

Congress of the United States

Washington, DC 20510

November 30, 2023

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

Dear Administrator Regan,

We write to express our strong support for the Environmental Protection Agency's (EPA) proposal to amend requirements for oil and natural gas systems to report emissions under EPA's Greenhouse Gas Reporting Program (GHGRP).¹ We also urge EPA to strengthen the final rule in several specific ways to meet Congress' directive in the Inflation Reduction Act (IRA) to ensure that oil and gas operators more accurately report their methane emissions. More accurate emissions reports are critical to support the deep, near-term reductions in methane emissions necessary to avoid the worst consequences of climate change.

In the IRA, Congress adopted the Methane Emissions Reduction Program (MERP) as section 136 of the Clean Air Act (CAA).² This new provision appropriates \$1.55 billion to EPA for financial and technical assistance to reduce methane emissions, and it establishes a methane waste emissions charge for methane released above specified thresholds.³ The charge is assessed based on the emissions that oil and gas producers report under the subpart W regulations of the GHGRP, which require owners or operators of oil and natural gas system facilities that emit 25,000 metric tons or more of greenhouse gases to report their emissions to EPA.⁴ The effectiveness of the methane waste emissions charge is dependent on accurate emissions reporting to GHGRP, but it is well-documented that these emissions have long been underestimated and underreported.⁵ Thus, in CAA section 136(h), Congress directed EPA to

¹ Greenhouse Gas Reporting Rule: Revisions and Confidentiality Determinations for Petroleum and Natural Gas Systems, 80 Fed. Reg. 50282 (August 1, 2023), <https://www.federalregister.gov/documents/2023/08/01/2023-14338/greenhouse-gas-reporting-rule-revisions-and-confidentiality-determinations-for-petroleum-and-natural>.

² Methane Emissions Reduction Program, (October 13, 2023), <https://www.epa.gov/inflation-reduction-act/methane-emissions-reduction-program#:~:text=The%20Inflation%20Reduction%20Act%20provides,the%20Methane%20Emissions%20Reduction%20Program>.

³ *Id.*

⁴ EPA Proposes Updates to Greenhouse Gas Emissions Reporting Requirements for the Oil and Gas Sector (July 6, 2023), <https://www.epa.gov/newsreleases/epa-proposes-updates-greenhouse-gas-emissions-reporting-requirements-oil-and-gas>.

⁵ See, e.g., Alvarez et al., *Assessment of Methane Emissions from the U.S. Oil and Gas Supply Chain*, 361 Science 186 (2018), <https://science.sciencemag.org/content/361/6398/186> (finding U.S. oil and gas supply chain methane emissions 60% higher than official EPA estimates under the Greenhouse Gas Inventory, derived from GHGRP reported emissions); see also Rutherford et al., *Closing the Methane Gap in US Oil and Natural Gas Production Emissions Inventories*, 12 Nature Comms. 4715 (2021), <https://www.nature.com/articles/s41467-021-25017-4#citeas> (describing the reasons EPA methods lead to persistent underestimation of actual methane emissions).

update subpart W of the GHGRP to “ensure the reporting . . . and calculations of charges” are “based on empirical data,” “accurately reflect the total methane emissions and waste emissions” from facilities, and allow operators “to submit empirical emissions data, in a manner prescribed by [EPA].”⁶

On August 1, 2023, EPA published its proposed revisions to subpart W.⁷ We make the following recommendations to strengthen these proposed revisions and ensure that EPA fulfills the intent of the Methane Emissions Reduction Program.

EPA should finalize reporting requirements for other large release events.

EPA’s proposed amendments to subpart W would add a large release events category to required reporting.⁸ This addition would better capture atypical events that the GHGRP currently does not require to be reported. Large release events contribute disproportionately to total emissions from oil and gas facilities—and accounting for large release events is necessary to calculate an accurate waste emissions methane charge.⁹ We support the creation of the other large release events category and urge EPA to finalize the methane emission rate and event thresholds, as well as the 182-day default duration assumption, as proposed.

EPA should develop a robust and consistent framework to support data collection and validation, timely operator notification, and accurate quantification and reporting of total emissions from large release events.

EPA should use MERP funding for monitoring, collecting, and incorporating top-down basin-level data.

Section 136(a)(4) of the CAA appropriates funding for MERP to be used for various specified purposes, including to “prepare inventories, gather empirical data, and track emissions.”¹⁰ EPA should use a portion of this funding to expand ground-based and aerial monitoring. Specifically, EPA should work with other entities to procure and incorporate satellite monitoring, aerial, and other observational methods into subpart W GHGRP reporting—prioritizing regions where there is a lack of monitoring data, and seeking opportunities to use this funding to improve estimates of emissions of toxic and other air pollutants as well from oil and natural gas facilities.

Current remote sensing programs offering actionable, facility-scale information and transparent publication of super-emitter detections are primarily supported by philanthropically funded non-governmental organizations and geographically or temporally constrained academic studies. To scale up, we recommend that EPA allocate a portion of the MERP funding available through 2030 to annual grants and contracts for sustained third-party remote sensing and transparent

⁶ 42 U.S.C. § 7436(h).

⁷ Greenhouse Gas Reporting Rule: Revisions and Confidentiality Determinations for Petroleum and Natural Gas Systems, 80 Fed. Reg. 50282 (August 1, 2023), <https://www.federalregister.gov/documents/2023/08/01/2023-14338/greenhouse-gas-reporting-rule-revisions-and-confidentiality-determinations-for-petroleum-and-natural>.

⁸ EPA Proposes Updates to Greenhouse Gas Emissions Reporting Requirements for the Oil and Gas Sector (July 6, 2023), <https://www.epa.gov/newsreleases/epa-proposes-updates-greenhouse-gas-emissions-reporting-requirements-oil-and-gas>.

⁹ Fact Sheet, Proposed Rule: Revisions and Confidentiality Determinations for Petroleum and Natural Gas Systems (June 2023), <https://www.epa.gov/system/files/documents/2023-07/Fact%20Sheet%20Proposed%20Rule.pdf>.

¹⁰ 42 U.S.C. § 7436(a)(4).

reporting of U.S oil and gas sector methane emissions. Specifically, we believe that competitive data acquisition grants or contracts are necessary to support third-party observation and timely notification of high-emission events. Acquiring such data will also help industry and community efforts to reduce methane emissions from the oil and gas sector.

Additionally, EPA should use these expanded monitoring efforts to incorporate top-down basin-level data into its reporting program. This will ensure more complete and accurate emissions estimates in reporting. EPA should use basin-level data to check if the whole (basin-level measurements) is equal to the sum of its parts (i.e., bottom-up, operator-reported emissions). We recommend EPA create a framework to include credible, basin-level observations to evaluate the extent of unreported or underreported emissions and inform potential revisions to subpart W. An integrated approach to reconciling operator-reported emissions with top-down observations can improve the accuracy of operators' methane emissions estimates and provide the information needed to effectively track emissions reductions and administer fair waste emission charges.

Operators should be required to use data from regulatory leak inspections to strengthen the accuracy of their reported emissions.

EPA should finalize the proposed changes to equipment leak surveys and equipment leaks by components and major equipment type (i.e., wellheads, compressors), which would make reported emissions from equipment leaks more complete and more accurate. In the final rule, EPA should also require that if an operator, during a leak survey, has sufficient evidence or a reasonable belief that emissions found during the survey would qualify as a large release event, the operator should measure and report the emissions as such, rather than reporting it as a leak.

EPA should finalize the proposed emission factors for equipment leaks by population count.

We support EPA's proposal to shift to the Rutherford et al. (2021) emission factors, which are derived from a "bottom-up inventory-based methane emissions model"¹¹ that has demonstrated that previous methods have historically undercounted emissions. The Rutherford emission factors incorporate emissions events that have previously not been accounted for in subpart W emission factors. Reporting by major equipment type and component level can greatly improve accuracy. EPA should finalize these emission factors and establish a process to periodically update default emission factors, using newly published empirical data.

EPA should be prepared to audit submitted emissions reports to ensure accuracy.

Assessing the waste emissions charge on the reported quantities of emissions introduces a new incentive that has not been present in historical subpart W reports. To ensure that operators are accurately reporting their actual emissions, EPA must be prepared to review submitted reports to ensure that they are accurate in practice and not just in theory. For example, *any* actions to repair malfunctioning or otherwise abnormally operating equipment should be included in reports so that a full picture of the annual emissions is included.

¹¹Burnham, A., *Updated Natural Gas Pathways in GREET 2021 (October 2021)*.

The public should have access to all reported emissions data in easy to use formats.

The CAA requires that “emissions data” be made publicly available.¹² Given the strong public and private sector interest in understanding the quantity and sources of oil and gas methane emissions, it is particularly important for EPA to ensure that emissions data reported under subpart W not only be available to the public, but also be easily accessible and easy to comprehend.

Additionally, we encourage EPA to continue coordinating its work to improve emissions reporting accuracy and transparency with similar efforts underway at other agencies, such as the Pipeline and Hazardous Materials Safety Administration, the National Oceanic and Atmospheric Administration, and the Department of Energy’s Emissions Measurement, Monitoring, Reporting and Verification (MMRV) framework, which is under development.

In closing, we commend EPA for this proposal, which is an important step in the right direction. We also encourage EPA to build on the proposal and include these recommended improvements in the final rule. Finalizing a strong and comprehensive rule on schedule is critical to implement Congressional direction in the IRA, ensure accurate emissions data and fair assessments of the charge, and support meaningful reductions in methane emissions to help avoid the worst consequences of climate change. We look forward to continuing to work with you, as you implement the Methane Emissions Reduction Program.

Sincerely,



Sheldon Whitehouse
United States Senator



Thomas R. Carper
United States Senator



Frank Pallone, Jr.
Member of Congress

¹² See CAA section 114(c), requiring information collected pursuant to section 114 (which is the authority for the GHGRP requirements) to “be available to the public.”