Ken McQueen
Secretary of Energy & Environment

J. Kevin Stitt
Governor

STATE OF OKLAHOMA
OFFICE OF THE
SECRETARY OF ENERGY & ENVIRONMENT

February 13, 2023

Submitted via: https://www.regulations.gov/

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

RE: U.S. Environmental Protection Agency's *Supplemental Notice of Proposed Rulemaking Addressing Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review*, EPA Docket ID No. EPA-HQ-OAR-2021-0317

Dear Administrator Regan:

Enclosed with this letter are comments submitted by my office and the Oklahoma Department of Environmental Quality in response to EPA's *Supplemental Notice of Proposed Rulemaking Addressing Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review*, EPA Docket ID No. EPA-HQ-OAR-2021-0317, 87 Fed. Reg. 74702 (Dec. 6, 2022). The proposed rule, if finalized, will substantially impact the State of Oklahoma. Oklahoma appreciates this opportunity to provide comments on the proposed rule, as well as EPA's consideration of said comments.

Sincerely,

Ken McQueen
Secretary of Energy & Environment

Comments on EPA's Supplemental Notice of Proposed Rulemaking ("SNPR") Addressing Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review, EPA Docket ID No. EPA-HQ-OAR-2021-0317

Submitted by:

Oklahoma Secretary of Energy and Environment (OSEE) and
Oklahoma Department of Environmental Quality (ODEQ)

I. Introduction

These comments are submitted by OSEE and ODEQ in response to the U.S. Environmental Protection Agency's ("EPA") supplemental notice of proposed rulemaking: *Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review*, 87 Fed. Reg. 74702 (Dec. 6, 2022) (hereinafter referred to as "SNPR"). The comment period ends on February 13, 2023.

The SNPR is an update to EPA's proposed *Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review*, 86 Fed. Reg. 63110 (Nov. 15, 2021), EPA Docket ID No. EPA-HQ-OAR-2021-0317 (herein referred to as the "November 2021 Proposal"). OSEE and ODEQ previously submitted comments to the docket on January 25, 2021 regarding the November 2021 Proposal, and that comment document will be referred to herein as the "OSEE/ODEQ 2021 Comment" (attached hereto as Attachment A).[1] Collectively, the SNPR and the November 2021 Proposal are referred to herein as "this rulemaking."

The SNPR fails to address several concerns raised in the OSEE/ODEQ 2021 Comment and compounds many problems that were notable in the November 15, 2021 Proposal. Therefore, OSEE and ODEQ object to the SNPR as written. However, if EPA must finalize the SNPR, these comments seek to provide feedback on aspects of the SNPR that could use the most improvement. Comments are numbered sequentially and (for the most part) are grouped according to the section of the SNPR under which they fall.[2]

As was the case for the November 2021 Proposal, the most concerning issue from the state regulator perspective is the vast amount of state resources that will be required to implement the SNPR and the absence of any additional funding to states to account for the extreme increase in workload. Due to the volume of supporting material released along with the SNPR, ODEQ submitted a request (attached hereto as Attachment B) to extend the comment period by at least 60 days. The request for extension contained data showing the SNPR (along with the November 2021

[1] Document ID EPA-HQ-OAR-2021-0317-0727 in EPA Docket ID No. EPA-HQ-OAR-2021-0317.

[2] Some comments address issues raised in more than one section. Where that is the case, the comment will reference the various sections addressed.

Proposal) has the potential to increase the number of oil and gas affected facilities in Oklahoma from 10,537 to 202,647.[3] This increase would have a seismic impact on ODEQ's air quality program for many reasons, not the least of which is the extreme strain on state resources that are already stretched to capacity.

II. Comments

A. Comments on Section VIII, Subsection J, Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

Comment 1: Environmental Justice Communities Reliant on Oil and Gas Economies Will Be Harmed by This Rulemaking

In the preamble to the November 2021 Proposal, EPA states the proposed rule was based on extensive outreach to underserved and overburdened communities and to environmental justice organizations. 86 Fed. Reg. 63139. Furthermore, in footnote 296 to the SNPR, EPA again refers to pre-proposal outreach activities and references a number of items in the regulatory docket. 87 Fed. Reg. 74830. EPA defined environmental justice ("EJ") as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations and policies." *Id.* Additionally, EPA cited Executive Order 12898, 59 Fed. Reg. 7629 (Feb. 16, 1994) as directing it to "identify the populations of concern who are most likely to experience unequal burdens from environmental harms; specifically, minority populations, low-income populations, and indigenous peoples." 86 Fed. Reg. 63139.

OSEE and ODEQ support the goal of environmental justice, in particular the encouragement of greater public participation. However, as was the case with the November 2021 Proposal, OSEE and ODEQ are concerned that the SNPR's focus on environmental justice may not fully take into consideration the potential economic effects on communities with oil and gas dependent economies. Specifically, the SNPR does not provide fair consideration of the economic impacts in distressed rural communities that may not meet EPA's threshold of "environmental justice community." Further, OSEE and ODEQ find that the SNPR exacerbates problems identified in the November 2021 Proposal and if the current SNPR is adopted without changes, it would do additional damage to communities that rely heavily on oil and gas employment, especially those located in rural parts of Oklahoma. OSEE and ODEQ strongly encourage EPA to broaden its evaluation of the costs and benefits of this rulemaking to incorporate economic effects with the same level of granularity that was used in targeting communities living in proximity to facilities that would be subject to this rulemaking. In particular, EPA has not adequately examined how these policies will affect employment in economically-distressed rural communities in states like Oklahoma.

[3] Similar data were included in ODEQ's request to extend the comment period for the November 2021 proposal. The more recent extension request updates the data included in the earlier request.

The OSEE/ODEQ 2021 Comment referenced a study by Price Waterhouse that was performed for the American Petroleum Institute, which determined that the oil and gas sector was responsible (including direct and indirect employment) for 16.7 percent of the Oklahoma workforce.[4] Additionally, many oil and gas jobs employ residents of rural communities.[5] To assess the possible impacts of job losses in those communities, the work performed by the U.S. Department of Agriculture's (USDA's) Economic Research Service investigated economic, social, and demographic factors that affect the poverty status of residents of rural communities. For 2019, the USDA estimated Oklahoma's statewide poverty rate at 15.1% with 19.7% of Oklahoma's children living in poverty.[6] Rural counties, especially in the southeastern part of the state are particularly impacted by poverty.[7] The availability of middle-class oil and gas jobs in rural Oklahoma mitigates the poverty experienced in many of these communities. To ensure that just policies are adopted, EPA should rethink the SNPR and allocate time and resources to properly weigh the economic impacts on vulnerable communities, especially rural communities, as carefully as the environmental benefits are evaluated.

ODEQ staff performed a review of the Regulatory Impact Assessment (RIA)[8] for the November 2021 Proposal as well as the RIA for the SNPR.[9] A longer review time was needed to allow adequate review of the SNPR RIA due to the complexity of the SNPR and the associated documents. However, as was the case for the November 2021 Proposal and stated in the OSEE/ODEQ 2021 Comment, ODEQ found the approach taken in the RIA for the SNPR to be inadequate. Further, it does not appear that EPA sufficiently addressed the issues raised in the

[4] "Impacts of the Oil and Natural Gas Industry on the US Economy in 2019," prepared by PricewaterhouseCoopers LLP, prepared for the American Petroleum Institute, July 2021, available on-line: https://www.api.org/-/media/Files/Policy/American-Energy/PwC/API-PWC-Economic-Impact-Report.pdf

[5] See, for example, the article "Feeling the Pain: In Rural Oklahoma, Oilfield Communities See the Ups and Downs of Oil and Gas Industry Firsthand," by Heidi Brandes, February 11, 2021, available on-line on the web page of The Petroleum Alliance: https://www.thepetroleumalliance.com/feeling-the-pain-in-rural-oklahoma-oilfield-communities-see-the-ups-and-downs-of-oil-and-gas-industry-first-hand/

[6] U.S. Department of Agriculture, Economic Research Service, Rural Poverty & Well-Being, state poverty rate data available on-line: https://data.ers.usda.gov/reports.aspx?ID=17826

[7] County data are available from the link cited in Footnote 5 by selecting "Oklahoma."

[8] U.S. EPA, "Regulatory Impact Analysis for the Proposed Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review," (RIA), EPA-452/R-21-003, October 2021 (https://www.epa.gov/system/files/documents/2021-11/proposal-ria-oil-and-gas-nsps-eg-climate-review_0.pdf).

[9] U.S. EPA, "Regulatory Impact Analysis of the Supplemental Proposal for the Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review," (RIA), EPA-452/R-22-007, November 2022 (https://www.epa.gov/system/files/documents/2022-12/Supplemental-proposal-ria-oil-and-gas-nsps-eg-climate-review-updated.pdf).

OSEE/ODEQ 2021 Comments. There are still details that warrant a more rigorous analysis by EPA.

One issue of concern is the lack of any detailed projections of likely reductions in oil and gas employment. While there are economic projections showing impacts on future oil and gas prices and production, there does not appear to be a concrete projection of the reduction in employment that would likely be associated with adoption of the proposed regulations. This is particularly concerning in Oklahoma due to the number of marginal wells that remain in operation and whose financial viability may be precarious. Further, jobs in the oil and gas sector are particularly well-paying when compared to alternatives, especially in rural areas and, because job losses are likely to be localized, the effects are magnified in those communities.

The SNPR RIA, beginning on page 126, explains the baseline approach used to evaluate employment impacts in Section 4 of the RIA:

> The EPA also conducted a baseline analysis to characterize potential distributional impacts on employment. A reduction in oil and natural gas activity could have a negative effect on employment among oil and natural gas workers. This could also reduce employment, earnings, and tax revenues in oil and natural gas intensive communities.[95] Any effect on oil and natural gas workers or oil and natural gas intensive locations would be a local and partial equilibrium effect. In general equilibrium, there could be other and potentially offsetting effects in other regions and sectors.
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> . . . .
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> Comparing workers in the oil and natural gas sector to workers in other sectors, oil and natural gas workers may have higher than average incomes, be more likely to have completed high school, and be disproportionately Hispanic. People living in some oil and natural gas-intensive communities concentrated in Texas, Oklahoma, and Louisiana, may have disproportionate income levels, rates of high school completion, and demographic composition.

This information appears unchanged from the RIA for the November 2021 Proposal and lends support to the contention that the economic impacts of this rulemaking will likely be significantly harmful to rural communities dependent on this industry. It is with this concern in mind that OSEE and ODEQ again recommend that EPA consider economic impacts of this rulemaking with the same level of granularity and diligence that was used in evaluating the rulemaking's benefits for environmental justice communities. The importance of oil and gas jobs is further emphasized by the information in Table 4-8 of the SNPR RIA which shows that the average income for oil and natural gas workers is $110,000 while the average income for other workers in "oil and gas communities" is $42,000. Thus, for every oil and gas job lost, even if there is a new non-oil and

gas job created in the same community, there will be a net loss of $68,000 with additional spillover effects in the community.[10]

Page 128 of the SNPR RIA sets forth data used to develop this analysis:

> This analysis uses 5-year ACS data from 2015-2019 retrieved from IPUMS. This is approximately 16 million individual ACS responses. Oil and natural gas workers are identified by working in industries with a NAICS code that begins with "211." Those are "Oil and natural gas Extraction," as well as the sub-industries "Crude Petroleum Extraction" and "Natural Gas Extraction."

Notably, OSEE and ODEQ are also concerned that the data set EPA used was exclusively from the oil and gas extraction segment and does not appear to include the drilling, treatment, storage, or transmissions segments. Further, both the RIA for the November 2021 Proposal and the SNPR RIA used Public Use Microdata Area (PUMA) data to identify oil and gas communities. This level of analysis is insufficiently specific in identifying impacts on rural areas. This assertion is demonstrated by the map (Figure 4-9 on p. 129 of the SNPR RIA) which shows the relatively large size of each PUMA. In addition, the oil and gas PUMAs shown in the map cover more than half the state of Oklahoma. In contrast, the environmental justice communities in EJScreen[11] are identified with much finer granularity. This raises the important question of whether and to what degree this analysis inherently biases the evaluation of costs and benefits, thereby possibly privileging certain communities compared to others.

Figure 4-9 from the SNPR RIA is reproduced below for comparison.[12]

[10] In the original RIA, the average income for oil and natural gas workers was the same as in the SNPR RIA ($110,000); in the SNPR RIA, the average income for other workers increased from $40,000 to $42,000.

[11] See https://www.epa.gov/ejscreen.

[12] The figure is largely unchanged (except for the title) from the original RIA.

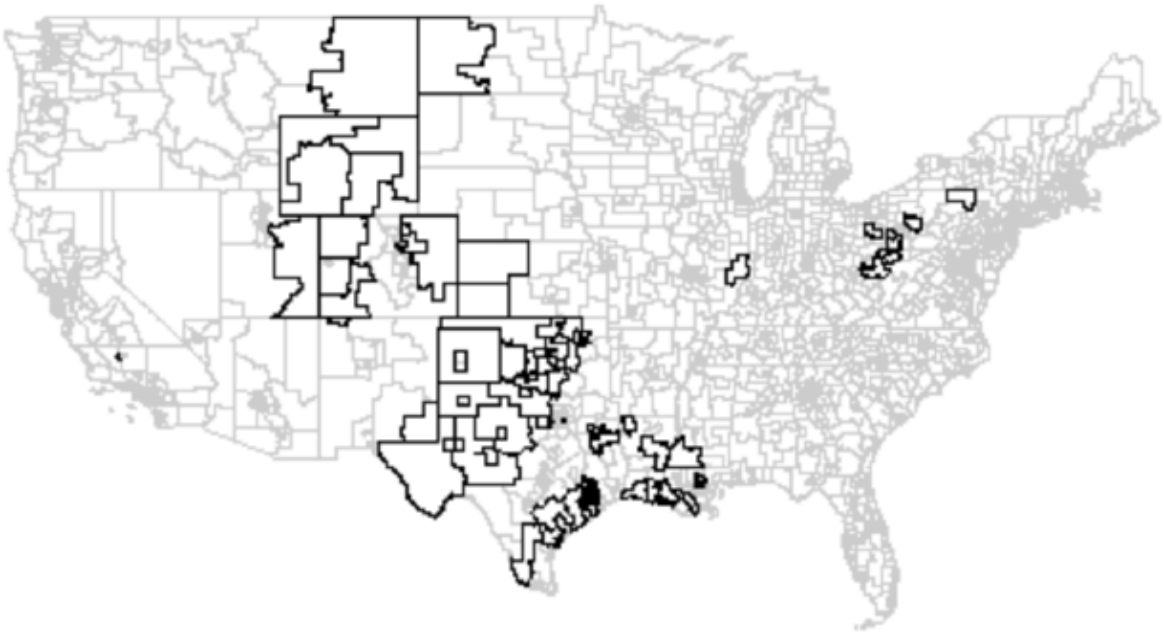

Figure 4-9 Continental U.S. Map of PUMAs and Oil and Natural Gas Intensive Communities

Table 4-9 in the SNPR RIA provides demographic data for the entire group of PUMAs with high oil and gas intensity. This analysis is used to draw various conclusions concerning the ethnic make-up, educational attainment, and income of residents in these areas compared with other areas with lower oil and gas intensity. By aggregating the high oil and gas PUMAs for these analyses, EPA fails to give a sufficiently granular analysis of the impacts of the types of rural communities found in Oklahoma. Again, this contrasts with EPA's approach in evaluating impacts on environmental justice communities.

While the analysis in the SNPR RIA that follows (see Table 4-10 and Figure 4-10 of the SNPR RIA) provides some greater specificity, it is still insufficient and fails to meet the standards EPA uses for evaluating environmental justice communities. Figure 4-10 is reproduced below.[13]

[13] Figure 4-10 is the same figure that appears (with the same number) in the RIA for the November 2021 proposal.

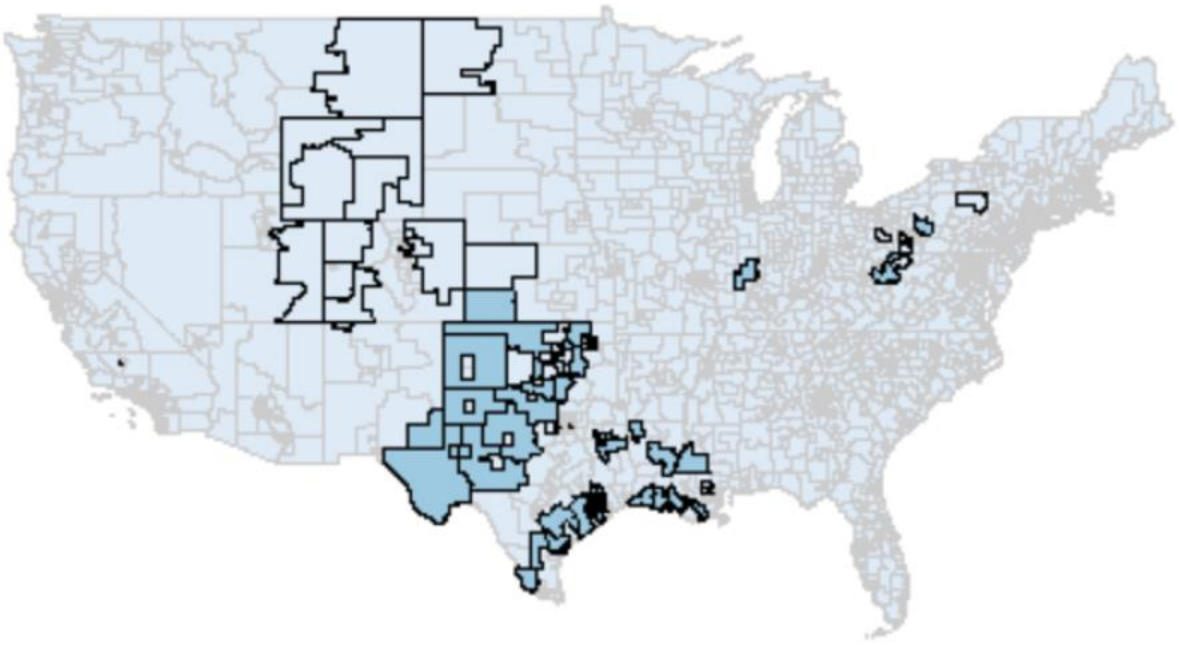

Figure 4-10 Map of Oil and Natural Gas Intensive Communities of Environmental Justice Note

Notable in Figure 4-10 is just how large a fraction of the state of Oklahoma is included in the PUMAs evaluated.

Jobs in the oil and natural gas sector are engines of Oklahoma's rural economy.[14] In rural Oklahoma, issues of environmental justice are closely tied to the success of the oil and natural gas industry. Any policy that undercuts employment in the oil and natural gas sector will harm the economic foundation of rural Oklahomans. In fact, even the New York Times recently published an article acknowledging that:

> People of color make up 24 percent of the rural population. Close to half of rural Native Americans and more than half of rural Black Americans live in a distressed county. That's compared with 18 percent of rural whites. Anyone serious about racial equity must also be serious about rural America.[15]

[14] *See*, for example, the article, "Feeling the Pain: In Rural Oklahoma, Oilfield Communities See the Ups and Downs of Oil and Gas Industry Firsthand," by Cody Bannister, February 11, 2021, available online: https://www.thepetroleumalliance.com/feeling-the-pain-in-rural-oklahoma-oilfield-communities-see-the-ups-and-downs-of-oil-and-gas-industry-first-hand/.

[15] "A Policy Renaissance Is Needed for Rural America to Thrive," by Tona Pipa (Senior Fellow at the Center for Sustainable Development at the Brookings Institution and leader of the Reimagining Rural

OSEE and ODEQ remain concerned that EPA's analysis is too vague and too broad-brush. EPA has not made or documented important inquiries, such as how many marginal wells are expected to close as a result of the proposed rules, how many jobs are expected to be lost, and which communities are likely to experience those losses. It may be challenging to attempt to address these issues with sufficient rigor, but an attempt is certainly warranted to justify policies that will have disproportionate impacts on some communities to benefit the entire public. OSEE and ODEQ support the evaluation of environmental impacts on environmental justice communities. However, it appears EPA's preliminary analysis does not account for the full range of this rulemaking's potential impacts and could result in unintended consequences for communities dependent on oil and gas economies, which could include overlooked environmental justice communities.

Further, the SNPR includes policies that, if adopted as proposed, would worsen the concerns raised in the OSEE/ODEQ 2021 Comment. The requirement that all existing wells undergo annual fugitive emissions monitoring (with no exemption for older, lower-producing wells) will likely render many of those older wells too expensive to operate. The job losses are likely to occur in older, rural communities that are not currently seeing new oil and natural gas exploration activities. Low-income rural communities are experiencing many negative socio-economic problems that will only be exacerbated if the SNPR is adopted.

In addition, the proposed super-emitter response program[16] runs the risk of privileging wealthier communities (or well-supported environmental advocacy organizations) at the expense of marginalized communities and smaller, less well-resourced oil and natural gas companies. Wealthier communities are more likely to hire expensive consultants to ensure they are equipped with the latest and most expensive technology. Well-resourced environmental advocacy organizations can observe activities in hot spots or areas of concern to their donor base, but those observations may not be well-evidenced due to a lack of expertise. Smaller oil and natural gas operators may be inundated with frivolous complaints from individuals or organizations with resources but not necessarily the expertise to set forth credible claims. . For these reasons, OSEE and ODEQ assert the SNPR would, if adopted, undermine EPA's goal of expanding environmental justice.

B. Comments on Section IV. Summary and Rationale for Changes to the Proposed NSPS OOOOb and EG OOOOc

Comment 2: Misrepresentation of Previous ODEQ Comments in the SNPR

In the preamble of the SNPR, and in regard to technologies that may be used to detect a super-emitter emissions event, EPA states that "several commenters raised concerns regarding potential safety or trespassing on sites with a program using more ground based or close-range

Policy Initiative), from the New York Times, online, published December 27, 2022, https://www.nytimes.com/2022/12/27/opinion/rural-america-left-behind-places.html.

[16] *See* the discussion in Section IV, Subsection C, beginning at 87 Fed. Reg. 74746 of the SNPR.

detection methods." 87 Fed. Reg. 74749. EPA cites the OSEE/ODEQ 2021 Comment as support for this statement, implying the cited commenters preferred satellite detection methods over ground-based detection methods for detecting super-emitters due to safety and trespassing concerns. The OSEE/ODEQ 2021 Comment did state concerns regarding safety of the public in community detection programs, but not with respect to detection methods (*See* OSEE/ODEQ 2021 Comment, Comment 5). The context of the comment at issue was to express concerns about allowing third-parties to detect large emission events that would require owners/operators to mitigate those events. It was not coupled with a statement of preference for satellite systems. In fact, in the very next comment (Comment 6 to OSEE/ODEQ 2021 Comment), OSEE and ODEQ stated that "OSEE and ODEQ note that the use of satellite data as the threshold could be problematic. For example, there could be large emission events that are not visible on satellite due to cloud cover or inadequate timing of satellite imagery for emissions that do not have a constant temporal profile, among other factors."[17] While ODEQ realizes that a satellite system would mitigate some of the aforementioned safety risks, these concerns remain valid, and OSEE and ODEQ maintain that third-party monitoring remains problematic in general.

Comment 3: Eliminating the 3 TPY Exemption Threshold Will Negatively Impact Employment, Production of Crude Oil and Natural Gas, and Will Overburden Industry and Regulatory Agencies

OSEE and ODEQ object to the SNPR's elimination of the 3 ton per year (TPY) methane emission exemption threshold that was included in the November 2021 Proposal. 87 Fed. Reg. 74722. Low-emitting wells which would fall below this exemption threshold are likely to be older wells, often referred to as stripper wells or marginal wells. ("Marginal" in this usage refers to the marginal profitability of these wells.) In spite of their low per-well productivity and profitability, the vast majority of existing wells are classified as stripper or marginal wells. The importance of maintaining operation of these wells is discussed in a 2017 news article by Adam Wilmoth, excerpted below.

> Darlene Wallace's 27 Oklahoma oil wells may not overwhelm the state's pipeline and production capacity. But along with the tens of thousands of other older, marginal wells scattered throughout the state, they represent a significant portion of Oklahoma's production and tax base.
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> "Most of the marginal wells are in rural areas, where they help the jobs and income [in] those parts of the state," said Wallace, president of Seminole-based Columbus Oil Co. and chairwoman of the National Stripper Well Association. "We employ pumpers and roustabouts and all the service industries."
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> Most of Wallace's wells have been pumping oil since the 1920s, although some were drilled in the 1980s.
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> Marginal — or stripper — wells are defined as those that produce no more than 15 barrels of oil or 90,000 cubic feet of natural gas per day. Those wells represent the vast majority of the operational wells in Oklahoma and throughout the country. While their production is overshadowed by the newer, much more

[17] *See "*State of Oklahoma's Comments on EPA's Proposed *Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review*" Document ID EPA-HQ-OAR-2021-0317-0727.

prolific horizontal wells, marginal wells promise to continue boosting the state and national economy well into the future, Wallace said.

. . . .

In Oklahoma, more than 90 percent of the state's 39,530 oil wells produced less than 15 barrels per day, while only 2.5 percent of the wells produced more than 100 equivalent barrels a day, according to a report the U.S. Energy Information Administration released this week. [18]

In spite of the low productivity of each stripper well, the large number of stripper wells yields a significant amount of production in aggregate as is explained in the following analysis provided by the U.S. Energy Information Administration (EIA):

Stripper wells, or wells that produce small volumes, represent an important but decreasing share of total U.S. oil and natural gas production. These wells are characterized as producing no more than 15 barrels of oil equivalent per day (boe/d) over a 12-month period. EIA estimates that there were about 380,000 stripper oil wells (so called because they are stripping the remaining oil out of the ground) in the United States operating at the end of 2015, compared to about 90,000 nonstripper oil wells.

Wells become stripper wells through the normal decline of producing wells, some of which may have at one time been very prolific. These wells usually have low ongoing maintenance costs and relatively low transportation costs to move their products to distribution systems. As long as these wells are economically feasible, they are kept active and may continue to produce for many years.

. . . .

Despite each stripper well's small individual production, their large number ensures a significant contribution to total oil production. The production share of oil stripper wells has fallen from a high of 19% in 2008 to an estimated 10% in 2015. [19]

The low maintenance costs and the fact that these wells are already tied into existing infrastructure (existing pipelines and transportation hubs) allows these wells to continue producing even though the profitability of each well is low. However, the vast number of wells not only

[18] "Older, Marginal Wells Increase Nationwide," by Adam Wilmoth, *The Oklahoman*, December 15, 2017, online: https://www.oklahoman.com/story/business/energy-resource/2017/12/15/older-marginal-wells-increase-nationwide/60555210007/.

[19] U.S. EIA, "Stripper Wells Accounted for 10% of U.S. Oil Production in 2015," June 29, 2016, online: https://www.eia.gov/todayinenergy/detail.php?id=26872#. EIA estimates that stripper wells contributed 7% of U.S. oil and natural gas in 2021. See the report, "The Distribution of U.S. Oil and Natural Gas Wells by Production Rate", U.S. EIA, December 2022, p. 9, online: https://www.eia.gov/petroleum/wells/pdf/full_report.pdf.

provides a significant amount of crude oil and natural gas, but operating these wells employs a significant number of workers whose jobs would be eliminated were these wells to cease operation.

The National Stripper Well Association (NSWA) quotes an Interstate Oil & Gas Compact Commission[20] estimate that closing U.S. stripper wells would result in the loss of 142,844 jobs.[21] A significant fraction of that impact would be felt in rural Oklahoma, impacting communities that can least afford to lose those jobs. Preserving the exemption threshold is essential to mitigating the negative impact of the proposed rule and maintaining the economic foundation for a number of socio-economically distressed Oklahoma communities.

Further, emissions from stripper wells are low. The U.S. Department of Energy (DOE) study on methane emissions from marginal wells reported average emissions ranging from 0.26 to 0.56 tons per year.[22] These wells are simply not large sources of emissions. If EPA is concerned about existing wells with emissions below the threshold becoming super-emitters, this could be mitigated by a more efficient satellite-focused super-emitter detection and response program that is run by an air agency with legal authority and delegation under the Clean Air Act, such as EPA or State/local/tribal entities, instead of relying on third parties. Comment 4 herein will speak on this in depth.

In combination, these policies would eliminate the cost burden to low-emitting oil and gas operators, maintain employment in socio-economically distressed rural communities, and mitigate risk of significant methane emissions. Therefore, ODEQ believes that retaining the exemption threshold is sound policy.

Comment 4: The Third-Party Notification System of the Super-Emitter Detection and Response Program is Problematic and EPA Should Consider an Alternative Approach Under the Cooperative Federalism Model

While OSEE and ODEQ are in favor of using new technology and addressing large emission events, there are various concerns regarding the Super-Emitter Detection and Response Program, especially when considering potential flaws involving the third-party notification system. Therefore, the most direct method of remedying these problems would be for EPA to abandon the current rulemaking effort and restart the process with a renewed commitment to working with state, local, tribal, industry, and community stakeholders.

In the alternative, if EPA insists on proceeding with a super-emitter response program, OSEE and ODEQ urge EPA to remove third parties from the equation. OSEE and ODEQ insist

[20] *See* http://nswa.us/stripper-wells/.

[21] EPA estimates the annual fugitive emission monitoring cost for a single well site or a single centralized production battery to be $2,100. (*See* 87 Fed. Reg. 74728.) This cost will push the majority of stripper wells into closure.

[22] The results of the DOE study are referenced in the preamble at 87 Fed. Reg. 74729. Bowers, Richard L., "Quantification of Methane Emissions from Marginal (Low Production Rate) Oil and Natural Gas Wells," United States, available online: https://www.osti.gov/biblio/1865859/.

the program be run directly by the entities with the actual legal authority to implement and enforce the Clean Air Act (CAA), be that a properly delegated state/tribal/local authority or EPA. In other words, if EPA insists on creating this program, it should be run like any other program under the CAA using the principles of cooperative federalism. A reliance on third-party notifications could lead to inaccurate data and unnecessary burdens. An EPA-directed program, while not the perfect solution, would address some concerns stemming from the use of third-parties, and would allow EPA to reduce the frequency with which new, and more importantly, *existing* facilities are monitored for methane leaks. This approach would also yield nearly all the methane emission reductions envisioned by EPA for the current proposal. OSEE and ODEQ suggest an alternative with the following elements:

(1) The Super Emitter Detection and Response Program should be run by an entity that has the actual legal authority to implement and enforce the Clean Air Act, i.e., EPA or a delegated air regulatory agency.
(2) EPA would exempt existing well sites with site-level baseline methane emissions below 3 tons per year (TPY) from fugitive emissions monitoring requirements (as discussed above in Comment 3);
(3) EPA would reduce the frequency of fugitive emissions monitoring events at well sites, centralized production facilities, and compressor stations; and
(4) To offset the reduced frequency of monitoring, a new requirement would be added for facilities to require tanker truck drivers who load liquids (crude oil, condensate, or produced water) from storage tanks to report the condition of the thief hatch on arrival at a site (discussed in more detail in the following Comment 5, below).

ODEQ has already dealt with burdensome issues involving notifications from third parties about methane releases detected by satellite systems. For example, in October of 2021, ODEQ was contacted by a media company about one such methane release. ODEQ investigated the event based on the latitude and longitude coordinates given by the media company and contacted various companies operating in that area. The accuracy of the location made it difficult to determine which company/facility caused the event. When it was determined where the release came from and contact with the company was completed, the methane release was found to have originated from a section of pipeline that needed to blowdown due to maintenance activities. Thus, being a pipeline, this release did not originate from a facility that would be subject to the requirements of Subparts OOOOb or OOOOc and therefore would not be considered a super-emitter in this program. Also, the estimated release was 116 tons/hour based on the satellite data. Yet, based on the size of the pipeline, the company verbally indicated that the release was much lower than this estimated amount from the satellite.

ODEQ was notified a second time of a release in a different location in January of 2022. This time, when ODEQ contacted nearby companies based on the latitude and longitude coordinates given, no company reported any potential releases. ODEQ inspected the area with a forward looking infra-red, or FLIR, camera to see if any leak could be found using optical gas imaging (OGI), however no leaks or super-emitters were discovered. ODEQ contacted various companies with pipelines in the area and none indicated any issues. It is suspected that the release may have come from a pipeline, which would not be subject to the requirements of Subparts OOOOb or OOOOc. Significant resources were used by various companies and ODEQ to try to

find this event, yet no super-emitter was identified, nor was a reduction of emissions achieved. With these two examples in mind, it becomes clear that it is vitally important that the satellite systems are accurate enough to determine precise locations to avoid false accusations and the waste of state resources.

While a satellite-centered program run by states or EPA could potentially still have issues, it is bound to at least be more accurate and efficient than relying on third-parties. Third parties could still work directly with industry if both parties agree, or third parties could report their findings directly to the state or local agencies or even to the EPA. But third-party reporting should not trigger any immediate obligation by the facility until verified by state regulatory personnel who would initiate a response. Only notification by a government agency should trigger a requirement for industry to respond. In fact, ODEQ already has mechanisms in place for this, as it would fit into ODEQ's Environmental Complaints Program. ODEQ's Environmental Complaints Program is a robust program that sets forth specific timelines for communication with the complainant that have been established within ODEQ's regulations. The program has a uniform investigation process, a central repository for all complaint records, and direct continuous involvement with each citizen who lodges a complaint.

Removing third parties' ability to engage facilities in enforcement would also mitigate some of the environmental justice concerns raised in Comment 1. This is because, while it would still be possible for wealthy communities to hire consultants to look for leaks, these activities would still require that a government agency act as an intermediary to verify the problem and oversee the response.

In the preamble to the SNPR (at 87 Fed. Reg. 74721), EPA requested feedback on the geographic elements of an evaluation[23] of equivalency between a program adopted by a state under either a Clean Air Act (CAA) 111(d) plan, EPA's current SNPR, or the November 2021 Proposal. A nation-wide satellite monitoring program operated by EPA and states under a cooperative federalism framework would certainly simplify that evaluation, because an EPA/state run program covering the entire greater methane reductions (focusing on super-emitters) than what would have occurred had EPA adopted either the November 2021 Proposal or the SNPR.

Comment 5: The Addition of a Requirement for Tanker Truck Drivers to Report the Condition of the Thief Hatch on Arrival Would Justify a Reduction in Monitoring Frequency

This comment is an expansion upon Prong 4 of OSEE/ODEQ's proposed cooperative federalism alternative for the Super-Emitter Detection and Response Program, detailed in Comment 4, above. In the SNPR, EPA is proposing to require an initial screening survey to identify fugitive emissions within 90 days of the start of production. 87 Fed. Reg. 74743. Alternatively, EPA could consider an approach where the facility at issue would require that tanker truck drivers report back to the facility the status of the thief hatch of the vessels that contain liquids (crude oil, condensate, or produced water) when the contents of the particular vessel are loaded onto a transport truck at facilities that lack access to a pipeline to transport liquids off site. Tanker truck

[23] The "IRA equivalence determination" referenced in the preamble.

drivers perform several activities (e.g., measurements of liquid height, temperature, and the collection of a sample to be spun in a centrifuge to assess the quantity of basic sediment and water) and this information is recorded on a trip ticket. The addition of a single data element – the status of the thief hatch on arrival – would allow identification of one of the most significant sources of potential emissions at a tank battery. This is especially important when a well comes online, because the production is highest during the first days of operation. During this time, the vapor collection and control system is more likely to be overstressed than at any other time during the operation of the facility. A single instance where a thief hatch is found open could signal an oversight, but a pattern of open (or popped) thief hatches could show that the vapor collection system has been undersized or could be an indication of another problem. Adding this requirement would justify reducing the frequency of monitoring and would allow the owner or operator more time to perform an initial survey (e.g,, within 180 days of initial production) and allow facilities to more quickly and efficiently address the issue. This would reduce the cost of compliance while still identifying the most problematic emissions events.

To support this suggestion, OSEE and ODEQ note that several field studies have identified leaking, but purportedly controlled, tanks as the largest source of super-emitters. For example, a study performed in the Uinta Basin, regarding emissions detected during ground and aerial surveys, found that "the majority of observed emission plumes were from liquid storage tanks (75.9% of all observed plumes), including emissions from pressure relief valves and thief hatches on the tank or from piping that connects to the tank."[24] Furthermore, tanks with control devices such as combustors or vapor recovery units were more likely to have detected emissions.[25]

OSEE and ODEQ agree with the findings reported in the study. These large emissions events are most likely to occur when new wells come into production, because the rate of liquids production is highest. When an upstream separator dumps liquids that are directed to an atmospheric storage tank, the high liquid flow rate, high pressure, and the likelihood that there has been insufficient residence time for complete separation of pressurized hydrocarbon gases from the liquids can overwhelm a vapor collection and control system. Noting the status of the thief hatch provides a quick, inexpensive check on the status of the vapor collection and control system. During initial production, it is possible that a single tank may be serviced quite frequently, and every trip ticket would document the status of a key element in the vapor collection and control system. These observations would detect the most likely leaks and the frequency of observation would justify reducing the frequency of more traditional monitoring and extending the time period for the first monitoring event. Reducing the frequency of OGI monitoring events from quarterly to semi-annually (or from semi-annually to annually) would save thousands of dollars per well per year. The additional time required to note the status of thief hatch during loading of liquids onto a tanker truck represents a trivial additional cost. The data management requirements could be added, at low cost, to the work done to determine the volume of liquids unloaded which yields the critical information required to ensure proper payment. This practice would also identify leaks on

[24] Lyman, Seth N., Trang Tran, Marc L. Mansfield, and Arvind P. Ravikumar, "Aerial and Ground-Based Optical Gas Imaging Survey of Uinta Basin Oil and Gas Wells," *Elementa: Science of the Anthropocence*, Volume 7, Issue 1, November 11, 2019, available online: https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1003&context=bingham.
[25] *Id.*

older equipment where the liquid production has decreased, but the possibility of equipment failure (e.g., due to rust) may be higher.

This is but one area where a common-sense approach could yield emission reductions at lower cost. EPA should delay the imposition of these requirements until there is time to gather additional data (especially regarding existing wells) and should re-calibrate the proposed rules to yield sufficient emission reductions at lower cost.

Comment 6: If EPA insists on moving forward with the third-party super-emitter notification system, EPA should note the following considerations

The preamble for the SNPR states that "Given the intermittency of super-emitter emissions events, the failure of the operator to find the source of the super-emitter emissions event upon subsequent inspection would not be proof, by itself, of demonstrable error on the part of the third-party notifier." 87 Fed. Reg. 74750. This statement implies that the company or facility in question is guilty until proven innocent. Given the possibility of errors, as covered above in Comment 4, this is highly problematic, and EPA should show discretion in accepting information provided by 3rd parties as proof that a super-emitter exists. Plausible reasons why no super-emission event happened such as accuracy of the location, actual concentration of the super-emitter, and human error in interpretation could be reasons why such an allegation of a super-emitter at a facility may be incorrect, and it should not be assumed that the company just did not find the methane release. EPA taking a stance of guilty until proven innocent should not be the default for the super-emitter program.

EPA is also requesting comments regarding the assumption that "that there should be no additional cost associated with this work practice standard for the super-emitter emissions event affected facility." 87 Fed. Reg. 74752. This seems unlikely as in almost every case an OGI camera with a properly trained OGI operator would be needed to find the potential super-emitter. For many companies this would require a third-party contractor who would be making an additional visit to the site, outside of the normally scheduled semi-annual or quarterly OGI monitoring program. Therefore, this super-emitter work practice would not be able to be done with no additional cost, as EPA seems to believe. If additional monitoring must be conducted, especially in more remote locations like those found in the western part of Oklahoma and the Oklahoma Panhandle, the monitoring, travel, root cause analysis, and coordination between operations and environmental staff would be in addition to the regular monitoring program. EPA should re-assess this idea that it would be no-cost to companies to find and fix these super-emitter events.

Furthermore, both NSPS OOOOb and EG OOOOc have language regarding the certification needed by the third-party in the notification of a super-emitter event, with each requiring in its certification to cite to its own provisions (i.e., 40 CFR 60.5371b(a) or 40 CFR 60.5388c(a)). It is unlikely that the third-party notifier will have sufficient information on the facility they are submitting to determine which regulation they are reporting under. This reinforces the assertion that, if EPA finalizes the super-emitter program, states or EPA should be running the program since they are best able to determine if a facility is subject to the requirements of OOOOb and OOOOc.

Lastly, EPA is requesting comment on whether the approval of a third-party notifier could be revoked. 87 Fed. Reg. 74750. OSEE and ODEQ believe it is essential that a third-party's notification rights could be revoked to limit the potential for abuse of the system. Furthermore, the SNPR seems to indicate this could be triggered with three demonstratable errors against a *site*; however, it later phrases it as three demonstratable errors against an *owner operator,* which could be interpreted to mean the entire company. *Id.* Therefore, it should be clarified if EPA intends to allow this for the entire company or only on an individual facility basis.

Comment 7: Monitoring and Control Costs Are Expected to Display a Heavy-Tailed Data Distribution; EPA's Cost Estimates Likely Significantly Underestimate Monitoring and Control Costs by Assuming an Incorrect Data Distribution

As noted in ODEQ's request for an extension of the comment period, the SNPR offers many proposed remedies to address "super-emitters," contextually defined in the Preamble to the SNPR as "large emission events." 87 Fed. Reg. 74742. The heavy-tailed data distribution that characterizes emissions from this sector (and many others) adds complexity to attempts to estimate aggregate emissions from the sector. In contrast, phenomena that display a normal or Gaussian distribution provide simpler approaches because, for example, the mean, median, and mode of the data set are the same. As a result, the sum of the values of all data points may be estimated by multiplying the median value by the total number of data points. However, this will not work for a heavy-tailed data distribution, because a relatively small number of data points occupying space in the long tail (high end) of the data distribution account for an oversized share of total emissions. Attempts to estimate total emissions by multiplying the median value by the total number of sources will significantly underestimate total sector emissions.

This principle is well understood and various attempts to address this issue are underway in various forums. But a similar phenomenon occurs with regard to costs of control and monitoring. After a reviewing several documents released by the EPA, ODEQ engineers and environmental program specialists have noted a similarly troubling aspect of EPA's attempt to estimate the cost of controls and monitoring. A description of the approach EPA used to estimate costs is reproduced below.

> The cost analysis presented in the SNPR RIA reflects a nationwide engineering analysis of compliance cost and emissions reductions, of which there are two main components. The first component is a set of representative or model plants for each regulated facility, segment, and control option. The characteristics of the model plant include typical equipment, operating characteristics, and representative factors including baseline emissions and the costs, emissions reductions, and product recovery resulting from each control option. The second component is a set of projections of activity data for affected facilities, distinguished by vintage, year, and other necessary attributes (e.g., oil versus natural gas wells). Impacts are calculated by setting parameters on how and when affected facilities are assumed to respond to a particular regulatory regime, multiplying activity data by model plant cost and emissions estimates, differencing from the baseline scenario, and then summing to the desired level of aggregation. 87 Fed. Reg. 74712

It appears that EPA has inadvertently assumed that the cost of controls and the cost of monitoring follow a normal or Gaussian distribution and, therefore, total costs may be estimated by multiplying median (in this case "model plant") costs by the total number of facilities of that type. If this is indeed the case, EPA would be making the same error in estimating costs that EPA is trying to avoid when estimating emissions.

Furthermore, the increased cost of implementing appendix K for all monitoring should be factored into the evaluation of the annual costs of the fugitive emissions monitoring and repair requirements. To implement the appendix K certification program for the camera, training of technicians (section 10), longer monitoring of components due to dwell time rest break requirements (section 9.4 and 9.5), and video storage of leaks (section 9.7.1) it is expected to increase the cost to conduct an OGI fugitive monitoring program at Compressor Stations and Natural Gas Plants when compared to OGI monitoring costs currently. The requirements for "Senior OGI camera operator" of 1,400 hours seems a high bar to cross and how this affects the cost of future OGI contractors and industry operators should be accounted for in the future cost/benefit of implementing the appendix K OGI monitoring proposed in Subpart OOOOb and OOOOc.

It will take additional time and effort to develop a better estimate of the cost of control and monitoring using a more accurate statistical approach than the one EPA has used in this proposal. Further, the current estimates are likely to substantially understate the costs of monitoring and control. Modifications to the SNPR are warranted to address these undercounted costs.

Comment 8: Adding Thief Hatches and Other Storage Vessel Components Only When the Storage Vessel is *Not* Subject to Applicable Requirements Is Sensible

OSEE and ODEQ concur with EPA's proposal to add thief hatches and other storage vessel components *only* when the storage vessel is *not* subject to applicable requirements. 87 Fed. Reg. 74723.

Comment 9: ODEQ is in Support of the Changes to the Definition of Fugitive Emissions Component

On the November 2021 proposal, OSEE and ODEQ commented that the definition for "fugitive emissions component" needed clarification regarding whether emissions from control devices should be included.[26]

The preamble to the SNPR states, "EPA agrees that control devices should not be treated as fugitive emissions components and is therefore revising the definition in this proposal to not include those devices." 87 Fed. Reg. 74724. OSEE and ODEQ support this revision.

Comment 10: Rather than Relying on Modeling, Model Plants, and

[26] *See "*State of Oklahoma's Comments on EPA's Proposed *Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review*" Document ID EPA-HQ-OAR-2021-0317-0727.

Simulations, EPA Should Gather Empirical Data on Actual Facilities to Assess the Effectiveness of Fugitive Emission Detection and Control Programs

OSEE and ODEQ are concerned that EPA's reliance on model plants and simulations will yield insufficiently well-informed policies. For example, in the preamble to the SNPR, EPA shared its use of modeling as described below.

> One such modeling simulation tool is the Fugitive Emissions Abatement Simulation Toolkit (FEAST). FEAST is an open-source modeling framework developed to evaluate the effectiveness of fugitive emissions programs at oil and gas facilities by simulating various scenarios of leaks (and subsequent repairs) occurring over time using an empirical leak dataset according to a randomized process. 87 Fed. Reg. 74725.

Therefore, OSEE and ODEQ suggest that EPA collect additional empirical data before implementing new regulatory requirements, especially where those requirements will be imposed on existing oil and gas facilities. For example, in the preamble to the SNPR, EPA acknowledges that "certain well sites are smaller than our model facilities, and that as a result the model may overstate emissions reductions, and thus cost-effectiveness, for fugitive emissions programs at such small sites." This further warrants the justification for an exemption threshold for well sites with low potential emissions, as discussed above in Comment 3. 87 Fed. Reg. 74731. There are too many existing well sites for EPA to properly characterize the fraction that experience unacceptably high fugitive emission rates and to properly assess the cost of control absent additional study. EPA should gather data from a large sample of existing wells with different configurations and fund multiple pilot studies to gather better cost data before embarking on such an ambitious regulatory project.

Comment 11: Allowing a Monitoring Plan to Cover Multiple Facilities Makes Sense

OSEE and ODEQ concur with EPA's proposal to allow companies to develop a monitoring plan that covers multiple facilities rather than a separate plan for each site. 87 Fed. Reg. 74731.This is not an endorsement of the entirety of the proposal, but a preference for this particular alternative.

Comment 12: EPA Should Support State and Local Agency Efforts to Incorporate Existing Research Findings into Emissions Estimates for the Oil and Gas Sector

In the following excerpt from the preamble, EPA notes that there are problems with developing accurate estimates of emissions from the oil and gas sector.

> We also take comment on how to improve the accuracy of our estimates of baseline emissions levels, emissions reduction opportunities, and the frequency and intensity of super-emitter events, and how to incorporate any recent, reliable estimates of methane emissions. 87 Fed. Reg. 74755.

Researchers have investigated emissions from various facility types in the oil and gas sector. Many of these efforts have been in collaboration with oil and gas companies, university researchers, and representatives from environmental advocacy organizations. However useful this work has been, little of this work has been incorporated directly into the emissions estimates that have been incorporated into EPA's triennial National Emissions Inventories (NEI). To ensure that valuable research findings are properly incorporated into emissions estimates (including notably the NEI), EPA should fund work by states and local agencies, in collaboration with university researchers and EPA contractors, to evaluate research findings and incorporate results, where warranted, into emissions estimates submitted to the NEI. State agencies do not currently have the resources to do this on their own.

Comment 13: More Clarity is Needed When Superseding Provisions of NSPS OOOO and OOOOa

For most existing affected facilities, it appears that EPA has determined that the presumptive standards in EG OOOOc are more stringent than the standards the affected facility may already be subject to in NSPS KKK, OOOO, or OOOOa. 87 Fed. Reg. 74716. However, it appears that EPA has made a few notable exceptions for when the existing standards may functionally be more stringent than the new emission guidelines and therefore must continue to be followed. Namely, EPA mentions that NSPS KKK is more stringent than the presumptive standard in EG OOOOc for centrifugal compressors and reciprocating compressors. 87 Fed. Reg. 74717. This would mean that some facilities could be subject to requirements of both NSPS KKK and EG OOOOc. In addition, EPA's change from regulating a single storage vessel in NSPS OOOO and OOOOa to regulating a tank battery in EG OOOOc and from a pneumatic controller in NSPS OOOO and OOOOa to a collection of pneumatic controllers in EG OOOOc further complicates the determination of what facilities are subject to which regulations. 87 Fed. Reg. 74717. The OSEE/ODEQ 2021 Comment stated the regulations need to be clear as to which subpart equipment was subject to along with when and how a source became subject to a different regulation. This is necessary to provide clarity to both the regulated entity and state regulators in determining compliance.

C. Comments on Section V. Supplemental Proposal for State, Tribal, and Federal Plan Development for Existing Sources

Comment 14: Implementation Timelines for State Plans Should be Lengthened to Three Years.

In the vacated provisions of 40 CFR Part 60, Subpart Ba[27], the timeline for submission to EPA of a state 111(d) plan per § 60.23a(a)(1) was *three years* after notice of the final emission guideline. EPA has very recently proposed a replacement of 15 months for this vacated timeline[28].

[27] *American Lung Association v. EPA*, No. 19-1140, ECF No. 1970895.

[28] 12/15/2022 Pre-publication version of proposed "Implementing Regulations under 40 CFR Part 60 Subpart Ba Adoption and Submittal of State Plans for Designated Facilities."

Although outside the scope of these comments, this 15-month timeline does not provide adequate time for states to develop rulemaking and a state plan, despite EPA's assertion to the contrary in its proposal. Both versions of Subpart Ba require their timeline to be followed unless another timeline is specified in the applicable subpart. The Emission Guidelines in 40 CFR Part 60, Subpart OOOOc propose an 18-month timeline for states to submit their plans (§ 60.5362c(c)), which is half the time of the vacated provisions of § 60.23a(a)(1) and only slightly longer than the newly proposed timeline. This 18-month timeline is for an EG that includes thousands of additional sources for oil and gas states. Rarely does an EG affect so many existing sources. The burden of gathering an inventory of designated facilities in accordance with § 60.5363c(a) alone warrants a longer timeframe. Even with the addition of a Model Rule, reducing the timeframe is not reasonable since state rulemaking often takes at least a year to go from proposed to effective. In addition to gathering the source inventory and promulgating a state rule, the state also must determine which facilities might be affected by remaining useful life and other factors (RULOF) in § 60.5365c. There is also the additional requirement of "meaningful engagement" in § 60.5363c(a)(6) and § 60.5366c that presumably requires additional outreach beyond what states typically conduct during a routine rulemaking and state 111(d) plan development (discussed further in Comment 17). All of these actions require significant amounts of time and cannot realistically be started until the final emission guideline has been published by EPA. OSEE and ODEQ requests that EPA extend the submission timeline contained in § 60.23a(a)(1) to three years. If EPA does not give states adequate time to supply state plans, then EPA will be facing the need to develop a federal plan and implement the emission guidelines themselves. EPA does not seem to have the manpower to do this adequately. Recent experiences with the Municipal Solid Waste Landfill Emission Guidelines and the subsequent Federal Implementation Plan have shown that even with a relatively small number of sources, EPA is unprepared to receive and review the documentation required. It is in everyone's best interest – the state's, the public's, and EPA's – to provide a reasonably adequate timeframe for this large burden on states.

Comment 15: The Use of GHGRP Data for Emission Inventories Will Lead to Inaccurate Results.

EPA is proposing to use Greenhouse Gas Reporting Program (GHGRP) data to satisfy the requirements of 40 C.F.R. 60.25a(a). OSEE and ODEQ believe that this does not accurately represent the information. The GHGRP does not identify all affected sources, as it has a high threshold for reporting. Also, GHGRP does not always utilize actual measurements; GHGRP has default emission factors and default equipment counts built in that reporters must utilize. Instead of utilizing GHGRP information, EPA should accept emissions data for these facilities in accordance with the provisions of the Air Emissions Reporting Requirements (AERR), with detailed requirements for designated facilities that are classified as AERR Type A and B sources and the use of alternative methods (e.g., a nonpoint tool) for designated facilities that would be classified as nonpoint sources under the AERR. The AERR already has emissions thresholds for what should be inventoried as a point source, and what is being captured in the National Emissions Inventory (NEI) as a nonpoint source. ODEQ believes the rule should align with the AERR thresholds and requirements. Using the NEI would give a much more comprehensive accounting of facilities and provide more accurate emissions.

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https://www.epa.gov/system/files/documents/2022-12/8606_Subpart%20Ba_Proposal_for%20posting.12.14.22.pdf Docket No. EPA-HQ-OAR-2021-0527

To compare GHGRP and NEI specifically for the oil and gas sector in Oklahoma, GHGRP includes 70 facilities[29], while the NEI accounts for 73,138 facilities[30]. The threshold for a reportable "facility" to GHGRP is 25,000 metric tons CO_2e. For companies with wellheads, the company must add up all of their wellhead assets in a basin to see if they meet the threshold and if they do, all of those wellheads get reported as a single facility. This means that many, possibly most, of the wellheads would be missed in every basin, as there are many small operators in this sector. Conversely, the EPA's Nonpoint Oil & Gas Tool used for compiling the NEI pulls data from Enverus (formerly DrillingInfo), to account for a vastly larger number of facilities, including both large and small operators.

Comment 16: Potential Requirement To Inventory and Enforce Upon Newly Designated Facilities Is Burdensome.

Oklahoma regulations state that any source of regulated air pollutants must submit an emission inventory. The SNPR would make methane a regulated air pollutant, and thus for Oklahoma, it could bring in the potential requirement to inventory 202,647 wells, regardless of where EPA obtains the data from to satisfy the requirements of 40 C.F.R. 60.25a(a). This is a substantial burden on industry and on state government resources.

Furthermore, OSEE and ODEQ are concerned about the significant cost of the implementation of a compliance and enforcement program for such a massive amount of facilities. Without additional funding from EPA, Oklahoma resources will be stretched very thin. This could create an environment where some companies try to take advantage of these limitations and make no good faith effort to comply with OOOOc. Meanwhile, companies that do comply are placed at an economic disadvantage, thus creating an unlevel playing field.

Comment 17: Meaningful Engagement Should Be Re-assessed

As stated in its previous comments on the November 2021 proposal, OSEE and ODEQ support robust public participation in state rulemaking efforts. ODEQ conducts public participation processes in accordance with the law. ODEQ's current method of notifying its citizens of hearings and other opportunities for public comment is through its website and through a dedicated listserv using GovDelivery. The burden on the state to reach out to nearly every community across the state in some individual way and list the pertinent stakeholders in its state plan would waste valuable resources and staff time and only delay actual implementation of the provisions of the emissions guidelines by delaying the state's ability to create a 111(d) plan.

In addition, many states will be either using EPA's model rule or justifying equivalency of state rules that are already in place. It is entirely possible that a state plan using the EPA-prescribed

[29] GHGRP figure obtained from EPA Flight tool for 2021, filtered for Oklahoma. The count includes Petroleum and Natural Gas Systems.

[30] NEI figure obtained from combination of EPA Nonpoint Oil & Gas Tool for Oklahoma and ODEQ's submission of relevant point sources. 71,683 sources from EPA Nonpoint Oil & Gas Tool for Oklahoma for 2020, plus 1,455 sources submitted as point sources to EPA for 2020.

BSER will, during the meaningful engagement period, receive comments from the community that the state has not gone far enough in its plan. This creates a logistical and regulatory conundrum since, theoretically, EPA's rulemaking should be presumptively approvable. Furthermore, some states cannot be more stringent than federal rules. Other states, like Oklahoma, are required to meet additional statutory burdens when promulgating rules more stringent than corresponding federal rules. In either case, the result is often that the state requirements remain equivalent to the federal requirements. Therefore, "meaningful engagement," as proposed by EPA and when taken to its logical conclusion, sets up states and the public for confusion and frustration due to a potential disconnect between the perceived outcomes. Thus, EPA's concept of meaningful engagement is more appropriate on the federal level before EPA sets the regulatory baseline.

This same idea is borne out by comments made at EPA's "Pre-proposal outreach-Meaningful Engagement Discussion with Communities" held on July 26, 2022 (Docket Document ID #EPA-HQ-OAR-2021-0317-1526). The very first commenter stated that "meaningful engagement should start with an expectation that through their feedback, stakeholders will have the ability to change the outcome." The commenter went on to say that "there needs to be a process created where community members have a sense that their comments will have an effect on the final outcome." Another commenter similarly stated, "if engagement has no impact, people do not see the point in participating in the process." Additional similar ideas and concerns can be found throughout the Question-and-Answer document. When asked at what point in the regulatory process should engagement begin, one commenter said "as soon as ideation turns to staff consideration. After the feasibility is considered, it is already too late to begin attempting engagement." By this commenter's standards, by the time the state is trying to implement EPA's emissions guidelines into state rules and a state plan, it is much too late for meaningful engagement.

OSEE and ODEQ acknowledge that state plans that incorporate Remaining Useful Life and Other Factors (RULOF) in their decision-making is one place where meaningful engagement truly has *meaning*. When RULOF is taken into consideration for a facility, the facility may no longer be strictly following the model rule requirements but rather be granted alternate requirements. In these scenarios, the public should have an opportunity to review and comment if they object to the RULOF decisions made by the state. This allows the public to potentially affect a change in what the state was proposing (i.e., meaningful engagement). The state will also have a defined audience for its meaningful engagement as it would be appropriate to engage the communities nearby the RULOF facilities.

EPA appears to believe it has made the meaningful engagement process clearer in the supplemental rulemaking when at most, all it has done is use more words to describe a nebulous process that will be judged by the regional EPA office months if not years after submittal of the state plan. OSEE and ODEQ request that the idea of meaningful engagement be re-assessed in light of these concerns.

D. Comments on Section III. Purpose of This Regulatory Action

Comment 18: The fees collected by EPA under the new "Methane Emissions and Waste Reduction Incentive Program for Petroleum and Natural Gas Systems" conflict with State's own Emissions Fees

The "Methane Emissions and Waste Reduction Incentive Program for Petroleum and Natural Gas Systems" appears to be on the cusp of treading on states' rights to collect fees for emissions by requiring methane emissions to be reported and fees imposed at the federal level. 87 Fed. Reg. 74720. Emission fees have historically been collected at the state level, where the emissions are occurring, and where the inventory, permit, inspection, and enforcement programs are located. This overreach by EPA to begin collecting fees on methane emissions while simultaneously expecting states to greatly expand their current programs to cover existing sources under EG OOOOc is unacceptable. EPA should ensure in its "IRA equivalence determination" that any state that implements EG OOOOc through the submission of a state 111(d) plan is considered equivalent to reductions under EPA's November 2021 proposed rule, ensuring the state's facilities are not subject to the federal methane fee. 87 Fed. Reg. 74721.

E. Comments on Proposed OOOOc Rule Language

Comment 19: Typographical Errors

There is a typographical error in the proposed language of § 60.5363c(a)(6), which currently reads:

> (5) Certification and evidence of meaningful engagement on such plan or plan revisions as specified in §60.5365c, including a list of identified pertinent stakeholders and a summary of the engagement conducted, a summary of stakeholder input received, and a description of any action or changes made as a result of the engagement.

The reference to §60.5365c should instead be §60.5366c for meaningful engagement.

Furthermore, Table 2 and Table 4 are currently fully titled "Table 2 to Subpart OOOOb" and "Table 4 to Subpart OOOOb." EPA should update the names of the tables to reflect they are part of OOOOc.

III. Conclusion

OSEE and ODEQ appreciate the opportunity to comment on the proposed rule. However, as stated above and previously in the OSEE/ODEQ 2021 Comment, OSEE and ODEQ object to the SNPR as written. Many aspects of the SNPR are unclear in scope and impact and have the potential to require massive state resources which are not available. In addition, the changes made to the November 2021 Proposal and incorporated into the SNPR appear to exacerbate those concerns. If EPA moves forward with the rule, OSEE and ODEQ offer the recommendations set forth above.

Attachment A

Kenneth E. Wagner
Secretary of Energy & Environment

J. Kevin Stitt
Governor

STATE OF OKLAHOMA
OFFICE OF THE
SECRETARY OF ENERGY & ENVIRONMENT

January 25, 2022

Submitted via: https://www.regulations.gov/

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

RE: U.S. Environmental Protection Agency's ("EPA") proposed: *Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review*, 86 Fed. Reg. 63110 (Nov. 15, 2021)

Dear Administrator Regan:

Enclosed with this letter are comments submitted by my office and the Oklahoma Department of Environmental Quality in response to EPA's proposed rule, *Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review*, 86 Fed. Reg. 63110 (Nov. 15, 2021). The proposed rule has the potential to substantially impact the State of Oklahoma. We appreciate this opportunity to provide comments on the proposed rule, as well as EPA's consideration of said comments.

Sincerely,

Kenneth E. Wagner
Secretary of Energy & Environment

Comments on EPA's Proposed *Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review*, EPA Docket ID No. EPA-HQ-OAR-2021-0317

Submitted by:

Oklahoma Secretary of Energy and Environment ("OSEE") and Oklahoma Department of Environmental Quality ("ODEQ")

I. Introduction

These comments are submitted by OSEE and ODEQ in response to the U.S. Environmental Protection Agency's ("EPA") proposed *Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review*, 86 Fed. Reg. 63110 (Nov. 15, 2021) (hereinafter referred to as the "proposed rule" or "proposal"). The comment period ends on January 31, 2022.

The proposed rule poses many problematic and concerning issues. Therefore, OSEE and ODEQ object to the proposed rule as written. However, if EPA must finalize the proposed rule, this comment seeks to provide feedback on aspects of the proposed rule that could use the most improvement. Comments are numbered sequentially and are grouped according to the section of the proposed rule under which they fall.

The most concerning issue presented by the proposed rule is the vast amount of state resources that will be required to implement the rule and the absence of any additional funding to states to account for the extreme increase in workload. ODEQ previously submitted a comment on the proposed rule at issue herein requesting an extension of the comment deadline, which was submitted to the docket on November 30, 2021 (attached hereto as Attachment A). Said comment contained data showing the proposed rule has the potential to increase the number of oil and gas permitted facilities in Oklahoma from 10,443 to 202,615. This kind of permitting increase would have a seismic impact on ODEQ's air quality program for many reasons, not the least of which is the extreme strain on state resources that are already stretched to capacity.

II. Comments

A. Comments on Section VI. Environmental Justice Considerations, Implications, and Stakeholder Outreach

Comment 1: Environmental Justice Communities Reliant on Oil and Gas Economies

EPA states the proposed rule was based on extensive outreach to underserved and overburdened communities and to environmental justice organizations. 86 Fed. Reg. 63139. EPA states it defines environmental justice ("EJ") as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations and policies." *Id.* Additionally, EPA cites Executive Order 12898, 59 Fed. Reg. 7629 (Feb. 16, 1994) as directing it

to "identify the populations of concern who are most likely to experience unequal burdens from environmental harms; specifically, minority populations, low-income populations, and indigenous peoples." 86 Fed. Reg. 63139.

OSEE and ODEQ support the goal of environmental justice, in particular the encouragement of greater public participation. However, we are concerned the proposed rule's focus on environmental justice may not take into consideration its potential economic effects on EJ communities within oil and gas dependent economies and that the proposal does not provide fair consideration of the economic impacts in distressed rural communities that may not meet EPA's definition of "environmental justice community." OSEE and ODEQ encourage EPA to broaden its evaluation of the costs and benefits of the proposed rule to incorporate economic effects with the same level of granularity that was used in targeting communities living in proximity to facilities that would be subject to this rulemaking. In particular, how will these policies affect employment in economically-distressed rural communities in states like Oklahoma?

A study by Price Waterhouse for the American Petroleum Institute determined that the oil and gas sector was responsible (including direct and indirect employment) for 16.7 percent of the Oklahoma workforce.[1] Additionally, many oil and gas jobs employ residents of rural communities.[2] To assess the possible impacts of job losses in those communities, the work performed by the U.S. Department of Agriculture's (USDA's) Economic Research Service investigated economic, social, and demographic factors that affect the poverty status of residents of rural communities. For 2019, the USDA estimated Oklahoma's statewide poverty rate at 15.1% with 19.7% of Oklahoma's children living in poverty.[3] Rural counties, especially in the southeastern part of the state are particularly impacted by poverty.[4] The availability of middle class oil and gas jobs in rural Oklahoma mitigates the poverty experienced in many of these communities. To ensure that just policies are adopted, OSEE and ODEQ encourage EPA to weigh the economic impacts on vulnerable communities, especially rural communities, as carefully as the environmental benefits are evaluated.

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[1] "Impacts of the Oil and Natural Gas Industry on the US Economy in 2019," prepared by PricewaterhouseCoopers LLP, prepared for the American Petroleum Institute, July 2021, available on-line: https://www.api.org/-/media/Files/Policy/American-Energy/PwC/API-PWC-Economic-Impact-Report.pdf

[2] See, for example, the article "Feeling the Pain: In Rural Oklahoma, Oilfield Communities See the Ups and Downs of Oil and Gas Industry Firsthand," by Heidi Brandes, February 11, 2021, available on-line on the web page of The Petroleum Alliance: https://www.thepetroleumalliance.com/feeling-the-pain-in-rural-oklahoma-oilfield-communities-see-the-ups-and-downs-of-oil-and-gas-industry-first-hand/

[3] U.S. Department of Agriculture, Economic Research Service, Rural Poverty & Well-Being, state poverty rate data available on-line: https://data.ers.usda.gov/reports.aspx?ID=17826

[4] County data are available from the link cited in Footnote 5 by selecting "Oklahoma."

OSEE and ODEQ performed a review of the Regulatory Impact Assessment (RIA)[5] for the proposed rule. OSEE and ODEQ note that a longer review time was needed to allow adequate review of the RIA due to the complexity of the proposed rule and the associated documents. However, OSEE and ODEQ offer feedback and suggestions to help EPA flesh out some of the details that appear to warrant a more rigorous analysis in support of the supplemental proposal anticipated for this rule.

One issue of concern is the lack of any detailed projections of likely reductions in oil and gas employment. While there are economic projections showing impacts on future oil and gas prices and production, there does not appear to be a concrete projection of the reduction in employment that would likely be associated with adoption of the proposed regulations. This is particularly concerning in Oklahoma due to the number of marginal wells that remain in operation and whose financial viability may be precarious. Further, jobs in the oil and gas sector are particularly well-paying when compared to alternatives, especially in rural areas and, because job losses are likely to be localized, the effects are magnified in those communities.

The RIA, on page 4-33, explains the baseline approach used to evaluate employment impacts in Section 4 of the RIA:

> The EPA also conducted a baseline analysis to characterize potential distributional impacts on employment. A reduction in oil and natural gas activity could have a negative effect on employment among oil and natural gas workers. This could also reduce employment, earnings, and tax revenues in oil and natural gas intensive communities.[69] Any effect on oil and natural gas workers or oil and natural gas intensive locations would be a local and partial equilibrium effect. In general equilibrium, there could be other and potentially offsetting effects in other regions and sectors.

The RIA, on page 4-34, continues:

> Comparing workers in the oil and natural gas sector to workers in other sectors, oil and natural gas workers may have higher than average incomes, be more likely to have completed high school, and be disproportionately Hispanic. People living in some oil and natural gas-intensive communities concentrated in Texas, Oklahoma, and Louisiana, may have disproportionate income levels, rates of high school completion, and demographic composition.

This information lends support to OSEE's and ODEQ's contention that the economic impacts of the proposed rules will likely be significantly harmful to rural communities dependent on this industry. It is with this concern in mind that OSEE and ODEQ recommend that EPA consider

[5] U.S. EPA, "Regulatory Impact Analysis for the Proposed Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review," (RIA), EPA-452/R-21-003, October 2021 (https://www.epa.gov/system/files/documents/2021-11/proposal-ria-oil-and-gas-nsps-eg-climate-review_0.pdf).

economic impacts of the proposed rulemaking with the same level of granularity and diligence that was used in evaluating benefits of the rule for environmental justice comments. The importance of oil and gas jobs is further warranted by the information in Table 4-8 of the RIA which shows that the average income for oil and natural gas workers is $110,000 while the average income for other workers in "oil and gas communities" is $40,000. Thus, for every oil and gas job lost, even if there is a new non-oil and gas job created in the same community, there will be a net loss of $71,000 with additional spillover effects in the community.

Page 4-35 of the RIA sets forth data used to develop this analysis:

> This analysis uses 5-year ACS data from 2015-2019 retrieved from IPUMS. This is approximately 16 million individual ACS responses. Oil and natural gas workers are identified by working in industries with a NAICS code that begins with "211." Those are "Oil and natural gas Extraction," as well as the sub-industries "Crude Petroleum Extraction" and "Natural Gas Extraction."

Notably, OSEE and ODEQ are also concerned that the data set EPA used was exclusively from the oil and gas extraction segment and does not appear to include the drilling, treatment, storage, or transmissions segments. Further, the RIA uses Public Use Microdata Area (PUMA) data to identify oil and gas communities. This level of analysis is insufficiently specific in identifying impacts on rural areas. This assertion is demonstrated by the map (Figure 4-9 on p. 4-36 of the RIA) which shows the relatively large size of each PUMA. In addition, the oil and gas PUMAs shown in the map cover more than half the state of Oklahoma. In contrast, the environmental justice communities in EJScreen[6] are identified with much finer granularity. This raises the question: to what degree does this analysis inherently bias the evaluation of costs and benefits, possibly privileging certain communities compared to others?

Figure 4-9 from the RIA is reproduced below for comparison.

[6] See https://www.epa.gov/ejscreen.

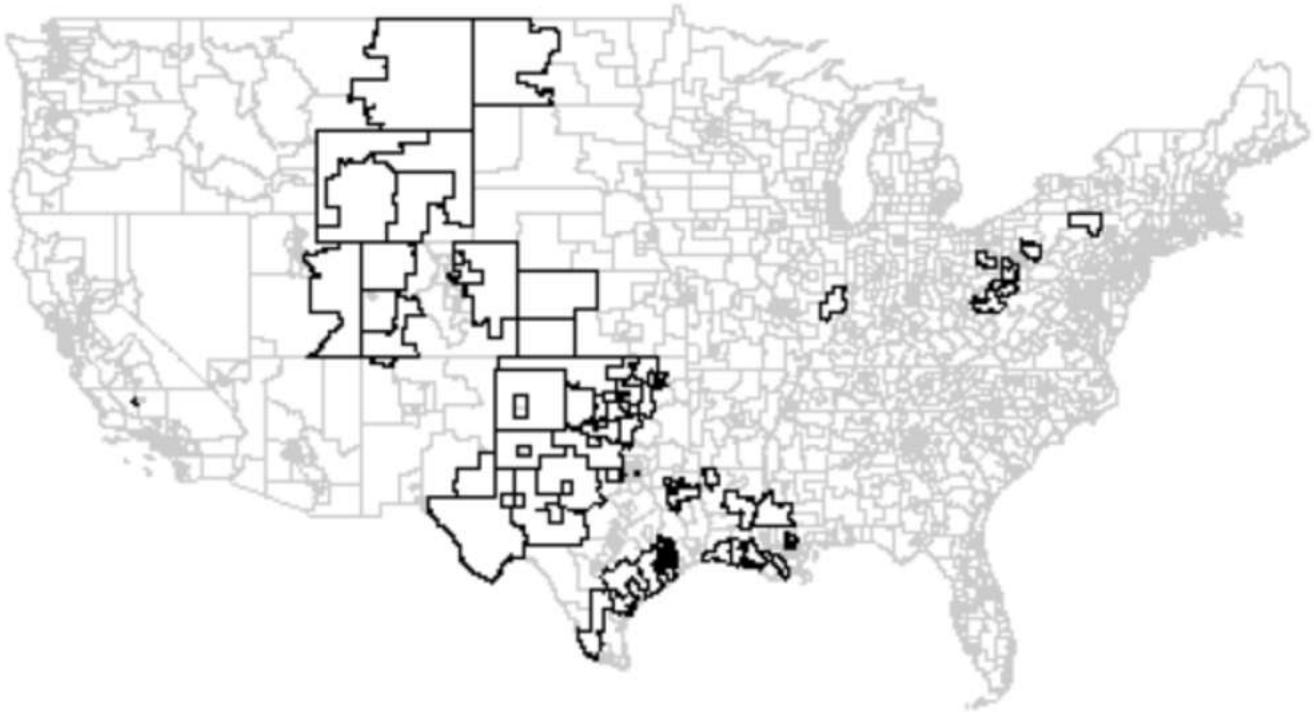

Figure 4-9 Map of PUMAs and Oil and Natural Gas Intensive Communities (Continental United States)

Table 4-9 in the RIA provides demographic data for the entire group of PUMAs with high oil and gas intensity. This analysis is used to draw various conclusions concerning the ethnic make-up, educational attainment, and income of residents in these areas compared with other areas with lower oil and gas intensity. By aggregating the high oil and gas PUMAs for these analyses, EPA fails to give a sufficiently granular analysis of the impacts of the types of rural communities found in Oklahoma. Again, this contrasts with EPA's approach in evaluating impacts on environmental justice communities.

While the analysis in the RIA that follows (see Table 4-10 and Figure 4-10 of the RIA) provides some greater specificity, it is still insufficient and still fails to meet the standards EPA uses for evaluating environmental justice communities. Figure 4-10 is reproduced below.

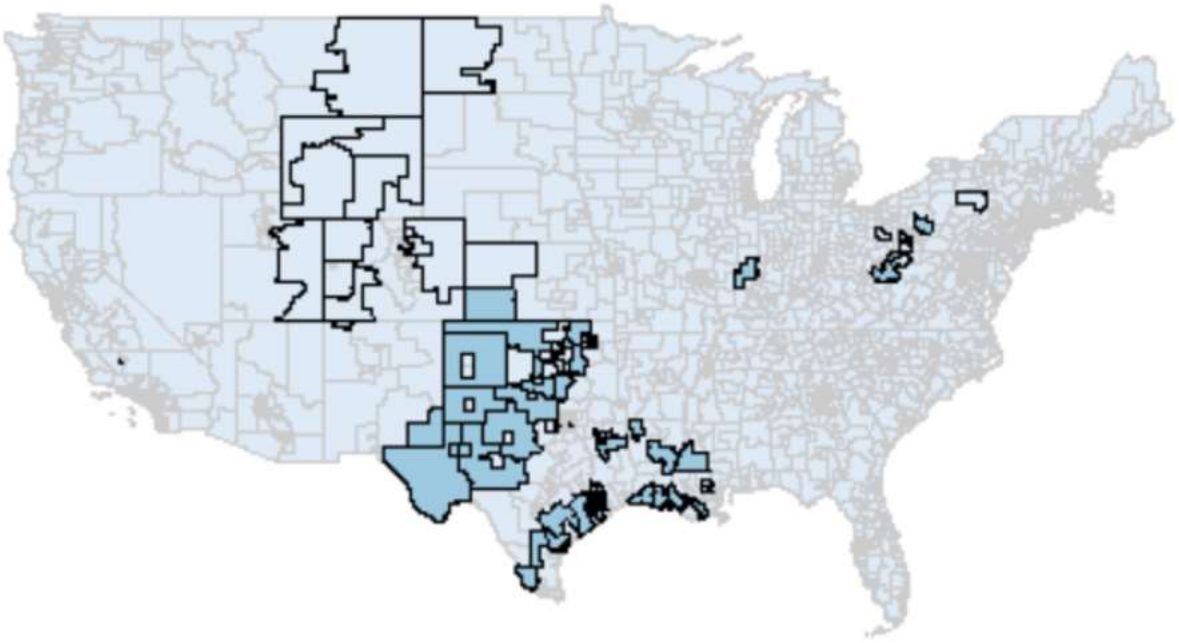

Figure 4-10 Map of Oil and Natural Gas Intensive Communities of Environmental Justice Note

Notable in Figure 4-10 is just how large a fraction of the state of Oklahoma is included in the PUMAs evaluated.

OSEE and ODEQ are concerned that EPA's analysis is just too vague and too broad-brush. Important questions need to be addressed. How many marginal wells are expected to close as a result of the proposed rules? How many jobs are expected to be lost and which communities are likely to experience those losses? It may be challenging to attempt to address these issues with sufficient rigor, but an attempt is certainly warranted to justify policies that will have disproportionate impacts on some communities to benefit the entire public. OSEE and ODEQ do not object to the evaluation of environmental impacts on environmental justice communities, but respectfully request EPA perform a similarly detailed and rigorous analysis of economic impacts, especially in rural communities.

B. Comments on Section X. Summary of Proposed Action for NSPS OOOOa

Comment 2: Outdated Text in C.F.R.

EPA outlines the legislative history of the Congressional Review Act joint resolution to disapprove the "2020 Policy Rule" on page 63149 of the proposed rule. The CRA joint resolution was signed into law by President Biden on June 30, 2021. EPA states the 2020 Policy Rule "rescinded all NSPS regulating emissions of VOC and methane from sources in the natural gas transmission and storage segment of the Oil and Natural Gas Industry and NSPS regulating

methane from sources in the industry's production and processing segments." 86 Fed. Reg. 63157. The CRA joint resolution disapproved the 2020 Policy Rule, and therefore the 2020 Policy Rule is treated as though it had never taken effect. 86 Fed. Reg. 63149 (citing 5 U.S.C. 801(f)). However, the rule text of the 2020 Policy Rule remains in the C.F.R., even though its provisions are no longer in effect due to the CRA joint resolution. This disparity between the rules currently in effect after passage of the CRA joint resolution and the outdated rule language that remains in the text of the C.F.R. creates confusion for both the regulated community and regulatory agencies, and especially members of the public who may be unaware of the CRA joint resolution. Regulatory clarity is needed immediately to reduce confusion and potential for error in compliance with and enforcement of the correct rule text.

C. Comments on Section XI. Summary of Proposed NSPS OOOOb and Emission Guidelines ("EG") OOOOc

Comment 3: Clarity Needed When Superseding Provisions of NSPS OOOO and OOOOa

The proposed rule states that EPA intends to publish supplemental rule proposals for NSPS OOOOb and OOOOc. In particular, with respect to new sources, the proposed rule states, "[b]ased on its review, the EPA is proposing revisions to the standards for certain emissions sources to reflect the updated BSER for those affected sources. Where our analyses show that the BSER for an affected source remains the same, the EPA is proposing to retain the current standard for that affected source." 86 Fed. Reg. 63117. These revisions to the standards would be contained in a future rule, NSPS OOOOb. *See id*. For existing sources, EPA is proposing to develop an Emission Guideline under CAA 111(d) that would then be rolled into a state plan. *Id*. Thus, once the aforementioned rules are final, there would be four CAA 111 rules applicable to the oil and gas sector (OOOO, OOOOa, OOOOb, and OOOOc/State Plan), all of which could potentially be applicable at a single facility, [7] albeit for different components/affected facilities. Because of this, each subpart needs to be clear in the rule text as to where one rule supersedes the other and where applicability of each rule starts and stops for each affected facility. No single component/affected facility should be subject to more than one NSPS or emissions guideline at any given time. Without clear rule text, there will be confusion among owners/operators as well as regulators about the applicability of each subpart. Regulatory clarity and certainty pertaining to the applicability of each potential future rule are necessary for effective programs, and OSEE and ODEQ request EPA pay close attention to this matter when finalizing any future rules.

[7] Here and elsewhere in this document, we use the term "facility" to refer to the Clean Air Act definition of stationary source, consisting of a "building, structure, facility, or installation," otherwise referenced under the common-sense notion of a "plant." Except where there the context is unambiguous, it does not refer to the term "affected facility" under 40 CFR Part 60; the explicit use of "affected facility" is one such unambiguous example.

Comment 4: Definition of Fugitive Emissions Component

EPA has proposed a new definition for "fugitive emissions component" that is more expansive than the current definition. 86 Fed. Reg. 63169. The preamble to the proposed rule discusses the reason EPA is considering expanding the definition, specifically that:

> [D]ata shows that the universe of components with potential for fugitive emissions is broader than the illustrative list included in the 2016 NSPS OOOOa, and that the majority of the largest emissions events occur from a subset of components that may not have been clearly included in the definition. Therefore, the EPA is proposing a new definition for ''fugitive emissions component'' to provide clarity that these sources of large emission events are covered. *Id.*

EPA proposes to also include natural gas discharged from natural gas-driven pumps and control devices, including flares. OSEE and ODEQ infer that EPA wants to ensure that the optical gas imaging ("OGI") surveys performed at sites will include these additional sources and, further, that redefining these sources as "fugitive sources" could simplify the rule development. However, OSEE and ODEQ note that fugitive emissions components have *not* included sources of emissions that are vented to the atmosphere through a stack or something similar. If EPA intends for these additional sources to be included in an OGI survey, they should not be included within the fugitive source definition. If EPA insists on adding true point sources to the definition of "fugitive emissions component," then EPA may need to provide additional clarification regarding the requirement to use the actual stack height for a flare subject to reporting requirements for emissions inventory purposes, since fugitive components have different parameters for characterizing the release.

Comment 5: Community Identification of Large Emission Events

The proposed rule envisions "a program for finding large emission events that consists of a requirement that, if emissions are detected above a defined threshold by *a community*, a Federal or State agency, or any other third party, the owner or operator would be required to investigate the event, do a root cause analysis, and take appropriate action to mitigate the emissions, and maintain records and report on such events." 86 Fed. Reg. 63177 (emphasis added). OSEE and ODEQ have numerous concerns with allowing the "community," i.e., individual citizens or groups, to detect large emissions events and require owners or operators to mitigate those events. These concerns are 1) safety of the public, 2) accuracy of data collected by the public, 3) regulatory ambiguity surrounding enforcement authority, and 4) EPA's creation of unrealistic expectations of the public. Notably, ODEQ maintains a 24-hour complaints hotline where the public can alert ODEQ to any environmental concerns. Thus, an effective mechanism already exists in Oklahoma for concerned citizens to initiate a regulatory response to emission events. Further, this proposal is problematic because it creates an unrealistic expectation for the public about 1) the public's ability to independently determine the existence of an enforcement issue and 2) whether identification of said perceived issue will result in a specific, direct action by either the regulatory authority or the facility. OSEE and ODEQ submit the following suggestions if EPA ultimately promulgates a rule allowing the community to collect data to be used for enforcement.

First, for safety and legal concerns, EPA should not give individuals or community groups the false impression that they have a right to enter onto facility property without permission to obtain or substantiate emissions data. Next, allowing the public to collect data that could be used in enforcement raises quality assurance/quality control and accuracy questions. Data that is used for enforcement purposes should be collected and verified according to applicable procedures to ensure its accuracy, and any person collecting, analyzing, evaluating, or verifying such data should be trained and certified to do so. At the very least, if EPA goes forward with this aspect of the proposal, the data collected by the community should be required to be verified by either the delegated regulatory authority or EPA. For this reason, OSEE and ODEQ strongly recommend that, should EPA promulgate a rule that allows the community to collect data to be used for enforcement, any data collected by individuals or community groups should be provided to the delegated agency for further evaluation, verification, and follow-up with the facility. Community groups or other third parties should not bypass the regulatory oversight and enforcement authority of the regulating agency by going directly to the facility for action and remediation.

Comment 6: Criteria for Defining "Large Emission Event"

EPA solicits comment on an emissions threshold that could be used to define large emission events, and which types of technologies would be suitable for identification of large emissions events. OSEE and ODEQ would like clarification regarding the use of the phrase "large emission event." 86 Fed. Reg 63177. For instance, what defines a large emission event, absent knowledge of the facility's permit limitations? Is EPA proposing that a separate, unpermitted emission limit apply to facilities, which communities should use as a benchmark for regulatory action? This aspect of the proposal raises serious concerns and questions, especially considering the technical complexity of identifying and characterizing emissions, as discussed above. For these reasons, OSEE and ODEQ reiterate that community involvement in finding large emission events would best work in partnership with the delegated regulatory authority.

EPA specifically solicits comment on whether the threshold for a large emission event should be lower than what is visible by satellite. 86 Fed. Reg 63177. OSEE and ODEQ note that the use of satellite data as the threshold could be problematic. For example, there could be large emission events that are not visible on satellite due to cloud cover or inadequate timing of satellite imagery for emissions that do not have a constant temporal profile, among other factors.

Comment 7: Determination of Whether a Well Site is Above or Below 3 TPY of Methane Emissions

Starting on page 63170, the proposed rule discusses the possible future proposed provisions of OOOOb and OOOOc with respect to fugitive emissions from well sites. EPA states well sites with site-level baseline methane emissions below 3 tons per year (TPY) are not required to conduct OGI monitoring. 86 Fed. Reg. 63171. However, EPA is also proposing that well sites perform a survey, presumably using OGI but possibly using another approved leak detection method, to confirm if the well site actual emissions are less than 3 TPY. This appears to be a contradiction within the rule, making it unclear what EPA is proposing. OSEE and ODEQ request that EPA ensure that the rule text clarifies how facilities should "demonstrate the actual emissions are accounted for in the calculation." 86 Fed. Reg. 63171.

OSEE and ODEQ note the ambiguity in EPA's proposal could be read to lead to two possible scenarios, and requests that EPA clarify its intent with respect to the requirements for well sites with site-level baseline methane emissions below 3 TPY. In these scenarios we use OGI as an example but recognize another approved leak detection method could be used.

Scenario 1: It can be inferred that the purpose of this demonstration is to require each well site with baseline methane emissions below 3 TPY to conduct an initial survey to find and fix any leaking fugitive emissions components, then no additional OGI monitoring would be required thereafter. If this is EPA's intent, EPA should clearly require an initial survey to be conducted at each well site requesting the exemption for methane emissions below 3 TPY and an additional requirement to fix any fugitive emission leaks within a 90-day timeframe with possible re-monitoring to verify repair of the leaking fugitive emission.

Scenario 2: It can be inferred that the purpose of this demonstration is to require each well site with baseline methane emissions below 3 TPY to quantify the emissions from each well site. Additionally, it is unclear whether, if a certain number of leaks are found, the well site would not qualify for this exemption. The tools to quantify emissions using OGI are expensive and time consuming for such a marginal well site, and it is questionable whether this is cost effective compared to any environmental benefit gained. If the purpose of the potential requirement in scenario 2 is EPA's intent, that requirement is unclear and OSEE and ODEQ respectfully request EPA clarify the intent behind this requirement.

Comment 8: Well Site OGI Monitoring Frequencies

EPA has proposed two approaches to well site monitoring frequencies for site-level baseline methane emissions, which are detailed in Table 13 of the proposed rule. 86 Fed. Reg. 63172. Of the two options offered, OSEE and ODEQ prefer the co-proposed OGI monitoring frequency which would require semiannual OGI monitoring for well sites with emissions between 3 and 8 TPY and quarterly OGI monitoring for well sites with emissions greater than 8 TPY. This would be preferred over the monitoring schedule of requiring every well site with baseline methane emissions above 3 TPY to monitor with OGI every quarter. The main reason for this is that the resources invested in conducting OGI at such high frequency for such low emissions outweigh any benefit to the environment. However, OSEE and ODEQ urge EPA not to preclude consideration of any potential third option that would provide more flexibility to maximize the resources invested in monitoring and, therefore, the environmental benefit.

Comment 9: Implementation Timelines for Facility Compliance

As discussed in Comment 7 above, in the discussion of a future proposed EG OOOOc, it appears that every existing well site could need a site-specific OGI survey to confirm actual baseline methane emissions. The baseline estimate will be based on major equipment counts and the process described in the Greenhouse Gas Reporting Program ("GHGRP"). 86 Fed. Reg 63170-6. For existing sources, EPA expects this to be accomplished within three years of publication of the final rule. This expectation is problematic. OSEE and ODEQ recommend that EPA consider phasing in this requirement over 5-7 years based on the age of the well. Alternatively, rather than

requiring every well site undergo a one-time OGI survey, EPA could consider setting a reasonable default emissions estimation approach for existing wells based on site complexity, while allowing companies to adopt more sophisticated approaches as an alternative. Along with this default approach, the rule could require statistically representative spot checks to confirm the status of a subset of wells subject to the EG. If properly configured, an on-going requirement for statistically representative spot checks (with OGI surveys of those facilities) could have a higher probability of detecting large emissions while reducing costs for the well operators. These alternatives are especially important considering the number of existing facilities that could be subject to the EG, as there are over 200,000 existing active wells in the State of Oklahoma alone. It is unreasonable to expect this vast amount of surveys to be done in the time frame proposed.

Comment 10: Component Counts for Calculating Site-Level Baseline Methane Emissions

EPA proposes owners/operators use default average component counts found in GHGRP to calculate their site-level baseline methane emissions. 86 Fed. Reg. 63171. OSEE and ODEQ recommend owners/operators should be allowed to use actual component counts if that data is available. For example, in Oklahoma's point source inventories, facilities provide their actual component counts, which in turn provides better emissions estimates.

Comment 11: Calculating PTE for Storage Vessels

OSEE and ODEQ support EPA's proposal to move away from calculating the PTE for each Storage Vessel individually towards calculating the PTE based on each tank battery. 86 Fed. Reg. 63176. In the previous versions of 40 CFR Part 60, NSPS Subparts OOOO and OOOOa, an affected facility was defined as a single storage vessel with potential VOC emissions of 6 TPY or greater. In the discussion of a future proposed NSPS OOOOb and EG OOOOc, EPA is proposing to change the definition to include a single storage vessel or tank battery which exceeds the 6 TPY threshold for VOC for a future proposed NSPS OOOOb or 20 TPY of methane for a future proposed EG OOOOc under the definition of an affected facility. OSEE and ODEQ believe this will improve the ability of industry to determine if a well site/compressor station is an affected facility. It will also improve the ability of regulatory agencies to determine compliance with federally enforceable limits. This approach would lessen confusion for all parties and allow a more straightforward determination of applicable requirements.

Comment 12: Pneumatic Controllers

The new rules, as proposed, would regulate intermittent vent controllers as well as continuous bleed controllers, with no exemption for non-zero bleed pneumatic controllers, except for very limited circumstances described in Section XII.C of the Preamble. 86 Fed. Reg. 63179. There should be sufficient flexibility to account for existing facilities with specialty equipment that may be difficult to replace or upgrade. In addition, OSEE and ODEQ are concerned that it will take a considerable length of time bringing existing facilities into compliance with the EG. EPA should consider establishing longer compliance times than the two years EPA appears to be considering in the proposal so that new staff may be trained and will have time to complete the required work. 86 Fed. Reg. 63164 and 63209. Furthermore, manufacturers need time to fulfill

orders without overly scaling up production. If compliance timelines are too short, there will be significant economic disruptions for the both the companies operating these facilities as well as the manufacturers who support them. 86 Fed. Reg. 63179 and 63204.

Comment 13: Liquids Unloading Requirements

EPA is proposing two options for liquids unloading operations, a source category that is currently unregulated. 86 Fed. Reg. 63179. For Option 1, every well that undergoes liquids unloading would be subject to the rule and no VOC or methane emissions would be allowed. 86 Fed. Reg. 63119 and 63179-80. Each well would be an affected facility and would be subject to certain reporting and recordkeeping requirements. 86 Fed. Reg. 63119. For Option 2, every well undergoing liquids unloading that does *not* use a method designated to eliminate venting would be an affected facility. *See id*. Wells that do eliminate venting would not be affected facilities and would *not*, therefore, be subject to more detailed reporting and recordkeeping requirements. *Id*. However, there would still be a requirement to maintain records that document the use of non-venting liquids unloading methods. *Id.* If one option must be selected, OSEE and ODEQ prefer Option 2.

In addition, OSEE and ODEQ are concerned about maintenance activities that require a well be opened for servicing. *See id*. If a well is opened for servicing, would those interventions be subject to reporting and/or recordkeeping? If so, what requirements would be applicable?

OSEE and ODEQ are also concerned with the fact that this proposal would consider each liquids unloading event a modification. 86 Fed. Reg. 63180. Liquids unloading would be a relatively small event to constitute a modification under Title I of the Clean Air Act and thus, it could potentially create unexpected regulatory complexities. OSEE and ODEQ recommend EPA reconsider this definition of modification to achieve the goals intended without entangling other requirements. Further, this could set an unwelcome precedent and it would seem to represent a significant departure from standard practice under 40 C.F.R. Part 60.

Comment 14: Oil Wells With Associated Gas

EPA states it is "proposing a standard under NSPS OOOOb that requires owners or operators of oil wells to route associated gas to a sales line" or, in instances where a sales line is unavailable, EPA proposes that the gas can be used as an onsite fuel source. 86 Fed. Reg. 63183. For facilities with existing gas-powered equipment, using the gas onsite seems more logical than sending the gas off site through a sales line and bringing other gas in to power the equipment. Further, routing gas to a sales line and using the gas onsite appear to be equally viable options. It is unclear why EPA distinguishes between the two and prefers one scenario over the other.

D. Comments on Section XII. Rationale for Proposed NSPS OOOOb and EG OOOOc

Comment 15: Publication of study on small and marginal wells

EPA provides its BSER analysis for a future NSPS OOOOb and EG OOOOc in Section XII of the proposed rule, which seems to disregard important forthcoming information about

marginal and low-producing wells by proposing to subject said wells to frequent OGI monitoring. EPA should wait to publish any final rule on NSPS OOOOb and EG OOOOc until the report, "Quantification of Methane Emissions from Marginal (Low Production Rate) Oil and Natural Gas Wells," conducted by the National Energy Technology Laboratory has been completed.[8] The final report can help inform EPA on this most recent rulemaking and, specifically, to understand at what point are small and marginal producing wells no longer cost effective to require fugitive monitoring using OGI.

E. Comments on Section XIV. State, Tribal, and Federal Plan Development for Existing Sources

Comment 16: Emissions Inventory of Designated Facilities

As EPA acknowledges within the preamble to the proposed rule, identifying Oklahoma's existing sources for the EG is going to be a resource-intensive process and will involve multiple agencies. See 86 Fed. Reg. 63253. EPA solicits comment on "whether the agency should supersede the requirements of 40 C.F.R. 60.25a(a) for purposes of this EG, and replace that requirement with a different emissions inventory requirement that seeks to represent the same general type of information but allows States to utilize existing inventories and emissions data. An example of an inventory that could be leveraged, and on which the EPA specifically solicits comment, is the GHGRP." 86 Fed. Reg. 63253.

With respect to whether EPA should supersede the requirements of 40 C.F.R. 60.25a(a) for purposes of the EG, OSEE and ODEQ support this approach. However, we make the following suggestions as to how EPA should accomplish this goal: (1) EPA should simplify the requirement to identify designated facilities potentially subject to the EG, taking into consideration the large number of such facilities and (2) EPA should accept emissions data for these facilities in accordance with the provisions of the Air Emissions Reporting Requirements (AERR), with detailed requirements for designated facilities that are classified as AERR Type A and B sources and the use of alternative methods (e.g., a nonpoint tool) for designated facilities that would be classified as nonpoint sources under the AERR.

Notably, 40 C.F.R. 60.25a contains outdated language, especially in reference to Appendix D, which predates the AERR and even predates AERR's predecessor, the Consolidated Emissions Reporting Requirements (CERR). Appendix D was last updated in 1975, and it appears the National Emissions Data System (NEDS), as referenced in Appendix D, was last updated in 1980, although it is difficult to find a historical timeline of its use. The CERR was finalized in 2002, and the AERR was finalized in 2008. Inventories have not been collected in the manner 40 C.F.R. 60.25a dictates for quite some time. OSEE and ODEQ suggest EPA update the rules to reference 40 C.F.R. 51a, i.e., the AERR. Furthermore, the AERR already has emissions thresholds for what should be inventoried as a point source, and what is being captured in the National Emissions Inventory (NEI) as a nonpoint source. OSEE and ODEQ believe the rule should align with the AERR thresholds and requirements. Furthermore, with respect to EPA's suggestion that states' inventories leverage the GHGRP for purposes of the EG, OSEE and ODEQ do not support this

[8] The following link shows the current status of the project: https://netl.doe.gov/node/9373.

approach. This is because (1) the GHGRP would not reflect emissions from smaller operators and (2) the GHGRP has default emission factors and default equipment counts built in that do not necessarily reflect actual data on site. Alternatively, we believe the NEI does a much better job of quantifying emissions from all sources.

Comment 17: Remaining Useful Life

EPA states it "intends to provide further clarification on the general process and requirements for accounting for remaining useful life and other factors . . ." 86 Fed. Reg. 63251. If EPA plans to issue guidance or specific provisions regarding remaining useful life, whether a part of this rulemaking or in the implementing regulations, these details need to be known now, in order to successfully evaluate and plan for the impacts of the proposed rule and the BSER. OSEE and ODEQ urge EPA to release this information as soon as possible as it may inform future comments on EPA's proposal.

Comment 18: Meaningful Engagement Should be More Clearly Defined

EPA is soliciting comment on requiring States to perform outreach and "meaningful engagement" with overburdened and underserved communities during the development process of their State plan for NSPS OOOOc. 86 Fed. Reg. 63253. OSEE and ODEQ support robust public participation in state rulemaking efforts and conduct public participation processes in accordance with the law. Importantly, states are already required to take measures to consider EJ in state activities, so an additional EJ requirement within this rulemaking seems unfounded and redundant.

The breadth of the term "meaningful engagement" is unclear in the proposed rule, and without further definition could create pitfalls for states when carrying out the requirement. Clarity is needed on exactly how states should identify these communities and then engage with them. Without further guidance, the granularity of the meaningful engagement requirement is unclear and could possibly lead to absurd interpretations from third parties. As stated above, OSEE and ODEQ support robust public participation and always seek to meaningfully engage the public in rulemaking efforts. However, the extent to which states must commit resources to additional public engagement above what is currently required by law is unclear, and states need to know the extent of said requirement to appropriately allocate their very limited resources. OSEE and ODEQ respectfully request that EPA clarify the term "meaningful engagement" and exactly what is required by states to fulfill this standard.

Comment 19: Is Meaningful Engagement Possible in States Adopting the Presumptive Standard?

The proposed rule states that under the Clean Air Act, "EPA has the authority and responsibility to determine the BSER and the degree of limitation achievable through the application of the BSER [and] that States shall submit to the EPA plans that establish standards of performance for designated facilities (i.e., existing sources) and provide for implementation and enforcement of such standards." 86 Fed. Reg. 63249. With respect to EPA's responsibility to determine the BSER and degree of limitation achievable, EPA states, "[f]or this EG the EPA is proposing to translate the degree of emission limitation achievable through application of the

BSER (i.e., level of stringency) into presumptive standards of performance that States may use in development of State plans for specific emission points." 86 Fed. Reg. 63249. EPA goes on to state that "if a State chooses to adopt the presumptive standards as the standards of performance in their State plan, then the EPA believes that such plan could be approved as meeting the requirements of CAA section 111(d) and the finalized EG." *Id.* It is unclear then what the meaningful engagement at this stage is accomplishing. EPA goes on to state, "This engagement will help ensure that State plans achieve meaningful emission reductions, that overburdened communities partake in the benefits and gains of the State plan, and that these communities are protected from being adversely impacted by the State plan" 86 Fed. Reg. 63254.

If EPA considers the presumptive standards to contain the level of stringency that EPA would require to approve a state plan, what then would be the purpose of meaningful engagement on the state level? Any outreach at this point will potentially disenfranchise the public that is expecting to be able to effect a change. Yet, the standards the state seeks to adopt are approvable as written, since EPA has already set the presumptive standards that are supposed to address public health and welfare. Therefore, the burden should be on EPA to satisfy this meaningful engagement requirement during the federal rulemaking process.

This logical fallacy comes full circle with the consequences to a state for failing to engage meaningfully with overburdened and underserved communities. The proposed rule states, "If a State plan submission does not meet the required elements for public participation, including requirements for meaningful engagement, this may be ground for the EPA to find the submission incomplete or to disapprove the plan." 86 Fed. Reg. 63254. If EPA disapproves a state plan for not having proper engagement, the remedy would be to issue a federal implementation plan ("FIP"). The FIP would have only undergone federal-level public involvement and presumably not a state-by-state meaningful engagement process. It is nonsensical that a state plan can be disapproved for failure to have meaningful engagement but then a federal plan, without that additional "meaningful engagement," would satisfactorily replace the disapproved state plan.

Comment 20: Implementation Timelines for State Plans

EPA states it plans "to undertake rulemaking to address the [40 CFR Part 60, Subpart Ba] provisions vacated under the court's decision in the near future." *Am. Lung Assoc.* v. *EPA* 985 F.3d at 991 (DC Cir. 2021). 86 Fed. Reg. 63255. The implementing regulations in 40 C.F.R. Part 60, Subpart Ba need to be addressed now so states know what timing is going to be expected for the State plan submittal and have an opportunity to make meaningful comments.

III. Conclusion

OSEE and ODEQ appreciate the opportunity to comment on the proposed rule. However, as stated above, we object to the rule as written. Many aspects of the rule are unclear in scope and impact and have the potential to require massive state resources which are not available. If EPA moves forward with the rule, OSEE and ODEQ offer the recommendations set forth above. Additionally, if EPA issues a supplemental rulemaking proposal as expected (86 Fed. Reg. 63115), OSEE and ODEQ may submit further comments on the proposed regulatory text that is related to the above recommendations or identify additional concerns. OSEE and ODEQ recommend that

EPA provide a sufficient length of time for stakeholders to comment on any future proposed supplemental rulemakings.

Attachment B

Oklahoma Department of Environmental Quality
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(405) 702-4100

Re: Docket ID No. EPA-HQ-OAR-2021-0317

Submitted on December 8, 2022 To: *The Federal eRulemaking Portal: http://www.regulations.gov* and a-and-r-docket@epa.gov

The Oklahoma Department of Environmental Quality ("ODEQ") respectfully requests a 60-day extension of the deadline to comment on the US EPA's supplemental proposed rule, "Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review" (hereinafter the "Supplemental Proposed Oil and Gas Methane Rule" or "SNPR"), published on December 6, 2022, at 87 Fed. Reg. 74702. The proposed rule expands EPA's November 2021 proposal and requests comment on a wide range of complex and technical issues. To provide time for meaningful review and response to this proposed rule, the deadline to comment should be extended. To warrant our request for an extension, the Oklahoma DEQ will highlight challenges posed by the extraordinary increase in the number of facilities which would be subject to regulatory oversight, the difficulties associated with cost estimation considering the heavy-tailed nature of the distribution of control and monitoring costs, new proposals and enhanced challenges associated with assessing "remaining useful life and other factors" (RULOF) and how those factors may affect appropriate control and monitoring approaches, issues with the rulemaking docket, and the overlap of the rule review period and the winter holiday season.

Concerns Associated with the (Proposed) Extraordinary Increase in Regulated Facilities

The challenges posed by the limited comment period are due not only to complexities inherent in the rule proposal, but also to the potential repercussions in ODEQ's approach to permitting, compliance monitoring, regulatory enforcement, and emissions inventory reporting. In short, the proposed rule, if adopted, would have extreme impacts on all aspects of ODEQ's program because it will dramatically affect workload, allocation of resources, and budgeting. The reason this rule poses such an extraordinary challenge is that the ODEQ's air program is grounded on the assumption that facilities[1] with emission sources are best addressed when the owner or operator of the facility obtains an air quality permit. Currently, the ODEQ program covers over 14,000

[1] The term "facilities" used herein refers to the Clean Air Act definition of stationary source, consisting of a "building, structure, facility, or installation," otherwise referenced under the common-sense notion of a "plant." It does not refer to the term "affected facility" under 40 CFR Part 60.

facilities with air quality permits. The 2021 Proposed Oil and Gas Methane Rule already had the possibility of increasing that number by an order of magnitude if permits are ultimately determined to be necessary for all designated facilities. This Supplemental Proposed Oil and Gas Methane Rule will require an entirely new analysis and adds requirements to even more sources that were not covered under the 2021 proposal. Table 1 provides a summary of the oil and gas facility types located in Oklahoma and the number of facilities with and without air quality permits.

Table 1. Oil and Gas Facilities in Oklahoma

Facility Type [2]	Number of Facilities by Type	
	Permitted [3]	Not Permitted
Active crude oil, natural gas, and coal-bed methane well sites	9,077	201,854 [4]
Production tank battery/central distribution point	194	388 [5]
Natural gas gathering compressor station	1,041	405 [6]
Natural gas gathering treatment facility without compression	25	0
Natural gas liquids (NGL) extraction and or fractionation facility (gas plant)	89	0
Natural gas transmission compressor station	104	0
Natural gas underground storage facility	7	0
Totals	**10,537**	**202,647**

[2] This table only identifies facilities that are likely to be subjected to requirements under the Supplemental Proposed Oil and Gas Methane Rule. Other crude oil and natural gas facilities (e.g., refineries, bulk crude oil tank farms, etc.) have been omitted.

[3] The numbers of permitted facilities shown in this table are based on facilities that reported calendar year 2021 emissions to ODEQ's state point source inventory supplemented by a count of facilities that are still operating and only report emissions every three or six years to align with the National Emissions Inventory schedule. This information is currently undergoing a quality control review, so these numbers will likely be updated and adjusted slightly.

[4] The number of active crude oil and natural gas wells was obtained from an Oklahoma Corporation Commission presentation to the Petroleum Alliance of Oklahoma on August 6, 2021. It should be noted that the number of unpermitted wells refers to individual wells and some wells may be collocated on the same facility. Collocation of wells is more common in newer wells, but some older wells may also be found on the same facility. Thus, the number of facilities will likely be lower, although not substantially lower. The presentation may be found on the web: https://oklahoma.gov/content/dam/ok/en/occ/documents/ajls/commissioners/Murphy-presentation-Petroleum-Alliance-08-06-2021.pdf

[5] This estimate was obtained by doubling the number of permitted facilities to yield a reasonable number of legacy facilities that predate permitting requirements.

[6] The number of unpermitted natural gas gathering compressor stations was estimated using a 28% ratio of unpermitted facilities to total facilities (permitted and unpermitted combined) consistent with the approach taken in Oklahoma's submission to the 2020 National Emissions Inventory (NEI).

Notwithstanding the complexity of the rule and the substantive requests EPA is making for feedback,[7] the number of facilities in Oklahoma that could be subject to applicable requirements is vast. States like Oklahoma with such a high potential for extreme changes to their programs need extra time to assess the true nature of the potential impacts of the rule to the environment, state programs, and to industry.

Heavy-Tailed Data Distributions and Difficulties Estimating Monitoring and Control Costs

The SNPR offers a number of proposed remedies to address "super-emitters," contextually defined in the Preamble to the SNPR as "large emission events."[8] The heavy-tailed data distribution (in contrast to a normal or Gaussian distribution) that characterizes emissions from this sector (and many others) adds complexity to attempts to estimate aggregate emissions from the sector. In this case, the relatively small number of data points occupying space in the long tail (high end) of the data distribution account for an oversized share of total emissions. Therefore, attempts to estimate total emissions by multiplying the median value by the total number of sources (as could be done when working with data showing a normal/Gaussian distribution) will significantly underestimate total sector emissions.

This principle is well understood and various attempts to address this issue are underway in various forums. But a similar phenomenon occurs with regard to costs of control and monitoring. After a limited review of the documents released by the EPA so far, Oklahoma DEQ engineers and environmental program specialists have noted a similarly troubling aspect of EPA's attempt to estimate the cost of controls and monitoring. A description of the approach EPA used to estimate costs is reproduced below.

> The cost analysis presented in the Rule Impact Assessment [RIA] reflects a nationwide engineering analysis of compliance cost and emissions reductions, of which there are two main components. The first component is a set of representative or model plants for each regulated facility, segment, and control option. The characteristics of the model plant include typical equipment, operating characteristics, and representative factors including baseline emissions and the costs, emissions reductions, and product recovery resulting from each control option. The second component is a set of projections of activity data for affected facilities, distinguished by vintage, year, and other necessary attributes (*e.g.*, oil versus natural gas wells). Impacts are calculated by setting parameters on how and when affected facilities are assumed to respond to a particular regulatory regime, multiplying

[7] EPA requests feedback on at least 142 different items, many with detailed informational needs.

[8] See, for example, page 74742 of the SNPR.

> activity data by model plant cost and emissions estimates, differencing from the baseline scenario, and then summing to the desired level of aggregation.[9]

It appears that EPA has inadvertently assumed that the cost of controls and the cost of monitoring follow a normal or Gaussian distribution and, therefore, total costs may be estimated by multiplying median (in this case "model plant") costs by the total number of facilities of that type. If this is indeed the case, EPA would be making the same error in estimating costs that EPA is trying to avoid when estimating emissions.

It will take additional time and effort to develop a better estimate of the cost of control and monitoring using a more accurate statistical approach than the one EPA appears to have used in this proposal. This alone warrants an extension of the comment period.

<u>New Challenges Associated with Assessing Remaining Useful Life and Other Factors</u>

The SNPR proposes to revise existing rules governing the requirements that states[10] must follow in evaluating a designated facility's or class of facilities' remaining useful life and other factors (RULOF) in assessing whether the proposed best system of emission reduction (BSER) is appropriate.

> While standards of performance must generally reflect the degree of emission limitation achievable through application of the BSER, CAA section 111(d)(1) also requires that the EPA regulations permit the states, in applying a standard of performance to a particular designated facility, to take into account the designated facility's RULOF. The EPA's implementing regulations under 40 CFR 60.24a(e) allows a state to consider a designated facility's RULOF in applying a standard of performance less stringent than the presumptive level of stringency given in an EG to a particular source, provided that the state makes the required demonstration under this provision. However, as described further below, this provision does not provide clear parameters for states on how and when to apply a standard less stringent than the presumptive level of stringency given in an EG to a particular source. The EPA intends to propose clarifying revisions to this provision under the implementing regulations in an upcoming rulemaking that would apply generally to new EG promulgated under CAA section 111(d). While inviting comments on the application of these proposed revisions in the context of the oil and gas sector in this rulemaking, the EPA also encourages the public to provide comments on these proposed revisions more generally in that upcoming rulemaking process to amend the implementing regulations.[11]

[9] From page 74712 of the SNPR.

[10] As well as local and tribal agencies with the authority to administer an air quality program.

[11] This language is from pages 74816-74817 of the SNPR.

As mentioned previously, based on a limited review of the SNPR, it appears that EPA is proposing to apply BSER to *all* oil and gas wells. Many of these wells are older, low-production wells that would have been exempt from some of these requirements under the November 2021 proposal. However, the SNPR not only proposes to require monitoring and control of emissions from *all wells*, but also proposes changes to the mechanism states may use to demonstrate that, due to RULOF, some facilities should either be exempt from some of these requirements or should have less onerous requirements applied during the limited time the facilities will continue to operate.

As such, the SNPR has the potential to cause significant reductions in production. The evaluation of these implications warrants additional time, and the potential deleterious impacts of these changes should be given sufficient time for proper evaluation and consideration.

Problems with the Docket

The Oklahoma DEQ appreciates EPA's efforts to release a pre-publication version of the SNPR early and efforts at outreach to states and other stakeholders. However, during the preparation of this extension request, Oklahoma DEQ staff checked the EPA rulemaking docket and found that very few new supporting documents were available. A thorough review requires access to the supporting documents. We expect these documents to be detailed and numerous. Additional time is needed for review.

Closing and Request

Without extension, the comment period does not allow states adequate time to analyze the voluminous background materials we expect to see in the docket, much less the proposed rule itself. This lack of adequate review time is compounded by the fact the comment period overlaps with the winter holiday season. Considering the gravity of the concerns stated herein, a 60-day extension to the comment period is necessary to allow states to adequately review and meaningfully comment on the proposed rule.