas) 3179.7 to 3179.8	Requires operators to capture specified percentage targets which increase over time. They are allowed to flare a certain volume of gas per well (“flaring allowable” decreasing over time) that they can average across wells in a lease, county, or state. Flaring in excess of the specified capture targets is considered avoidably lost and royalty bearing. Failing to meet capture target also comes with consequences greater than royalty assessment (outside of 3179.7, operators could be subject to assessments, penalties, shut-in or lease cancellation). The operator may apply for alternative capture targets if meeting the target would require cessation of production and abandonment of	Team expressed concern that the current regulations are overly complex while allowing operators to flare large amounts of associated gas royalty free.  (1) Maintain current framework, but lessen the increase in capture percentages over time and decrease the flaring allowable. Issues: difficult to justify with record and data; legal concern that change would be arbitrary and capricious; and does not address deficiencies above.  (2) Change the conceptual framework. Reset [royalty-free] flaring limits to lower levels, but limit the punishment to royalty only. Meaning, gas flared above XX Mcfd per well would be considered avoidably

Section	Summary of Current Requirements (Waste Prevention Rule, Jan 2017)	Alternative Policies/ Rationale
	significant oil reserves under the lease (application quite extensive).	<p>lost, but the operator would not be compelled to capture. Could tailor limits to state thresholds for royalty-free flaring considerations. Issues: setting appropriate thresholds - must be supported by record and data; and potential for non-enforcement by state regulatory authority</p> <p>(3) Revert to NTL-4A framework with revisions: change action plan duration to 6 months; make all flaring from wells connected to pipelines for sale royalty bearing (not subject to royalty-free flaring requests). Would allow for local flexibility and case-by-case assessment. Addresses royalty assessment - in ND ~85% of wells are connected to pipelines for sale. Relies on economic evaluation for unconnected wells, which we could clarify in the regulation or policy.</p> <p>(4) Allow gas flared to be treated as royalty free while the operator has a pending (and complete) application with the BLM for a ROW that is required in order to capture/transport gas from the well. Can be done in conjunction with the above options, but not a stand-alone. Considerations with this option: there are only a handful of outstanding ROW applications; and BLM setting the precedent that any holdup is royalty free.</p>
Measurement of gas vented and flared 3179.9	Requires operators to estimate or measure all gas vented or flared from the well and report to ONRR. Must measure if gas flared from a high-pressure flare exceeds 50 Mcfd.	Revise so that BLM <i>may</i> require measurement of vented and flared gas. Rescind the rest. There is value to having the ability in certain instances to require measurement. For example if there are large volumes of flared gas that might be royalty bearing.
Regarding Existing Royalty Free Approvals 3179.10	Provides that determinations made prior to Jan 17, 2017 not affected. Existing approvals as of Jan 17, 2017 remain in effect until Jan 17, 2018.	Expect to make conforming changes based on other policy decisions.
Other Waste Prevention Measures 3179.11	Provides that the BLM may exercise authority to (1) limit production from a new well if it is expected to force other producing well off of a pipeline or (2) delay action on an APD or add conditions of approval if gas capture capacity is not available.	<p>(1) Retain (2) Rescind</p> <p>The section is a restatement of existing authority, so retaining or rescinding would have no practical effect (except maybe reducing confusion).</p>
Coordination with State Regulatory Authority 3179.12	Provides that the BLM will coordinate with State RA, on a case-by-case basis, if any requirement in 3179 would adversely impact production from non-Federal and non-Indian interests. (pertains to all 3179, but more directed towards gas flaring)	Retain because: (1) it does not constrain BLM if BLM and State RA cannot reach agreement,, (2) coordination with states in these circumstances is generally a good practice, and (3) keeping this section shows BLM's good faith to be a "good neighbor."
Well Drilling 3179.101	Requires operators to capture, sell, flare use in operations on lease, or inject gas that reaches the surface, unless technically infeasible.	(1) Rescind if desired. It aides in the continuity of timeline, but operators should be complying regardless. Any venting is expected to be very rare and is a well control issue.
Well Completion and Related	Requires operators to capture, sell, flare, use in operations on lease, or inject gas that reaches the surface, unless technically infeasible.	(1) Retain, but group with Initial Production Testing (below). Team thinks it is important for both HF and conventional completions and maintain the volumetric limit for royalty purposes. Potentially remove the

Section	Summary of Current Requirements (Waste Prevention Rule, Jan 2017)	Alternative Policies/ Rationale
Operations 3179.102		exploratory well limit due to potential lack of infrastructure to deliver to market.  (2) Rescind, but retain duration and volume limits (as relates to royalty on flared). Team does not favor but recognizes argument in support of that option: duplicates EPA (at present); some states; generally flaring is practice; and the sections of this rule (venting prohibition).
Initial Production Testing 3179.103	Allows for royalty free flaring up to 20 MMcf (or 30 MMcf for exploratory wells). Includes volume during well completions.	See above.
Subsequent Well Tests 3179.104	Allows operators to flare gas for no more than 24 hours royalty free, unless the BLM approves or requires a longer period	No identified alternatives.
Emergencies 3179.105	Defines emergencies and when operator can flare royalty free.	(1) Remove reporting burden: "(c) Within 45 days of the start of the emergency, the operator must estimate and report to the BLM on a Sundry Notice the volumes flared or vented beyond the timeframes specified in paragraph (b) of this section."
Pneumatic Controllers 3179.201	Requires continuous bleed controllers to be low bleed, except when needed functionally, routed to combustion, or replacement would impose such costs as to cause the operator to cease production and abandon significant recoverable oil reserves under the lease. Lengthy exemption request materials.	(1) Rescind, due to overlap with EPA (at present), some states, and general practice. We generally think this is self-correcting. And it is very difficult for PET to determine whether a device is high or low bleed.  (2) Make distinction between operations that are selling gas, but objectives are conceptually covered under the beneficial use and general prohibition against venting sections. If the operator is selling the gas, we want it to use a device that minimizes the amount of gas used for beneficial use (maximizes efficiency). If the operator is not selling the gas, it would minimize the amount vented.
Pneumatic Chemical Injection Pumps and Diaphragm Pumps 3179.202	Requires zero emissions pump or routing emissions for capture and sale except when pump is temporary, needed functionally, routing is technically infeasible or unduly costly, or routes to combustor (not required if this would cause the operator to cease production and abandon significant recoverable oil reserves under the lease). Lengthy exemption request materials.	(1) Rescind, due to overlap with EPA (at present) and some states. Concern with requiring zero emissions pumps which are only as energy efficient as their power source, and therefore, may be no more efficient than the devices they would replace. Same situation as pneumatic controllers, may or may not be on connected sites. Some mitigation, i.e. routing to flare, are unproven.  (2) Could refer to beneficial use provisions, i.e. operators should minimize the use of gas (maximize efficiency).
Storage Vessels 3179.203	Requires VOC emissions to be routed to sales, if potential for VOC emissions exceeds 6 tpy per vessel. If technically infeasible or unduly costly, then route to continuous combustion. Exempt if this would cause the operator to cease production and abandon significant recoverable oil reserves under the lease. Lengthy exemption request materials.	(1) Rescind, due to overlap with EPA (at present) and some states (note ND has new requirements, Dec 2016).  (2) Require an evaluation of VRU's economics and feasibility if throughput threshold is above XX amount. Determination would indicate if gas is avoidably lost, but BLM would not require operator to make investment. Need to be mindful of mitigation measures that they have already completed pursuant to EPA or states.

Section	Summary of Current Requirements (Waste Prevention Rule, Jan 2017)	Alternative Policies/ Rationale
		(3) Retain, but remove mention of EPA. Route to sales (VRU) unless unduly costly, and then route to flare unless it would force abandonment.
Downhole Well Maintenance and Liquids Unloading 3179.204	Requires operators to minimize venting for well maintenance and Liquids Unloading. Before first manual purging, operator must consider other methods and determine that they are technically infeasible or unduly costly. Operator must remain onsite during well purging. Reporting burdens. Estimate volumes.	No identified alternatives. Team views the requirements as being necessary to understand the problem of well purging.
Leak Detection and Repair (LDAR) 3179.301	Requires semi-annual inspections for well-sites and quarterly inspections for compressor stations; instrument specifications; alternative instrument approvals; repairing leaks and verification, and reporting. Specifies which components require inspection. Operator may apply for exemption if it would cause the operator to cease production and abandon significant recoverable oil or gas reserves.	<p>(1) Rescind, due to overlap with EPA and some states.</p> <p>(2) More clearly exempt operations (without application) based on observable characteristics: operations not selling gas; marginal wells (or some other threshold); equipment after the FMP.</p> <p>(3) Broader allowable inspection standards, i.e. AVO-based. Lessen frequency.</p> <p>(4) Remove substantial reporting burdens.</p> <p>(5) Change the framework entirely. Return to a more conventional BLM/operator regulatory framework. BLM would check for leaks during I&amp;E inspections and issue immediate assessments if/when leaks are found (exclude leaks where fixing would mean a net loss of gas). Raises potential issues: would this require BLM to conduct/verify with a sniffer or OGI; and is the immediate assessments concept viable, as opposed to INC process?</p>
State or Tribal Variances 3179.401	State or Tribe may request variance if its requirements meet or exceed BLM's.	<p>(1) Remove the "state and tribal variance" concept/terminology. Typically, an operator requests a variance to meet the requirements using an alternative method or technology, not a state to opt out of a BLM requirement.</p> <p>(2) Replace with concept of state/tribe requirements apply if equivalent or more stringent than Federal requirements. Coordination to determine cases where not as evident.</p>