

*Via regulations.gov*

March 15, 2016

Carole Cook  
Climate Change Division  
Office of Atmospheric Programs  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Washington, D. C. 20460

Re: Greenhouse Gas Reporting Rule: Leak Detection Methodology Revisions and Confidentiality Determinations for Petroleum and Natural Gas Systems, Docket Id No. EPA-HQ-OAR-2015-0764-0001

Dear Ms. Cooke:

The following comments to the proposed Greenhouse Gas (GHG) Reporting Rule (Subpart W) changes released by the Environmental Protection Agency (EPA) on January 29, 2016, are submitted on behalf of Western Energy Alliance, the Independent Petroleum Association of America, and the American Exploration and Production Council. We appreciate the opportunity to provide EPA with comments on its proposed rule, and wish to express several concerns with EPA's proposal. The timing of EPA's proposal is troubling, given that industry cannot fully evaluate its impacts until EPA's New Source Performance Standards (NSPS) Subpart OOOOa is finalized. This problem is compounded by the Bureau of Land Management's (BLM) recently proposed rule addressing venting and flaring, as there is potential for significant overlap in leak detection and repair (LDAR) protocols. Should EPA decide to move ahead with its proposed changes despite these concerns, we have several suggested revisions that will increase the accuracy and flexibility of the proposed rule.

Western Energy Alliance (the Alliance) represents over 450 companies engaged in all aspects of environmentally responsible exploration and production of oil and natural gas in the West. The Alliance represents independents, the majority of which are small businesses with an average of fifteen employees.

The Independent Petroleum Association (IPAA) represents the thousands of independent oil and natural gas explorers and producers, as well as the service and supply industries that support their efforts, that will most directly be impacted by the proposed actions. Independent producers develop 90 percent of American oil and natural gas wells, produce 54 percent of American oil and produce 85 percent of

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American natural gas. IPAA is dedicated to ensuring a strong, viable American oil and natural gas industry, recognizing that an adequate and secure supply of energy is essential to the national economy.

The American Exploration & Production Council (AXPC), is a national trade association that represents 31 of the largest US independent natural gas and crude oil exploration and production companies - leaders in finding and developing secure energy supplies throughout North America. Members are "independent" in the sense that they do not have petroleum refining or retail marketing operations and therefore are not "fully-integrated". The AXPC mission is to work constructively for sound energy, environmental and related public policies that encourage responsible exploration, development and production of natural gas and crude oil to meet consumer needs and fuel our economy.

In addition to the comments submitted herein, Western Energy Alliance, IPAA, and AXPC also endorse the comments submitted by the American Petroleum Institute.

We appreciate EPA's attempt to improve GHG reporting requirements to more accurately reflect the oil and natural gas industry's actual emissions. However, we are concerned with the timing of EPA's proposal. Given the extensive and ongoing rulemaking effort on EPA's New Source Performance Standards (NSPS) Subpart OOOOa, which address emissions from oil and natural gas production activity, it strikes us as remarkably premature to codify GHG reporting changes that reference this rulemaking while it remains in the proposed rule stage. It is difficult for industry to contemplate the full impact and scope of what EPA is proposing with its Subpart W changes while the OOOOa rulemaking remains in progress. EPA received over 1.3 million public comments during the OOOOa comment period, including 111 pages of detailed technical comments from Western Energy Alliance, IPAA, and AXPC. We urge EPA to review the comments it received on the proposed rule before moving ahead with these reporting changes.

### **Leak Detection and Repair Program Concerns**

Western Energy Alliance's OOOOa comments raised serious concerns about the feasibility of EPA's proposed LDAR program, among other aspects of the rule. By proceeding with this rulemaking before addressing the numerous concerns about NSPS OOOOa, EPA could be putting a program in place that is likely to be problematic for the oil and natural gas industry. We strongly urge EPA to suspend its update to the Greenhouse Gas Reporting Program (GHGRP) until it finalizes the changes to NSPS OOOOa.

As the Alliance stated in its OOOOa comments, the proposed LDAR program is highly problematic in numerous respects and would be extremely difficult and costly to implement, all while providing little emissions benefit over and above state and voluntary operator programs. There are proven feasible and cost-effective alternatives to EPA's proposed LDAR program. These alternatives are flexible, cost-effective, and provide the same (or improved) benefits to the environment. Such alternatives include corporate-wide programs executed voluntarily and compliance with various state-mandated regulatory programs such as in Wyoming and Colorado. Other programs, such as those modeled after D&IM programs, allow operators to focus on high and frequent emitters.

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While we appreciate the purpose behind an incentive-based LDAR program that rewards operators who follow diligent inspection and repair protocols, the proposed step-up/step-down approach is unworkable. The proposal would require operators to track the percentage of leaking components at every possible location, both to first establish a baseline, and then to track changes, modifications, and repairs. Tracking these components will require operators to use extraordinary software and database sets that are simply not realistic, practical, or cost-effective. States such as Colorado, Wyoming, and Utah already achieve similar, if not greater, environmental benefits than promised under the proposal. But these states do so without the logistical challenges of a percentage-based approach. Western Energy Alliance strongly recommended in its OOOOa comments that the rule not include a program provision that would require extensive data management (*i.e.*, no step-up/step-down provision).

As written, the proposed OOOOa would require operators to monitor leaks across an entire field, with multiple facilities, on different and changing inspection schedules. This monitoring burden is in addition to the challenges associated with calculating the leak rate at every single facility, as described above. Adding Subpart W reporting requirements on top of this already-problematic program would serve to needlessly complicate GHG reporting without any environmental benefit.

Additionally, as the Alliance, IPAA, and AXPC pointed out in our detailed comment letters, OGI monitoring is a useful approach to leak detection but also has numerous flaws. The proposed NSPS OOOOa suggests relying solely on OGI or Method 21 for monitoring and repair, but such constraints are self-limiting and ignore existing, successful LDAR programs. OGI and Method 21 are reasonably effective technologies for LDAR applications; however, they are imperfect and may not function well in all situations. For example, OGI is also not a quantitative tool and depending on the camera, it may also detect water vapor and heat signatures. An OGI camera survey may not always be able to tell an operator whether a repair is necessary since it is not quantitative. During periods of overcast skies, high winds, or inclement weather, OGI technology is unable to effectively detect hydrocarbon vapors. In certain parts of the West, such overcast and windy conditions can persist for long periods during the winter. Lastly, OGI cameras are generally not intrinsically safe and would require a hot work permit in many instances. Thus, a prescriptive LDAR rule that relies too heavily on an OGI monitoring plan will be ineffective in many basins across the West for much of the year. While OGI cameras have their place in certain circumstances, they are inherently limiting in their utility within an LDAR program—particularly one so focused on defining leaks and leak percentages such as that being proposed. For a more effective LDAR program, the rule should give operators flexibility to select the ideal monitoring technology for the prevailing conditions.

In the Alliance's comments on the proposed NSPS OOOOa rule, it expressed concern that EPA's overly-prescriptive LDAR approach would stifle innovation of new leak detection methodologies. Despite our substantive concerns, EPA appears to double down on this problematic approach to LDAR technology by incorporating it directly in the proposed GHGRP changes. The proposed NSPS OOOOa would stifle innovation of more effective monitoring and measuring equipment. Instead of prescribing two methodologies, the rule should permit flexibility, in accordance with other successful LDAR programs.

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For example, in Colorado, 5 C.C.R. 1001-9 (Regulation 7) gives operators some flexibility in choosing a leak detection technology. EPA's vendor testing program for flares and combustors may also be another viable option. Under this program, EPA allows vendors to test according to protocols set by EPA and determine standard operating procedures for control devices. New and innovative technologies are constantly evolving in this space, and the rule should encourage not stifle such progress.

We recognize that EPA has reached out in previous proposed rules to get information on emerging technologies, but critically, this is a constantly evolving space. Even the emerging technologies investigated by EPA do not represent the entire scope of activity in this area. The Department of Energy's [MONITOR grant program](#) is an example of the early-stage commercialization opportunities that exist. We encourage EPA to make very clear in the rule that new technologies are encouraged and will be approved and allowed through a straightforward and expedited review process (*i.e.*, avoiding an onerous, years-long application process that would otherwise be applied to actual emissions control devices or continuous emissions monitoring systems). We would welcome the opportunity to work with EPA to determine what methods should be approved for LDAR monitoring and verification.

We also have concerns regarding the proposed leak calculation methodology that may lead to unreasonably high emissions estimates. EPA's determination of the number of hours a component has been leaking is problematic when an operator uses the exact counts of leaks and leaker emission factors. To better illustrate this point, we pose two examples.

Example one: A facility subject to OOOOa must perform an annual inspection and finds one leak in May of the reporting year. That leak is also fixed in May. According to the GHG revisions, that one leak would be multiplied by the leaker emission factor (scf/hr/component) and the estimated leak duration (in hours) to arrive at a total scf volume of emissions. According to the GHG revisions, the time components (or leak duration) for a site with only one leak survey is the entire calendar year or 8760 hours. Accordingly, although only one leak was found in May and fixed during the same month, the facility is now required to assume that the component at issue was leaking for the entire year. As a result, the GHG revisions assume that the annual leak survey repair was unsuccessful, or that another leak developed immediately after repair. While it may be difficult to pinpoint the start of a leak and any subsequent leak, such a broad and unjustified estimate of time (a full year) is an overestimate of emissions.

Example two: A facility subject to OOOOa must perform quarterly inspections with the following results (assuming each leak is fixed the same month it was found):

- Q1 January: 2 Leaks
- Q2 May: 0 Leaks
- Q3 September: 1 Leak
- Q4 November: 3 Leaks

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Pursuant to the proposed GHG revisions, the leak duration for the three November leaks is from the last Q3 inspection in September through the end of the year. This brings up the same problems as Example one above. Assuming the November leaks started in September and then, after being fixed in November, additional leaks immediately developed, persisting through the end of the year, is an overly conservative and inaccurate method to calculate emissions. Every calculation will be an overestimate.

Further, under the proposed GHG revisions, the leaks found in January and September in Example two are assumed to start from the previous survey or from the start of the year, whichever is more recent. That said, it is unclear in the revisions whether the leaks found in January and September have to be carried through to the end of the year. We urge EPA to clarify that these types of leaks end at repair and do not persist through the end of the year.

We propose a simple solution to the overestimates identified above. In both examples, we do not know the exact date the leaks started or, albeit very rare, if another leak arose immediately upon repair. However, statistically speaking, the average start time of a leak would be half the time between the previous inspection and when the leak was found. Similarly, if another leak were to arise later in the year, it would on average occur half the time between the inspection and the end of the year. Considering the many sites expected to be subject to NSPS OOOOa and the leaks that may be detected, our solution will likely average out to half the emissions the current GHG revisions propose to calculate. EPA may adopt this solution by revising the GHGRP to allow reporting entities to multiply the entire equation W-30 by half.

### **Inconsistencies with Other Proposed Rules**

In NSPS OOOOa, EPA advanced a problematic definition of a fugitive emissions component. The definition of *fugitive emission component* is inconsistent with historical definitions for other leak detection programs. For example, in the NSPS OOOO requirements for gas processing plants, “fugitive emission components” are effectively included within the definition of “*equipment*.” See 40 C.F.R. § 60.5430 (“*Equipment*, as used in the standards and requirements in this subpart relative to the equipment leaks of VOC, from onshore natural gas processing plants, means each pump, pressure relief device, open-ended valve or line, valve, and flange or other connector that is in VOC service or in wet gas service, and any device or system required by those same standards and requirements in this subpart.”)

The proposed rule proposes the following definition of fugitive emissions component, which is notably more expansive:

*Fugitive emissions component* means any component that has the potential to emit fugitive emissions of methane or VOC at a well site or compressor station site, including but not limited to valves, connectors, pressure relief devices, open-ended lines, access doors, flanges, closed vent systems, thief hatches or other openings on a storage vessels, agitator seals, distance pieces, crankcase vents, blowdown vents, pump seals or

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diaphragms, compressors, separators, pressure vessels, dehydrators, heaters, instruments, and meters. Devices that vent as part of normal operations, such as natural gas-driven pneumatic controllers or natural gas-driven pumps, are not fugitive emissions components, insofar as the natural gas discharged from the device's vent is not considered a fugitive emission. Emissions originating from other than the vent, such as the seals around the bellows of a diaphragm pump would be considered fugitive emissions.

80 Fed. Reg. at 56,638. EPA has provided no rationale for such a significant deviation from the long-standing approach as reflected in NSPS OOOO. As a matter of regulatory consistency and efficient program implementation, the definition of "fugitive emissions component" in OOOOa should not be more expansive than other similar regulatory definitions in NSPS OOOO.

Moreover, the definition of "fugitive emissions component" above incorrectly includes equipment that should be listed as devices that vent as part of normal operations. Specifically, included within the definition of "fugitive emissions component", but which should not be, are "thief hatches or other openings on a storage vessels (part of closed vent system, not relevant to an uncontrolled storage vessel, agitator seals, distance pieces, crankcase vents, blowdown vents, pump seals or diaphragms, compressors, separators, pressure vessels, dehydrators, heaters, instruments, and meters.)" 80 Fed. Reg. at 56,638. Each of these vents is part of normal operations and must be allowed to within the confines of these pressurized systems for very serious safety and other operational reasons.

In the proposed changes to Subpart W, EPA states that it intends to align Subpart W with this problematic definition from NSPS OOOOa. However, EPA goes on to state:

Based on this evaluation, we determined that the subpart W calculation methodology for storage tanks already generally includes emissions from thief hatches or other openings on storage vessels. Similarly, the subpart W methodologies for gas-liquid separators include all potential emissions from these sources. Therefore, these sources are not considered equipment leak components in the proposed amendments to subpart W.

This distinction makes the interpretation of Subpart W potentially confusing and could lead to inconsistencies. EPA should apply a consistent rationale regarding fugitive emission components across NSPS OOOOa and Subpart W, and the fugitive emission component definition should be consistent with other EPA programs.

The proposed rule essentially creates an inconsistent component definition within Subpart W between the major equipment and LDAR-based calculation methods. The major equipment count-based method, which could be used for all non-OOOOa sites, has the traditional component definition, while the LDAR method adds the additional sources discussed above. This would lead to a situation where the two

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equipment leak methodologies that would be valid under Subpart W reporting would have different scopes.

In addition to inconsistencies with Subpart W, EPA needs to evaluate the LDAR program requirements of the Bureau of Land Management (BLM)'s proposed venting and flaring rules, which lay out similar LDAR provisions with several important distinctions. Given that BLM's proposed rule is currently still out for comment and was published in the federal register three weeks ago, industry is still digesting the proposed rule and identifying new concerns. BLM and EPA imposing different LDAR provisions could create potentially confusing and redundant requirements for operators, particularly when GHG reporting requirements are layered on top.

### **Procedural Concerns with the Proposed Rule**

In addition to the feasibility issues raised here with EPA's proposed LDAR requirements, we are concerned by EPA's decision to allow only 45 days to comment on the proposed changes to Subpart W. Although the rule itself may appear minor to EPA, its reference to an important and problematic rule still in the proposed stage makes this rule significant to industry. Furthermore, [Executive Order No. 12866](#) stipulates that, in most cases, a comment period "of not less than 60 days" should accompany a proposed rule. Given this standard practice and the unprecedented regulatory activity facing the oil and natural gas industry, EPA's decision to deny our request to extend the comment to the standard 60-day period is perplexing. The exceptionally tight comment deadline is compounded by the fact that the first quarter of the year is a busy time for industry GHG reporting personnel, as they are typically preparing the prior calendar year reports. It is particularly difficult to get substantive feedback from industry experts during this time.

### **Burdens to Small Operators**

We are concerned by the potential burden of this proposed rule on small entities who may struggle to comply with the additional burden imposed by the calculation requirements of the proposed rule. As EPA acknowledges in the proposed rule, "This action proposes to increase burden related to recordkeeping and reporting requirements for reporters in two industry segments: Onshore Petroleum and Natural Gas Production and Onshore Petroleum and Natural Gas Gathering and Boosting [sic]." The purpose of the Paperwork Reduction Act (PRA) is to "minimize the paperwork burden for individuals, *small businesses*, educational and nonprofit institutions, Federal contractors, State, local, and tribal governments, and other persons resulting from the collection of information by or for the Federal Government" and to "strengthen the partnership between the Federal Government and State, local, and tribal governments by minimizing the burden and maximizing the utility of the information" collected. 44 U.S.C. § 350(1) and (6). (Emphasis added).

In order to reduce the burden to small operators, we recommend EPA offer them a choice in their reporting methodologies. As EPA acknowledges, there may be a benefit to industry to calculating its emissions using actual emissions rather than an equipment count and emission factor. However, EPA

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could greatly improve the flexibility of its reporting requirements by allowing any small operator to select one of these methods of calculation.

This added flexibility will also prevent operators from having to follow two different emission calculation protocols for OOOOa and non-OOOOa facilities. As the proposal currently is written, a company would have to follow two different reporting procedures for these different sources, even in the same basin. This would be a significant burden for all operators, regardless of size, and therefore we encourage EPA to increase flexibility across the board. However, at a minimum, EPA should allow small businesses added flexibility in their calculations.

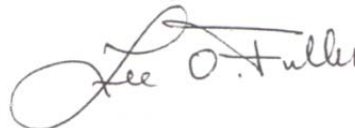
### Conclusion

We urge EPA to suspend its revisions to Subpart W until after NSPS OOOOa and BLM's venting and flaring rules have been finalized. Only then will industry be able to understand and fully contemplate the consequences of incorporating the proposed LDAR programs into GHG reporting rules. We also urge EPA to maintain consistency in its leak definition, particularly regarding storage tanks. As EPA correctly points out in Subpart W, normal emissions from components like thief hatches and pressure relief devices should be treated as part of storage tank emissions, rather than equipment leaks. NSPS OOOOa should be amended to maintain this consistency. Lastly, we encourage EPA to evaluate all options to minimize the reporting burden on small operators, including allowing flexibility in emission calculation methodology.

Sincerely,



Kathleen M. Sgamma  
VP, Public & Gov't Affairs  
Western Energy Alliance



Lee O. Fuller  
Executive Vice President  
IPAA



V. Bruce Thompson  
President  
AXPC