

JAMES M. INHOFE  
OKLAHOMA

WASHINGTON OFFICE  
205 RUSSELL SENATE OFFICE BUILDING  
WASHINGTON, DC 20510-3603  
(202) 224-4721

TULSA OFFICE  
1924 SOUTH UTICA, SUITE 530  
TULSA, OK 74104  
(918) 748-5111

OKLAHOMA CITY OFFICE  
1900 N.W. EXPRESSWAY, SUITE 1210  
OKLAHOMA CITY, OK 73118  
(405) 608-4381

COMMITTEES:  
ARMED SERVICES  
INTELLIGENCE *ex officio*  
ENVIRONMENT AND  
PUBLIC WORKS

# United States Senate

WASHINGTON, DC 20510-3603

September 3, 2014

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. 20460

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:

One of the primary components of the President's Climate Action Plan (CAP) is the Strategy to Cut Methane Emissions (Methane Strategy). In it, the Administration identified a number of potential major sources of methane emissions across the economy, including the oil and natural gas sector. Pursuant to the Methane Strategy, the Environmental Protection Agency (EPA) released a series of White Papers detailing the sources of methane emissions that could come from the oil and natural gas sector and explored potential mitigation techniques to reduce emissions.

I have serious concerns with these White Papers. First, the White Papers demonstrate that EPA lacks a fundamental understanding of the industry's practices and inner workings. They also reveal that EPA believes it has the capacity to actually help oil and natural gas companies operate more efficiently and profitably by mandating more guidelines and regulations; no regulatory body should have this perspective. Further, the White Papers are handicapped by inaccurate and outdated data estimates of industry-wide emissions. I have personally addressed this practice with Administrator McCarthy, yet the EPA's use of faulty data persists and will yield nothing but inappropriate policy discussions and decisions by the agency. I urge the EPA to gather more information, revise the White Papers, and allow an official, robust comment period prior to engaging in any policymaking discussion that could impact the oil and natural gas industry.

One of the most pressing concerns is that the White Papers demonstrate that EPA lacks fundamental knowledge of the intricacies and practices of the oil and natural gas industry. EPA seems to discount – and even ignore – the fact that methane is a highly valuable component of natural gas. Oil and natural gas producers have distinct economic incentives to prevent methane and other forms of natural gas from being emitted into the atmosphere. Producers often have safety incentives to reduce methane emissions from their operations as well. In line with this, it is important to point out that the upstream oil and natural gas industry *voluntarily* reduced methane emissions by 40% between 2006 and 2012. This was accomplished without any federal oversight or mandate, and the industry is continuing to develop and implement new technologies and practices that will continue this positive trend. Further, the natural gas transmission industry has reduced the number of pipeline leaks by 94% over the past thirty years. These trends and developments demonstrate that there is no need for additional regulation.

EPA's understanding of industry incentives aside, the Agency also demonstrates its lack of industry knowledge by using terms throughout the White Papers that are inconsistent with industry

definitions and uses. In the completions and production White Paper, EPA introduces a new term of “coproducing well” to identify how associated gas is handled in wells that are primarily producing oil. Many geologic formations with oil development also produce natural gas to varied degrees based on each well’s unique characteristics, but these wells are not referred to as coproducing wells by industry or state regulators.

The same White Paper also inappropriately, and quite causally, labels unconventional resource development as hydraulic fracturing. Hydraulic fracturing is a specific component of the completion process of many unconventional oil and natural gas wells; however, it cannot be used to refer to the entire process. It is also unclear whether EPA wants to use the data on methane emissions from the completion process to address new sources, existing sources, or recompletions. EPA’s definition of what actually constitutes a “leak” also needs revision; it is unclear whether EPA is referring to leaking, venting, or normal emissions because all are referred to by EPA as leaks.

A lack of clarity over definitions raises questions about whether data sets within the White Papers overlap one another. If they do, it raises questions about EPA’s policymaking intent and whether it is interested in sound policy development or if it has predetermined to regulate methane and is simply building a case to do so, however crude it may be. EPA must revise its White Papers to reconcile any data overlaps and work with industry to clarify misunderstandings about standard industry practices.

The White Papers also indicate that the EPA is taking a one-size-fits-all approach to evaluating the problem of and determining solutions for methane emissions. For example, in the White Paper on liquids unloading, EPA does not provide any discussion about the differences in cost/benefit analyses for small producers, marginal well operators, conventional well operators, and unconventional well operators, which will each have different potential to produce methane emissions and therefore different cost/benefit considerations when addressing something like liquids unloading. It is imperative that EPA account for this diversity as it considers methane emissions and associated policy discussions.

In the same White Paper, EPA does not accurately describe the conditions under which venting occurs during the liquids unloading process; rather, the Agency assumes by formula that whenever an unloading lasts longer than one hour, methane is being vented continually at the rate of production prior to the start of the unloading process. Industry has identified conditions where no emissions would take place during this time, but EPA does not account for this in its discussion, nor does it reflect this possibility in its assessment of available data. EPA must modify its White Papers accordingly.

EPA also fails to consider how overregulation of the oil and natural gas industry actually impacts its ability to mitigate methane emissions. For completion and production activities, one of the most significant impacts determining whether methane is captured, flared, or vented is the availability of gathering infrastructure and midstream pipelines. Regulatory hurdles at the U.S. Army Corps of Engineers, the Bureau of Land Management, and the U.S. Fish and Wildlife Service can all severely hinder oil and natural gas companies’ ability to develop the infrastructure necessary to mitigate methane emissions. Regulations, particularly related to the Endangered Species Act, can also discourage operators from using technology during activities like liquids unloading that could reduce fugitive methane emissions. The same is true in the natural gas transmission industry, which may become the subject of additional safety regulations in the next year that could require additional blowdowns, which will result in significant increases in methane emissions. It is important for agencies to collaborate on efforts like this

that may ultimately prove counterproductive if unintended consequences are not fully explored and evaluated. EPA must account for this in its White Papers.

When considering the impact monitoring could have on mitigating leaks from various natural gas systems, it is important for EPA to recognize that the majority of leaks are identified and fixed in the first round of monitoring. Any successive iteration is less beneficial than the last, and any cost/benefit analysis conducted by EPA in policy decisions should account for the reality of these diminishing returns. EPA must recognize that not all leaks are economical to repair, which is contrary to at least one report being cited by EPA in its White Paper. Further, EPA must also explain why the cost/benefit analysis it presented in its compressors White Paper does not follow the method used by EPA in its subpart OOOO regulations that were finalized for the oil and natural gas industry several years ago.

The White Papers also fail to address the full scope of valuable and available information involving possible emissions, and this is particularly true with its presentation of data for pneumatic devices. Although the White Paper provides a summary of various data sources, EPA did not analyze it or compare it to current industry practices or emerging regulatory requirements. EPA's pneumatics data is drawn from outdated sources, and several of the referenced studies do not provide new, independent emissions calculations. The oil and natural gas industry was once reliant on high bleed devices, but this is no longer representative of current industry practices. Further, EPA's recent subpart OOOO regulations require the installation of low bleed devices. EPA must take a more complete analytical approach to drawing conclusions from its data, while ensuring its data is adjusted for new trends and emerging regulatory requirements.

In its discussion about mitigation options, EPA appears intent to prescribe a single solution in some of the White Papers. For instance, EPA seems to indicate that plunger lifts can always be an effective mitigation tool for liquids unloading; however, they are not always an appropriate means of accomplishing a liquids unloading. This policymaking perspective is inappropriate given the diversity of the oil and natural gas industry and the unique characteristics under which each well operates. EPA should not prevent the totality of available technology from being used in oil and natural gas operations; doing so could actually jeopardize its goals and yield significant reductions in safety standards. The oil and natural gas industry is decidedly *not* homogenous, which is why state driven oil and natural gas regulations have been so successful at creating safe, efficient, and environmentally sound operating practices. EPA must account for this in its White Papers.

Prior to moving forward with its Methane Strategy, EPA must collaborate with industry to assess the mitigation options that are presented in the White Papers and make modifications that reflect accurate cost/benefit assumptions, that consider the different industry needs across a diverse set of geographic and geologic operating qualities, and that encourage the use of the best technologies without tying the hands of industry in ways that may actually reduce its ability to operate safely and efficiently.

Most alarming about the White Papers is the presentation of incomplete and often inaccurate methane emission data. The White Papers continue an assumption by EPA that all stranded and associated gas produced during the completion process is vented instead of flared, used in the field, or sold. This has led to a significant overstatement of emissions from the completion process, and data set being used by EPA must be accordingly modified. I am outraged over this because I have met personally with the Administrator of the EPA twice on this issue. Despite making adjustments to one database

following this meeting, EPA continues to present the wrong data and perspectives in its White Papers. This is wholly unacceptable.

EPA also seems to be ignoring the substantial data that has been collected as a part of EPA's Greenhouse Gas Reporting Program (GHGRP), and is instead primarily relying on figures from EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks (National Inventory). The National Inventory has inherent risks of drawing conclusions for policymaking purposes because it is a top-down estimate that relies heavily on often outdated factors and rarely relies on actual measurements from individual facilities. The GHGRP, on the other hand, is a bottom-up assessment that relies on reporting from individual facilities.

There are significant gaps in these two data sets, but EPA does not make any attempt to reconcile them. This is inappropriate; EPA must reconcile the two national data sets and establish a unified methane emission data set for the oil and natural gas industry that accounts for differences in emission levels across production basins. EPA's unified emission estimates should be based on bottom up assessments that heavily favor studies that rely on actual measurements instead of those articulated by computer models.

In assessing the risk of methane emissions posed by various components of the oil and natural gas industry, EPA must also make adjustments for scenarios where large quantities of methane are leaked by a few individual facilities or incidents. Removing these outliers will provide EPA and industry with a data set confidently based on normal operations and procedures, rather than extreme scenarios.

The need for EPA to carefully consider the true risk and amount of methane emissions from the oil and natural gas industry cannot be understated. If EPA completes its White Paper process without widespread confidence that it is operating with the most accurate figures, then its exercise will be a complete waste of time and confirm that the Administration's ambitions are purely political with an end game exclusively focused on additional regulations of the oil and natural gas industry.

Accordingly, prior to completing the White Paper process and before moving on to any additional steps of the Administration's Methane Strategy, I urge EPA to:

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.
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.
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

September 3, 2014

streamlining that could prove more beneficial than any new mitigation standards or requirements. EPA must add this discussion to the White Papers.

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.
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 outdated 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.

Once EPA has taken these steps, it should make official modifications to the White Papers to reflect the findings of these steps (and to reflect other comments received on the White Papers), republish them, and open them for an official public comment period. It is imperative that EPA have the best information available while providing transparency when reviewing that information. Many entities that provided comments were concerned by the truncated timeline EPA originally provided for the review of the White Papers; I share this concern. The process, however, can be ameliorated with an official public comment period following needed revisions of the White Papers.

Lastly, I ask that you provide me with a detailed overview of what next steps the Administration plans to take with respect to the oil and natural gas industry and the Methane Strategy. Please do not hesitate to contact me with any questions or concerns.

Sincerely,



James M. Inhofe  
United States Senator