



January 31, 2022

Submitted via <http://www.regulations.gov>

Michael S. Regan, Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Re: Comments on the Environmental Protection Agency's Proposed Standards of Performance for New, Reconstructed, and Modified sources and Emission Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review, Docket ID # EPA-HQ-OAR-2021-0317

Dear Mr. Regan:

The Petroleum Alliance of Oklahoma (The Alliance) appreciates the opportunity to provide comments to the Environmental Protection Agency (EPA) regarding the proposed rule, Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review (Proposed Rule), Docket ID # EPA-HQ-OAR-2021-0317.

The Alliance is the only trade association in Oklahoma to represent all sectors of the state's oil and natural gas industry. Representing more than 1,300 individuals and companies and their tens of thousands of employees, the Alliance's membership includes oil and natural gas producers, service providers to the oil and natural gas industry, midstream companies, refiners, and other associated businesses, and our members include companies of all sizes, ranging from small, family-owned companies to large, publicly traded corporations. The Alliance addresses industry issues of concern and works toward the advancement and improvement of the domestic oil and gas industry. We support and advocate for legislative and regulatory measures designed to promote the well-being and best interests of the citizens of Oklahoma and a strong and vital petroleum industry within the state and throughout the United States.

Our members are committed to extracting, producing, transporting, and refining crude oil and natural gas in a safe and environmentally-sound manner. As EPA proceeds in the development of the Proposed Rule to reduce methane and volatile organic compounds (VOCs) emissions from new and existing oil and gas sources, we encourage EPA to develop rules that are reasonable, practical and economical to implement, and provides compliance flexibility to meet the needs of all sizes of oil and gas businesses, especially small oil and gas operators.

The Proposed Rule will have a significant and direct impacts on our members' business operations, and will increase operational costs on all our members, especially our small oil and gas members. We support the comments submitted by Spilman Thomas & Battle, PLLC on behalf of the Producer Associations, a large coalition of oil and gas trades associations from across the country. In addition, we provide the following comments.



1. General

a. Clarity is Needed on the Proposed Rule

It is very confusing (especially among smaller operators) as to how the Proposed Rule (NSPS OOOOa/b/c) will function collectively. For example, it is unclear how the effective dates, requirements, new definitions, etc. overlap and/or are triggered pushing an operator into different rule requirements. We encourage EPA to provide clarity as to how each rule (NSPS OOOOa/b/c) will work together, separately or be superseded.

b. More Stringent Regulations May Have Unintended Consequences

In general, EPA's Proposed Rule provides more stringent, "one-size-fits-all" regulations for new and existing oil and gas wells. This may lead to manpower and equipment availability issues that will increase costs and the ability for oil and gas operators, especially small businesses, to comply with the proposed regulations. Smaller operators cannot compete with larger companies when it comes to securing services or equipment (as currently shown with existing supply/demand issues). In addition, a one-size-fits-all rule that applies to all wells is not appropriate or reasonable, is an inefficient use of manpower and funds, and it detracts focus away from high-emission sources where the greatest environmental benefits could be obtained.

c. EPA's Proposed Rule Should be Reasonable, Practical and Economical to Implement

We encourage EPA to develop the Proposed Rule in a fair and balanced approach, which is reasonable, practical, and economical to implement by all sizes of oil and gas companies. EPA should develop its Proposed Rule that provides operators flexibility, is easy to understand by all size operators, provides simplified compliance processes, and reduces recordkeeping and reporting burdens and costs on the regulated community. More complicated, burdensome and costly regulations do not necessarily drive environmental progress, and it may lead to a non-compliance and negative consequences for the environment.

2. Inadequate Comment Time Frame and "Applicability Date" (November 15, 2021) Issues

The Proposed Rule was released just prior to the holidays and during the ongoing issues with the pandemic. The 60-day comment period along with the 15-day comment extension is unreasonable for such a complex rulemaking. It does not allow our members adequate opportunity to review the information and rationale for the Proposed Rule, and to provide meaningful and fully informed comments on the requested topics given the breadth of the issues raised. We request EPA's forthcoming proposed supplemental rule provide at least a 120-day comment period.

In addition, EPA's publication of the Proposed Rule does not include any proposed regulatory language. As such, this Proposed Rule should not be characterized as a "proposed rule" in which the publication date of November 15, 2021 becomes the applicability date for methane and VOC emissions from sources that commenced construction, modification, or reconstruction. We request EPA revise the applicability date to align with a forthcoming proposed supplemental rule publication date that contains actual text.

3. Fugitive Emissions

a. Well Sites

- i. **Wellhead Only Well Sites** - EPA is proposing to exclude from fugitive emissions monitoring a well site that is or later becomes a "wellhead only well site," which the 2020 Technical Rule defines as "a well site that contains one or more wellheads and no major production and



processing equipment.” The 2020 Technical Rule defined “major production and processing equipment” as including reciprocating or centrifugal compressors, glycol dehydrators, heater/treaters, separators, and storage vessels collecting crude oil, condensate, intermediate hydrocarbon liquids, or produced water. We support EPA’s proposal that follows the 2020 Technical Rule.

- ii. ***Initial Monitoring for Well Sites*** – EPA is proposing to further amend the 2016 NSPS OOOOa to extend the deadline for conducting initial monitoring from 60 to 90 days for monitoring both VOC and methane fugitive emissions at all well sites and compressor stations (except those on the Alaska North Slope provided elsewhere in the proposed rule). We support this proposal that follows the 2020 Technical Rule.
- iii. ***Repair*** – Similar to the 2020 Technical Rule, EPA is proposing to require a first attempt at repair within 30 days of identifying fugitive emissions and final repair, including the resurvey to verify repair, within 30 days of the first attempt at repair. In addition, EPA proposes to utilize other “repair related” requirements items provided in the 2020 Technical Rule. We support these proposals that follow the 2020 Technical Rule.
- iv. ***Site Level Baseline Emissions*** – To establish site level baseline emissions, EPA proposes the use of emission factors and component counts identified in the Greenhouse Gas Reporting Program (GHGRP) under Subpart W. First, the use of this information would not be appropriate as it has the potential to overestimate or underestimate the emissions from oil and gas sources. For example, see the comments below regarding intermittent pneumatic controllers. EPA should conduct a rulemaking effort to update this information in the GHGRP to reflect emissions more accurately. In addition, as an option, EPA should allow operators to use actual data for this calculation.

To develop site level baseline emissions, EPA is proposing the calculation of the total site-wide methane emissions, including fugitive emissions from components, emissions from natural gas-driven pneumatic controllers, natural gas-driven pneumatic pumps, storage vessels, as well as other regulated and nonregulated emission sources, and are proposing that owners or operators would calculate the site-level baseline methane emissions using a combination of population-based emission factors and storage vessel emissions. This calculation would have to be repeated every time equipment is added to or removed from the site. It is unclear why EPA is including affected facility equipment (e.g., pneumatic controllers and storage tanks) in this fugitive emission calculation when they are separately regulated emission sources. For this calculation, EPA should utilize and follow the same requirements for reporting fugitive emissions in accordance with the GHGRP subpart W (note comments directly above regarding needed updates) or allow actual data to be used.

In addition, EPA proposes thresholds (and co-proposal thresholds) at which fugitive emissions would be conducted. First, EPA should use terminology small oil and gas operators are familiar with without the help of consultants. The lack of plain language and complicated compliance mandates has left many small businesses confused and overwhelmed. For example, the Proposed Rule does not use common oil field measurement



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terminology e.g., operators understand production information expressed in barrels of oil per day or cubic feet of gas per day. EPA proposes to use site-level baseline methane emissions <3 tons per year (tpy) (with no routine monitoring, ≥3 tpy and <8 tpy (quarterly monitoring), and ≥8 tpy (quarterly monitoring). However, these thresholds do not equate to something understandable or useable by smaller operators without the assistance of hired consultants to conduct emission calculations for each well to make that determination. We request EPA propose a rule using terminology that is transparent, understandable, and useable by small oil and gas businesses (preferably production info) so they can easily comply, avoiding the need to hire consultants which will increase the cost of compliance. As an alternative, EPA could develop a matrix or framework that provides smaller operators the option to use in lieu of conducting detailed calculations to determine if the methane emission at their site exceed the proposed thresholds.

As previously stated, we do not think the site level baseline emissions should include sources that are separately regulated as an affected facility. However, if EPA plans to include these affected facilities in the baseline emission calculations, then EPA should increase the tiered thresholds. In addition, EPA proposes “co-proposed” monitoring frequencies (i.e., no routine monitoring required, semiannual monitoring, and quarterly monitoring). Any monitoring frequencies proposed should not be more stringent than these.

Finally, EPA should allow operators the ability to reduce monitoring if fugitive emissions monitoring findings are reduced or eliminated, especially for marginal/low producing wells. For example, upon completion of two successful (no findings) optical gas imaging (OGI) inspections, the inspection interval requirement should be reduced to one time per year or every 2 years. In addition, EPA should consider incentives that encourages operators to anticipate sources of emissions and/or install proactive measures to effectively monitor or manage those emissions.

- v. **Appendix K**- EPA requests comment on the proposed Appendix K and whether the proposed training, certification, and audit provisions are appropriate and do not place undue burden on the ability of industry to satisfy the regulatory requirements. First, in EPA’s December presentation, Appendix K is written for broader applicability other than the upstream oil and natural gas sector. We do not think Appendix K should be a separate, standalone document. Future amendments to Appendix K focused on other industrial sectors may have unintended consequences on upstream oil and gas production operations as it relates to NSPS OOOO a/b/c rules. In addition, the proposed performance verification, development of the operating envelope, monitoring plan, verification checks, survey requirements, operator training/audits, recordkeeping, etc. are excessive. EPA is making these survey compliance requirements too complicated and onerous for all operators, especially for small oil and gas operators that have marginal/low production wells e.g., the requirements will significantly extend survey timeframes beyond what is necessary to detect fugitive emissions, will likely require the use of contract surveyors, require excessive electronic recordkeeping efforts, and increase costs excessively. Additionally, we question if there will be adequate surveyors available to all operators, especially small oil and gas operators, when needed to meet the monitoring compliance requirements of NSPS OOOOa/b/c. Finally, if EPA makes this a requirement for oil and gas operators, it should apply these same standards



to any entity conducting or using such equipment for emissions monitoring surveys. We request EPA maintain the current OGI methodologies under NSPS OOOOa.

- vi. ***Emission Monitoring Technologies and Alternatives*** – The goal of emission monitoring technologies is to find and fix leaks quickly; however, a mandated, “one-size-fits-all” emission monitoring requirement may not meet that goal or work in every scenario or for every size of operator. For example, a smaller operator with fewer facilities or simplified operations may benefit from merely using AVO techniques (less costly, but effective) whereas companies with more expansive operations spread out over large areas may benefit from OGIs, continuous or airborne monitoring systems. Also, each technology has pros and cons, and the implementation, accuracy, reliability, and maintenance may be dependent on a variety of things e.g., location/remoteness, field operations or typical weather conditions in an area. The Alliance supports alternative emissions monitoring technologies, but EPA should not mandate a specific technology. EPA should allow operators the flexibility to tailor technologies to their specific operations that are appropriate for the well and the area.

Finally, emissions technologies are evolving quickly. EPA should simplify the approval process and not delay or hold emerging alternative technologies to higher standards than existing OGI requirements. For this type of technology, as well as continuous monitoring technologies, we encourage EPA to develop a framework that will allow technologies to be used without going through an additional approval process (e.g., specified surveys per year if the technology has a specified detection limit).

- vii. ***Use of Public and Community Monitoring*** – EPA request input on a program it is considering whereby communities and others can identify large emission events and provide notification to operators for subsequent investigation and remediation. First, as a matter of practice, operators are generally responsive to information presented to them that indicates a potential upset or malfunction, regardless of the source of the information. However, EPA’s consideration of a community program does not address any safety or trespass issues. The Alliance is concerned that such a program will encourage the public to illegally trespass onto a well site to gain videos or emission data. The public may not be aware or trained on the many safety risks associated with a well site. Additionally, it is an illegal trespass for the public to go on well sites without the operator’s permission. Any community emission collection data should be conducted under the same requirements as applied to operators, e.g., follow Appendix K requirements. Any community monitoring data should be fully transparent e.g., identify who collected it, how it was collected, when it was collected, etc. Finally, community monitoring data and notice to operators should not “bypass” existing regulatory authorities and processes in place that require the state and/or EPA to manage compliance of a regulated entity. The agency with jurisdiction (whether the state or EPA) should conduct an unbiased data quality review of the community data to validate the accuracy of the information prior to any actions being taken or its release to the public. Typically, states with delegated authority are in the best position to address these issues, have processes in place and are familiar with the regulated entities in their state. As such, we don’t think an additional or separate community monitoring program by EPA is needed in this rulemaking.



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viii. Marginal/Low Producing Wells

a. General Information and Benefits of Oklahoma’s Marginal/Low Production Wells

- Marginal wells are defined in federal law as oil wells producing 15 barrels per day or less and natural gas wells producing 90 thousand cubic feet (Mcf) per day or less. The Interstate Oil and Gas Compact Commission (IOGCC) defines a marginal well as a well that produces 10 barrels of oil or 60 Mcf of natural gas per day or less. However, according to the IOGCC’s 2016 [report](#) regarding marginal wells in Oklahoma, the average crude oil and natural gas production for a marginal well is approximately 1.43 barrels per day of crude oil and 18 Mcf of natural gas per day. Oklahoma has approximately 28,000 marginal crude oil wells and 45,000 marginal natural gas wells. Approximately 9.5 percent of Oklahoma’s total crude oil production and approximately 12.0 percent of Oklahoma’s total natural gas production comes from marginal wells. These wells provide an important revenue resource for the State. In addition, small [businesses](#) in the Mining, Quarrying, and Oil and Gas Extraction industry in Oklahoma employ over 20,000 people, or over 50.5% of the private workforce employed in that sector in 2017. Many small oil and gas businesses may be negatively impacted if the Proposed Rule is implemented.

Additionally, marginal wells provide a significant share of the U.S. domestic oil and natural gas output and economic contributions. The IOGCC states that since approximately 2006, marginal wells have produced oil and natural gas valued at nearly \$30 billion annually, or approximately 10 percent of the total value of oil and natural gas produced domestically. It is important that EPA understand the importance and benefits of marginal wells and small business impacts to the U.S., the State of Oklahoma, and small businesses, and consider this information in its rulemaking process.

b. EPA Must Determine if Marginal Well Emissions Warrant Regulation

- When EPA developed its NSPS OOOOa regulation for oil and gas, it had no emissions profile for marginal/low production wells; however, EPA proceeded to regulate them with a limited data set. Currently, EPA still has a limited data set that fully characterizes these types of wells. The Department of Energy (DOE) is conducting a study to better characterize emissions from these types of wells (expected to be publicly available in early 2022). EO 13990 requires the Federal Government, “...be guided by the best science and be protected by processes that ensure the integrity of Federal decision-making.” As such, EPA should defer regulating marginal/low production wells until this report is available for review or collect additional data to fully determine the emissions profile of these types of wells, determine if requirements are needed, and if needed, develop an appropriate regulatory program.

4. Storage Vessels

EPA proposes to define a tank battery as a group of storage vessels that are physically “adjacent” and that receive fluids from the same source (e.g., well, process unit, compressor station, or set of wells, process units, or compressor stations) or which are manifolded together for liquid or vapor transfer. The use of the term “adjacent” should not be included in the definition as it is unclear as to what this means e.g., tanks on a site may receive fluids from the same source but are separated by significant distances for various reasons e.g., safety. These types of tanks should undergo a separate emission calculation as compared to the tanks manifolded together elsewhere on the location.



5. **Pneumatic Controllers**

Under NSPS OOOOa, if a continuous bleed pneumatic controller is not located at an onshore natural gas processing plant, NSPS OOOOa requires the pneumatic controller to operate at a natural gas bleed rate no greater than 6 standard cubic feet per hour. Additionally, NSPS OOOOa does not regulate intermittent vent natural gas driven pneumatic controllers at any location. EPA now proposes to define each natural gas-driven intermittent vent pneumatic controller as an affected facility at all types of sites and proposes to require zero emissions from both continuous bleed and intermittent vent controllers.

In 2014, the Oklahoma Independent Petroleum Association conducted a Pneumatic Controller Emissions Study across Oklahoma. The results of the study showed that 17 of 77 controller models identified, were backpressure controllers (accounting for approximately 40% of controllers observed) that are often used for overpressure protection that rarely actuated when encountered during field observations. The average controller count per site was higher by 2.2 for new sites as compared to older sites due to increased process units at the newer sites. The study also found that intermittent vent controllers emitted on the average 0.047 tons/year of methane. The results of this study were compared with the existing body of work on emissions from these types of controllers and found that the other studies overestimated emissions by a factor ranging from 5.4 to 27.5. This information indicates that normally functioning intermittent pneumatic controllers are not an issue and should not be regulated. It is not reasonable, cost effective or efficient for operators, especially marginal/low production well operators to now replace well-functioning intermittent vent controllers or retrofit their sites to use air-driven, solar, electric or self-contained controllers. Many of these options are not feasible, reliable, safe or economic for all sites. In addition, replacement devices are not readily available or field tested in a way that would make them safe for mass deployment. EPA should remove this requirement for zero emission intermittent vent controllers. As an alternative, EPA could include these under the fugitive emission monitoring requirements to ensure malfunctioning controllers are addressed.

6. **Well Liquids Unloading Operations**

There are a variety of liquids unloading processes e.g., blowing a gas well down to a tank, swabbing a cased hole, and artificial lift. These techniques are tailored to the best production methods for the well. EPA should not dictate to operators production methods. In addition, many of our members participate in The Environmental Partnership whereby participants commit to monitor the manual unloading process on-site or in close proximity and close all wellhead vents to the atmosphere as soon as practicable. The Alliance supports and encourages EPA to allow the use of these best management practices for this operation.

7. **Reciprocating Compressors**

The current NSPS OOOOa requirement for reducing VOC and methane emissions from affected reciprocating compressors is to replace the rod packing on or before 26,000 hours of operation or 36 calendar months, or to route emissions from the rod packing to a process through a closed vent system under negative pressure. However, EPA is proposing that the owner or operator of a reciprocating compressor affected facility would be required to monitor the rod packing emissions annually using a flow measurement. When the measured leak rate exceeds 2 standard cubic feet per minute (scfm) (in pressurized mode), operators would be required to replace the rod packing. It is unclear how the 2 scfm leak rate appropriately addresses variability in compressor configurations (e.g., compressor stages,



operating conditions, and compressor size). In addition, many operators use leased reciprocating compressors where vendors replace the rod packing as part of their maintenance programs. This schedule provided in NSPS OOOOa is preferred by our membership for ease of compliance demonstration. We request EPA keep the existing requirements under NSPS OOOOa for these types of compressors instead of the proposed monitoring requirement.

In addition, EPA states it will apply this proposed monitoring requirement for reciprocating compressors located at “centralized production facilities”. This may be beneficial in certain operations and where larger oil and gas operators may have the resources and equipment to monitor those emissions; however, it should be an option/alternative, and not a mandatory requirement as it may unnecessarily create additional burdens and costs for smaller operators that send production from several marginal/low production wells to a “centralized production facility”. For marginal/low production well operators, centralized production facilities may be more cost efficient than having equipment at each well site and this practice reduces overall the environmental footprint of the operation. This would be an unnecessary additional cost on small businesses and disincentivizes the use of centralized production facilities in this scenario. We request EPA remove this requirement for marginal/low production wells that send production to centralized production facilities.

8. Oil Wells with Associated Gas

EPA is proposing a standard under NSPS OOOOb/c that requires owners or operators of oil wells to route associated gas to a sales line. In the event that access to a sales line is not available, EPA proposes that the gas be used as an onsite fuel source, used for another useful purpose that a purchased fuel or raw material would serve, or routed to a flare or other control device that achieves at least 95 percent reduction in methane and VOC emissions. There may be situations where gas sales pipelines to new or existing wells are not available, feasible or economic, and there may not be adequate volumes or quality of gas to use onsite or route to a flare. EPA should allow exemptions for these situations, especially for marginal/low production wells. In all other situations, EPA should allow operators the option to implement a proposed requirement (sales pipeline, onsite fuel use, another useful purpose or route to a flare or other control device that achieves 95 percent reduction in methane and VOC emissions) that best fit their operations.

9. Centralized Production Facilities

See our comments above on Storage Vessels

10. Additional Emission Sources

a. Abandoned Wells

First, EPA broadly characterizes abandoned wells as oil or natural gas wells that have been taken out of production, which may include a wide range of non-producing wells such as idle, inactive, dormant, shut-in, and orphaned wells. These wells, except for orphaned wells, typically have a responsible owner/operator but are not producing for a specific reason e.g., product pricing, held by other production in the unit, or waiting on some specific activity like a workover. On the other hand, an orphaned well is a well where there is no responsible owner/operator e.g., the owner/operator has gone bankrupt. EPA should not broadly characterize these wells collectively as they are very different.



In November 2021, President Biden signed into law the infrastructure bill that includes \$4.7 billion to restore and plug orphaned wells on federal, state, private and tribal lands (aka REGROW Act of 2021). In December, the Department of Interior released [guidance](#) on state applications for grants under the program. Since then, many states, including Oklahoma, have applied for this funding and are aggressively prioritizing and addressing the plugging of orphaned wells. The [Interstate Oil and Gas Compact Commission](#) has been working with states and provinces to evaluate their idle- and orphan-well programs and identify useful regulatory tools and strategies to address this issue. In addition, in Oklahoma, the industry [voluntarily](#) takes responsibility for orphaned well sites and has invested over \$132 million to clean up over 18,000 orphaned wells sites.

Finally, preventing wells from becoming orphaned in the future is complicated. States recognize this issue and are reviewing their programs, statutes, and rules to determine the best course of action to prevent the occurrence of these types of wells. States, like Oklahoma, are in the best position to address future orphaned wells, and as such, EPA should defer to the state. In addition, if EPA proposes requirements, it needs to provide detailed rationale for its authority.

b. Tank Truck Loading

The EPA is considering including emission standards and EGs for tank truck loading operations. EPA is considering 3 options. The first option is vapor balancing using a closed system. There would also be a significant cost to setup the vapor balancing system and significant training for tank truck operators for proper operation and maintenance, and there are potential safety issues with the introduction of oxygen into atmospheric tanks. EPA's second option includes the use of a vapor recovery system. As previously mentioned, this would also be a significant cost, especially for marginal/low production wells. EPA's third option considers requiring liquid pipeline connections for all locations. This is completely impractical and inordinately expensive. If a liquid pipeline was accessible and economically feasible, operators would be using pipelines. Finally, the bulk of the fluids hauled by tank trucks in Oklahoma consists mostly of produced water with minimal emissions. EPA should not include any requirements in its Proposed Rule for tank truck loading operations at well sites, especially marginal well sites, and instead should leave tank truck loading to be addressed within the State's permitting program.

c. Control Device Efficiency and Operation

Combustion control devices have to be engineered and operated under certain conditions (e.g., consistent flows and appropriate gas quality) to attain 98% destruction efficiency (DE). This may be appropriate in certain situations (e.g., newer wells). However, as wells decline, gas flows and pressures decrease or become variable, and it becomes increasingly difficult to ensure complete combustion to achieve the 98% DE. The use of complex control devices and monitoring/automation systems are possible to implement for very small vapor streams, but they are significantly more costly, especially for marginal/low production wells, and may make the well uneconomical. Also, the gas quality may also be a factor preventing the use of combustion control devices with higher DEs. EPA should not mandate the requirement for combustion control devices at oil and gas well sites to attain 98% DE but allow it as an option in situations where it is cost effective and feasible. EPA should provide incentives to operators where use of this equipment is feasible. Finally, EPA should avoid burdensome or onerous monitoring requirements that dissuade operators from using combustion control devices that can attain 98% DE.



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Thank you for the opportunity to provide comments.

Sincerely,

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