

FACT SHEET ON METHANE AND WASTE PREVENTION RULE

OVERVIEW: The Bureau of Land Management (BLM) has updated its regulations to reduce the waste of natural gas from flaring, venting, and leaks from oil and gas production operations on public and Indian lands. The final requirements, which will be phased in, will help curb waste of our nation's natural gas supplies; reduce harmful air pollution, including greenhouse gases; and provide a fair return on public resources for federal taxpayers, Tribes, and States.

The BLM's final rule requires oil and gas producers to take commonsense and cost-effective measures to reduce this waste of gas, modernizing the existing, more than 30-year-old oil and gas production rules and bringing them in line with technological advances in the industry. In addition, the rule modifies the existing royalty rate provisions to better align with the BLM's authority and enhance flexibility, but the rule would not raise royalty rates.

FACT: **The BLM's onshore oil and gas management program is a major contributor to our nation's oil and gas production.** Domestic production from almost 100,000 federal onshore oil and gas wells accounts for five percent of the nation's oil supply and eleven percent of its natural gas. In Fiscal Year 2015, the production value of this oil and gas was worth almost \$21 billion and generated over \$2 billion in royalties.

FACT: **Large quantities of natural gas are wasted during oil and gas production.** Between 2009 and 2015, oil and gas producers on public and Indian lands vented, flared and leaked about 462 billion cubic feet (Bcf) of natural gas. That's enough gas to supply about 6.2 million households for a year. These losses create a myriad of problems, including: releasing harmful emissions, including methane, into the atmosphere; safety issues, if not properly handled; and waste of a valuable domestic energy resource.

FACT: **Taxpayers are losing out.** States, Tribes and federal taxpayers also lose royalty revenues when natural gas is wasted – as much as \$23 million annually in royalty revenue for the Federal Government and the States that share it, according to a 2010 Government Accountability Office (GAO) report.

FACT: **The rule minimizes waste of natural gas.** The final rule will save and put to productive use up to 41 Bcf of gas a year – enough to supply up to about 740,000 households each year. Overall, the rule will reduce flaring by an estimated 49 percent and venting and leaks by roughly 35 percent (compared to 2014 rates).

FACT: **Inaction is not an option.** Methane, a powerful greenhouse gas about 25 times more potent than carbon dioxide, accounts for nine percent of all U.S. greenhouse gas emissions, and almost one-third of that is estimated to come from oil and gas operations. U.S. methane emissions are projected to rise substantially without additional steps to lower them. Several states, including North Dakota, Colorado, Wyoming, Utah and most recently Pennsylvania, as well as the U.S. Environmental Protection Agency (EPA), have also taken steps to limit venting, flaring and/or leaks.

FACT: The rule will reduce emissions that worsen climate change. BLM estimates that this rule could avoid an estimated 175,000-180,000 tons of methane emissions per year, roughly equivalent to 4.4-4.5 million metric tons of carbon dioxide emissions. This is also roughly equivalent to eliminating the greenhouse gas emissions from 924,000 to 950,000 vehicles.

FACT: The rule's benefits are projected to outweigh its costs. Using conservative assumptions, the BLM estimates that the rule's net benefits could range from \$46 to \$204 million per year. Benefits include revenues for operators from sale of recovered natural gas and environmental benefits of reducing methane emissions and other air pollutants.

FACT: Impacts to operators are expected to be minimal. Many oil and gas operators are voluntarily taking steps required in the rule to reduce wasted gas and improve operations. The BLM estimates that the annual cost to industry of implementing the rule will be \$110-279 million. Individual, small business operators may see profit margins reduced by less than two-tenths of one percent, on average. About 40 percent of natural gas now vented or flared from onshore Federal leases could be economically captured with currently available technologies, according to the 2010 GAO report.

FACT: The rule reflects stakeholder outreach through public meetings and tribal consultations. The BLM conducted public and tribal meetings in 2014 and again in 2015 during the public comment period. The BLM received over 300,000 comments on the proposed rule. The BLM has also coordinated with individual states, as well as the Environmental Protection Agency, to avoid inconsistency or redundancy in regulations.

PROPOSED RULE OVERVIEW

The Mineral Leasing Act requires the BLM to ensure that operators “use all reasonable precautions to prevent waste of oil or gas.” Important elements of the proposed rule include:

LIMITING ROUTINE GAS FLARING

- Currently, there is no upper limit on how much an operator can flare. The proposal would phase in, over several years, a flaring limit per development oil well, averaged across all of the producing wells on a lease.
 - Year one limit: 7,200 thousand cubic feet (Mcf)/month/well;
 - Year two limit: 3,600 thousand cubic feet (Mcf)/month/well; and
 - Year three limit (and thereafter): 1,800 thousand cubic feet (Mcf)/month/well.
- Estimated to affect about 16% of existing wells, which account for about 87% of gas flared.
- Applies only to flared associated gas from production wells, not flaring from exploration or wildcat wells or during emergencies.
- Provides an exemption if meeting the limit would cause an operator to cease production and abandon significant recoverable oil reserves under a lease.
- Operators could comply with the proposed flaring limits by: expanding gas-capture infrastructure (e.g. installing compressors to increase pipeline capacity, or connecting wells to existing infrastructure through gathering lines); adopting alternative on-site capture technologies (e.g. compressing the natural gas or stripping out natural gas liquids and trucking the product to a gas processing plant); or temporarily slowing production at a well to minimize losses until capture infrastructure is installed.
- Also improves disclosure of flared volumes by requiring metering when flared volumes reach 50 Mcf/day.

PRE-DRILLING PLANNING FOR GAS CAPTURE

- Currently, there is no mechanism to better align timing of well development and pipeline installation.
- Before drilling a development oil well, operators would need to evaluate opportunities for gas capture and prepare a waste minimization plan, which must be submitted with an Application for Permit to Drill.
- The plan must meet various requirements, and must be shared with midstream gas capture companies to facilitate timely pipeline development, but plan details would not be enforceable elements of the permit to drill.

DETECTING LEAKS

- The proposed rule will require operators to use an instrument-based leak detection program to find and repair leaks. Operators could use infrared cameras or other methods approved by the BLM; smaller operators (fewer than 500 wells) could alternatively use portable analyzers assisted by audio, visual and olfactory inspection.
- Operators would begin by inspecting twice a year. If they consistently find few leaks, they would be allowed to inspect annually, while if they consistently find more leaks, they would be required to inspect quarterly.

- The proposal is similar to EPA’s recent proposed rule requiring leak detection and repair for new wells and facilities, as well as leak detection and repair requirements in Colorado and Wyoming.

REDUCING VENTING

- Except in narrowly specified circumstances, operators would be prohibited from venting natural gas. Exceptions include emergencies and venting from certain equipment subject to proposed limits.
- Operators would have to replace all “high bleed” pneumatic controllers with “low bleed” controllers within one year in most instances, tracking requirements in Colorado and Wyoming.
- Operators would generally have to replace certain pneumatic pumps with solar pumps, if adequate for the function, or route the pumps to a flare (if one is available on-site), similar to Wyoming and proposed EPA requirements for new and/or existing pumps.
- Within six months of rule’s effective date, operators would have to capture or flare gas from storage tanks that vent more than six tons of volatile organic compounds (Volatile Organic Compounds)/year. This is expected to affect fewer than 300 tanks and is similar to EPA requirements for new tanks and Colorado and Wyoming requirements for new and existing tanks.
- Operators of new wells (drilled after rule’s effective date) would generally not be allowed to purge those wells into the atmosphere; and operators unloading liquids from existing wells would be required to use best management practices.
- Operators would be required to capture, flare, use, or re-inject gas released during well completions. This would affect only conventional well completions, assuming that EPA finalizes its proposed rule for all hydraulically fractured well completions and recompletions.

CLARIFYING AND REVISING ROYALTY RATES

- The proposal revises existing royalty provisions for onshore oil and gas leases to specify a royalty rate at or above 12.5 percent for new competitive leases, consistent with the statutory authority in the Mineral Leasing Act.
- This modifies the existing regulation, which sets the rate at 12.5 percent and leaves the BLM no discretion to raise the rate as conditions change.
- The proposal responds to findings and recommendations in audits from the Government Accountability Office and Department of Interior Office of Inspector General.
- The BLM does not currently propose to raise royalty rates for new competitive leases.
- The proposed rule also clarifies that royalties would apply only to gas flared from wells already connected to gas capture infrastructure. This reduces burden on operators to submit applications for approval to flare royalty-free.

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