

Comments of Environmental Defense Fund at EPA's Public Hearing on Proposal to Reduce Methane Emissions from the Oil and Natural Gas Industry

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Good morning. My name is Grace Smith and I'm an Attorney on the U.S. Clean Air Team at Environmental Defense Fund. We want to thank the EPA for holding a public hearing on its proposed oil and gas rule and for considering our views on reducing methane emissions from the oil and gas sector. The EPA's proposal is historic, applying for the first time to the nation's nearly one million existing oil and gas facilities,¹ and we commend EPA for moving forward swiftly with proposed standards that are urgently needed to address this harmful pollution. EDF strongly supports several aspects of the proposal. However, final standards must be further strengthened to require regular monitoring across smaller, leak-prone wells and address the wasteful practice of flaring. EDF supports EPA's plan to further address these issues in a supplemental proposal. Today, I'd like to kick-off EDF testimony by highlighting the urgent need for EPA standards and the potentially transformative nature of EPA's proposal, and by commenting on EPA's proposed standards for pneumatic devices. My colleagues, Edwin LaMair and Grace Weatherall, will be providing comments on other aspects of EPA's standards.

The anthropogenic climate crisis is no longer an abstract future event; it is upon us, already wreaking havoc in the form of wildfires, flooding along the coasts and in the Midwest, and unprecedented heat waves. The Intergovernmental Panel on Climate Change (IPCC) projects that we have a chance to slow these impacts and limit global temperature rise to 1.5 degrees, but only if governments initiate immediate, rapid, and large-scale reductions in greenhouse gas emissions.² It singles out tackling methane as a critical solution.³

Methane is a climate pollutant with over eighty times the global warming power of carbon dioxide in the near term⁴ — at least 25% of the warming we experience today is caused by human-made methane emissions.⁵ Fortunately, due to methane's short life, reducing emissions from fossil fuel operations represents one of the best near-term solutions for limiting climate change.⁶

¹ Environmental Defense Fund, Here's what you need to know about EPA's landmark methane proposal (Nov. 9, 2021), <http://blogs.edf.org/energyexchange/2021/11/09/heres-what-you-need-to-know-about-epas-landmark-methane-proposal/>

² Intergovernmental Panel on Climate Change, Climate change widespread, rapid, and intensifying - IPCC (August 9, 2021), <https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/>

³ *Id.*

⁴ Environmental Defense Fund, Methane: a crucial opportunity in the climate fight (2021), <https://www.edf.org/climate/methane-crucial-opportunity-climate-fight>

⁵ 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-supplementarymaterial/>

⁶ IEA, Curtailing Methane Emissions from Fossil Fuel Operations: Pathways to a 75% Cut by 2030 (2021), <https://www.iea.org/reports/curtailing-methane-emissions-from-fossil-fuel-operations>

The oil and natural gas sector is the largest industrial emitter of methane,⁷ representing nearly half of domestic emissions.⁸ It is also the sector with the greatest reduction potential.⁹ A significant portion of emissions from the sector is the result of outdated equipment that operators can cost-effectively replace with zero-emitting technologies¹⁰ and the result of leaks that can be detected and fixed.¹¹ Deploying these feasible measures now would cut methane pollution in half by 2030, avoid up to a quarter degree of warming by midcentury,¹² and help to satisfy the U.S.'s commitments under the new Global Methane Pledge.¹³

Reducing methane emissions is not only necessary for slowing climate change, but also for protecting the frontline communities that face negative health impacts due to their proximity to oil and gas development.¹⁴ Smog-forming, volatile organic compounds and toxic air pollutants like benzene are emitted alongside methane, and these dangerous pollutants can lead to irreversible lung damage, asthma attacks, and cancer. Around 9 million people in the U.S. live in close proximity to oil and gas sites,¹⁵ and an analysis from EPA predicts that air pollution from the oil and gas sector will lead to 1,970 premature deaths in 2025 alone.¹⁶ As well, the Administrator's Journey to Justice Tour in the South underscored the need for urgent action for communities that have felt the impacts of pollution for decades.¹⁷ By taking bold action on methane and other harmful pollutants from the oil and gas sector, EPA can begin to reduce pollution in communities that have long borne disproportionate health burdens and show them that it listened to community concerns.

One of the most important steps EPA can take as it addresses methane is to eliminate emissions from pneumatic devices. Oil and gas operations in North America have traditionally relied heavily upon natural gas-driven pneumatic controllers that automatically emit methane as they

⁷ EPA, Overview of Greenhouse Gases: Methane Emissions, <https://www.epa.gov/ghgemissions/overview-greenhouse-gases#methane> (accessed Nov. 29, 2021)

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-achievableaffordable/>

⁹ Ocko 2021; 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 *Id.*

¹¹ Environmental Defense Fund, Here's what you need to know about EPA's landmark methane proposal (Nov. 9, 2021), <http://blogs.edf.org/energyexchange/2021/11/09/heres-what-you-need-to-know-about-epas-landmark-methane-proposal/>

¹² 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>

¹³ See European Commission, Joint EU-US Press Release on the Global Methane Pledge (Sept. 18, 2021), https://ec.europa.eu/commission/presscorner/detail/en/IP_21_4785

¹⁴ Fann, et al., Assessing human health PM2.5 and ozone impacts from US oil and natural gas sector emissions in 2025, 52 Env'tl. Sci. & Tech. 8095 (2018), <https://pubs.acs.org/doi/pdf/10.1021/acs.est.8b02050> [hereinafter Fann, et al.]; Clean Air Task Force, Gasping for Breath: An analysis of the health effects from ozone pollution from the oil and gas industry (2016).

¹⁵ Environmental Defense Fund, Federal Methane Map Project, US Methane Fact Sheet, <https://www.edf.org/federalmethanemap/USmethanefactsheet.pdf> (accessed Nov. 29, 2021)

¹⁶ Fann, et al. at 8099.

¹⁷ U.S. Environmental Protection Agency, ICYMI: On his Journey to Justice, EPA Administrator Michael S. Regan Toured Historically Marginalized Communities in the American South, Highlighted Benefits of Bipartisan Infrastructure Law (Nov. 22, 2021), <https://www.epa.gov/newsreleases/icymi-his-journey-justice-epa-administrator-michael-s-regan-toured-historically>

operate. In 2019, pneumatic controllers contributed significantly to emissions from the production segment, which, according to EPA inventories, accounts for 96% of methane emissions from the sector.¹⁸

EDF strongly supports EPA's proposed standards for pneumatic controllers – protective requirements that operators install zero-emitting controllers at both new and existing facilities other than those located on the north slope of Alaska. There are several available zero-emitting options for operators on and off the grid, and these technologies are cost-effective since compliance costs can be offset by the capture and sale of natural gas that would otherwise be wasted. EQT, the largest natural gas operator in the country, has committed to replacing all its pneumatic devices by 2023.¹⁹ Moreover, states like Colorado²⁰ and New Mexico²¹ require (or have proposed) zero-emitting technologies.

While EDF commends EPA for its strong controller standards, it encourages EPA to adopt more protective standards for pneumatic pumps in its supplemental proposal. EDF would support standards that transition operators to zero-emitting solutions for these devices.

Right now, EPA has an unparalleled opportunity to lead the world in addressing climate change and seize on available, cost-effective solutions to achieve deep reductions in methane emissions and local air pollution in all communities across the country. Thank you for convening these important hearings and considering our views.

¹⁸ U.S. Environmental Protection Agency, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019 3-71, <https://www.epa.gov/sites/default/files/2021-04/documents/us-ghg-inventory-2021-main-text.pdf?VersionId=yu89kg1O2qP754CdR8Qmyn4RRWc5iodZ>

¹⁹ ESG Report Calendar Year 2020, Environment: Climate and GHG Emissions <https://esg.eqt.com/environmental/climate-and-ghg-emissions/#strategy> (accessed Nov. 25, 2021).

²⁰ 5 Colo. Code Regs. § 1001-9, Pt. D, § I.V. (2021), https://drive.google.com/file/d/1sCtcjhhaexdE0_KfvrFudgO0vMuYis_/view

²¹ See New Mexico Environmental Improvement Board, Proposed N.M. Code R. § 20.2.50.122 (May 6, 2021), <https://www.env.nm.gov/air-quality/wp-content/uploads/sites/2/2018/08/Proposed-Part-20.2.50-May-6-2021-Version.pdf>