



February 22, 2015

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Environmental Protection Agency
EPA Docket Center (EPA/DC)
Mailcode 28221T
Attention: Docket ID No. EPA-HQ-OAR-2014-0831
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

RE: Comments Regarding the Proposed Rule, Greenhouse Gas Reporting Rule: 2015 Revisions and Confidentiality Determinations for Petroleum and Natural Gas Systems (Docket ID No. EPA-HQ-OAR-2014-0831)

Dear Sir or Madam:

Western Energy Alliance (the Alliance) and American Exploration & Production Council (AXPC) respectfully submit the following comments to the U.S. Environmental Protection Agency (EPA) in response to Proposed Rule, *Greenhouse Gas Reporting Rule: Revisions and Confidentiality Determinations for Petroleum and Natural Gas Systems* dated December 9, 2014.

The Alliance represents over 450 companies engaged in all aspects of environmentally responsible exploration and production of oil and natural gas across the West. The Alliance represents independent producers, the majority of which are small businesses with an average of fifteen employees. Our members are committed to reducing emissions from their operations and consistently employ best industry practices whether mandated by regulations or voluntary.

The American Exploration & Production Council ("AXPC") is a national trade association representing 32 of America's largest and most active independent oil and natural gas exploration and production companies. AXPC members are leaders in developing and applying innovative and advanced technologies necessary to explore for and produce oil and natural gas, both offshore and onshore, from unconventional sources.

Our members are "independent" in that their operations are limited to exploration for and production of oil and natural gas. Moreover, our members operate autonomously, unlike their fully integrated counterparts, which operate in additional segments of the energy business, such as downstream refining and marketing.

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We are concerned with EPA's proposal specific to greenhouse gas (GHG) estimates and reporting for the gathering and boosting and completions and workovers of oil wells with hydraulic fracturing. Many facilities and flaring venting sources are subject to the GHG Reporting Program (GHGRP) with requirements to report under Subpart C, "General Stationary Fuel Combustion Sources" and Subpart W, "Petroleum and Natural Gas Systems."

Our comments are presented below, under three specific categories of concern: Definitions and Clarifications, Extension of Best Available Monitoring Method (BAMM) provisions, and Additional Data Collection and Reporting Requirements.

Definitions and Clarifications

Workovers with Hydraulic Fracturing

- We have concerns with the inclusion of "workovers with hydraulic fracturing." It is
 our understanding that the EPA is interpreting a workover as equivalent to a
 recompletion. A workover is an operation that affects the well itself and typically
 does not involve hydraulic fracturing. Workovers are performed during major
 maintenance or remedial treatments on a well, such as removing or replacing
 production tubing, or cleaning out accumulations of substances that may inhibit
 production.
- 2. In contrast, a recompletion consists of a process in which hydrocarbon-bearing formations are "re-stimulated" by means such as re-fracturing prior producing formations or hydraulic fracturing different formations from the same wellbore.

Onshore Petroleum and Natural Gathering and Boosting Segment

3. We have several concerns with the EPA's proposed definition of the Onshore Petroleum and Natural Gas and Boosting segment (hereinafter referred to as the "Gathering and Boosting segment"), as outlined below. First, we are concerned that the definition, as stated, would unintentionally require collecting and reporting data of <u>petroleum</u> gathering pipelines and other associated equipment. The proposal defines [§98.230(a)(9)] onshore natural gas gathering and boosting systems as:

"...gathering pipelines and other equipment used to collect <u>petroleum</u> <u>and/or</u> natural gas from production gas or oil wells and used to compress, dehydrate, sweeten, or transport the gas to a natural gas processing facility, a natural gas transmission pipeline or to a natural gas distribution pipeline."

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- 4. <u>Petroleum</u> gathering pipelines and equipment are not used to compress, dehydrate, sweeten, or transport natural gas. Therefore, we request "petroleum and/or" be stricken from the definition.
- 5. We believe it was not the intention of EPA to include <u>petroleum</u> gathering pipelines since the emissions would be negligible. Moreover, the proposed 2.81 scf/hr/mile emission factor is clearly only applicable to <u>gas</u> gathering lines. In addition, we assume that EPA intends to allow the use of company records and engineering estimates for determining the gas gathering pipeline distances when utilizing this emission factor, such that these distances do not need to be explicitly measured by field surveys which would be prohibitively expensive (upwards of \$9,000 per mile surveyed¹). Thus, we request confirmation of this assumption.
- 6. In §98.230(a)(9), the proposed rule states "gathering and boosting equipment includes, but is not limited to gathering pipelines", and §98.232(j) states:

"for an onshore petroleum and natural gas gathering and boosting facility, report CO2, CH4, and N2O emissions from the following source types:... (5) Blowdown vent stacks".

Since this segment includes gathering pipelines, and blowdowns are included as a source type, it appears that gathering pipeline blowdowns in the field are to be included. However, it is our assessment that the cost and effort to track gathering pipeline blowdown activities at "field" locations that are located <u>outside</u> the fence line of typical gathering and boosting facilities (e.g., compressor stations, central tank batteries) would be excessive and infrequent. Moreover, the majority of blowdowns typically occur at manned or frequently visited facilities where information needed for GHG emissions calculations can be readily logged. Therefore, we request that blowdown events that occur outside the fence line of gathering and boosting facilities be excluded from GHG reporting.

7. As EPA is aware, gathering and boosting systems may cross among multiple reporting basins. We are requesting clarification of how emission estimates are to be calculated so it ensures that the same emissions are not being counted in multiple reporting basins. The bounds of the gathering and boosting segment lack clear distinction and create overlap into the existing Onshore Petroleum and Natural Gas Production segment. Confusion as to who needs to report, and under which reporting segment, will persist if the revisions to Subpart W are finalized as proposed. Therefore, we request that EPA incorporate, by reference, the U.S. Department of Transportation's Pipeline and Hazardous materials Safety Administration (PHMSA) federally defined

¹ Operator-provided Alliance member estimate for hiring a contractor to conduct surveys.

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boundaries of the production vs. gathering and boosting vs. transmission segments to ensure state/federal transparency and consistency.

8. We are concerned that the regulated community may be required to report emissions from operations that are not specific to one particular segment. Data may be mistakenly excluded within a particular segment when reporting responsibility among several potential entities is unclear. Or, emissions will be double-counted (and over reported) by reporting entities. Regardless, a lack of clarity will create an inaccurate catalog of information.

For instance, there may be gathering and boosting equipment located on a single well pad or associated with a single well pad. Emissions from such equipment would need to be reported, or at minimum analyzed for emissions estimates. The gathering and boosting equipment at a production facility may be under common ownership of the upstream production operator in some situations; however, it is more common that this equipment is owned and/or operated by a midstream operator. To further explain, one Alliance member company has noted that certain gathering and boosting equipment operated by the upstream production company is actually owned by a separate and distinct midstream entity. Under the rule as proposed, it appears that this equipment would fall under both the production and gathering and boosting reporting segments. Thus, emissions potentially could be double counted.

An additional problem may arise if certain gathering and boosting equipment or systems, associated with complex ownership scenarios, represent the "determining factor" of the emissions for one of more entities' 25,000 metric tons of CO2e per year reporting threshold (i.e., inclusion of the emissions would require GHG reporting, but exclusion would place the facility(s) below reporting threshold(s). If the reporting segment boundaries are unclear, which entity includes the subject emissions in their calculations to determine GHG reporting applicability?

These complex ownership/operating scenarios, as well as our general concerns outlined above, illustrate the need for clear distinctions between which emissions get calculated and reported under which segment. As previously stated above, we request that EPA incorporate, by reference, the U.S. Department of Transportation's Pipeline and Hazardous materials Safety Administration (PHMSA) federally defined boundaries of the production vs. gathering and boosting vs. transmission segments to ensure state/federal transparency and consistency.

Extension of BAMM

9. We appreciate that EPA developed BAMM provisions for the initial implementation of the proposed amendments, with the ability for extension requests through December 31, 2016. However, the proposed vast expansion of the rule to include oil well

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completions and workovers with hydraulic fracturing, coupled with two completely new segments, creates great challenges in being inclusive of all segments with regard to monitoring methods.

- 10. The increase in meter installation and recalibrations that would be required due to the inclusion of completions and workovers of oil wells with hydraulic fracturing and the two newly proposed segments will significantly increase the efforts and costs of compliance. The applicable elements of Subpart W are spread out over very large geographical regions. The mobilization man-hours and associated costs need to be factored into the overall cost impact of the amendments. The availability of not only the meters, themselves, but also the contractors needed to perform the installations and calibrations is unknown. Furthermore, if liquid and/or gas compositional data are required for calibrations, more contactors will need to be hired to properly gather and analyze the samples. Securing contractors for the purpose of meter installation/calibration throughout a basin will take several years to fully implement.
- 11. We request that EPA automatically allow BAMM for the newly required elements to be extended to December 31, 2018. Note that EPA allowed 3 years of BAMM when Subpart W was originally proposed for the production segment, and now that two new segments have been proposed, EPA should allow the same amount of time given the large amount of potential sources and effort needed to comply with the rule. This would allow reporters sufficient time to get the additional data collection, management, and reporting systems in place for the newly required data elements. This will take a significant amount of time and effort. Operators that may have common ownership in more than one segment will be required to follow monitoring methods from each segment.

Although, as of January 1, 2015, BAMM is no longer allowed for the currently regulated segments of Subpart W, we are requesting that BAMM be reopened, and extended until December 31, 2017. Due to the inclusion of all segments of the onshore oil and gas operations, operators will need time to incorporate and reevaluate the methods of monitoring on a corporate, grand scale. This is necessary for operators to ensure the implementation of monitoring methods can be efficiently applied and integrated across each of the segments. This will allow for a more accurate and inclusive internal management system to be implemented for all of the data.

12. While we continue to investigate and search for innovative technologies and methods to increase accuracy and efficiency in our operations, the increased burden of expanding reporting data and elements reduces these efforts. We would like to continue to work with the EPA to determine ways to decrease the cost of current technology implementations before spending more time to focus on advanced methods. Although we support the EPA's request for operators to research advanced

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monitoring methods, such as possible remote sensing, monitoring, we prefer the operators' limited resources to be focused on identifying and fixing leaks, rather than quantifying the volume of the associated leaks. Furthermore, we feel resources should be focused on implementing current technologies that conform to the requirements of the rule, rather than allocating resources to future technologies.

Additional Data Collection and Reporting Requirements

13. The proposed rule, with the expansion of oil wells completed with hydraulic fracturing and the addition of the two new reporting segments, adds a large number of additional data collection and reporting requirements that will be unduly burdensome for the regulated community, as well as costly and difficult to implement.

The majority of resources (e.g., cost, time, and efforts) are associated with gathering and documenting required data under the regulation. A typical operator currently reporting for the production segment that has gathering and boosting operations is estimated to more than double its current level of effort, including the time and materials needed to set up and implement systems for sources that previously were not required to be reported under the current Subpart W rule.² Based on Alliance members' experience, EPA vastly underestimated, by at least an order of magnitude, the amount of time necessary to accommodate the new reporting obligations as proposed. For example, if a consultant was hired to gather and report the information on behalf of a regulated entity, a large process would need to be implemented. This process includes:

- 1) Developing new processes and creating or modifying software to collect the required information
- 2) Updating monitoring plans
- Conducting training for persons responsible for collecting and reporting data
- 4) Auditing new data elements for accuracy
- 5) Revising reporting processes and updating data management software
- 6) Preparing and reviewing expanded annual reports
- 7) Documenting and archiving data used for reporting.

The level of effort could easily total 1,000 to 1,500 man-hours or more across the three segments (production plus the two newly proposed segments). Assuming a labor consulting costs of \$150/hr, the initial investment would be between \$150,000 and \$225,000. This estimate does not even include the expected additional costs for

Operator-provided Alliance member estimate that the number of sources that would require evaluation and potentially be reported under the gathering and boosting segment would increase 112% compared to the current number of sources reported for the production segment.

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such items as conducting site-specific inventories, gathering and analyzing oil or gas samples, installing/calibrating flowmeters.

Data reported under the GHG emissions reporting rule is often compiled from a number of different systems and the addition of each data element will require an evaluation of where the data can be accessed, how it can be integrated into current data management systems and processes, and how it can be integrated into existing raw data reporting formats. This process will take many man-hours per data element, vastly more than the EPA estimate of 113 hours per respondent, by at least an order of magnitude, especially during the initial implementation of data gathering and reporting of the associated amendments.

14. Additionally, many of the added data elements to be gathered and reported under the EPA's proposal, although not confidential business information, are not essential to the emission calculations required under the GHG emissions reporting rule. These added data elements do not embody the purpose of the GHG emissions reporting rule and, in being mindful of limited resources and challenging economic times, should not be required of the regulated community. For instance, EPA has added many reporting data elements to atmospheric tanks: number of tanks, number of tanks with VRUs and flares, number of tanks controlled/uncontrolled, etc., within a basin or sub-basin. The number of tanks in a basin or sub-basin is not used in calculations when estimating the associated emissions. Furthermore, depending on the operations, the number of tanks may be variable during any given calendar year. This information is not technically relevant to estimating emissions. Rather emissions are estimated based on oil and/or gas throughput, composition, controls, etc. – data already required (and reported to EPA) under the GHG emissions reporting rule.

We request that EPA reconsider the addition of data elements to report in this rulemaking, particularly those that do not pertain to emission calculations. While we recognize that much of the non-emissions calculations data is not CBI (e.g., information submitted in permit applications or contained in permits) we urge EPA to remove or significantly limit its request for information that does not inform the actual emissions calculation as issue under the GHG emissions reporting rule. The significant resources consumed by the regulated community to gather and cull the non-emissions calculations data will outweigh the informational benefit to EPA and may detract for reporting entities' ability and focus to provide timely and accurate emissions information to the Agency.

15. In the very least, we urge EPA to recalculate compliance and implementation dates for the proposed rules in light of the significant man-hours that will be required to implement the proposed data additions and changes to calculation methodologies, described above.

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Conclusion

Thank you for the opportunity to comment on the proposed Subpart W amendments and for working with industry as EPA develops methods to collect complete and accurate facility-level GHG emissions from the petroleum and natural gas industry. Please do not hesitate to ask for more information and input. We appreciate your continued attention to our feedback.

Sincerely,

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