



COLUMBIA LAW SCHOOL

SABIN CENTER FOR CLIMATE CHANGE LAW

July 26, 2017

Office of the Executive Secretariat
ATTN: Regulatory Reform
U.S. Department of the Interior
1859 C Street NW, Mail Stop 7328
Washington, DC 20240

Re: DOI's Regulatory Reform Pursuant to Executive Order 13777

To Whom It May Concern:

The Sabin Center for Climate Change Law submits these comments in response to the U.S. Department of the Interior ("DOI")'s request for input on regulations that may be appropriate for repeal, replacement, or modification pursuant to Executive Order 13777.

We appreciate that some regulations may be redundant or impose unnecessary costs. As recognized in Executive Order 13563, regulations should only be adopted where their benefits justify their costs, and should be tailored to impose the least burden on society. Executive Order 13563 directed federal agencies to coordinate, simplify, and harmonize rules both within and across agencies with a view towards reducing costs and easing regulatory burdens. Previous administrations have also sought to "clean up" the universe of regulations in ways consistent with the statutory limits on agency discretion, and the legal obligation to secure desired benefits for the public, enacted by Congress.

The purpose of our submission is two-fold. First, we wish to emphasize the importance of existing DOI regulations aimed at ensuring the safe and efficient development of energy resources on federal land, which have been identified for review by Secretary Zinke. Second, we also wish to highlight the benefits of other DOI regulations aimed at mitigating and adapting to climate change. Our ultimate goal is to explain why these regulations should not be repealed or weakened by DOI in implementing Executive Order 13777.

I. Existing Regulations Addressing Energy Development on Federal Land Have Important Benefits

Existing regulations addressing energy development on federal land serve a vital function, protecting local communities and avoiding environmental harm. These benefits significantly outweigh the regulations' potential costs. Despite this, however, Secretarial Order 3349 indicated

that DOI would review four such regulations, namely:

- the Bureau of Land Management (“BLM”)’s final rule entitled “Waste Prevention, Production Subject to Royalties, and Resource Conservation” (“BLM Waste Rule”) dated January 17, 2017;
- BLM’s final rule entitled “Oil and Gas: Hydraulic Fracturing on Federal and Indian Lands” (“BLM Fracking Rule”) dated March 26, 2015;
- the National Park Service (“NPS”)’s final rule entitled “General Provisions and Non-Federal Oil and Gas Rights” (“NPS Rule”) dated November 4, 2016; and
- the Fish and Wildlife Service (“FWS”)’s final rule entitled “Management of Non-Federal Oil and Gas Rights” (“FWS Rule”) dated November 14, 2016.

As explained below, these regulations are needed to ensure energy development is conducted safely, with minimal adverse impacts. Repealing or weakening the regulations would, therefore, place federal lands and the Americans who use them at significant risk.

A. BLM’s Waste Rule is Necessary and Provides Important Public Benefits that Significantly Outweigh Costs

The BLM Waste Rule aims to reduce natural gas losses due to flaring, venting, and leaks during oil and gas production on public and tribal lands.¹ BLM estimates that, between 2009 and 2015, producers operating on public and tribal lands lost 462 billion cubic feet of gas through flaring, venting, and leaks.² At current spot market prices of \$3.00 per million British thermal units, this lost gas has a value of more than \$1.4 billion.³ It could, if captured, be used to meet the annual gas needs of approximately 6.2 million households.⁴

Recognizing the value of the country’s gas resources, Congress has directed BLM to take steps to minimize losses. The Mineral Leasing Act, enacted by Congress in 1920, requires BLM to ensure that persons leasing public land containing oil and gas resources “use all reasonable precautions to prevent waste of oil and gas developed in the land.”⁵ Lessees must conduct oil and gas development with “reasonable diligence, skill, and care” and comply with rules “for the

¹ Waste Prevention, Production Subject to Royalties, and Resource Conservation, 81 Fed. Reg. 83008, 83009 (Nov. 18, 2016) [hereinafter BLM Waste Rule].

² Bureau of Land Management, Fact Sheet on Methane and Waste Prevention Rule 1 (2016), <https://perma.cc/N5LM-WD2X>.

³ The natural gas spot price (Henry Hub) is currently hovering around \$3.00 per million British thermal units or \$3.11 per thousand cubic feet of gas. *See* U.S. Energy Information Administration, Natural Gas Weekly Update for Week Ending July 19, 2017, <https://perma.cc/6SLB-42NP>.

⁴ Bureau of Land Management, *supra* note 2, at 1.

⁵ 30 U.S.C. § 225.

prevention of undue waste.”⁶

In order to fulfill its statutory obligations, BLM must retain the Waste Rule. Prior to adoption of the rule, BLM regulated the wasteful venting and flaring of gas 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. In the intervening years, gas venting and flaring practices have changed significantly, as have technologies for controlling gas leaks. A 2010 Government Accountability Office (“GAO”) 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.⁷ Recognizing this, BLM has itself noted that “NTL-4A neither reflects today’s best practices and advanced technologies, nor is particularly effective in minimizing [gas] waste.”⁸ Stricter controls on waste are, therefore, needed if BLM is to fulfill its statutory obligations under the Mineral Leasing Act.

BLM has determined that the benefits of stricter waste controls far outweigh the costs. These benefits include:

- mitigation of climate change and other environmental benefits (due to reduced gas venting and leaks, which lead to emissions of methane, volatile organic compounds (“VOCs”), and hazardous air pollutants (“HAPs”));
- improvements in public health (as uncontrolled gas flaring, venting, and leaks contribute to smog and other air pollution problems that cause respiratory and other illnesses);
- increased quality of life in communities where oil and gas development occurs (as a result of reduced visual and noise impacts from gas flaring);
- additional revenues from gas sales and increased federal / state royalties (as gas that would otherwise be lost through flaring, venting, and leaks is captured); and
- employment benefits (resulting from the creation of new jobs in the gas capture industry).

The Regulatory Impact Analysis⁹ for BLM’s Waste Rule estimated that it would result in monetized net benefits of up to \$133 million in 2020 and \$209 million in 2025.¹⁰ This estimate is

⁶ *Id.* § 187.

⁷ 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), <https://perma.cc/A823-3KNB>.

⁸ BLM Waste Rule, *supra* note 1, at 83017.

⁹ The Regulatory Impact Analysis reported net benefits in 2012\$. These values have been converted to 2016\$ using a factor of 1.059, consistent with the Implicit Price Deflator maintained by the Federal Reserve Bank of St. Louis. See Federal Reserve Bank of St. Louis, *Gross Domestic Product: Implicit Price Deflator*, <https://perma.cc/J3GB-T2AH> (last updated Jun. 29, 2017).

¹⁰ Bureau of Land Management, Regulatory Impact Analysis for Revisions to 43 CFR 3100 (Onshore Oil and Gas

based on just two of the above categories of benefit, namely: (1) increased revenues from the capture and sale of gas (estimated at \$21-\$166 million annually); and (2) environmental benefits from reduced methane emissions (estimated at \$200-\$262 million annually).¹¹ BLM did not monetize benefits to public health or the environmental benefits of VOC and HAP reductions.¹² Even without their inclusion, benefits far outweigh costs, by a factor of roughly 2:1.

BLM determined the annualized cost of complying with the rule would “represent only a small fraction of the annual net incomes of companies likely to be impacted.”¹³ For example, based on data from 26 small businesses that currently hold federal oil and gas leases, BLM estimated that compliance would result in an average reduction in profit margins of just 0.15 percentage points.¹⁴ The rule is, therefore, unlikely to alter the businesses’ investment or employment decisions or lead to job losses.

Retention of the BLM Waste Rule is likely to have economic benefits, including leading to job creation in the gas capture industry. In this regard, BLM noted that the rule “would require the one-time installation or replacement of equipment and the ongoing implementation of a leak detection and repair program, both of which would require labor.”¹⁵ Prior studies suggest that the adoption of regulations targeting gas leaks has resulted in new jobs in the leak detection and repair services sector.¹⁶ That sector currently consists of at least 60 companies operating in forty-five states.¹⁷ Companies in Colorado, Ohio, and Wyoming – three states that have begun regulating gas leaks in the last three years – have experienced growth of five to thirty-percent during that period.¹⁸

B. The BLM Fracking Rule, NPS Rule, and FWS Rule Establish Important Environmental Safeguards and Will Not Have Significant Economic Impacts

Recent increases in domestic oil and gas production, made possible by technological advances, including the combination of horizontal drilling with hydraulic fracturing (“fracking”), have created a need for enhanced regulation to protect federal lands. Fracking and other activities associated with oil and gas production have the potential to adversely impact federal lands and

Leasing) and 43 CFR 3600 (Onshore Oil and Gas Operations) and Additions of 43 CFR 3178 (Royalty-Free Use of Lease Production) and 43 CFR 3179 (Waste Prevention and Resource Conservation) 112 (2016), <https://perma.cc/74CA-KSF8> (estimating net benefits of \$95 million to \$126 million in 2020 and \$128 million to \$197 million in 2025 (in 2012\$, assuming a 7% discount rate)).

¹¹ *Id.* at 107 (values reported in 2012\$ were converted to 2016\$ using a factor of 1.059).

¹² *Id.*

¹³ *Id.* at 119.

¹⁴ *Id.* at 129.

¹⁵ *Id.* at 119.

¹⁶ See e.g. Shawn Stokes et al., *The Emerging U.S. Methane Mitigation Industry* (2014), <https://perma.cc/4Q6T-S732>; Marie Veyrier et al., *Find and Fix: Job Creation in the Emerging Methane Leak Detection and Repair Industry* (2017), <https://perma.cc/7ZKD-Z22B>.

¹⁷ *Id.* at 3.

¹⁸ *Id.* at 13.

the resources therein. A comprehensive five year study by the Environmental Protection Agency, undertaken between 2011 and 2016, found that fracking “can impact drinking water resources” and identified several instances of water contamination.¹⁹ Other possible impacts include:

- reduced air quality from dust, gas leaks, and flaring;
- soil contamination from spills and leaks;
- land clearing, visual impacts, and noise from construction;
- disturbance of archaeological and cultural resources and viewshed intrusion by construction equipment, roads, and traffic; and
- visitor safety hazards from equipment and other facilities.²⁰

Given these risks, federal regulations are needed to ensure oil and gas activities are conducted safely, in a manner that avoids or minimizes impacts to federal lands. The BLM Fracking Rule, NPS Rule, and FWS Rule help to fulfill this purpose. Retention of the rules is essential to meet each agency’s statutory duty to protect federal lands under its control. While the three agencies’ statutory duties vary, each is required to manage federal lands to ensure the conservation of natural resources, for the benefit of current and future generations. In summary:

- The Federal Land Policy and Management Act directs BLM to manage “public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people.”²¹ BLM must regulate the use of public lands so as to protect “the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values.”²²
- The National Park Service Organic Act requires NPS to “regulate the use of the National Park System . . . to conserve the scenery, natural and historic objects, and wildlife in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wildlife in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”²³

¹⁹ Environmental Protection Agency, Hydraulic Fracturing for Oil and Gas: Impacts from the Hydraulic Fracturing Water Cycle on Drinking Water Resources in the United States 1 (2016), <https://perma.cc/4YY3-LY42>.

²⁰ Management of Non-Federal Oil and Gas Rights, 81 Fed. Reg. 77972, 77974 (Nov. 4, 2016) [hereinafter NPS Rule]; Management of Non-Federal Oil and Gas Rights, 81 Fed. Reg. 79948, 79949 (Nov. 14, 2016) [hereinafter FWS Rule].

²¹ 43 U.S.C. § 1732(a) (requiring BLM to “manage the public lands under principles of multiple use and sustained yield”). *See also Id.* § 1702(c) (defining “multiple use”).

²² *Id.* § 1740 (requiring BLM to promulgate rules and regulations to carry out the purposes of the Act). *See also Id.* § 1701 (defining the purposes of the Act).

²³ 54 U.S.C. § 100101(a).

- The National Wildlife Refuge System Improvement Act charges FWS with overseeing the use of wildlife refuges to, among other things, “provide for the conservation of fish, wildlife, plants, and their habitats within the [National Wildlife Refuge] System . . . [and] ensure that the biological integrity, diversity, and environmental health of the System are maintained for the benefit of present and future generations.”²⁴

Federal land was not adequately protected prior to adoption of the BLM Fracking Rule, NPS Rule, and FWS Rule. Under the pre-existing regulatory regime, oil and gas activities were subject to decades-old rules,²⁵ which did not reflect the realities of modern operations,²⁶ and were often inconsistent with industry best practice.²⁷ Various independent bodies had, therefore, called for the rules to be updated. For example, in a 2003 report to Congress, GAO recommended that FWS take steps to improve the management of oil and gas operations in national wildlife refuges.²⁸ The report indicated that FWS should “apply a consistent and reasonable set of regulatory and management controls over all oil and gas activities occurring on national wildlife refuges to protect the public’s surface interests.”²⁹

The adoption of updated regulations, as set out in the BLM Fracking Rule, NPS Rule, and FWS Rule, was found to deliver significant environmental and public health benefits. These include: improved air quality (e.g., resulting from the adoption of new technologies that prevent air emissions), reduced risk of soil and water contamination (e.g., due to improved handling of fracking fluid and waste), fewer impacts on animals and plants, protection of cultural resources, and enhanced visitor safety.

These benefits are achieved at little cost. As an example, BLM estimated that its Fracking Rule would impact just 2,800 operations annually, imposing costs of approximately \$11,000 per operation, or less than 0.25% of total well drilling costs.³⁰ Given this, BLM determined that the

²⁴ 16 U.S.C. § 668dd(a)(4).

²⁵ Hydraulic fracturing on federal land was previously regulated under rules developed in 1982 and last updated in 1988. *See* Oil and Gas: Hydraulic Fracturing on Federal and Indian Lands, 80 Fed. Reg. 16128, 16131 (Mar. 26, 2015) [hereinafter BLM Fracking Rule]. Oil and gas operations in national parks were previously regulated under rules developed in 1978. *See* NPS Rule, *supra* note 20, at 77972. The previous rules governing oil and gas operations in wildlife refuges were more than fifty years old. *See* FWS Rule, *supra* note 20, at 77948.

²⁶ *See e.g.* Bureau of Land Management, Regulatory Impact Analysis for Hydraulic Fracturing Rule 9 (2015), <https://perma.cc/VT9Z-JTZZ> (noting that, at the time the prior rules were developed, “hydraulic fracturing was a completion or re-completion technology that used relatively small quantities of fluid to improve the flow of hydrocarbons around the bottom of conventional wells. Due to advances in horizontal drilling, hydraulic fracturing operations are now conducted on wells with longer lateral legs . . . and require larger volumes of water”).

²⁷ *See e.g.* FWS Rule, *supra* note 20, at 79948 (noting that the new rules are required to make the regulation of operations in national wildlife refuges “more consistent with existing laws, policies, and industry practices”).

²⁸ U.S. Government Accountability Office, National Wildlife Refuges: Opportunities to Improve the Management and Oversight of Oil and Gas Activities on Federal Lands 43 (2003), <https://perma.cc/9SM7-V6EG>.

²⁹ *Id.*

³⁰ Bureau of Land Management, *supra* note 26, at 2-3 (indicating that BLM “estimate[s] that the rule will impact about 2,800 hydraulic fracturing operations per year . . . We estimate that the compliance costs could reach about \$11,400 per operation or \$32 million per year. The estimated per-operation compliance costs represent about 0.13 to 0.21 percent of the cost of drilling a well”).

rule would not alter operators' investment or employment decisions, nor have other major economic impacts.³¹ The same conclusion was reached with respect to the NPS Rule and FWS Rule.³² The annual economic effect of all three rules was found to be well below the \$100 million threshold established in Executive Order 12866.³³

The economic impacts of the BLM Fracking Rule, NPS Rule, and FWS Rule were likely overstated in the agency analyses. BLM concluded, for example, that the costs of complying with its Fracking Rule are “likely” to be significantly lower than forecast, as the “majority” of the rule requirements are taken from voluntary industry guidelines (e.g., published by the American Petroleum Institute) and are already met by “many operators.”³⁴ Similarly, the NPS Rule and FWS Rule are also largely reflective of current industry practice. This should not, however, be taken to suggest that the BLM Fracking Rule is unnecessary. There are sound policy reasons for codifying industry best practice in regulation, e.g. to ensure that it is followed by all operators, and prevent backsliding if changing market conditions encourage cost cutting.

II. DOI Regulations are Needed to Address the Problem of Global Climate Change

Recognizing the threat posed by global climate change, DOI agencies have recently sought to mitigate greenhouse gas emissions. For example, NPS has adopted a Climate Change Response Strategy³⁵ and Climate Change Action Plan,³⁶ identifying concrete steps to reduce emissions from national parks. NPS has also begun planning for future climate change and implemented measures to increase the resiliency of national parks.³⁷ Similar measures have been taken by FWS with respect to national wildlife refuges³⁸ and BLM with respect to public lands.³⁹

While these actions are an important first step, more needs to be done to address climate change. Without further action, the U.S. will not achieve the greenhouse gas emissions reductions needed to limit the increase in global average temperatures to 2°C, i.e. the commonly agreed goal for avoiding dangerous climate change. Larger temperature increases will have devastating consequences, not just for the environment and public health, but also for the American economy. The Environmental Protection Agency estimates that, under a “business-as-usual” emissions scenario, climate change will cause \$138 to \$322 billion in annual damages in

³¹ *Id.* at 96.

³² NPS Rule, *supra* note 20, at 77990; FWS Rule, *supra* note 20, at 79968.

³³ *Id.* See also BLM Fracking Rule, *supra* note 25, at 16195.

³⁴ *Id.* at 2-3, 77 & 102.

³⁵ National Park Service, Climate Change Response Strategy (2010), <https://perma.cc/NZ7S-FEJD>.

³⁶ National Park Service, Climate Change Action Plan 2012-2014 (2012), <https://perma.cc/6XQF-QB94>.

³⁷ See e.g., National Park Service, Green Parks Plan (2016), <https://perma.cc/69W2-6V48>.

³⁸ See e.g., Fish and Wildlife Service, Rising to the Urgent Challenge: Strategic Plan for Responding to Accelerated Climate Change (2010), <https://perma.cc/XBQ9-43SJ>.

³⁹ See e.g. Bureau of Land Management, *The BLM's Landscape Approach for Managing Public Lands*, LANDSCAPE APPROACH, <https://perma.cc/XBQ9-43SJ>.

America by 2100.⁴⁰

Given the above, rather than eliminating existing climate change policies, DOI agencies should be looking to build on them. To that end, we urge BLM to move forward with its April 2014 proposal to establish a program to address waste mine methane, which is released during underground mining for coal and other minerals on federal lands.⁴¹ In addition to improving the health and safety of miners, such a program would also reduce methane emissions, thereby helping to mitigate climate change.

III. DOI Must Consider the Environmental Impacts of Regulatory Changes

If, despite their benefits, DOI wishes to revise or repeal its energy- and/or climate-related regulations it must first conduct an environmental review under the National Environmental Policy Act (“NEPA”). Enacted in 1969, NEPA aims to ensure federal agencies take a “hard look” at environmental issues,⁴² considering them alongside economic and other matters.⁴³ To that end, NEPA requires agencies to prepare an environmental impact statement (“EIS”) for all “major federal actions significantly affecting the quality of the human environment.”⁴⁴ Regulations issued under NEPA define “federal action” broadly to include the issuance of “new or revised agency rules, regulations, plans, policies, or procedures.”⁴⁵ This definition has been applied in numerous court decisions.⁴⁶ Importantly, deregulatory actions, such as the removal of existing regulations, are also “federal actions” under NEPA.⁴⁷ In determining whether deregulation significantly affects the environment, such that an EIS must be prepared, the agency must consider the status quo with the regulation.⁴⁸

Revising or repealing existing energy- and/or climate-related regulations will have significant environmental impacts (i.e., compared to if the regulations were retained in their current form). It would, among other things, increase the potential for water and soil contamination (e.g., due to leaks and spills during oil and gas operations) and place animals and plants at risk (e.g., from land clearing and increased vehicle traffic). It would also likely lead to air pollution problems, including the emission of greenhouse gases which contribute to climate change (e.g., due to increased gas venting and flaring).

Given the above, in order to comply with NEPA, DOI must prepare an EIS before revising or

⁴⁰ Environmental Protection Agency, *Climate Change in the United States: Benefits of Global Action* (2015), <https://perma.cc/8KSH-98K3>.

⁴¹ *See* Waste Mine Methane Capture, Use, Sale, or Destruction, 79 Fed. Reg. 23923 (Apr. 29, 2014).

⁴² *Metcalf v. Daley*, 214 F.3d 1135 (9th Cir., 2000).

⁴³ *Calvert Cliffs’ Coordinating Comm. v. U.S. Atomic Energy Comm’n*, 449 F.2d 1109 (D.C. Cir., 1971)

⁴⁴ 42 U.S.C. § 4332(2)(C).

⁴⁵ 40 C.F.R. § 1508.18.

⁴⁶ *See e.g.*, *Dep’t Transp. v. Pub. Citizen*, 541 U.S. 752 (U.S., 2004).

⁴⁷ *See e.g.*, *Geertson Seed Farms v. Johanns*, 2007 U.S. Dist. LEXIS 14533 (N.D. Cal., 2007), *aff’d* *In re Geertson Seed Farms*, 541 F.3d 938 (9th Cir., 2008).

⁴⁸ *Id.*

repealing any of its existing energy- or climate-related regulations. The EIS must include an assessment of all environmental impacts – both direct and indirect – associated with the proposed regulatory action.⁴⁹ It must also assess the cumulative impacts of the action, when added to other past, present, or reasonably foreseeable future actions, whether undertaken by DOI or another federal agency.⁵⁰

IV. Conclusion

In light of their significant environmental and other benefits, we urge DOI to retain its existing regulations addressing energy development on federal lands, as well as its policies with respect to climate change. As we have explained, the former are necessary to ensure safe and efficient energy development, and provide important public benefits at minimal cost. The latter also have significant benefits and help to avoid future climate change costs. DOI should account for the full benefits and costs of any regulatory change, including considering its likely environmental impacts, when deciding how to proceed with the implementation of Executive Order 13777 and whether to promulgate, repeal, or revise rules with respect to energy development and climate change.

We have attached the studies noted herein for your reference. Please do not hesitate to contact us if you have any questions about the points raised in this letter.

Sincerely,



Michael Burger
Executive Director
Sabin Center for Climate Change Law
Columbia Law School
212-854-2372
mburger@law.columbia.edu



Romany Webb
Climate Law Fellow
Sabin Center for Climate Change Law
Columbia Law School
212-854-0088
rwebb@law.columbia.edu

⁴⁹ *Id.* § 1508.25.

⁵⁰ *Id.* See also *Id.* § 1508.7.