Bureau of Land Management’s Proposed Revisions to Methane Waste and Prevention Rule

Modifies the 2016 Methane Waste and Prevention Rule to decrease regulations on oil and gas operators regarding methane waste reduction and monitoring.

Updated last April 13, 2018 for the 02/22/2018 proposed rule.

WHAT IT DOES

The Bureau of Land Managements (BLM) has proposed a rule that would modify the 2016 Methane Waste and Prevention Rule. The 2016 rule was put in place to reduce the amount of gas lost during energy production on federal and Indian lands through planning, direct restrictions, and improved monitoring. The proposed rule would rescind or modify many aspects of the 2016 rule on the grounds that they are redundant with existing regulation or else hinder economic development.

The proposed rule would:

- Stop requiring well operators to submit a waste minimization plan with their Application for Permit or Drill (APD).
- Increase limits on loss of gas due to processes known as flaring and venting.
- No longer require enhanced and standardized storage, monitoring, and inspection procedures to prevent gas loss.

If adopted, the proposed rule would remove the cost of compliance associated with the regulations put in place under the 2016 final rule. The BLM’s stated goal is that the financial relief provided by the proposed rule will spur domestic energy production toward the goal of US energy independence.

Loosening of these regulations could lead to an increase in the amount of methane, carbon dioxide, and other gases released into the atmosphere as a result of oil and gas production. These increased emissions would contribute to climate change and its associated environmental impacts.

BACKGROUND

The BLM manages more than 245 million acres of land in the Unités States. Energy production makes up a major use of BLM-managed lands. The BLM leases land to entities that want to operate a well on public lands to extract oil or natural gas. The lessee entities pay a leasing fee and pay royalties on the energy they produce. The 2016 rule states that the BLM is responsible for minimizing waste of oil or gas generated by these leases under 35 USC 225.

Most gas loss during production occurs due to venting and flaring, which refer to the burning (flaring) or release (venting) of oil or gas without collecting it for energy production. Leaks are a smaller but significant source of waste that occur during the collection, storage, and transport of oil and gas. The first rule regulating methane waste on BLM managed lands, NTL-4A (44 FR 76600), went into effect in 1979. It defined instances when venting and flaring of gas was allowable and royalty-free, and when it was subject to royalties. The Obama administration’s 2016 Methane Waste and Prevention (81 FR 83008) final rule was established to update these regulations based on improvements in technology and a better understanding of the impacts of venting and flaring gas. The primary objective of this rule was to limit waste of useable natural gas, with a secondary goal of mitigating environmental impacts that
resulted from that waste. The rule was to be phased into effect between 2017 and 2019.

However, the priorities of the Trump administration have contrasted with the policies put in place by the Obama administration on many aspects of energy policy. The Trump administration has stated that it aims to spark economic growth, domestic energy production, and industry action through relaxing regulations.

The following regulations put in place by the 2016 rule would be rescinded by the proposed rule (83 FR 7924):

- **Waste minimization plan**: The 2016 rule required any entity wishing to operate a well on federal or Indian lands to submit a plan detailing minimization of gas loss during well operations.
- **Well drilling, completion, and operational requirements**: The 2016 rule mandates that any gas reaching the surface must be captured and sold, flared, used in operations, or injected back into the well.
- **Pneumatic pump, diaphragm, and storage vessel requirements**: The 2016 rule put in place the following equipment requirements
  - All pneumatic controllers must use a low-bleed valve, which would bleed less gas as opposed to a high-bleed valve.
  - Pneumatic diaphragm pumps must be zero emission or the emissions must be routed back into gas processing equipment.
  - Storage vessels must have their contents routed to a gas line for sale if they leak more than 6 tons per year of volatile organic compounds.
- **Leak detection and repair (LDAR) requirements**: The 2016 rule put in place guidance on detection and repair of gas leaks. These included equipment and protocols for detecting leaks, leak inspection schedules, timelines on repair of detected leaks, and LDAR reporting requirements.
- **Gas capture requirements**: The 2016 rule implemented annually increasing gas capture requirements aimed at decreasing wasteful flaring by forcing operators to capture gas that would normally be flared. The capture requirements went from 85% in 2019 to a 99% in 2027.

Finally, the 2016 rule restricted venting of gas to all but extreme circumstances and limited royalty-free flaring to 20 million cubic feet (Mcf) or 30 days, with exemptions and extensions available. The proposed rule will keep the restrictions on venting in place, but modify the restrictions on royalty free flaring to no more than 50 Mcf, which was the royalty-free limit prior to the 2016 rule.

**RELEVANT SCIENCE**

*Science Module: Unconventional Fossil Fuel Extraction*

Oil and gas extraction:

Oil and natural gas are major fuel sources that are formed from the decomposed remains of plants and microscopic animals that lived millions of years ago. The principal component of natural gas is methane, which is the focus of BLM’s proposed rule. Prospective oil and gas wells are identified by surveying, which involves monitoring seismic waves as they reflect off of the bedrock of an area of interest to determine if it has the right composition to be a potential oil or gas reservoir. Oil and natural gas can be drilled for separately, but most conventional wells extract both oil and natural gas. Natural gas released from an oil well is sometimes called associated gas.

When a well is first tapped, there is generally enough natural pressure to bring oil and gas to the surface for collection. Some flaring of oil and gas is necessary during production testing to assess the pressure and composition of the well. During production, venting and flaring can be used as a relief measure when gas reaches an unsafe pressure or to dispose of gas that cannot be processed due to contaminants such as hydrogen sulfide. However, some gas is vented or flared due to lack of infrastructure to capture and reuse, process, or transport the gas.

Economics:

The United States consumed 97 quadrillion Btu of energy in 2016. The largest source of that energy was petroleum (37%) followed
by natural gas (29%). In 2016, 91% of the energy used by the US was produced domestically. Production of oil and gas on BLM lands accounts for approximately 5% of the US oil supply and 11% of the natural gas supply. In 2015, the value of oil and gas production from on-shore BLM wells was more than $20.9 billion and in FY2016, royalties from onshore BLM oil and gas leases generated revenue of $1.6 billion.

According to BLM analysis of publicly available data published in the 2016 rule, in 2014, oil and gas wells vented and flared a combined 111 billion cubic feet (Bcf) of natural gas, which is equivalent to 4.1% of the total gas produced during that time. In 2015, out of the total 85 Bcf flared, 83 Bcf was from flaring of associated natural gas from oil wells. The total amount of gas flared between 2009 and 2015 was 462 Bcf, which is 2.6% of the total gas produced during that interval, or enough natural gas to power approximately 886,000 homes a year over that period.

Environment:

Greenhouse gases are gases that, when released, can trap heat in the atmosphere. The burning of fossil fuels such as oil, coal, and natural gas produces carbon dioxide, the most abundant greenhouse gas. Not all greenhouse gases have the same heat trapping ability; they are organized based on a value called their global warming potential (GWP). The GWP takes into account how long these gases stay in the atmosphere and how effective they are at trapping heat as compared to carbon dioxide, which has a baseline GWP of 1. Natural gas is considered a “cleaner fuel” because, when burned, it produces less carbon dioxide per unit of energy than fuel sources like oil and coal. However, the methane that natural gas is made up of is also a greenhouse gas, with a GWP value between 28 and 36. Because methane is such a powerful greenhouse gas, emissions of methane during production and transport could more than offset its benefits as a fuel.

The release and burning of gas has both regional and global impacts. Greenhouse gases are considered to be the major cause of climate change, which has global impacts on the environment. Regionally, flaring and venting can result in the release of toxic gases such as sulfur dioxide when burning natural gas contaminated with hydrogen sulfide.

Industry experts have proposed that one way to limit flaring and venting is to make it easier to build pipelines and gas transport infrastructure. The construction of pipelines can also be hazardous to the environment, as the land must be cleared for installation of the pipeline. Additionally, any spills or leaks by oil pipelines could contaminate the surrounding environment or water supplies, while leaks in gas pipelines increase their greenhouse gas emissions profile.

CONTROVERSIES & IMPLICATIONS

Redundancy and impact of the 2016 rule

One justification for the regulatory rollbacks in the proposed rule is that the 2016 rule overlaps with EPA, state, and/or tribal regulations. The 2016 rule itself states that it sought to avoid regulatory overlaps with EPA regulations. Part of the justification for the 2016 rule’s regulations overlapping with the EPA is that EPA rules only focused on pollution reduction, not reduction in gas waste. The 2016 rule also states that having overlap in one specific case serves as a “backstop” for aspects of the EPA regulations in case they were to be rescinded. The proposed rule states that it is inappropriate for BLM to issue regulation for these reasons.

Industry groups also feel that the 2016 rule is unnecessary and redundant. They point to increased energy production on private lands, and decreasing methane emissions, and overlap with existing EPA regulations to suggest the scope and impact of the 2016 rule are limited.

Climate Change

A major aspect of the proposed rule is how climate change is factored into the proposed rule’s cost-benefit analysis. The 2016 rule factors the global impacts of climate change costs into the savings generated by the rule. Factoring in these costs results in a calculated net benefit of that rule of $50-$204 million a year.
The new proposed rule states that the 2016 rule underestimates the cost of compliance with the regulations and overestimates their benefits. This largely comes down to how the costs of climate change are factored into a Regulatory Impact Analysis. For the 2016 final rule, the Regulatory Impact Analysis factored in global impacts of climate change under the justification that domestic methane emissions have a global impact. Using these values, the regulations in the 2016 final rule were economical.

Section 5(b)(i) of President Trump’s EO 13873 disbanded the working group that determined the social costs of greenhouse gas emissions and withdrew the group’s results, which were used in the 2016 rule’s Regulatory Impact Analysis. The order directs the new values be determined in accordance with OMB Circular A-4 and focus on domestic impacts of climate change as opposed to global impacts. When reviewing the 2016 final rule regulations with these new domestically focused assumed values, BLM found that the regulations would not be as economical as the 2016 rule projected and would cost industry and the government more money than it would save. This disagreement over cost-benefit analysis is similar to the economic debate over the Trump EPA’s proposed repeal of the Clean Power Plan.

Root causes of venting and flaring

The 2016 rule proposes to limit venting and flaring through planning requirements, restrictions, and gas capture and monitoring requirements. However, some industry groups argue that the lack of necessary infrastructure, such as processing facilities, cause well operators to flare more gas than they would otherwise.

The Natural Gas Gathering Enhancement Act, introduced as S Res 411 and H R 1615 in 2015 by Sen. John Barrasso (R-WY) and Rep. Kevin Cramer (R-ND-AL) respectively, sought to make it easier to build new pipelines by giving the Secretary of the Interior the ability to grant a right of way through lands managed by the National Parks Service. This would expedite the infrastructure building process, but the new pipelines could negatively impact the surrounding environment if proper planning and oversight were not in place. Although S Res 411 and H R 1615 died in committee, the Trump Administration’s Legislative Outline for Rebuilding Infrastructure in America proposes the same mechanism to expedite the approval process for such projects.

ENDORSEMENTS & OPPOSITION

Endorsements:

Rep. Rob Bishop (R-UT-1), Chair of the House Committee on Natural Resources, in a statement on his website: “The previous administration scorned domestic energy development and crafted the prior rule to deliberately stifle it. This is a necessary step to promote investment in federal and tribal lands so that economies in the west can grow.”

The American Petroleum Institute, a national trade organization representing the oil and natural gas industries, in a statement on their website: “We are supportive of smart regulation that is effectively tailored to BLM’s authority to prevent waste and conserve resources, an objective that our industry shares. We are hopeful that the new proposed rule will strengthen our nation’s energy renaissance, our economy and environmental stewardship.”

Opposition:

Senator Michael Bennet (D-CO) and Rep. Raúl Grijalva (D-AZ-3), the ranking member of the House Committee on Natural Resources, along with four other lawmakers in a letter to Secretary of the Interior Ryan Zinke: “Waste of taxpayer-owned natural gas is a significant fiscal issue on public and tribal lands. We call on BLM to address this problem by maintaining the 2016 methane waste rule and by undertaking extensive public outreach in considering any changes to this rule.”

The Sierra Club, a national environmental organization, in a statement on their website: “The commonsense [2016] methane standard was developed with the input of millions of Americans and diverse stakeholders. The only people who want to see it weakened are fossil fuel industry executives who don’t want to be held accountable for the threats their outdated and reckless practices pose to the public. With this latest attack on our public lands, Donald Trump and Ryan Zinke are once again selling out our
health and our climate in favor of corporate polluters' profits.”

STATUS

The Proposed Rule is open for public comment through April 23, 2018.

RELATED POLICIES

- **Rescission by BLM** of the 2015 Hydraulic Fracturing Rule
- **Proposed rule** to repeal the Clean Power Plan

POLICY HISTORY

- **March 28, 2017:** President Trump issued **EO 13783** “Promoting Energy Independence and Economic Growth,” which ordered agencies to review regulation on domestic energy production and remove any found to be detrimental.
- **March 29, 2017:** Secretary of the Interior Ryan Zinke issued **SO 3349** “American Energy Independence,” which directed BLM to review the 2016 rule.
- **June 15, 2017:** BLM issued a notice postponing compliance with the proposed rule. This was challenged in court and **vacated** by the US District Court for Northern California on October 4, 2017. This ruling was initially appealed by BLM, but the appeal was dropped on March 14, 2018.
- **December 8, 2017:** A new notice delaying and suspending the 2016 rule was issued by BLM. This notice was also challenged in court and on February 22, 2018, the US District Court for Northern California issued a temporary **injunction** against the notice for delay, keeping the 2016 final rule in effect.
- **February 22, 2018:** The **Proposed Rule**, which would rescind or revise many aspects of the 2016 rule, was published on the same day as the US District Court for Northern California injunction.
- **April 5, 2018:** the US District Court for Wyoming ruled to **suspend** the 2016 final rule until the comment period for the proposed rule closes and the new regulations are put in place.

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ENERGY SUBCATEGORY

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