Responses to Questions for the Record 1.10.24 Energy & Commerce Hearing

The Honorable Frank Pallone

1. Can you explain why a strong financial incentive, like the Waste Emissions Charge, is an important tool for dealing with methane emissions from the oil and gas sector?

A primary pillar of MERP is its charge on excessive methane emissions from U.S. oil and gas facilities – the waste emissions charge. The charge provides a strong incentive to cut pollution since many operators will choose to reduce their emissions by implementing highly cost-effective solutions rather than pay for excessive emissions. Leading companies have already pledged to limit emissions below MERP's thresholds, meaning many would not need to pay the charge at all, but the waste charge encourages action sooner and ensures the worst actors are incentivized to take action.

The charge starts in 2024 at \$900/ton of methane and increases over time to \$1500/ton by 2026. It only applies to large polluting facilities with over 25,000 metric tons of carbon dioxide equivalent emissions annually. Further, the charge is only assessed on excessive emissions above commonly used emissions intensity thresholds that are consistent with industry's own pollution targets.¹ Additionally, there is an exemption for emissions from wells that are plugged, which encourages the plugging of marginal wells that may otherwise become orphaned. And finally, there is an exemption for facilities in compliance with final EPA regulatory standards. By avoiding excessive emissions and adopting commonsense pollution reduction measures, like those contained in EPA's rules, operators can fall below the thresholds and avoid the charge. The charge is therefore an important tool for reducing emissions because it serves to incentivize swift and full compliance with EPA's state-of-the-art methane regulations on oil and gas facilities, which are expected to reduce methane emissions by 58 million metric tons by 2038.

Because the charge only applies to operators of large facilities with major emissions, smaller companies may not be subject to the charge. For instance, an independent operator with many low-producing wells within a particular basin may be exempt from the charge. MERP also sets aside \$700 million specifically to assist marginal conventional wells with emissions reduction.

2. How do strong methane policies correct existing market failures that perversely incentivize methane waste, and benefit American consumers?

Oil and gas companies emit roughly 16 million metric tons of methane every year, with the same near-term climate damage as 350 coal plants. That much methane represents \$2 billion in wasted gas resources. Wasteful venting and flaring can occur for a variety of reasons but is often caused by operators seeking to maximize near-term profits from oil production while forgoing investments in natural gas capture and takeaway capacity. EPA's standards correct this market

¹ See OGCI, OGCI's 2025 Methane Intensity Target, <u>https://www.ogci.com/action-and-engagement/reducingmethane-emissions/#methane-target.</u>

failure by requiring operators to repair leaks and capture gas so that product is no longer wasted. This in turn will benefit American consumers by keeping more product in pipelines.

Strong and comprehensive pollution standards from EPA are needed to ensure protective, broad and equitable pollution reductions for all communities. Meanwhile, a charge on especially wasteful levels of methane emissions further discourages pollution and holds companies accountable for their impact.

Reducing methane emissions from oil and gas operations is a triple win for the climate, public health, and our energy security. Because of methane's elevated short-term impact, cutting this pollution is the quickest, most cost-effective way to slow the rate of climate change in the near term and avert its worst impacts. These efforts will protect millions of Americans from health harming pollution. And – since methane is the primary component of natural gas – these efforts will reduce energy waste and keep American energy competitive in the global market.

- **3.** The Inflation Reduction Act directed EPA to revise methane reporting requirements for larger oil and gas operators under Subpart W to ensure we have better data on methane pollution.
 - a. How is better data helpful in reducing methane pollution?

EPA's current methods undercount emissions from today's oil and gas industry production, practices, and equipment. Numerous studies have found that observed methane emissions are significantly higher than current EPA estimates. A comprehensive study released in 2018 found emissions to be 60% higher than EPA figures.²

To ensure that we have durable and effective solutions, it is vitally important to accurately understand the magnitude and source of the problem. Ensuring emission estimates are accurate is also essential for the effectiveness of the waste emissions charge, which relies on subpart W data to calculate the charge for each eligible operator.

b. How will EPA's proposed update to Subpart W improve the effectiveness of methane mitigation strategies?

EPA's proposed updates to subpart W will improve data collection from sources subject to control requirements, which will allow EPA and the public to assess the efficacy of those requirements and determine whether improvements are necessary. Subpart W updates are also essential to accurately administering the waste emissions charge. MERP directs and provides funds for EPA to update the Greenhouse Gas Reporting Program to incorporate empirical measurement data to ensure emissions estimates and MERP's waste charge accurately reflect total methane emissions from oil and gas facilities. With the release of a proposal to

² 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.

update oil and gas emissions reporting last summer, EPA is taking steps to fulfil those Congressional directives.

4. Please explain how EPA and industry partners can leverage data submitted by third-party monitors to better identify harmful methane leaks and quickly address them.

As part of its final methane regulations for the oil and gas sector, EPA finalized the super-emitter program, which enables certified third parties to submit independent monitoring data showing large emissions events (>100kg/hr) to EPA who will then notify the responsible operator of their obligation to investigate and correct the problem. Under the program, EPA will publicly post the third-party emission notification in real time so nearby communities are aware and can take protective action. The emissions event will not be attributed to a specific operator until the operator has had a chance to respond.

Third party monitors will need to be certified and demonstrate experience in using remote sensing technologies. Leveraging reliable, independent monitoring data can allow for timely mitigation of the largest emission events. Because of the magnitude of super-emitters, even short duration leaks can be extremely damaging to the climate and public health. Using all available data to find and repair these leaks as quickly as possible is a commonsense measure that benefits the public and operators.

The largest source of methane emissions from the oil and gas sector is leaks, and while EPA's proposal for periodic screening and repair of leaks is strong, the super-emitter program serves as a backstop to catch and address intermittent events that occur in between screenings. The super-emitter program therefore gives EPA a fuller picture of emissions, allows EPA to require greater emissions reductions, and gives operators a chance to fix leaks and save product when their screenings may not have caught these large release events.

The Honorable Diana DeGette

1. You mentioned in your testimony that Colorado was the first state in the U.S. to enact oil and gas methane standards in 2014. How did Colorado's methane standards drive the conversation in 2014?

In 2014, Colorado became the first in the nation to implement methane standards for oil and gas sites and served as a model that other states have followed under both Republican and Democratic leadership. Since 2014, Colorado has strengthened its requirements and now requires smaller wells with leak prone equipment to receive regular inspections, more routine leak inspections for well sites located close to homes and schools, zero-emitting pneumatic controllers and pumps, and restrictions on flaring. Because operators have been able to implement Colorado's regulations, Colorado has served as a model for other states and EPA in demonstrating the feasibility and efficacy of certain controls on oil and gas methane.

2. I was proud to attend COP28 with the Energy and Commerce Delegation, and methane was a topic of discussion the international community united around. More

than 150 countries have now signed the Global Methane Pledge, agreeing to act to collectively reduce global methane emissions by at least 30 percent by 2030.

a. Why is it important for the U.S. to be part of global pledges to reduce emissions?

As the world's largest oil and gas producer and largest emitter of methane from the oil and gas sector, the United States has both an opportunity and a responsibility to lead the way on reducing methane emissions. Climate change is a global problem that requires global cooperation, and global participation relies on U.S. leadership.

Do you think undermining our own EPA's methane regulations at home has the potential to compromise American leadership in methane reduction on the global stage?

EPA's limits on oil and gas methane pollution are vitally important for the climate and are a core component of U.S. leadership to achieve the Global Methane Pledge. With other countries also zeroing in on methane as a key climate risk, it's a signal to operators worldwide that clean-up time is here. Undermining our own regulations would show the world and operators that we're not serious about taking responsibility ourselves, which could have a negative cascading effect. For example, the European Union has new methane regulations that set strict new curbs on emissions from fossil fuel operations across all member states *as well as* imports from the US and other suppliers. Undermining the EPA's methane regulations could put US exporters out of compliance with a major international market in the future.

3. This month, the Department of Energy's Loan Programs Office announced a conditional commitment of funding to LongPath Technologies, located in Boulder, Colorado, to support the creation and installation of real-time methane emissions monitoring networks across multiple states. If approved, how would the real-time monitoring of methane support EPA's methane reduction goals?

Real time monitoring can help ensure that operators are not only meeting their methane reduction obligations but are finding and fixing problems as soon as they occur, unlocking even greater reductions.

EDF's recently launched emissions monitoring satellite MethaneSAT will also provide real-time monitoring to support EPA's methane reduction goals. Orbiting Earth in 95 minutes with a swath width of 200 km, MethaneSAT's high precision and a wide view path will track emission rates and locations and show how those emissions are changing over time - making it easier to track performance and prioritize solutions. While EPA implements its new methane rule to reduce emissions from leaks, flares and super-emitters, data from platforms like MethaneSAT can help monitor progress.