

Congress of the United States
Washington, D.C. 20510

September 22, 2021

The Honorable Michael Regan
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Administrator Regan:

We write to request that the Environmental Protection Agency (EPA) swiftly adopt protective methane standards for the oil and gas sector. Though Congress recently restored protections that the Trump Administration rolled back, we must now strengthen and expand those protections to older wells to achieve the greatest possible emission reductions. EPA has a historic opportunity to cut climate-destabilizing and health-harming pollution from oil and gas. These methane standards, along with complimentary policies across all economic sectors, including market-based pollution reduction strategies, are essential for achieving the President's climate targets and science-based emissions reduction goals.

Methane is the main component of natural gas and a climate pollutant many times more potent than carbon dioxide, especially in the near-term. Atmospheric methane concentrations are now higher than at any time in the last 800,000 years and have been increasing at an alarming rate since 2007, driven in significant part by emissions from fossil fuel development.¹ Human-caused methane emissions are responsible for at least 25% of the warming we are experiencing today,² with recent studies finding that methane alone contributes around half a degree to global warming.³ Deploying all technically feasible measures now could cut methane pollution in half by 2030, slowing climate change and avoiding up to a quarter degree of warming by midcentury.⁴ To have a chance of

1 Intergovernmental Panel on Climate Change, *Sixth Assessment Report, Climate Change 2021: The Physical Science Basis, Technical Summary*, TS-35, https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_TS.pdf

2 Intergovernmental Panel on Climate Change, *Fifth Assessment Report, Climate Change 2013: The Physical Science Basis, Chapter 8SM – Anthropogenic and Natural Radiative Forcing – Supplementary Material*, <https://www.ipcc.ch/report/ar5/wg1/chapter-8sm-anthropogenic-and-natural-radiative-forcing-supplementary-material/>

3 Intergovernmental Panel on Climate Change, *Sixth Assessment Report, Climate Change 2021: The Physical Science Basis, Summary for Policymakers*, Figure SPM.2, https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf

4 Ocko, et al., *Acting rapidly to deploy readily available methane mitigation measures by sector can immediately slow global warming*, 16 *Env. Research Letters* 054042 (2021), <https://doi.org/10.1088/1748-9326/abf9c8>

limiting warming to 1.5 degrees, we must seize every opportunity to reduce these emissions in the near term.⁵

Cutting methane pollution is also necessary to protect communities on the frontlines of oil and gas development. Methane leaks from oil and gas equipment alongside dangerous volatile organic compounds and hazardous air pollution contribute to smog and lead to a wide range of harmful health impacts—triggering asthma attacks, heart attacks, and early death.⁶ These harms fall disproportionately on vulnerable populations including children, the elderly, communities of color, and low-income communities.

The oil and natural gas sector is the largest industrial emitter of methane⁷ and represents nearly half of all domestic methane emissions.⁸ The sector also has the greatest reduction potential.⁹ Solutions for stopping methane leaks during oil and gas production are cost-effective and can be deployed immediately, often at financial gain to the operator who can market the captured gas.

Colorado has led the nation in developing common-sense, highly cost-effective measures to limit methane from the oil and gas sector since 2014. Colorado’s standards apply to both new and existing sources and require frequent leak monitoring—up to monthly at certain sites—and the use of zero-bleed pneumatic controllers, including retrofits for older wells. The Colorado Air Quality Control Commission has adopted these standards with broad stakeholder support.

As EPA moves forward on these standards, we urge you to include provisions to:

- **Require frequent traditional and advanced monitoring.** Significant oil and gas emissions come from intermittent leaks and equipment failures, which can lead to very large “super-emitter” events.¹⁰ These emissions can be detected and stopped through a leak detection and repair program that applies across the sector to all sources.¹¹ Frequent traditional monitoring, like that required in Colorado,¹² is essential for detecting small but widespread leaks and identifying the best way to allocate capital regarding retrofits to

5 Intergovernmental Panel on Climate Change, *Sixth Assessment Report, Climate Change 2021: The Physical Science Basis, Summary for Policymakers*, Figure SPM.10, https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf (showing entire carbon budget for 1.5 degrees depleted in early 2030’s).

6 Fann, et al., *Assessing human health PM2.5 and ozone impacts from US oil and natural gas sector emissions in 2025*, 52 *Envtl. Sci. & Tech.* 8095 (2018), <https://pubs.acs.org/doi/pdf/10.1021/acs.est.8b02050>; Clean Air Task Force, *Gasping for Breath: An analysis of the health effects from ozone pollution from the oil and gas industry* (2016).

7 EPA, *Overview of Greenhouse Gases: Methane Emissions* <https://www.epa.gov/ghgemissions/overview-greenhouse-gases#methane>

8 Ilissa Ocko, *A U.S. economy-wide methane target: essential, achievable, affordable*, Energy Exchange (Mar. 22, 2021), <https://blogs.edf.org/energyexchange/2021/03/22/a-u-s-economy-wide-methane-target-essential-achievable-affordable/>

9 UNEP, *Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions, Summary for Decision Makers* 8 (2021), https://wedocs.unep.org/bitstream/handle/20.500.11822/35917/GMA_ES.pdf

10 Rutherford et al., *Closing the gap: Explaining persistent underestimation by US oil and natural gas production-segment methane inventories*, Earth ArXiv (2021), <https://eartharxiv.org/repository/view/1793/>

11 Accounting for emissions from leaks and malfunctions could increase EPA’s oil and gas methane emission inventory by as much as 60%. Cusworth et al., *Intermittency of Large Methane Emitters in the Permian Basin*, *Env. Sci. Tech. Letters* (2021), <https://pubs.acs.org/doi/pdf/10.1021/acs.estlett.1c00173>

12 5 Colo. Code Regs. § 1001-9, Pt. D, VI.C. §§ I.L, II.E.

reduce emissions. Advanced monitoring can be implemented across large areas at low cost to capture major leaks and allow for timely repairs.¹³

- **Eliminate the low-production well exemption and avoid other carve-outs or exemptions.** Marginal or low-production wells have been shown to leak at similar rates and represent a significant portion of total emissions. The last administration's exemption for these wells was not based on scientific data. These wells represent a majority of the nation's fleet, just a small percentage of oil and gas production, and about half of the methane emissions from the industry. We urge EPA to eliminate the low-production well exemption and ensure these wells are subject to rigorous leak-detection and repair requirements. Further, given the urgency of reducing methane emissions and the rapidly improving technology for cost-effective leak monitoring and detection, any kind of carve-outs or exemptions would be inappropriate and unnecessary.
- **Require zero-emitting pneumatic controllers and pumps** at all new sources and retrofits at existing sources. Zero-bleed pneumatics are widely available and cost effective. Colorado has adopted standards for zero-bleed pneumatics that many operators supported and can serve as a model for the federal rules.¹⁴
- **Eliminate the practice of routine flaring**, which is another large source of methane, carbon dioxide, and hazardous pollution, that also wastes domestic energy resources. Capturing natural gas that would otherwise be vented or flared generates revenue for operators and reduces pollution. EPA should eliminate the practice of routine flaring, following the lead of states like Colorado and New Mexico.
- **Prevent improperly abandoned wells and set closure standards.** Abandoned wells pose serious health and safety hazards, leak methane,¹⁵ and burden taxpayers with clean-up and plugging costs. EPA should take steps to prevent improperly abandoned or orphaned wells and set closure standards to ensure industry remains accountable for its operations.

We were pleased to learn of President Biden's commitment to advance protective methane standards. As your agency moves to strengthen requirements for new oil and gas facilities and begins the process of addressing existing sources, we urge you to look to Colorado. We're proud that our progress was the result of collaboration between environmental, health, and community groups, as well as industry. Our rules can serve as a blueprint for bold action that is cost effective while protecting the climate and the health of communities affected by oil and gas operations.

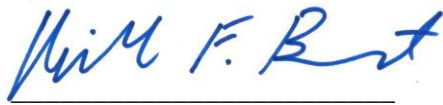
13 Kemp & Ravikumar, *New Technologies Can Cost Effectively Reduce Oil and Gas Methane Emissions, but Policies Will Require Careful Design to Establish Mitigation Equivalence*, __ *Envtl. Sci. Tech.* __ (2021),

<https://pubs.acs.org/doi/abs/10.1021/acs.est.1c03071>

14 5 Colo. Code Regs. § 1001-9, Pt. D, § I.V. (2021), https://drive.google.com/file/d/1sCtcjhhaexdE0_K-fvrFudgO0vMuYis_/view

15 Williams et al., *Methane Emissions from Abandoned Oil and Gas Wells in Canada and the United States*, 55 *Env. Sci. Tech.* 563 (2020), <https://pubs.acs.org/doi/10.1021/acs.est.0c04265>

Sincerely,



Michael F. Bennet
United States Senator



John Hickenlooper
United States Senator



Diana DeGette
Member of Congress



Jason Crow
Member of Congress



Joe Neguse
Member of Congress



Ed Perlmutter
Member of Congress