



COLUMBIA LAW SCHOOL

SABIN CENTER FOR CLIMATE CHANGE LAW

August 8, 2017

Environmental Protection Agency
EPA Docket Center (EPA/DC)
Mail Code 28221T
1200 Pennsylvania Ave NW
Washington, DC 20460

By email: a-and-r-Docket@epa.gov

Re: EPA’s Proposed Two Year Stay of Oil and Gas New Source Performance Standards (Docket ID EPA-HQ-OAR-2010-050)

To Whom It May Concern:

The Sabin Center for Climate Change Law submits these comments in response to the U.S. Environmental Protection Agency (“EPA”)’s request for input on its proposed two year stay of certain requirements in the final rule entitled “Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources” published on June 3, 2016 (“2016 Rule”). For the reasons explained below, we oppose the proposed stay, and urge EPA to immediately implement the 2016 Rule in full.

I. Staying the 2016 Rule Will Adversely Affect Public Health and the Environment

Immediate implementation of the 2016 Rule is vital to mitigate air pollution problems arising from oil and gas production. A key aim of the 2016 Rule was to reduce emissions of methane – an air pollutant that has been found to endanger the health and welfare of current and future generations¹ – due to gas leaks and venting during the production process.² To that end, the 2016 Rule requires producers to implement a leak control program at well sites and compressor stations³ and take steps to prevent venting from pneumatic pumps, among other things.⁴ Compliance with these requirements would, as a result of the stay, be delayed for two years until

¹ Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496 (Dec. 15, 2009).

² EPA, EPA’s Actions to Reduce Methane Emissions from the Oil and Natural Gas Industry: Final Rules and Draft Information Collection Request 2 (2016), <https://perma.cc/FA55-R3BR>

³ See Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources, 81 Fed. Reg. 35,824 (June 3, 2016).

⁴ *Id.* at 35,844-35,845.

September 2019.⁵ In the interim, significant methane will likely be emitted, endangering public health and the environment.

The oil and gas sector is currently the U.S.'s largest industrial emitter of methane,⁶ a potent greenhouse gas that contributes to climate change.⁷ As EPA has itself recognized, climate change “affects all American’s lives,” with “[t]he most vulnerable among us – including children, older adults, people with heart or lung disease and people living in poverty – . . . at most risk.”⁸ The 2016 Rule was intended to mitigate these risks, with EPA estimating that it would deliver mean climate benefits of \$360 million in 2020, rising to \$690 million by 2025.⁹ These benefits are unlikely to be fully realized if the 2016 Rule is stayed. Based on data from the Regulatory Impact Analysis for the 2016 Rule, we estimate that the proposed two year stay would result in the loss of at least \$75.6 million in climate benefits.¹⁰

Staying the 2016 Rule may also exacerbate other environmental and public health problems, caused by pollutants emitted alongside methane during oil and gas production, such as volatile organic compounds (“VOCs”) and hazardous air pollutants (“HAPs”).¹¹ VOC emissions, for example, contribute to the formation of ozone which can reduce the growth rate of certain plants and lead to changes in species composition.¹² It is, as EPA has noted, also “linked to a variety of serious public health effects, including reduced lung function, asthma attacks, asthma development, emergency room visits and hospital admissions, and early death from respiratory and cardiovascular causes.”¹³ Similar health effects are also associated with the emission of

⁵ Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources: Stay of Certain Requirements, 82 Fed. Reg. 27,646, 27,648 (June 16, 2017).

⁶ EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2015 3-66 & 3-78(2017), <https://perma.cc/3LQ7-85F2> (indicating that, in 2015, natural gas systems emitted 6,497 kilotons of methane and petroleum systems emitted 1,595 kilotons).

⁷ *Id.* at ES-3 (indicating that methane has a global warming potential 25 times that of carbon dioxide over a 100 year time horizon).

⁸ EPA, *supra* note 2, at 2.

⁹ The climate benefits were monetized using the social cost of methane. The figures shown are based on a social cost of methane of \$1,300 per metric ton in 2020 and \$1,500 per metric ton in 2025 (i.e., assuming a three percent discount rate). See 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>.

¹⁰ This calculation is based on a two year stay of the leak control and pneumatic pump requirements in the 2016 Rule. The calculation uses the same basic methodology as was used by EPA to calculate the climate benefits of the 2016 Rule. See *Id.* at 4-16. Using EPA’s estimate of the number of sources covered by the 2016 Rule, we determined that 38,000 fugitive emissions sources and 1,580 pneumatic pumps would be affected by the stay. See *Id.* at 3-10. This represents forty percent of the total number of facilities affected in 2020. Assuming constant per-facility methane emissions, we calculated forty percent of the 2020 avoided emissions, which equals 66,406 metric tons. See *Id.* at 4-18. We then multiplied this figure by the social cost of methane for 2015 (i.e., \$1,100 per metric ton, assuming a three percent discount rate) to produce a total of \$75,610,647.

¹¹ In this regard, EPA has acknowledged that “[m]ethane from the oil and gas industry comes packaged with other pollutants,” including volatile organic compounds and air toxins. See EPA, *supra* note 2, at 1.

¹² EPA, *supra* note 9, at 4-27.

¹³ EPA, *supra* note 2, at 1.

HAPs.¹⁴ To minimize the potential for such effects, the 2016 Rule should be immediately implemented in full.

II. Staying the 2016 Rule Will Result in Lost Economic Benefits

In addition to the above environmental and public health risks, staying the 2016 Rule would also have economic impacts, resulting in the waste of a valuable resource. The Regulatory Impact Analysis for the 2016 Rule indicated that it would reduce wastage by requiring the capture of gas that is currently lost through leaks and venting. According to the Regulatory Impact Analysis, an additional sixteen billion cubic feet of gas, valued at \$63 million, would be captured annually as a result of the 2016 Rule.¹⁵ This is largely due to the leak control requirements, which are estimated to result in the annual capture of 9.8 billion cubic feet of gas, valued at \$39 million.¹⁶ Staying that requirement for two years could, therefore, result in the loss of nearly \$80 million worth of gas.

Staying the leak control requirement could also affect employment in the oil and gas industry. Absent the stay, industry participants would likely need to employ additional staff to develop their leak control program, and perform ongoing activities. The Regulatory Impact Analysis for the 2016 Rule estimated that 660 full time staff would be needed to perform ongoing activities associated with leak control by 2020.¹⁷ While EPA indicated that this does not necessarily mean 660 new jobs will be created,¹⁸ some increase in employment is likely, with prior research suggesting that the adoption of state-level regulations targeting gas leaks has led to job creation in the leak detection and repair services sector.¹⁹ Companies involved in that sector 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.²⁰

III. Conclusion

Given its likely adverse effects, we urge EPA not to adopt the proposed two year stay, and immediately implement the 2016 Rule in full. As explained above, staying the 2016 Rule will result in the loss of significant environmental benefits, including \$75.6 million in climate benefits. It will also have major economic impacts, leading to the wastage of large amounts of gas, due to continued venting and leakage. Absent the stay, the 2016 Rule would require the

¹⁴ EPA, *supra* note 9, at 4-29.

¹⁵ *Id.* at 3-15.

¹⁶ *Id.*

¹⁷ *Id.* at 6-34.

¹⁸ *Id.* at 6-31.

¹⁹ See e.g. Shawn Stokes et al., *The Emerging U.S. Methane Mitigation Industry* (2014), <http://perma.cc/4Q6T-S732>; Marie Veyrier et al., *Find and Fix: Job Creation in the Emerging Methane Leak Detection and Repair Industry* (2017), <http://perma.cc/7ZKD-Z22B>.

²⁰ *Id.* at 13.

capture of vented and leaked gas, leading to increased sales revenue and creating jobs in the oil and gas industry.

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,

A handwritten signature in black ink, appearing to read "R. Webb". The signature is fluid and cursive, with the first letter "R" being particularly large and stylized.

Romany Webb
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