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United States Senate

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
WASHINGTON, DC 20510–6175

May 24, 2016

The Honorable Dan Utech
Special Assistant to the President
The White House
1600 Pennsylvania Avenue N.W.
Washington, D.C. 20500

The Honorable Gina McCarthy
Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue N.W.
Washington, D.C.

The Honorable Janet McCabe
Acting Assistant Administrator
Office of Air and Radiation
Environmental Protection Agency
1200 Pennsylvania Avenue N.W.
Washington, D.C. 20460

Dear Mr. Utech, Administrator McCarthy, and Acting Assistant Administrator McCabe:

On September 3, 2014, I sent a letter to your respective offices expressing serious concerns with the U.S. Environmental Protection Agency's (EPA) methane white papers published in April 2014.[1] Those white papers serve as the basis for the EPA's climate change mandates on America's oil and gas producers. As attested to by experts with working knowledge of the engineering involved in oil and gas production, EPA made fundamental mistakes in its assessments and egregiously mischaracterized the current state of industry technology. More than 18 months have passed, and EPA has not sufficiently responded to my requests or made meaningful changes based on my concerns or those expressed by outside experts. EPA appears intent on fulfilling an ideological goal to stop American energy production, and as a result the Agency fails to follow data quality, transparency, and public input requirements key to the regulatory process. Accordingly, until EPA can thoroughly demonstrate a sound and consistent understanding of methane emissions from the oil and gas sector, the Agency should halt any work on regulatory actions impacting this sector.

My foremost concern with the white papers was their demonstrated lack of fundamental knowledge of the realities and practices of the oil and gas industry. Oil and natural gas producers have both financial and safety incentives to prevent the loss of methane and other forms of natural gas from being vented into the atmosphere. As evidence of this, EPA's most recent data shows a slight decline in methane emissions from both oil and natural gas systems since 1990[2] while oil production increased 16 percent[3] and natural gas production increased 69

[1] Letter from Sen. James M. Inhofe, to Adm'r Gina McCarthy, U.S. Envtl. Prot. Agency, Sept. 3, 2014, available at http://www.inhofe.senate.gov/newsroom/press-releases/inhofe-outlines-serious-concerns-for-epas-methane-strategy-white-papers.

[2] U.S. Envtl. Prot. Agency, 2016 Greenhouse Gas Inventory, Apr. 15, 2016, available at https://www3.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2016-Chapter-Executive-Summary.pdf

[3] Energy Information Administration, Petroleum & Other Liquids, April 29, 2016, available at https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mcrfpus1&f=a.

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percent[4] during the same period of time. Notably, this data seemingly underestimates the amount of methane reductions from the sector, and has come under congressional scrutiny by several U.S. Senators, including myself, in a May 20, 2016, letter to the EPA.[5] For years EPA data reported a dramatic decrease in methane emissions from the oil and natural gas sector, which has been confirmed by multiple academic studies and reports, each showing a very small leak rate of 1.2 -1.6 percent for the production sector.[6] This overwhelming trend clearly indicates that the industry has been taking the lead and working to decrease methane emissions absent federal mandates.

The white papers are also based on outdated estimates of industry-wide emissions, the technologies discussed suggest EPA has a lack of understanding of oil and natural gas development technologies and practices, and even the pricing estimates for natural gas are nearly double the recent history of actual pricing trends. These facts alone demonstrate that EPA has a limited understanding of the industry, but this was confirmed by Administrator McCarthy in late February in her presentation at IHS Energy's CERA Week Conference when she said:

> "My caveat is that *EPA's learning this industry right now* because it is not an industry we regulate. We've just gotten into regulation of this so there's a lot of hundreds of thousands of small sources and EPA doesn't generally have a relationship with this industry as we do other sectors that we've regulated for frankly, decades. But we're learning"[7] (emphasis added).

This admission is as telling as it is disturbing. EPA does not understand the oil and gas industry, as stated by the Administrator, but the justification given for this lack of understanding is the false statement that the EPA does not and has not regulated the oil and natural gas industry.

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[4] Energy Information Administration, Natural Gas Withdrawals (April 29, 2016), available at http://www.eia.gov/dnav/ng/hist/n9010us2a.htm.

[5] Letter from Sens. David Vitter, James M. Inhofe, et al. to Hon. Gina McCarthy, Adm'r, U.S. Envtl. Prot. Agency, May 20, 2016, available at http://www.vitter.senate.gov/imo/media/doc/EPA%20letter%205-20-16.pdf.

[6] ICF - http://www.ngsa.org/download/analysis_studies/NGC-Final-Report-4-25.pdf - Finding the Facts on Methane Emissions: A Guide to the Literature, Apr.2016; University of Colorado Boulder/NOAA - http://onlinelibrary.wiley.com/doi/10.1002/2014JD022697/abstract;jsessionid=6BA0EA007BDD8D03D6BBE08BD82B470B.f02t02%20 - Quantifying atmospheric methane emissions from the Haynesville, Fayetteville, and northeastern Marcellus shale gas production regions, Mar. 13, 2015; MIT - http://iopscience.iop.org/article/10.1088/1748-9326/7/4/044030/pdf;jsessionid=6ACEB15A633852AD6FDF19AA674369B1.c4.iopscience.cld.iop.org - Shale gas production: potential versus actual greenhouse gas emissions, Nov. 26, 2012; University of Maryland - http://iopscience.iop.org/article/10.1088/1748-9326/6/4/044008/pdf - The greenhouse impact of unconventional gas for electricity generation, Oct. 25, 2011; Department of Energy - http://www.netl.doe.gov/energy-analyses/pubs/NG-GHG-LCI-Pres.pdf - Life Cycle Greenhouse Gas Inventory of Natural Gas Extraction, Delivery, and Electricity Production, Oct. 24, 2011; Carnegie Mellon University - http://iopscience.iop.org/article/10.1088/1748-9326/6/3/034014/fulltext/ - Life cycle greenhouse gas emissions of Marcellus shale gas, Aug. 5, 2011; Cornell University - http://www.geo.cornell.edu/eas/PeoplePlaces/Faculty/cathles/Natural%20Gas/2012%20Cathles%20et%20al%20Commentary%20on%20Howarth.pdf - A commentary on "The greenhouse gas footprint of natural gas in shale formations" by R.W. Howarth, R. Santoro, and Anthony Ingraffea, Jan. 3, 2012.

[7] Katie Brown, *EPA Chief Pushes Methane Rule, Admits EPA Still Just 'Learning This Industry Right Now'*, EnergyInDepth (Feb. 29, 2016), available at http://energyindepth.org/national/epa-chief-pushes-methane-rule-admits-epa-still-just-learning-this-industry-right-now/.

Administrator McCarthy specifically ignores the regulation of the industry under the Clean Water Act with the Underground Injection Control program and Effluent Limitation Guidelines starting in 1980, and Clean Air Act regulation, starting in 1970 of hazardous air pollutants and national primary and secondary ambient air quality standards. In April 2012, EPA finalized regulations for new sources of oil and natural gas production under Section 111(b) of the Clean Air Act (NSPS OOOO). These regulations covered tanks, compressors, pneumatic devices, hydraulic fracturing operations, and other sources within the industry.

These are clear examples where EPA has been regulating the industry over the course of several decades, yet the EPA Administrator admits remarkably that the Agency does not understand it. EPA should therefore not proceed with any future regulatory action until, at a minimum, the Agency can demonstrate, and have independent experts certify, a deep understanding of how the industry actually operates on a day-to-day basis.

In spite of all evidence to the contrary, EPA believes that it has the responsibility to provide additional guidance and "assistance" to oil and gas operators by imposing additional regulatory and overlapping mandates. Industry is already taking steps to reduce emissions in a much more efficient and cost-effective way than that proposed by EPA, making the Agency's behavior irresponsible and a contributing factor to the industry's ongoing financial uncertainty that puts at risk America's energy future.

In my September 4, 2014, letter on the white papers, I urged the Obama Administration to work with the oil and natural gas industry and state regulators to correct the white papers before moving on to any additional steps of the Administration's "Strategy to Cut Methane Emissions." To date, EPA has not revised the white papers per my request. I also stated that EPA's failure to obtain the most accurate data and a firm understanding of the oil and natural gas industry's operations, technological advances, and regulatory hurdles before finalizing the white papers would result in poor public policy. Indeed, EPA's recently finalized methane rules for new, modified, and reconstructed oil and gas systems illustrates such policy.

I have grave concerns that EPA has not taken appropriate action since my September 2014 letter. EPA has continued to ignore data collected through the Agency's own Greenhouse Gas Reporting Program, information and data from oil and natural gas operators, and data collected through university and non-governmental organization research. EPA has done little if anything to alleviate my concerns. Therefore, I request an explanation of exactly what actions have been taken and what changes have been incorporated in response to my recommendations. For your convenience, my requests from the September 2014 letter are relisted below, followed by several new related requests for information:

1. *"Conduct a roundtable discussion with oil and natural gas industry representatives and state regulators to determine appropriate terms to be used throughout the White Papers that are consistent with their uses within the oil and natural gas community. Concurrently, EPA should ensure that its understanding of oil and natural gas operations are appropriately articulated in the White Papers in accordance with industry standards and practices. EPA must amend its White Papers accordingly."*

a. Between September 2014 and May 2016, what meetings has EPA held with industry and university representatives on the topic of the EPA White Papers, the new NSPS OOOOa, Source Determination, Tribal New Source Review and existing source methane regulations under the Clean Air Act Section 111(d) for oil and natural gas production sector?
b. Has a roundtable discussion specifically tailored to the White Papers been conducted, and if so, what information or data was discovered that could inform changes in the White Papers themselves with respect to the terminology used throughout the documents?
c. What changes were made in the White Papers to reflect information supplied by industry experts?

2. *"Conduct a series of roundtable meetings with oil and natural gas industry representatives to discuss mitigation options for each of the five areas being explored by EPA. EPA should seek to gain an understanding of the scenarios and operating conditions under which some mitigation options may not be appropriate. EPA must include these findings into the White Papers' discussion of mitigation options."*

a. Have roundtable discussions specifically tailored to the White Papers been conducted and if so, what information or data was discovered that could inform changes in the White Papers themselves with respect to the mitigation options discussed throughout the documents?
b. What changes were made in the White Papers to reflect information supplied by industry experts?
c. If additional information is supplied with regards to mitigation techniques, will EPA rescind, revise, and republish the White Papers?
d. How have these roundtable meetings impacted the EPA's final methane regulations for new, modified, and reconstructed sources as well as the Agency's plans to regulate existing sources?

3. *"Conduct a review of regulatory hurdles to deploying technologies and developing infrastructure that would reduce methane emissions from oil and natural gas operations. Regulations, especially those developed quickly and in isolation from one another, can prove counterproductive for other policy goals. In assessing mitigation options, EPA must include recommendations for regulatory streamlining that could prove more beneficial than any new mitigation standards or requirements. EPA must add this discussion to the White Papers."*

a. Has EPA conducted a review of regulatory hurdles to technology deployment in the oil and natural gas industry?
b. Does EPA publish findings of regulatory hurdles in any alternate publications, on regulatory hurdles to methane emission mitigation technologies?
c. If so, what recommendations has EPA made to streamline regulations to improve the potential for adoption of mitigation technology?

d. To what extent would streamlining Clean Water Act Section 404 permits and NEPA environmental reviews expedite the development of gathering pipelines for natural gas and accomplish the Administration's methane reduction goals?
e. To what extent is gathering infrastructure the hurdle to greater emission reduction and what steps could the government take to ease this infrastructure buildup?

4. *"Conduct a series of roundtable meetings with state regulatory officials to better understand state efforts to regulate methane emissions. EPA must include these findings in the White Papers and include state regulators' perspectives on whether EPA should take any methane related policymaking actions."*

   a. Which regulators from oil and gas producing states have influenced the current published White Papers, and what information provided by them was included in the White Papers themselves?
   b. Has EPA conducted an analysis of existing regulations at the state level that reduce methane emissions to determine if new rulemaking efforts are necessary? If so, which states do not have sufficient regulations in place, and has EPA contacted regulators from those states to understand their rationale for their existing regulatory schemes?

5. *"Develop, in cooperation with industry and state regulators, a unified national data set articulating an agreed upon estimate of nationwide methane emissions from the oil and natural gas industry that is differentiated by basin and alleged source. The discussion surrounding the data set should also articulate the gaps and differences between the National Inventory and the GHGRP data sets. EPA should conduct a comprehensive data collection in conjunction with oil and natural gas producers on the methane emissions from each of the alleged sources of emissions discussed in the White Papers and in any other area of EPA's interest where comprehensive data are not presently available. EPA should also update the factors it is currently relying on from outside studies to estimate emission levels. The oil and natural gas industry has changed substantially since many of the factors being used by EPA were developed; these must be updated to account for new practices. This data set should be used in the White Papers as the standard moving forward."*

   a. What progress has EPA made toward developing a nationwide methane emission database from the oil and natural gas industry?
   b. What data gaps between the National Inventory and the GHGRP have been identified by EPA when attempting to quantify methane emissions from the oil and natural gas industry?
   c. EPA has since published rules covering most of the sources identified in the White Papers. These White Papers were published during a period of time that EPA did not understand the oil and natural gas industry, yet they were relied upon as justification for the final rules for new, modified, and reconstructed sources. What changes were made in the final rules from data collected from industry and during the process of developing a national database of methane emissions?

As stated in my September 2014 letter, EPA has a legal and moral obligation *to carefully and accurately* consider the real-world risks posed its regulation of the oil and natural gas industry. If EPA persists in ignoring the concerns expressed by me and other outside experts, then the public can only conclude, as noted above, that EPA is simply an extension of the dangerous "keep in the ground" movement, which opposes any and all American energy production. That is an outcome that is bad for America, our allies, and the environment.

I look forward to your prompt responses to my questions by no later than June 13, 2016. If you have any questions on this request, please contact the Senate Committee on Environment and Public Works at (202) 224-6176.

Sincerely,

James M. Inhofe
Chairman