# Subcommittee on Energy and Mineral Resources

## Doug Lamborn, Chairman Hearing Memorandum

April 25, 2016

**To:** All Subcommittee on Energy and Mineral Resources Members

**From:** Majority Committee Staff

Subcommittee on Energy and Mineral Resources (5-9297)

**Hearing:** Oversight Hearing entitled: "The Bureau of Land Management's Regulatory

Overreach into Methane Emissions Regulation"

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The subcommittee hearing will take place on **Wednesday**, **April 27th at 10:00 A.M. in Room 1324 Longworth House Office Building.** This hearing will focus on a recent regulation issued by the Bureau of Land Management (BLM) regarding methane on federal lands.

## **Policy Overview**

- While oil and natural gas production has increased dramatically on state and private lands, methane emissions have simultaneously decreased.
- O Under the Clean Air Act (CAA) greenhouse gas emissions are regulated by the Environmental Protection Agency (EPA) in partnership with State Implementation Plans. EPA has proposed regulations designed to reduce methane emissions from new oil and natural gas wells, and from existing sources.
- While the BLM has no authority under the Clean Air Act, it still proposes to greatly expand BLM's existing regulations to include duplicative measures that further regulate methane emissions under the Mineral Leasing Act. This Act directs lease holders to prevent *waste* of natural gas.
- O The BLM refuses to address pipeline rights-of-way delays on BLM lands the most common sense tool in their toolshed to prevent waste of natural gas.
- Overall, BLM's methane emissions rule will have a negligible impact on overall greenhouse gas emissions, but will likely significantly and negatively impact jobs, production, and federal, state and local revenues.

## <u>Invited Witnesses</u> (in alphabetical order)

*Mr. Shawn Bolton*Rio Blanco County Commissioner
Meeker, CO

Mr. Lynn D. Helms
Director, North Dakota Department of Mineral Resources
Bismarck, ND

The Honorable Gwen Lachelt La Plata County Commissioner Durango, CO

Ms. Amanda Leiter
Deputy Assistant Secretary, Land and Minerals Management
Department of the Interior
Washington, D.C.

Mr. Mark WatsonOil and Gas Supervisor,Wyoming Oil and Gas Conservation CommissionCasper, WY

#### **Background**

Methane is a basic organic compound with the chemical composition of CH<sub>4</sub>. The primary constituent of natural gas,<sup>1</sup> it has a variety of uses, including as a fuel for electric generation and heating. It is a very valuable natural resource for the energy industry, supporting over four million jobs in the United States.<sup>2</sup> The *production* of methane on federal lands is currently regulated by the Bureau of Land Management (BLM) under the regime of the Mineral Leasing Act (MLA), which permits the BLM to lease land for the purpose of "prospect[ing] for oil or gas" to "any applicant qualified."<sup>3</sup>

On February 8, 2016, BLM proposed a new rule – the "Methane and Waste Prevention Rule" – under the MLA's requirement that a lessee "use all reasonable precautions to prevent waste of oil or gas developed in the land." This new rule seeks to limit flaring, venting and leakage of methane on both new and existing sources that "could be put to productive use,"

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<sup>&</sup>lt;sup>1</sup> 81 Fed. Reg. 6617.

<sup>&</sup>lt;sup>2</sup> America's Natural Gas Alliance, http://anga.us/issues-and-policy/jobs.

<sup>&</sup>lt;sup>3</sup> Mineral Leasing Act of 1920, § 13.

<sup>&</sup>lt;sup>4</sup> 81 Fed. Reg. 6616.

<sup>&</sup>lt;sup>5</sup> 30 U.S.C. 225.

while limiting the harm the gas causes on "regional and global air pollution problems of smog, particulate matter, toxic air pollution . . . and climate change."

The BLM rule is driven by the Obama Administration's Climate Action Plan – which includes a goal to cut methane emissions in the oil and gas sector. In essence, the BLM has proposed a rule to combat the emission of methane from oil and gas wells – a task Congress authorized the U.S. Environmental Protection Agency (EPA) to regulate under the Clean Air Act (CAA) in 1963.

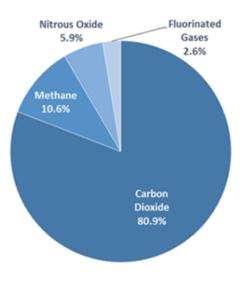
Specific aspects of the BLM rule include: stringent flaring limits phased in over three years, ending in no more than 1,800 thousand cubic feet (Mcf) per month, per well; requiring pre-drilling planning for gas capture, even though many operators work with midstream gas capture companies (such as pipeline companies); leak detection requirements; prohibitions on venting except in narrowly specified circumstances (including liquids unloading, which even the EPA rulemaking chose not to regulate); and the potential for increased royalty rates.

### Duplicative and Overlapping Regulations

One of the inherent purposes of the CAA is "to protect and enhance the quality of the

Nation's air resources so as to promote the public health and welfare and the productive capacity of its population". Since 1979, the EPA under the requirement of CAA section 111(b)(1)(A) has recognized "crude oil and natural gas production" as an activity that could contribute significantly to air pollution.<sup>10</sup> On September 18, 2015, the EPA announced a new rule to regulate methane emissions from new oil and gas wells. 11 The new EPA rule seeks to regulate methane emissions across the "oil and natural gas source category" by "requir[ing] reduction of methane as well as [Volatile Organic Compounds]."12 In addition, on March 10, 2016, President Obama, with Canadian Prime Minister Justin Trudeau, announced the EPA would be developing rules to regulate methane emissions from existing sources under CAA section 111(d).<sup>13</sup>

U.S. Greenhouse Gas Emissions



<sup>&</sup>lt;sup>6</sup> 81 Fed. Reg. 6617.

<sup>&</sup>lt;sup>7</sup> Bureau of Land Management, <a href="http://www.blm.gov/wo/st/en/info/newsroom/2016/march/nr">http://www.blm.gov/wo/st/en/info/newsroom/2016/march/nr</a> 03 22 2016.html.

<sup>&</sup>lt;sup>8</sup> 42 U.S.C. 7401 et seq.

<sup>&</sup>lt;sup>9</sup> 42 U.S.C. 7401.

<sup>10 44</sup> Fed. Reg. 49222.

<sup>&</sup>lt;sup>11</sup> 80 Fed. Reg. 56593.

<sup>12 80</sup> Fed. Reg. 56593.

The EPA has the authority to set minimum regulatory standards nationwide and it is proposing to do so for emissions from oil and gas wells. However, the primary responsibility for ensuring the application of the CAA has been delegated to the states through the establishment of State Implementation Plans. The CAA makes clear, each state has primary responsibility for assuring air quality "within the *entire geographic area comprising such State*" regardless of land ownership, be it federal, state, or private. 15

The BLM's proposed rule overlaps with and is duplicative of state and EPA efforts to reduce methane emissions from oil and gas sites, and overreaches by regulating an area it has no statutory authority to do so.

Exacerbating Impact on BLM Rights-of-Way (ROW) Permitting Delays

Natural gas gathering lines and pipelines work in concert to move natural gas directly from the wellhead to the final customer. Gathering lines are small-diameter pipelines that move natural gas from the wellhead to the processing plant where impurities or natural gas liquids (NGL) are removed from the natural gas stream before further transportation. A recent study conducted by the Interstate Natural Gas Association of American (INGAA) found that more than 500,000 miles of new pipeline will be needed for natural gas, NGL, and oil gathering and transport over the next 20 years in order to accommodate growing production. <sup>16</sup>

Section 185 of the Mineral Leasing Act provides authority for the Secretary of the Interior to issue rights-of-way for pipelines on federal lands. The BLM handles the processing of ROW permits not only for BLM lands, and also acts as lead agency on permitting of pipelines that cross the lands of more than one federal agency. BLM not only charges cost recovery fees for costs incurred while processing and monitoring ROW applications, but also charges rents for locating a ROW facility on federal lands. While BLM's own brochure on how to obtain ROWs states a commitment to customer service and that the "BLM strives to provide ROW applicants a decision within **60 days** form the receipt of a completed application," in reality, BLM's process for ROW permits has already demonstrated significant delays.

For example, the State of New Mexico states that in some cases in the state, operators "wait from six months to a year" for federal ROW permits. Instead, to address these

 $<sup>^{13}\,\</sup>underline{\text{https://blog.epa.gov/blog/2016/03/epa-taking-steps-to-cut-methane-emissions-from-existing-oil-and-gas-sources/}$ 

<sup>&</sup>lt;sup>14</sup> "Each state shall have the primary responsibility for assuring air quality within the *entire geographic area comprising such State* by submitting an implementation plan for such State which will specify the manner in which national primary and secondary ambient air quality standards will be achieved and maintained", 42 U.S.C. 7407 (emphasis added). <sup>15</sup> 42 U.S.C. 7407.

<sup>16</sup> http://www.ingaa.org/file.aspx?id=21498; p. 19.

<sup>&</sup>lt;sup>17</sup> Obtaining a Right-of-Way on Public Lands (BLM; 2009).

<sup>&</sup>lt;sup>18</sup>http://www.nmstatelands.org/uploads/PressRelease/7c63bfca932547d89f9afbbc8739d0aa/venting\_and\_flaring\_release\_1.pdf

bureaucratic delays facing permitting for natural gas pipelines, BLM has opted to ramp up and focus solely on enforcement mechanisms to reduce methane emissions.

Monetizing the Social Cost of Carbon and the Social Cost of Methane

The Regulatory Impact Analysis for BLM's Venting and Flaring rule relies upon monetized benefits of both methane and carbon dioxide emissions reductions in order to inflate the economic benefit of more stringent regulations. Known as the "Social Cost of Carbon" and the "Social Cost of Methane," BLM claims these "benefits" outweigh their calculation of compliance costs. The BLM derives these figures directly from the EPA, claiming it was "appropriate for the BLM to defer to and rely on the subject matter expertise of EPA in evaluating and selecting estimates of the social costs of methane emissions." <sup>20</sup>

The social cost of methane figures used by the EPA, and consequently the BLM, are derived from a 2014 study<sup>21</sup> by EPA's National Center for Environmental Economics. Perhaps best stated in the study's abstract, the estimated social cost of both carbon dioxide and methane "...represents the aggregate *willingness to pay* to avoid the damages" associated with GHG emissions. (Emphasis added) The BLM does not have regulatory authority to promulgate rulemakings based on GHG emissions, yet BLM relies entirely on the EPAs social cost of methane economic model, applying monetary benefits on GHG reductions to its rulemaking. BLM's scope of authority is measurement of benefits from waste reduction under the Mineral Leasing Act. To put these costs in perspective, the BLM estimates implementation of the rule would result in an overall reduction in greenhouse gas emissions of 4.2 million metric tons of CO2-equivalent, which is .0092% of global greenhouse gas emissions.

#### Differing Opinions on Cost/Production Impact

Currently, BLM NTL-4A includes very clear standards requiring the application of a royalty to any natural gas production that has been "avoidably lost" due to negligence and/or the failure of the lessee to take reasonable measures. Given that the BLM has no CAA authority to regulate air quality, the BLM rulemaking relies upon the concept that natural gas emissions through venting, flaring or from leaks is wasteful in order to regulate.

<sup>21</sup> Marten et al. (2014)

<sup>&</sup>lt;sup>19</sup>BLM Regulatory Impact Analysis for Revisions to 43 CFR 3100/3600 (RIA); p. 32.

<sup>&</sup>lt;sup>20</sup> RIA; p. 40.

<sup>&</sup>lt;sup>22</sup> BLM NTL-4A defines "Avoidably Lost" production as: "... the venting or flaring of produced gas without the prior authorization, approval, ratification, or acceptance of the Supervisor and the loss of produced oil or gas when the Supervisor determines that such loss occurred as a result of (1) negligence on the part of the lessee or operator, or (2) the failure of the lessee or operator to take all reasonable measures to prevent and/or to control the loss, or (3) the failure of the lessee or operator to comply fully with the applicable lease terms and regulations, appropriate provisions of the approved operating plan, or the prior written orders of the Supervisor, or (4) any combination of the foregoing."

Cost analyses of the rule are predicated upon the assumption that methane molecules not put into commercial production from the well site are being wasted and thus applicable to a royalty under the Mineral Leasing Act. The BLM's economic assumptions fail to accommodate cases where the economic costs to develop the well may be overshadowed by the infrastructure costs of capturing the methane under the new BLM regulations. This, in turn, will lead to net losses in production, forcing producers in many cases to choose between simply not developing a well or shutting-in an existing well because regulatory costs now outweigh potential net profits.

The BLM believes that the proposed methane rule will lead to additional natural gas production ranging from 11.7 – 14.5 Bcf per year and a reduction in crude oil production ranging from .6 - 3.2 million bbl per year<sup>23</sup>. At the same time, BLM also asserts that the rule: "...is not expected to materially impact the employment within the oil and gas extraction, drilling, and support industries."<sup>24</sup> The BLM analysis of **net** benefits ranges from \$115 million at its lowest end and \$245 million at its highest end - with an estimated annual cost to industry of implementation ranging from \$125 to \$161 million. Public comments filed on the rule by the joint trades paint a different picture - estimating the rule may cost nearly 10 times as much at \$1.26 billion.<sup>25</sup> The North Dakota Petroleum Council estimates that this rule would reduce production by nearly 8 million barrels annually in North Dakota alone. <sup>26</sup>

## Methane Emissions Decreasing

According to a 2015 study by the EPA, methane emissions from natural gas systems (which include hundreds of thousands of wells, hundreds of processing facilities, and over a million miles of transmission and distribution pipelines) have fallen by 12.2% <sup>27</sup> and methane emissions from crude oil production has fallen by 20%<sup>28</sup> over the same period. Moreover, the study also found that since 2005 – the beginning of the shale gas revolution - methane emissions from hydraulically fractured natural gas wells has fallen by 79 percent. This same report found that overall, greenhouse gas emissions in 2014 were 9 percent below 2005 levels.

More importantly, the significant declines in methane emissions from oil and natural gas production has occurred during a time when overall production in the U.S. has surged predominately on state and private lands as seen on the Congressional Research Service charts below. Natural gas production in the United States overall has dramatically increased each year since 2006, while production on federal lands has declined each year from FY2007 to FY2014.

<sup>&</sup>lt;sup>23</sup> 81 Fed. Reg. 6625.

<sup>&</sup>lt;sup>24</sup> 81 Fed. Reg. 6672.

<sup>25</sup> http://www.ipaa.org/wp-content/uploads/downloads/2016/04/Joint-Trades-Comments-On-BLM-Venting-Flaring-Rule.pdf
http://www.northdakotaoilcan.com/wp-content/uploads/2016/03/BLM-Fact-sheet-final4.pdf
https://www3.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2015-Main-Text.pdf; ES-13.

<sup>&</sup>lt;sup>28</sup> https://www3.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2015-Main-Text.pdf; 3-57.

While crude oil production has remained stagnant on federal lands over the past years, it has increased dramatically on nonfederal lands.

Figure 1. U.S. Crude Oil Production: Federal and Nonfederal Areas, FY2006-2015

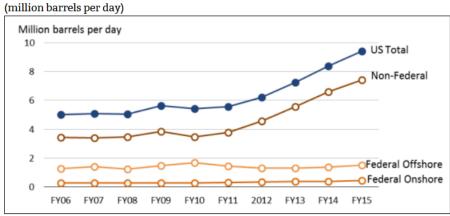


Figure 2. U.S. Natural Gas Production: Federal and Nonfederal Areas FY2006-FY2015

