COLUMBIA LAW SCHOOL
SABIN CENTER FOR CLIMATE CHANGE LAW

March 26, 2018

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Re: BLM's Proposed Revisions to the Waste Prevention, Production Subject to Royalties, and Resource Conservation Rule (Docket ID BLM-2018-0001)

To Whom It May Concern:

The Sabin Center for Climate Change Law submits these comments in response to the Bureau of Land Management ("BLM")'s request for input on its proposed revisions[1] to the final rule titled "Waste Prevention, Production Subject to Royalties, and Resource Conservation" published on November 18, 2016 ("2016 Rule").[2]

Under BLM's proposal, key provisions of the 2016 Rule would be replaced with pre-existing regulations, dating from the 1970s.[3] As BLM has itself recognized, those regulations fail to prevent the undue waste of federally-owned natural gas resources, making their reinstatement inconsistent with the Mineral Leasing Act ("MLA").[4] In justifying reinstatement of the regulations, BLM has relied on faulty economic data, which does not reflect the true benefits and costs of preventing gas waste. For these reasons, the Sabin Center opposes reinstatement of the regulations, and urges BLM to retain the 2016 Rule in its current form.

[1] Waste Prevention, Production Subject to Royalties, and Resource Conservation; Rescission or Revision of Certain Requirements, 83 Fed. Reg. 7924 (Feb. 22, 2018) [hereinafter "Proposed Rule Revision"].
[2] Waste Prevention, Production Subject to Royalties, and Resource Conservation, 81 Fed. Reg. 83008 (Nov. 18, 2016) [hereinafter "2016 Rule"].
[3] Notice to Lessees and Operators of Onshore Federal and Indian Oil and Gas Leases, Royalty or Compensation for Oil and Gas Lost (Jan 1, 1980), http://perma.cc/2RJT-8875 [hereinafter "NTL-4A"].
[4] 2016 Rule, *supra* note 2, at 83017.

I. BLM Adopted, and Must Retain, the 2016 Rule to Fulfill its Statutory Obligation to Prevent Natural Gas Waste

The 2016 Rule was intended to prevent the loss of natural gas through venting, flaring, and leaks during oil and gas production on federal land. In adopting the rule, BLM noted that 462 billion cubic feet of gas were lost through these causes from 2009 to 2015, with regulations in force during that period failing to ensure producers minimize venting, flaring, and leaks.[5] Nevertheless, BLM is now proposing to reinstate those failed regulations, arguing that the 2016 Rule is unnecessary. That argument is entirely without merit and lacks a reasoned basis.

A. The 2016 Rule is Needed to Prevent Natural Gas Waste

The MLA, enacted by Congress in 1920, requires BLM to ensure that persons leasing federal land containing oil and gas resources "use all reasonable precautions to prevent waste of oil and gas developed in the land."[6] Additionally, under the MLA, BLM must ensure that lessees conduct oil and gas development with "reasonable diligence, skill, and care" and comply with rules "for the prevention of undue waste."[7]

Consistent with its statutory authority under the MLA, BLM adopted the 2016 Rule "to reduce waste of natural gas from venting, flaring, and leaks."[8] Prior to adoption of the rule, BLM regulated gas waste under the "Notice to Lessees and Operators of Onshore Federal and Indian Oil and Gas Leases, Royalty or Compensation for Oil and Gas Lost" ("NTL-4A"), issued in December 1979.[9] Over the subsequent four decades, gas venting and flaring practices have changed significantly, as have technologies for controlling gas leaks.[10] A 2010 Government Accountability Office report found that, using new technologies developed after the issuance of NTL-4A, forty percent of gas lost through venting and flaring on public lands could be economically captured.[11] Thus, as BLM has itself recognized, "NTL-4A neither

[5] *Id*. at 83009 & 83017.
[6] 30 U.S.C. § 225.
[7] *Id*. § 187.
[8] 2016 Rule, *supra* note 2, at 83008.
[9] NTL-4A, *supra* note 3.
[10] 2016 Rule, supra note 2, at 83017.
[11] Government Accountability Office, Federal Oil and Gas Leases: Opportunities Exist to Capture Vented and Flared Natural Gas Which Would Increase Royalty Payments and Reduce Greenhouse Gases (GAO-11-34) 19 (2010), http://perma.cc/A823-3KNB. The Government Accountability Office's findings have been confirmed in a number of more recent studies. See e.g., ICF Research, Economic Analysis of Methane Reduction Opportunities in the U.S. Onshore Oil and Natural Gas Industries 1-1 (2014), http://perma.cc/3ZYF-TTV9 (indicating that a forty percent reduction in losses could be achieved at a cost of less than one center per thousand cubic feet of gas captured).

reflects today's best practices and advanced technologies, nor is particularly effective in minimizing [gas] waste."[12]

Given the limitations of NTL-4A, BLM concluded that stricter controls on gas venting, flaring, and leaks are needed to prevent gas waste in accordance with the MLA. Now, less than two years after adopting those controls, BLM has suddenly and inexplicably changed its view. BLM now asserts that the controls are unnecessary and that NTL-4A is sufficient to "ensure operators take 'reasonable precautions to prevent undue waste.'"[13] It has not, however, provided any convincing evidence to support that view or justify its change in position.

It is well established that agency rulemaking must be based on a consideration of relevant evidence and accompanied by a clear statement of how that evidence supports the action taken. As the Supreme Court explained in *Motor Vehicle Manufacturers Association v. State Farm Mutual Automobile Insurance Company*, the agency must "articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made."[14] Where, as here, the agency is reversing a previously held position, its explanation for doing so must be particularly strong. This is because, according to the Supreme Court, "a settled course of behavior embodies the agency's informed judgement that, by pursuing that course, it will carry out the policies committed to it by Congress. There is, then, at least a presumption that those policies will be carried out best if the settled rule is adhered to."[15] As a result, "an agency changing its course . . . is obligated to supply a reasoned analysis for the change beyond that which may be required when an agency . . . acts in the first instance."[16]

BLM has not provided a satisfactory explanation as to why the 2016 Rule is unnecessary. While BLM attempts to justify that view by arguing that gas waste is adequately controlled under NTL-4A, it has not provided any evidence to support that argument, which contradicts its own previous findings (discussed above). BLM has failed to demonstrate that its previous findings were incorrect or explain why it has disregarded the facts underlying those findings. That failure has legal implications. As the U.S. Court of Appeals for the District of Columbia Circuit recently recognized in *U.S. Sugar Corporation v. EPA*, an agency seeking to reverse a prior policy must provide "a reasoned explanation for . . . disregarding facts and

[12] 2016 Rule, *supra* note 2, at 83017.
[13] Proposed Rule Revision, supra note 1, 7928.
[14] Motor Vehicle Mfrs. Ass'n. v. State Farm Mut. Auto Ins. Co., 463 U.S. 29, 43 (1983).
[15] *Id*. at 41-42 (quoting Atchison, T. & S.F.R. Co. v. Wichita Bd. of Trade, 412 U.S. 800, 807-808 (1973)).
[16] *Id*. at 42. *See also* U.S. Sugar Corp. v. Envtl. Prot. Agency, 830 F.3d 579, 626 (D.C. Cir. 2016) (holding that, when an agency reverses a previous policy and "its new policy rests upon factual findings that contradict those which underlay its prior policy," it must "provide a more substantial explanation or reason . . . that [would be required] for any other action").

circumstances that underlay or were engendered by the prior policy."[17] Where, as here, no such explanation is provided, the agency's action may be considered arbitrary and capricious.[18]

BLM cannot justify its decision to reinstate NTL-4A by pointing to the existence of other federal and state regulations governing oil and gas regulations. The existence of those regulations does not, contrary to BLM's claims, render the 2016 Rule unnecessary. While the regulations may incidentally address gas waste, for example through limits on venting, that was generally not their primary purpose. The regulations are more limited than the 2016 Rule, in terms of both scope and stringency, and thus will not prevent all undue gas waste (see subpart B). Retention of the 2016 Rule is, therefore, essential to fulfill BLM's statutory duty to prevent waste.

B. EPA and State Regulations are Inadequate to Prevent Natural Gas Waste

In adopting the 2016 Rule, BLM emphasized that other federal and state regulations do not "fully address the issue of waste of gas" on federal land.[19] Now, without explanation, BLM has changed its view and asserted that gas waste is sufficiently addressed by other regulatory frameworks. That assertion is not, however, supported by the available evidence. Nor does BLM explain why it is now reaching a conclusion about the efficacy of other regulatory programs directly opposite to that it reached only two years ago.

Contrary to BLM's suggestion, gas waste is not adequately controlled under the Environmental Protection Agency ("EPA")'s New Source Performance Standards ("NSPS"), targeting methane emissions from oil and gas operations. While the NSPS impose similar restrictions on gas venting and flaring as the 2016 Rule, those restrictions only apply to a subset of oil and gas facilities, constructed or modified after September 18, 2015. BLM has sought to downplay this limitation by arguing that the NSPS will eventually apply to all oil and gas facilities (i.e., once those in existence prior to September 2015 are decommissioned).[20] However, that will not occur for many years, with some NSPS-exempt facilities expected to remain in operation until 2045 and possibly beyond.[21] In the interim, the NSPS will fail to prevent all undue waste of gas on federal land, making retention of the 2016 Rule essential.

The 2016 Rule is not rendered unnecessary by state regulation of oil and gas development. While BLM argues that regulations addressing gas waste have been adopted in the ten states

[17] *Id*. at 626.
[18] Id.
[19] 2016 Rule, *supra* note 2, 83010.
[20] Proposed Rule Revision, *supra* note 1, at 7928.
[21] The average life of an oil and gas well is twenty to thirty years, meaning that facilities installed prior to September 2015 could still be in operation in September 2045.

where federal oil and gas production is largest, its own analysis shows that those regulations are both less comprehensive and less stringent than the 2016 Rule. For example, of the ten states, only North Dakota has established a gas capture target for oil producers similar to that in the 2016 Rule. The North Dakota target is set below that in the 2016 Rule[22] and only apples to a subset of oil producers in the state,[23] whereas the 2016 Rule would apply to all producers operating on federal land.[24] Similarly, the 2016 Rule also has advantages over other states' regulations, none of which establish a comprehensive framework for addressing gas waste.

II. BLM Did Not Exceed its Statutory Authority in Adopting the 2016 Rule

In adopting the 2016 Rule, BLM acted within its statutory authority to control gas waste, and did not engage in environmental regulation. The record clearly demonstrates that the 2016 Rule was intended "to reduce waste of natural gas" during federal oil and gas production.[25] Consistent with that goal, the rule requires producers to take "reasonable and common-sense measures to prohibit routine venting [of natural gas], minimize the quantities of natural gas routinely flared, [and] reduce natural gas losses through leaks."[26] The mere fact that addressing venting, flaring, and leaks also has air quality benefits does not transform the rule into an environmental regulation. As the U.S. District Court for the District of Wyoming has observed, "BLM has authority to promulgate and impose regulations which may have air quality benefits . . . if such [regulations] are independently justified as waste prevention measures."[27] That requirement is clearly met in this case, with the 2016 Rule targeting the three major causes of waste.

BLM's concern that, in adopting the 2016 Rule, it "may have usurped" EPA's authority to regulate air pollution is unfounded. The 2016 Rule addresses an issue – i.e., gas waste prevention – squarely within BLM's statutory authority. While it also touches on an area under EPA's authority – i.e., air pollution control – that does not render it invalid. The courts have repeatedly held that two agencies with independent, but overlapping, statutory authorities may exercise them simultaneously. Thus, for example, in *Massachusetts v. EPA* the Supreme Court rejected claims that EPA was prevented from regulating motor vehicle

[22] Whereas the 2016 Rule sets a target of ninety-eight percent gas capture, the North Dakota target is just ninety-one percent. *See* 2016 Rule, *supra* note 2, at 83023; North Dakota Industrial Commission, Order 24665 Policy / Guidance Version 102215 (Oct. 22, 2015), http://perma.cc/5K55-2HMK.
[23] The North Dakota regulations only apply to oil production in the Bakken, Bakken / Three Forks, and Three Forks Pools. Oil producers in other areas are subject to less stringent requirements, including gas capture rates of just seventy-five percent. See *Id*.
[24] The capture target in the 2016 Rule applies to all oil producers operating on federal land. There are few exceptions to the requirement for producers to comply with the target. *See* 2016 Rule, *supra* note 2, at 83023-83024.
[25] *Id*. at 83008.
[26] *Id*. at 83015.
[27] Wyoming v. U.S. Dep't of Interior, 2017 U.S. Dist. LEXIS 5736 (Wyo. Dist. 2017).

carbon dioxide emissions because doing so would require it to tighten vehicle mileage standards which fall under the authority of the Department of Transportation ("DOT").[28] The court emphasized that EPA's statutory obligation to regulate emissions is "wholly independent" of DOT's obligation to set mileage standards.[29] According to the court, while the two agencies' mandates "may overlap," they can "both administer their statutory obligations and yet avoid inconsistency."[30] Similarly here, BLM's statutory obligation to prevent gas waste is wholly independent of, and can be exercised without inconsistency with, EPA's obligation to control air pollution.

III. BLM Seeks to Rely on Flawed Economic Data to Justify its Proposed Revision of the 2016 Rule

BLM has sought to justify its proposal to revise the 2016 Rule by asserting that it would impose significant costs on oil and gas producers and generate few benefits.[31] That assertion is based on an updated economic analysis in which BLM has recalculated the costs and benefits of the 2016 Rule. For the reasons set out below, we consider the revised figures to be incorrect.

A. BLM has Overestimated the Cost Impacts of the 2016 Rule

BLM erroneously claims that the 2016 Rule would impose significant costs on oil and gas producers.[32] In support of that claim, BLM asserts that retaining the 2016 Rule in its current form would increase small producers' costs by $69,000 per annum, compared to if the rule was revised.[33] That figure is, however, difficult to reconcile with BLM's earlier estimate that small producers would incur costs of between $11,170 and $41,550 in complying with the 2016 Rule.[34] How can the cost savings from revising the 2016 Rule exceed those that would have been imposed by its retention? BLM has not considered, much less answered, this fundamental question. In fact, BLM has not provided any explanation for how it arrived at the $69,000 figure, which appears to overstate the costs of retaining the 2016 Rule.[35]

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[28] Mass. v. Envtl. Prot. Agency, 549 U.S. 497, 531-532 (2007)
[29] *Id*. at 532.
[30] *Id*.
[31] Proposed Rule Revision, *supra* note 1, at 7925.
[32] *Id*.
[33] *Id*. at 7941. *See also* BLM, Regulatory Impact Analysis for the Proposed Rule to Rescind or Revise Certain Requirements of the 2016 Waste Prevention Rule 53 (2018), http://perma.cc/DJM5-VB9X,
[34] BLM, Regulatory Impact Analysis for: Revisions to 43 CFR 3100 (Onshore Oil and Gas Leasing) and 43 CFR 3600 (Onshore Oil and Gas Operations), Additions of 43 CFR 3178 (Royalty-Free Use of Lease Production) and 43 CFR 3179 (Waste Prevention and Resource Conservation) (2016), http://perma.cc/67RF-AY6K.
[35] BLM's Regulatory Impact Analysis does not explain the methodology used to calculate compliance costs. *See* BLM, *supra* note 31.

Even if BLM's estimate is correct, it does not justify revising the 2016 Rule. In this regard, we note that the costs of complying with the 2016 Rule represent a small percentage of total oil and gas production costs, with the U.S. Energy Information Administration reporting that drilling and completing a single well typically costs $4.9 million to $8.3 million.[36] Thus, contrary to BLM's suggestion, retention of the 2016 Rule would not "encumber energy production . . . and prevent job creation."[37] In fact, it would have the opposite effect, leading to an increase in gas production,[38] and the creation of new jobs in the leak detection and repair services sector.[39]

A. BLM Has Under Estimated the Benefits of the 2016 Rule

BLM has also miscalculated the climate benefits associated with retaining the 2016 Rule. Whereas climate benefits were previously calculated based on the global social cost of methane ("SC-CH_4"), BLM is now proposing to use a domestic-only SC-CH_4, which reflects "an approximation of the climate change impacts that occur within U.S. borders."[40] This new approach is seriously flawed.

By focusing solely on climate change impacts within the U.S., the domestic SC-CH_4 used by BLM underestimates the cost of emissions. This is because, as other federal agencies have recognized, "[t]he impacts of climate change outside the United States . . . will also have relevant consequences on the United States and our citizens."[41] For example, the U.S. will likely be forced to increase humanitarian aid, deal with mass migrations, and manage changing security needs (e.g., in the Arctic) as a result of overseas climate change impacts.[42] Overseas impacts could also affect the U.S. economy, disrupting international trade and undermining financial markets.[43]

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[36] U.S. Energy Information Administration, Trends in U.S. Oil and Natural Gas Upstream Costs 2 (2016), http://perma.cc/WCZ7-RF5L.
[37] Proposed Rule Revision, *supra* note 1, at 7925.
[38] BLM's own data indicates that, if the 2016 Rule was retained, "there would be 299 Bfc [i.e., billion cubic feet] of additional gas production." *See* BLM, *supra* note 33, at 48.
[39] For a discussion of the potential for job creation in the leak detection and repair services sector, *see* Shawn Stokes et al., The Emerging U.S. Methane Mitigation Industry (2014), http://perma.cc/4Q6TS732; Marie Veyrier et al., Find and Fix: Job Creation in the Emerging Methane Leak Detection and Repair Industry (2017), http://perma.cc/7ZKD-Z22B.
[40] BLM, supra note 31, at 71.
[41] See e.g., Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources, 81 Fed. Reg. 35824, 35836 (Jun. 3, 2016).
[42] *Id.*
[43] For a discussion of these effects, *see* Dr. Peter H. Howard & Jason A. Schwartz, *Think Global: International Reciprocity as Justification for a Global Social Cost of Carbon*, 42 COLUM. J. ENVTL. L. 203 (2017).

Given these spill-over effects, failing to account for overseas climate change impacts will lead to poor regulatory decisions, which fail to adequately address climate change.[44] Accordingly, many countries have based their climate policies on the global costs and benefits of reducing greenhouse gas emissions (e.g., the global social cost of carbon ("SCC")).[45] Examples include Germany, which uses a global SCC of US$167 per ton in 2030 and the U.K., which uses US$115 per ton in 2030.[46] The U.K. also applies a global SC-CH_4, equal to approximately US$400 in 2010, rising to US$1200 by 2040.[47]

Contrary to BLM's assertion, switching from a global to domestic-only SC-CH_4 is not required to comply with OMB Circular A-4, which states that regulatory analyses "should focus on the benefits and costs that accrue to [U.S.] citizens and residents." Given that overseas climate change impacts will inevitably affect the U.S., accurately assessing costs and benefits to U.S. citizens and residents requires a global focus. Thus, a working group of twelve federal government agencies (including OMB) has repeatedly determined that global climate impacts should be considered, notwithstanding the references to domestic effects in Circular A-4.[48] Consistent with this determination, BLM and other federal agencies have traditionally used global values in their regulatory analyses.[49]

IV. Conclusion

For the reasons explained above, BLM's proposed revision of the 2016 Rule is inconsistent with its statutory duty to prevent gas waste, and has been justified based on faulty economic data. We therefore urge BLM to retain the 2016 Rule in its current form.

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[44] *Id*. at 222 ("If all countries…set their greenhouse gas emissions levels based on only their domestic costs and benefits, ignoring the large global externalities, the collective result would be substantially sub-optimal climate protections").
[45] *Id*. at 223.
[46] *Id*. at 285 – 286.
[47] U.K. Department for Environment, Food and Rural Affairs, The Social Cost of Carbon (SCC) Review – Methodological Approaches for Using SCC Estimates in Policy Assessment 58 (2005) (specifying an average SC-CH_4 of £317 in 2010 and £920 in 2040).
[48] Interagency Working Group on the Social Cost of Carbon, U.S. Government, Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 10-11 (2010), https://perma.cc/L8YG-R42D; Interagency Working Group on the Social Cost of Carbon, U.S. Government, Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 17 (2016), https://perma.cc/H5G5-9SP6.
[49] *See e.g.*, BLM, *supra* note 34; EPA, Regulatory Impact Analysis of the Final Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources 4-16 & 4-18 (2016), https://perma.cc/33MF-6CSQ; Regulatory Impact Analysis for the Final Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units (2015), https://perma.cc/W2CB-SXHH; Regulatory Impact Analysis for the Clean Power Plan Final Rule (2015), https://perma.cc/4FEC-4WXV.

The studies referred to in this letter are attached for your reference. Please do not hesitate to contact me if you have any questions about the letter or attachments.

Sincerely,

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