Comments of Environmental Defense Fund at EPA's Public Hearing on Oil and Natural Gas Methane Rulemaking

Grace Weatherall Legal Fellow, U.S. Clean Air Environmental Defense Fund December 1, 2021

Good afternoon. My name is Grace Weatherall, and I am a Legal Fellow on the U.S. Clean Air Team at Environmental Defense Fund. We want to thank EPA for convening this hearing, and for considering the important issues of flaring and abandoned wells in this proposed rulemaking. We particularly applaud EPA's decision to end venting practices. We also urge EPA to go farther, to end wasteful routine flaring, and to address the widespread problem of abandoned and orphaned wells.

Flaring

"Flaring" is the burning off of excess gas produced during oil drilling operations.¹ Flaring done at oil wells to dispose of excess uncollected gas is known as "routine" flaring. Methane is a climate pollutant with over eighty times the global warming power of carbon dioxide in the near term.² Flaring is considered to mitigate methane emissions as compared to venting, because by burning gas, operators convert pure methane into CO2. But flaring is a wasteful process even in ideal conditions, and an ineffective method of reducing methane emissions—not all methane is converted successfully,³ and in practice many flares malfunction or are left unlit.⁴ As a result, routine flaring leads to massive methane emissions across the United States every year. According to EDF estimates, routine flaring releases approximately 200,000 tons of methane into the atmosphere every year in the Permian Basin alone.⁵ Colorado⁶ and New Mexico⁷ have already taken action to eliminate routine flaring, and EDF urges EPA to do the same.

Under EPA's proposed rule, associated gas must be routed to a sales line if access to a sales line is "available".⁸ If access is not available, gas can be used as an onsite fuel source; used for another

- ³ Most functioning flares operate at 95% efficiency, meaning that approximately 5% of gas released is pure methane. *See, e.g.*, Björn Pieprzyk and Paula Rojas Hilje, *Flaring and Venting of Associated Gas*, ENERGY RESEARCH ARCHITECTURE, 12 n.3 (Dec. 2015).
- ⁴ EDF, Permian Methane Analysis Project (2021), https://www.permianmap.org/ (last accessed Nov. 29, 2021).

https://www.govinfo.gov/content/pkg/FR-2021-11-15/pdf/2021-24202.pdf.

¹ U.S. DEPARTMENT OF ENERGY, Natural Gas Flaring and Venting: State and Federal Regulatory Overview, Trends, and Impacts, 6 (Jun. 2019),

https://www.energy.gov/sites/prod/files/2019/08/f65/Natural%20Gas%20Flaring%20and%20Venting%20Report.pd f.

² Environmental Defense Fund, Methane: a Crucial opportunity in the climate fight (2021),

https://www.edf.org/climate/methane-crucial-opportunity-climate-fight

⁵ EDF, Flaring Aerial Survey Results (2021), https://www.permianmap.org/flaring-emissions/ (last accessed Oct. 27, 2021).

⁶ See Code of Colorado Regulations, Oil and Gas Conservation Commission, 2 CCR 404-1 § 903 (accessible at https://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=9245).

⁷ *See* New Mexico Administrative Code, Venting and Flaring of Natural Gas, § 19.15.27.8(A) (accessible at https://www.emnrd.nm.gov/ocd/wp-content/uploads/sites/6/Part27-FinalRule3.25.21a.pdf).

⁸ Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review, 86 Fed. Reg. 63110, 63120 (Nov. 15, 2021),

useful purpose that a purchased fuel or raw material would serve; or flared.⁹ This is an improvement on current regulations, but it does not eliminate routine flaring, which could allow many operators to continue business as usual on the theory that collection of the gas would be difficult or inconvenient.

EDF therefore urges EPA to finalize a standard for associated gas methane emissions from new and existing oil wells which would require capture of associated gas and enable a diverse array of solutions to do so, including routing to a sales line, transport in tanker trunks, and other onsite and offsite uses. Such an approach would protect public health and the environment by significantly reducing methane, CO2, NOX and VOC emissions. In many cases, well operators capturing and selling associated gas can be expected to break even, if not earn money on the captured gas, because they will be able to sell the gas at a profit, rather than burning it as waste.¹⁰

In all of the above, EPA can and should refer to the flaring rules developed by Colorado and New Mexico, and take advantage of the state innovation developing protective standards in this area.

Abandoned Wells

Abandoned and orphaned wells are a massive and costly problem. EPA reports that they emitted 55,000 metric tons of methane in 2019 alone,¹¹ and other studies suggest that the number may be much higher.¹² In cases where a well operator or responsible party cannot be identified, the cost of plugging the well falls squarely on the taxpayer.¹³ EDF appreciates EPA's attention to this problem, and urges the agency to explore various options for addressing the massive problem of leaking abandoned wells, including, for example, considering closure plans and standards, drawing from examples the EPA has previously adopted for other sources where post-closure emissions are likewise an issue.

Finally, as in the case of flaring, EPA can and should look to state examples in designing its own rules. For example, in Colorado, temporarily abandoned wells must satisfy a mechanical integrity test within 30 days of abandoning the well and at 5-year intervals thereafter. Further, temporarily abandoned wells must be "closed to the atmosphere" and any needed repairs must be made within 6 months. Colorado also links its permit application reviews to completion of a well closure plan and documentation satisfying financial assurance requirements.¹⁴

⁹ See id.

¹⁰ See ICF International, Memorandum: Breakeven Analysis for Four Flare Gas Capture Options (Apr. 22, 2016) (on file with EDF), at 9.

¹¹ See EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks (2021),

https://www.epa.gov/sites/default/files/2021-04/documents/us-ghg-inventory-2021-main-text.pdf at 3-111.

¹² See, e.g, EDF, Documenting Orphan Wells Across the United States (2021), <u>https://www.edf.org/orphanwellmap</u> (last accessed Nov. 30, 2021).

¹³ See U.S. GOVERNMENT ACCOUNTABILITY OFFICE, BONDING REQUIREMENTS AND BLM EXPENDITURES TO RECLAIM ORPHANED WELLS at 16 (Jan. 2010), https://www.gao.gov/assets/gao-10-245.pdf.

¹⁴ See Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review: Technical Support Document (Oct. 2021) at 14-5.

Thank you for your time, and for considering our recommendations. We respectfully urge EPA to finalize standards that are protective and substantially reduce climate and other health-harming pollution from the oil and gas sector.