ORAL ARGUMENT NOT YET SCHEDULED

CASES NO. 24-1101 & 24-1103 (consolidated with 24-1054)

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

MICHIGAN OIL AND GAS ASSOCIATION and
MILLER ENERGY COMPANY II, LLC,

Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY and
MICHAEL S. REGAN, Administrator, U.S. Environmental Protection Agency,

Respondents.

INDUSTRY ASSOCIATION PETITIONERS' MOTION TO STAY

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CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

Pursuant to Circuit Rules 27(a)(4), Petitioners states as follows:

A. Parties and *Amici*:

These cases (23-1101 and 24-1103) have been consolidated with Cases Nos. 24-1054, 24-1059, 24-1111, 24-1114, 24-1115, 24-1116, 24-1117, and 24-1118. The parties in these cases include Petitioners the Michigan Oil and Gas Association ("MOGA") and Miller Energy Company II, LLC (collectively, "MOGA Petitioners"); and Independent Petroleum Association of America, Arkansas Independent Producers and Royalty Owners, Domestic Energy Producers Alliance, Eastern Kansas Oil & Gas Association, Gas and Oil Association of West Virginia, Illinois Oil and Gas Association, Independent Petroleum Association of New Mexico, Indiana Oil and Gas Association, International Association of Drilling Contractors, Kansas Independent Oil and Gas Association, the Kentucky Oil and Gas Association, National Stripper Well Association, North Dakota Petroleum Council, Ohio Oil and Gas Association, Panhandle Producers and Royalty Owners Association, Pennsylvania Independent Oil & Gas Association, Permian Basin Petroleum Association, Petroleum Alliance of Oklahoma, Petroleum Association of Wyoming, Texas Alliance of Energy Producers, Texas Independent Producers and Royalty Owners Association, and Western Energy Alliance; GPA Midstream Association (collectively, "Producer Association Petitioners") (together with

MOGA Petitioners, the "Industry Association Petitioners"); and Respondents United States Environmental Protection Agency ("EPA") and EPA Administrator Michael S. Regan.

Petitioners in the consolidated cases are the State of Texas, Railroad Commission of Texas, and Texas Commission on Environmental Quality; the States of Oklahoma, West Virginia, Arkansas, Alabama, Alaska, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Montana, Nebraska, North Dakota, Ohio, South Carolina, Tennessee, Utah, Virginia, and Wyoming, and the Arizona Legislature; Texas Oil and Gas Association; Interstate Natural Gas Association of America; American Petroleum Institute; American Exploration & Production Council; and Air Alliance Houston, Clean Air Council, and Environmental Integrity Project.

Continental Resources, Inc. also intervened in support of Petitioners State of Texas, Railroad Commission of Texas, and Texas Commission on Environmental Quality. The following parties have intervened in the consolidated cases in support of EPA and EPA Administrator Michael S. Regan: Center for Biological Diversity, Clean Air Council, Dakota Resource Council, Earthworks, Environmental Defense Fund, Environmental Law & Policy Center, Food & Water Watch, Fort Berthold Protectors of Water and Earth Rights, GreenLatinos, Natural Resources Defense Council, Sierra Club, and the States of Massachusetts, Pennsylvania, Wisconsin,

California, Colorado, Connecticut, Delaware, Illinois, Maine, Maryland, Michigan, New Jersey, New Mexico, New York, North Carolina, Oregon, Rhode Island, Vermont, Washington, and District of Columbia.

Industry Association Petitioners are not aware of any *amici* in this case or any of the consolidated cases.

B. Rulings Under Review:

The ruling under review in this case is the EPA's final rule entitled "Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review," 89 Fed. Reg. 16,820 (Mar. 8, 2024) (the "Methane Rule").

C. Related Cases:

These cases have not been before this Court or any other court. These cases have been consolidated with Case Nos. 24-1054 (*State of Texas, et al. v. EPA, et al.*), 24-1059 (*State of Oklahoma, et al. v. EPA, et al.*), 24-1111 (*GPA Midstream Ass'n v. EPA, et al.*), 24-1114 (*Texas Oil and Gas Ass'n v. EPA, et al.*), 24-1115 (*Interstate Natural Gas Ass'n v. EPA*), 24-1116 (*American Petroleum Institute v. EPA, et al.*), 24-1117 (*American Exploration & Production Council v. EPA, et al.*), 24-1118 (*Air Alliance Houston, et al. v. EPA, et al.*).

Industry Association Petitioners are aware of numerous related cases challenging previous iterations of the action being challenged here. The designated

lead case for those related cases is *American Petroleum Institute, et al. v. EPA* (No. 13-1108). The cases consolidated with that case are *American Petroleum Institute v. EPA* (No. 13-1289), *Gas Processors Ass'n v. EPA* (No. 13-1290), *Texas Oil and Gas Ass'n v. EPA* (No. 13-1292), *Independent Petroleum Ass'n of America v. EPA* (No. 13-1293), *Western Energy Alliance v. EPA* (No. 13-1294), *Independent Petroleum Ass'n of America v. EPA* (No. 15-1040), *Gas Processors Ass'n v. EPA* (No. 15-1041), *Texas Oil and Gas Ass'n v. EPA* (No. 15-1042), *Western Energy Alliance v. EPA* (No. 15-1043), *American Petroleum Institute v. EPA* (15-1044), *State of North Dakota v. EPA* (No. 16-1242), *State of Texas, et al. v. EPA* (16-1257), *Independent Petroleum Ass'n of America, et al. v. EPA* (No. 16-1262), *Interstate Natural Gas Ass'n of America v. EPA* (No. 16-1263), *State of West Virginia, et al. v. EPA* (No. 16-1264), *Western Energy Alliance v. EPA* (No. 16-1266), *GPA Midstream Ass'n v. EPA* (No. 16-1267), *Texas Oil and Gas Ass'n v. EPA* (No. 16-1269), and *American Petroleum Institute v. EPA* (No. 16-1270).

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GLOSSARY

CAA	Clean Air Act
EPA	Environmental Protection Agency
MEC	Miller Energy Company II, LLC
MOGA	Michigan Oil and Gas Association
NSPS	New Source Performance Standards
VOC	Volatile Organic Compound
Methane Rule	"Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review," 89 Fed. Reg. 16,820 (Mar. 8, 2024)

INTRODUCTION

With its new rule for methane gas, EPA has unlawfully imposed onerous requirements on owners and operators of oil and gas wells related to methane and other volatile organic compounds ("VOCs"). *See Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review*, 89 Fed. Reg. 16,820 (Mar. 8, 2024) (the "Methane Rule"). The Methane Rule will impose billions of dollars of costs on the oil and gas industry, including on the Industry Association Petitioners.

Most devastatingly and contrary to the interest of American energy resiliency and independence, the Methane Rule will result in the closure of a significant number of low-production, so-called "marginal" wells even though these wells contribute relatively few greenhouse gas emissions. That outsized impact on small contributors to methane emissions highlights EPA's disproportionate response to this aspect of the purported problem sought to be addressed by its rule. And it thus shows EPA's failure to engage in the kind of reasoned decision-making that rulemaking requires—both in setting "new source performance standards" under 42 U.S.C. § 7411(b), specifically, and more broadly. *See Motor Vehicle Mfrs. Ass'n of United States, Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (hard look review generally); *Heating, Air Conditioning & Refrigeration Distributors Int'l*

v. EPA, 71 F.4th 59, 63 (D.C. Cir. 2023) (applying the "same standard" under the Clean Air Act ("CAA")).

Because the Rule immediately threatens the economic viability of small producers like Industry Association Petitioners, they now move to stay the EPA's Methane Rule pending the outcome of this litigation. This Court should grant an immediate stay.

STATEMENT OF THE CASE

EPA's Methane Rule creates new 40 C.F.R. Part 60 Subparts OOOOb and OOOOc. New Subpart OOOOb applies to oil and gas facilities that were constructed, reconstructed, or modified after December 6, 2022, and requirements under this subpart became effective on May 7, 2024. *See* 89 Fed. Reg. at 16,820–23. This Subpart OOOOb is enforced directly by EPA. New Subpart OOOOc contains "presumptive standards" that states must implement to govern oil and gas facilities constructed on or before December 6, 2022. *Id*. Relevant here—among numerous other recently developed requirements—those newly promulgated subparts impose demanding monitoring requirements and restrictions concerning associated gas from oil and gas wells.

Specifically, both Subpart OOOOb and Subpart OOOOc mandate different fugitive emissions monitoring requirements for different types of well sites. For "Single Wellhead Only Well Sites and Small Well Sites," EPA imposed quarterly

Audio, Visual, and Olfactory ("AVO") monitoring requirements, and for "Multi-wellhead Only Well Sites (2 or more wellheads)," EPA imposed quarterly AVO monitoring requirements as well as monitoring and repair mandates based on more expensive semiannual optical gas imaging ("OGI"). *Id*. at 16,830–33. EPA also imposed bimonthly AVO monitoring requirements and monitoring and repair mandates based on quarterly OGI for "Well Sites with Major Production and Processing Equipment and Centralized Production Facilities" subject to Subpart OOOOB, *id*. at 16,830, and for "Well Sites and Centralized Production Facilities" subject to Subpart OOOOc. *Id*. at 16,833–34. When categorizing these well sites, EPA relied on the number of pieces of certain equipment associated with a well site—not its actual throughput or emissions—to determine whether a well site was "small" and therefore exempt from OGI monitoring requirements. *See id*. at 17,134 & 17217 (defining "small well site" under both subparts as "a well site that contains a *single* wellhead no more than *one piece* of certain major production and processing equipment, and associated meters and yard piping") (emphasis added).

The Methane Rule also imposes restrictions concerning associated gas and requires that well owners and operators to either: (1) route associated gas to a sales line, use it for other certain useful purposes, recover and reinject the gas into a well; or (2) in certain circumstances, route the gas to a flare that achieves at least a 95% reduction in methane and VOC emissions. *Id*. at 16,832–35.

EPA's Methane Rule was promulgated under Section 111 of the CAA, 42 U.S.C. § 7411, and Sections 111(b) and 111(d) in particular. Section 111(b) allows EPA to promulgate new source performance standards ("NSPS") for stationary sources of air pollution. Section 111(d) works in tandem by providing state regulation of existing sources through EPA-approved plans (or by EPA directly if states have failed to submit or enforce adequate plans—and on federal lands).

EPA's regulation under these sections is constrained by Section 111's plain language and by rulemaking standards. When promulgating standards of performance, EPA must "tak[e] into account the cost of achieving [any] such [emission] reduction and any nonair quality health and environmental impact and energy requirements" and must also determine that such standards have "been adequately demonstrated." 42 U.S.C. § 7411(a)(1). *See also* 89 Fed. Reg. at 16,866 (noting the same). These provisions prevent EPA from mandating measures that impose "exorbitant," "unreasonable," or "excessive" costs. *Lignite Energy Council v. EPA*, 198 F.3d 930, 933 (D.C. Cir. 1999); *Sierra Club v. Costle*, 657 F.2d 298, 383 (D.C. Cir. 1981). EPA cannot cause expense "greater than the [regulated] industry could bear and survive." *Portland Cement Ass'n v. Train*, 513 F.2d 506, 508 (D.C. Cir. 1975). The methods promulgated by EPA must be "reasonably reliable, reasonably efficient, and . . . reasonably . . . expected to serve the interests of pollution control without becoming exorbitantly costly in an economic or

environmental way." *Essex Chem. Corp. v. Ruckelshaus*, 486 F.2d 427, 433 (D.C. Cir. 1973).

Contrary to EPA's statutory mandate, however, the Methane Rule's requirements will impose exorbitant and unreasonable costs on the oil and gas industry. That is particularly true for owners and operators of marginal wells, which generally do not produce enough gas to make sales lines economically viable and are often located at geographically remote locations without sales lines. *See, e.g.,* Ex. A, Martin Decl. ¶ 10; Ex. B, Myler Decl. ¶ 10. Marginal wells represent approximately 78% of all producing wells in the United States, but their production (and emissions impacts) are much less than larger-producing wells, accounting for only about 10% of the nation's oil supply. *See* EPA's *Regulatory Impact Analysis of the Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review* (Dec. 2023) (the "RIA"), at 4–11; Ex. C, Comment of Indep. Petro. Assoc. of Am., et al., at 8 (Feb. 13, 2023).

Yet hundreds of thousands of marginal wells will likely be closed as a result of the Methane Rule. The Methane Rule's impacts would also have a major chilling effect on the development of new wells in Michigan and other states, where the exorbitant costs of addressing associated gas under the Methane Rule make it economically infeasible to facilitate new marginal well sites. *See, e.g.,* Ex. A, ¶¶ 25–

28 (noting drilling plans and improvement projects that may be canceled, along with lost property rights); Ex. B, ¶¶ 21–24 (noting the same and that negotiations for purchasing wells were recently terminated due to the Methane Rule). The collective impacts will not only cause major economic harm to marginal well owners but also will cost numerous employees their jobs and livelihood, deprive landowners of property rights and revenue, and jeopardize the stability of the public's energy supply. *See* Ex. C, at 8 (noting that marginal wells represent approximately 10% of American oil and natural gas production).

Petitioner Miller Energy presents a critical example of this impact. Miller Energy currently owns and operates over 450 active wells in Michigan, employs over 50 people, and generates contract-based royalty checks for at least 2,000 people each month. Ex. A, ¶¶ 5–6. All of Miller Energy's wells are marginal wells, producing only an average of 2.59 barrel oil equivalents per day ("BOPD") per facility and venting only a *de minimis* amount of associated methane gas (if any at all). *Id*. at ¶¶ 12, 20. By comparison, larger wells can potentially produce thousands of BOPD. *See* Ex. G, Comment of The Petroleum Alliance of Okla., at 1.

Indeed, the majority of Miller Energy's well sites do not even produce enough associated gas to maintain the flare required by the Rule. At these marginal wells, the installation of propane gas facilities and regular burning of propane gas would be needed to maintain a pilot for the mandated flare. *Id*. at ¶ 11. Yet EPA nonetheless

failed to rationally treat marginal well operations differently from larger, higher producing and emitting well sites. And Miller Energy now forecasts that over half of its wells will need to be shut-in because they will no longer be economically viable. *Id*. at ¶ 29. Miller Energy is, of course, only one example. Hundreds of thousands of marginal wells across the country will face a similar fate.

In short, EPA failed in its duties to provide reasoned rulemaking, particularly in its failure to appropriately address the impact of the Methane Rule on marginal wells. Accordingly, Petitioners ask this Court to stay the Methane Rule until their challenge is fully resolved.[1]

STANDARD OF REVIEW

Courts consider four factors in deciding whether to grant a stay: (1) whether Petitioners are likely to succeed on the merits of the case; (2) whether Petitioners are likely to suffer irreparable harm absent a stay; (3) whether the stay will substantially injure other interested parties; and (4) whether the public interest favors a stay. D.C. Cir. Rule 18(a); *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 20 (2008). The first two factors are considered the "most critical." *Nken v. Holder*, 556 U.S. 418, 434-35 (2009). And this Court has also explained that the "[p]robability of success is inversely proportional to the degree of irreparably injury evidenced," such that a

[1] Consistent with Fed. R. App. Proc. 18(a)(1), Petitioners also requested a stay from EPA. Ex. D, Stay Request. EPA has not acted on that request.

strong demonstration of one factor can overcome a weaker demonstration of the other. *Cuomo v. Nuclear Regul. Comm'n*, 772 F.2d 972, 974 (D.C. Cir. 1985).

ARGUMENT

I. Industry Association Petitioners are likely to succeed because EPA failed its statutory duties by not adequately accounting for the Methane Rule's impacts on marginal wells.

This Court should vacate the Methane Rule for several reasons—as will be detailed further in future briefing. For the purposes of this motion only, EPA's failure to adequately consider the costs of the Methane Rule and its irrational categorization of "small wells" based on the number of pieces of equipment rather than on throughput or emissions warrant a stay.

A. The Clean Air Act required EPA to conduct a cost-benefit analysis that balanced both sides of the equation in setting "new source performance standards."

On the first, the CAA requires a cost-benefit analysis in setting "new source performance standards." Yet EPA disclaimed any duty to provide one. Thus, Petitioners are likely to succeed in their challenge.

i. A cost-benefit analysis is inherent in Section 111. But EPA expressly disclaimed any reliance on a cost-benefit analysis.

Section 111 requires EPA to conduct a cost-benefit analysis before setting or revising "new source performance standards." That is evident in two subsections relevant here.

First, the definition of "new source performance standard" requires EPA to "tak[e] into account the cost of achieving" what EPA decides is the "best system of emissions reduction." 42 U.S.C. § 7411(a)(1); *Portland Cement Ass'n v Ruckelshaus*, 486 F.2d 375, 385 (D.C. Cir. 1973). And this Court has long expressed that when establishing a BSER this statutory provision demands balancing all relevant factors. *Essex*, 486 F.2d 42, 433–34 (1973) (requiring BSER to be "adequately demonstrated" and thus "be reasonably reliable, reasonably efficient, and . . . reasonably be expected to *serve the interests of pollution control without becoming exorbitantly costly in an economic or environmental way*") (emphasis added); *Portland Cement Ass'n*, 486 F.2d at 385 (explaining that Section 111 displaces a NEPA statement and "requires that the Administrator accompany a proposed standard with a statement of reasons that sets for the environmental considerations, *pro and con*, which have been taken into account") (emphasis added); *Lignite*, 198 F.3d 933 (requiring EPA's "balancing" of factors). Indeed, reading Section 111(a) to require otherwise would be nonsensical. "*[T]aking into account* cost," 42 U.S.C. § 7411(a) (emphasis added), inherently requires balancing that cost against the anticipated benefits sought to be achieved through the proposed regulation. Thus, EPA's promulgation of a "new source performance standard" required a cost-benefit analysis.

Second, EPA's choice to issue or revise "new source performance standards" under 42 U.S.C. § 7411(b)(1) requires a threshold determination that the standard or revision is "appropriate." 42 U.S.C. § 7411(b)(1)(B) (EPA shall promulgate standards "as [it] deems *appropriate*" and "shall . . . review and, *if appropriate*, revise such standards . . . ."); 89 Fed. Reg. at 16,847 (acknowledging EPA's "discretion to determine the pollutants and sources to be regulated" based on this statutory provision); *see also* 89 Fed. Reg. at 16,860 ("the final NSPS OOOOb and EG OOOOc reflect the EPA's unique authority and responsibility under the CAA to ensure that new and existing sources throughout the nation are *subject to appropriate standards of performance* through NSPS") (emphasis added). That decision requires a rational cost-benefit analysis.

The Supreme Court has recognized that "'appropriate' is 'the classic broad and all-encompassing term that naturally and traditionally includes consideration of all the relevant factors.'" *Michigan v. EPA*, 576 U.S. 743, 752 (2015). "Read naturally," the word "requires at least some attention to cost." *Id*. (addressing the phrase "appropriate and necessary"). Indeed, "[o]ne would not say that it is even rational, never mind 'appropriate,' to impose billions of dollars in economic costs in return for a few dollars in health or environmental benefits." *Id*. Cost is traditionally a "centrally relevant factor when deciding whether to regulate," and considering costs "reflects the understanding that reasonable regulation ordinarily requires

paying attention to the advantages *and* the disadvantages of agency decision." *Id*. at 753 (emphasis in original). Moreover, "no regulation is 'appropriate' if it does significantly *more harm than good*." *Id*. at 753 (emphasis added).

Read "as a whole," *Territory of Guam v. United States*, 593 U.S. 310, 316 (2021), Section 111 thus requires a cost-benefit analysis. Notwithstanding these statutory requirements, EPA here wrongly disclaimed any need for cost-benefit balancing. While EPA conducted a "benefit-cost" analysis in its RIA, it repeatedly noted in the Methane Rule that "the benefits analysis [in the RIA] is distinct from the statutory BSER determinations," explaining that its "assessment of benefits . . . is presented *solely for the purposes of complying with E.O. 12866* and providing the public with a complete depiction of the impacts of the rulemaking." 89 Fed. Reg. 16,836; *see also* 89 Fed. Reg. 16,866. And EPA vigorously contended that it was not "required—under *Michigan* [*v EPA*] or any other authority—to undertake a formal cost-benefit analysis in this rulemaking." 89 Fed. Reg. 16,866. In other words, EPA explained that any cost-benefit analysis in the RIA or supplements did not affect its decisions on whether or how to revise its "new source performance standards" for oil and natural gas notwithstanding 42 U.S.C. § 7411(a) and (b)(1)(B).

EPA was wrong to do so. Those subsections require a cost-benefit analysis. Nor are those provisions satisfied by a one-sided evaluation of cost, as EPA attempted here in its reductive "cost effectiveness" assessment. *See* 89 Fed. Reg. at

16,864. Its Methane Rule is thus invalid, and Petitioners are likely to succeed in their challenge.

ii. EPA's disclaimed cost-benefit analysis irrationally distorts the balance by weighing global benefits against national costs.

To the extent EPA may now seek to justify the Methane Rule by its RIA notwithstanding its express rejection of that analysis as justification for the Rule, such a *post-hoc* rationalization would fail.

First, the agency is bound by its admission that its RIA was "presented *solely for the purposes of complying with E.O. 12866*" and for public informational purposes and did not inform its statutory analysis. 89 Fed. Reg. 16,836; see also 89 Fed. Reg. 16,866. This Court "'must judge the propriety of [EPA's] action solely by the grounds invoked by the agency.'" *Calcutt v. FDIC*, 598 U.S. 623, 624 (2023) (quoting *SEC v. Chenery Corp.*, 332 U.S. 194, 196 (1947)).

Second, if considered, the RIA's weighing of "global" benefits through its "Social Cost of Methane" standard is contrary to the CAA's declared purpose and statutory focus on national and interstate harms. Congress was unequivocal that the purpose of the CAA is "to protect and enhance the quality of *the Nation's* air resources," 42 U.S.C. § 7401(b)(1) (emphasis added), including through resolving interstate problems. 42 U.S.C. § 7401(a)(1); *see also Audubon Naturalist Soc. of the Central Atlantic States, Inc. v. U.S. Dep't of Transp.*, 524 F.Supp.2d 642, 692 (D. Md. 2007) ("The Clean Air Act . . . establishes a joint state and federal program to

control the Nation's air pollution."). That express focus on a domestic problem is consistent with the presumption against extraterritorial legislation. *See, e.g., EEOC v. Aramco*, 499 U.S. 244, 248 (1991) ("Congress legislates against the backdrop of the presumption against extraterritoriality."). EPA's consideration of and reliance on purported "global" benefits is thus contrary to the plain language of CAA and Congress's mandate to EPA. *See, e.g.,* EPA, *Supplementary Material for the Regulatory Impact Analysis for the Final Rulemaking, "Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review": EPA Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances* (Nov. 2023), at 12–19.

To the extent it justified its rulemaking on these considerations, EPA's focus on "global" benefits balanced against domestic costs is also arbitrary. *Motor Vehicle Ass'n*, 463 U.S. at 43. Inherent in any rational cost-benefit analysis is that the *same* comparator be used on both the "cost-side" and "benefit-side" of the equation. EPA did not do that here, instead balancing domestic costs against global benefits. But weighing apples against watermelons unfairly tips the scales. And it's a tacit admission that EPA understood the aggressive mandates of the Methane Rule would fail a balanced, apple-to-apple comparison.

In any event, because EPA did not comply with the law and disclaimed any need for a cost-benefit analysis, Industry Association Petitioners are likely to prevail. And this Court should grant a stay.

B. EPA arbitrarily imposed "one-size-fits-all" requirements and failed to adequately consider the impacts of the Methane Rule—particularly for marginal well owners.

Next, Petitioners are likely to succeed because EPA arbitrarily decided to treat marginal wells no differently than larger sources of pollution in most instances and failed to adequately consider the Methane Rule's economic impacts on marginal wells. In doing so, EPA created an unachievable standard for marginal wells.

Similar to hard-look review, EPA's actions are reversible under the CAA if they are "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law . . . ." 42 U.S.C. § 7607(d)(9); *Heating, Air Conditioning & Refrigeration Distributors*, 71 F.4th at 63. Rules are "arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Motor Vehicle Ass'n*, 463 U.S. at 43.

EPA must also consider costs when imposing NSPS under Section 111 of the CAA, and EPA cannot impose exorbitant compliance costs. *See also Whitman v.*

Am. Trucking Ass'ns, 531 U.S. 457, 464–71 (2001) (EPA must take costs into account); *Lignite*, 198 F.3d at 932–33 (D.C. Cir. 1999) (EPA cannot impose Section 111 standards where "the environmental or economic costs of using the technology are exorbitant") (citing *Asphalt Pavement Ass'n v. Train*, 539 F.2d 775, 786 (D.C. Cir. 1976)); *see also* 89 Fed. Reg. at 16,847 & 16,866 (EPA admitting same).

Hand-in-hand with economic considerations, EPA's standards must be "achievable." For example, in *National Lime Association v. EPA*, 627 F.2d 416, 431–33 (D.C. Cir. 1980), the Court held that EPA failed its statutory duty to promulgate "achievable" standards. The Court focused on EPA's failure to adequately consider "the representativeness for the industry as a whole of the tested plants on which it relies, at least where [EPA's] central argument is that the standard is achievable because it has been achieved (at the test plants)." *Id*.

Here, EPA has arbitrarily categorized "small wells" based on equipment numbers rather than throughput or emissions. That failure—and its attendant inadequate consideration of cost impacts to marginal well sites—showcases that the Methane Rule is not "achievable" for marginal wells (and, thus, invalid). For example, EPA has arbitrarily required marginal well owners to conduct fugitive emissions monitoring using overly expensive OGI, a requirement that (even standing alone and ignoring the other significant compliance costs imposed by the Methane Rule) will be cost-prohibitive for many marginal wells. And EPA did so while

acknowledging that it had not even estimated the impact that these new compliance costs would have on marginal wells. *See* RIA at 4–6.

In EPA's initial proposed rule from November 15, 2021, EPA used the amount of annual emissions of methane as a way to categorize wells for the purposes of determining what fugitive emission monitoring and repair requirements would apply to different well sites. *See* 86 Fed. Reg. 63,110, 63,118–21 (Nov. 15, 2021) (the "Initial Proposed Rule"). Notably, the Initial Proposed Rule exempted smaller-producing marginal well sites emitting less than three tons per year ("tpy") of methane from monitoring requirements. 86 Fed. Reg. 63,110 & 63,118–21. The logic behind such an exclusion is apparent as the significant costs of conducting OGI monitoring do not outweigh the miniscule benefits such monitoring would provide.

EPA changed course, however, and relied on the number of pieces of certain equipment (e.g., natural gas-driven pumps, storage vessels) as a basis for categorizing well sites in the December 6, 2022, supplemental notice of proposed rulemaking, *see* 87 Fed. Reg. 74,702, 74,708–12 (Dec. 6, 2022) (the "Supplemental Proposal"), and the Methane Rule. *See* 89 Fed. Reg. at 16,830–34. *See, e.g., Motor Vehicle Ass'n*, 463 U.S. at 52 (explaining that agencies changing course are "obligated to supply a reasoned analysis for the change *beyond* that which may be required when an agency does not act in the first instance") (emphasis added). EPA now only exempts "Single Wellhead Only Well Sites and Small Well Sites" from

OGI monitoring requirements. 89 Fed. Reg. at 16,830–34. The term "Small Well Sites" is defined under the Methane Rule as well sites containing only one or fewer pieces of certain equipment, 89 Fed. Reg. at 17,134, 17,217.

As was explained to EPA in numerous comments on the Supplemental Proposal, equipment count is not a reliable way of determining which well sites should be considered "small" or pose greater risks of fugitive emissions. *See, e.g.,* Ex. E, Comment of Penn. Indep. Oil & Gas Assoc., at 2–4 (Feb. 13, 2023) (explaining that most well sites have a tank, separator, and controller, and citing example of family-run company that operates very low production wells, of which 90% would fall into the "large" well category under the Final Rule); Ex. F, Comment of Ohio Oil & Gas Assoc., at 6–7 (Feb. 13, 2023) (explaining that a separator and storage tank are "minimum necessities for well site operations" and suggesting that fugitive monitoring requirements be based on production rates and not "flawed component counts"); Ex. G, Comment of The Petroleum Alliance of Okla., at 1–3 (Feb. 13, 2023) (explaining that production rates significantly impact fugitive emissions risk and that EPA should consider exemptions for marginal wells); Ex. H, Comment of Mich. Oil & Gas Assoc., at 4, 8 (Feb. 13, 2023) (explaining that Michigan marginal wells will need additional equipment because of lower ambient winter temperatures and fewer days of sunlight); Ex. C, at 9–15 (Feb. 13, 2023) (explaining that AVO is sufficient for marginal wells and their accompanying

equipment); Ex. I, Comment of U.S. Small Business Administration, at 3–4 (Feb. 13, 2023) (suggesting that EPA allow more frequent AVO monitoring for small well sites in lieu of expensive OGI).

Instead, the large majority of marginal well sites (which typically have less than three tpy of methane emissions) require at least *two* pieces of relevant equipment. *Id*. And EPA's approach would result in an improper characterization of these marginal well sites as being treated the same much larger well sites and production facilities with a significant potential for methane emissions. *Id.* Moreover, as set forth by these commenters and acknowledged by EPA, the low-production volumes from these marginal wells render the Methane Rule's compliance costs "prohibitive for small owners and operators and will result in the end of their operations." 89 Fed. Reg. at 16,905 (citing comments); *Lignite*, 198 F.3d at 932–33; *Nat'l Lime Ass'n*, 627 F.2d at 431–33.

EPA brushed these comments aside, arguing that equipment count was still the better way of categorizing wells. *Id*. at 16906. Despite claiming it was "mindful how the fugitive emissions monitoring requirements will affect small entities," EPA ignored that these compliance costs will be prohibitive for many marginal well owners. *Id*. Instead, it stated only that it is "difficult to determine the full impact of regulation on the financial status of marginal well owners," *id*.—a concession that it did not do so.

EPA also directed readers to the Rule's Technical Support Document, which includes a chapter where EPA purports to conduct a financial analysis of marginal wells. *Id.*; *see also* EPA, *Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review, Background Technical Support Document (TSD) for the Final New Source Performance Standards (NSPS) and Emissions Guidelines (EG)*, November 2023 (the "TSD"). However, the TSD merely states that "*EPA* ***cannot estimate*** *the impacts* of the final regulation on the owners or operators of marginal wells." *Id*. at 6-1 (emphasis added); *see also* RIA at 4–10 (acknowledging EPA "cannot estimate" impacts on marginal wells).

EPA has thus admittedly failed its statutory duty to consider the costs of the Methane Rule on marginal wells. Notably, this is true not only for the exorbitant fugitive monitoring costs now placed on marginal well owners and operators, but also for other excessively costly requirements in the Methane Rule, such as installing flaring equipment or constructing sales lines, despite commenters making it clear that such requirements were neither necessary nor economically viable for most marginal wells. *See* Ex. H, at 13–21; Ex. G, at 10; Ex. F, at 11–12.

EPA may argue that it satisfied its duty because it considered the costs of the Methane Rule on an industry-wide basis (*i.e.*, considering the costs on the collective oil and gas industry as a whole with no regard to marginal wells as compared to

larger wells), *see, e.g.,* 89 Fed. Reg. at 16,865–68, but such an approach is simply irrational where marginal wells cannot accommodate the Methane Rule's exorbitant compliance costs the way larger wells can. *See, e.g.,* Ex. C, at 6–9; Ex. J, Comment of Miller Energy Co., at 1–3 (Feb. 14, 2023); Ex. F, at 4–5. Nor does such an approach satisfy EPA's duty to ensure that its standards are "achievable." *See Nat'l Lime Ass'n*, 627 F.2d at 431–33.

EPA cannot simply shrug its shoulders and say it did not have adequate data or that marginal well impacts were too complex to analyze. EPA must take these costs into account. *Id.* (finding that EPA failed its statutory duty despite lack of industry cooperation in providing useful data). EPA failed to do so, instead arbitrarily imposing cost-prohibitive regulations on the regulated community—particularly on marginal well owners. Accordingly, Industry Association Petitioners are likely to succeed on the merits of this case.

II. Petitioners will suffer irreparable harm without a stay.

Industry Association Petitioners will suffer irreparable harm without a stay. Marginal well owners, like MOGA's members and Miller Energy, in particular will suffer irreparable harm in the form of compliance costs that will be immediately imposed for any well that is constructed, reconstructed, or modified after December 6, 2022 (and therefore falls under Subpart OOOOb). *See* Ex. K, Gibson Decl. ¶ 14 (approximately 20 wells immediately impacted by OOOOb); Ex. L, Pangborn Decl.

¶ 21 (at least 20 wells already subject to OOOOb); Ex. A, ¶¶ 24–25 (at least one well already subject to OOOOb and dozens of planned well modifications that would subject wells to OOOOb); Ex. B, ¶ 21 (contracted wells to be subject to OOOOb or canceled). Because EPA enjoys sovereign immunity from any lawsuit to recover those compliance costs, this is an irreparable harm. *See Thunder Basin Coal Co. v. Reich*, 510 U.S. 200, 220–21 (1994) (Scalia J., concurring in part) ("[C]omplying with a regulation later held invalid almost always produces the irreparable harm of nonrecoverable compliance costs."); *see also Xiaomi Corp. v. Dep't of Def.*, 2021 WL 950144, at *10 (D.D.C. March 12, 2021) (explaining that courts have recognized that damages which are unrecoverable due to sovereign immunity "can indeed constitute irreparable harm").

In many cases, these compliance costs will be too exorbitant and render the wells no longer economically viable. *See* Ex. A, ¶¶ 24–29; Ex. B, ¶¶ 21–25; Ex. L, ¶ 22. Accordingly, Petitioners will also suffer the loss of many wells altogether. *Id*. Indeed, Petitioner Miller Energy Company II, LLC and other MOGA members anticipate shutting in a significant number of marginal wells and abandoning previously planned projects because of the Methane Rule's compliance costs. *Id*.

Petitioners will also immediately lose valuable property rights as a result of the Methane Rule. Properties that were acquired or leased for well development and future production will no longer be able to be utilized for those purposes because the

Methane Rule will make such development uneconomical. *See* Ex. A, ¶ 28; Ex. B, ¶ 23. The value of these properties, many of which were acquired solely for oil production, will also be significantly reduced. *Id*.

III. The other factors favor a stay.

The other factors (*i.e*., the effect on other parties and whether the public interest favors a stay) also support granting a stay. The public interest of American energy resilience and independence overwhelmingly supports a stay for the reasons noted above. Further, to avoid duplicative arguments, Petitioners direct the Court to the arguments on these two factors set forth in Section III of the States' Motion to Stay. *See* Case No. 24-1059, Doc. No. 2049412, pp. 19–21.

CONCLUSION

For those reasons, the Court should stay the Methane Rule until it decides on the Petitioners' petition for review.

Respectfully submitted,

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Counsel for Producer Association Petitioners

Dated: May 17, 2024

CERTIFICATE OF COMPLIANCE

I certify that this motion complies with the type-volume limitation of Fed. R. App. P. 27(d)(2)(A) because it contains 5,163 words, excluding the parts of the motion exempted by Fed. R. App. P. 32(f). I also certify that this motion complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because it has been prepared in a proportionally spaced typeface using Microsoft Word in 14-point Times New Roman font.

/s/ Zachary C. Larsen
Zachary C. Larsen

Date: May 17, 2024

ORAL ARGUMENT NOT YET SCHEDULED

CASES NO. 24-1101 & 24-1103 (consolidated with 24-1054)

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

MICHIGAN OIL AND GAS ASSOCIATION and
MILLER ENERGY COMPANY II, LLC,

Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY and
MICHAEL S. REGAN, Administrator, U.S. Environmental Protection Agency,

Respondents.

INDEX OF EXHIBITS TO INDUSTRY ASSOCIATION PETITIONERS' MOTION TO STAY

EXHIBIT	**DESCRIPTION**
A	Declaration of Drew Martin
B	Declaration of Joel Myler
C	Comment of IPAA, et al.
D	Stay Request to EPA
E	Comment of Pennsylvania Independent Oil & Gas Association
F	Comment of Ohio Oil & Gas Association
G	Comment of The Petroleum Alliance of Oklahoma
H	Comment of Michigan Oil & Gas Association
I	Comment of U.S. Small Business Administration
J	Comment of Miller Energy Company
K	Declaration of Patrick Gibson
L	Comment of Tom Pangborn

Exhibit A

Declaration of Drew Martin

May 9, 2024

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

MICHIGAN OIL AND GAS ASSOCIATION and MILLER ENERGY COMPANY II, LLC Petitioners, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY and MICHAEL S. REGAN, Administrator, U.S. EPA, Respondents.	)	Docket No. 24-1101

DECLARATION OF DREW MARTIN

I, Drew Martin, hereby declare and state under penalty of perjury as follows:

1. I am more than eighteen years old and am competent to testify. This Declaration is based on my personal knowledge.

2. I am the Managing Partner and Chief Executive Officer of Miller Energy Company, LLC ("MEC"). I have been Managing Partner since 2017 and Chief Executive Officer since 2024.

3. MEC is a member of the Michigan Oil and Gas Association. MEC is the Managing Member of Miller Energy Partners LLC and its subsidiary Miller Energy Company II, LLC ("MEC II"), a Petitioner in this case. I am an authorized signatory for MEC II and competent to testify on behalf of MEC II.

4. This Declaration addresses the consequences of EPA's final rule entitled "Standards of Performance for New, Reconstructed, and Modified Sources

and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review," 89 Fed. Reg. 16820 (Mar. 8, 2024) (the "Final Rule").

5. MEC II currently owns and operates 451 active oil and gas wells at 258 different well sites in the State of Michigan. These wells produce a total of approximately 640 barrels of crude oil per day.

6. MEC II's wells are operated by a team of 51 employees in 14 different counties in Michigan. Over 6,000 unique parties have royalty interests related to MEC II's operations, and production from MEC II's wells generates mineral royalty checks for at least 2,000 people each month.

7. The term "marginal well" or "stripper well" is defined in the federal tax code as a well with "marginal production" of not more than 15 barrels of oil equivalent per day ("BOPD") annualized.[1] All of MEC II's wells are marginal wells.

8. The large majority of MEC II's marginal wells require the use of associated gas for operation of field equipment. Natural gas powered pumping units bring oil to the surface and treaters are flared to properly separate produced fluids. MEC II accordingly tries to capture as much associated gas from oil production in order to recycle the associated gas to fuel its field equipment.

9. Due to the age and reservoir pressure of the majority of MEC II's wells, MEC II must more often address producing too little associated gas for its operations than producing any excess associated gas. MEC II must often purchase natural gas or electricity to run its equipment due to the limited availability of associated gas that can be recycled to power its pumping units. Only 37% of MEC II's well sites produce continuous associated gas.

10. Sales lines are not available for any of MEC II's well sites due to the combination of marginal production volumes and the lack of available commercial purchasers.

11. The majority of MEC II's well sites do not produce enough associated gas to support a continuous flare, and these well sites would require the purchase and regular burning of propane gas to maintain a pilot for a flare.

[1] Internal Revenue Code § 613A(c)(6)(D)-(E).

12. For the majority of MEC II's well sites, any associated gas that is not reused as fuel or for another useful purpose is *de minimis* and vented.

13. In the Final Rule, EPA excluded storage tanks emitting less than 14 tons per year ("tpy") of methane from flaring and other requirements concerning associated gas. However, for wells constructed before December 6, 2022, with methane emissions of 40 tpy or less, EPA mandated that states require associated gas be routed to a flare or other device that achieves at least 95 percent reduction in methane emissions, regardless of how low the relevant methane emissions are.

14. Due to the Final Rule's flaring requirements, MEC II would need to install approximately 150 new flares across its 258 well sites, at an estimated initial infrastructure cost of approximately $6 million.

15. All of MEC II's well sites have employees that physically monitor production and processing equipment and perform audio, visual, and olfactory ("AVO") assessments on a regular basis.

16. In promulgating fugitive emissions surveying and monitoring requirements under the Final Rule, EPA categorized well sites based on equipment count and not based on throughput or emissions).

17. Under the Final Rule, for well sites constructed after December 6, 2022, EPA will require quarterly AVO monitoring surveys to be conducted for "Single Wellhead Only Well Sites and Small Well Sites" while quarterly AVO monitoring surveys and more expensive semiannual monitoring and repair using optical gas imaging ("OGI") is required for "Multi-wellhead Only Well Sites (2 or more wellheads)" and bimonthly AVO monitoring surveys and quarterly monitoring and repair using OGI is required for "Well Sites or Centralized Production Facilities that Contain Major Production and Processing Equipment." 89 Fed. Reg. at 168330. This latter category is defined to include well sites containing two or more pieces of certain equipment. 89 Fed. Reg. at 17134.

18. Under the Final Rule, for well sites constructed on or before December 6, 2022, EPA mandated that states require quarterly AVO monitoring surveys to be conducted for "Single Wellhead Only Well Sites and Small Well Sites" while quarterly AVO monitoring surveys and more expensive semiannual monitoring and repair using optical gas imaging ("OGI") is required for

"Multi-wellhead Only Well Sites (2 or more wellheads)" and bimonthly AVO monitoring surveys and quarterly monitoring and repair using OGI is required for "Well Sites or Centralized Production Facilities that Contain Major Production and Processing Equipment." 89 Fed. Reg. at 168333-34. This latter category is defined to include well sites containing two or more pieces of certain equipment. 89 Fed. Reg. at 17217.

19. Most well sites, including marginal well sites, require a minimum of two to three pieces of equipment regardless of throughout or volume of oil produced at the well site. The large majority of MEC II's well sites require two or more pieces of equipment despite their low throughout and production.

20. Due to the way in which EPA categorized well sites under the Final Rule (*i.e.*, categorizing sites based on equipment count and not based on throughput), 228 of MEC II's 258 well sites would be categorized as "Well Sites with Major Production and Processing Equipment and Centralized Production Facilities" despite these well sites only having an average production of 2.59 BOPD in 2023.

21. Due to the way in which EPA categorized well sites under the Final Rule (*i.e.*, categorizing sites based on equipment count and not based on throughput), the annual costs for surveying and monitoring these 228 well sites will increase by close to $2 million as compared against the surveying and monitoring costs that would be incurred if these well sites were instead categorized as "Small Wellhead Sites." Due to the Final Rule, MEC II also anticipates incurring over $1 million in repair costs that will only result in a *de minimis*, and possibly zero, reduction of methane emissions.

22. In the Final Rule, for wells constructed, reconstructed, or modified after December 6, 2022 (*i.e.*, wells subject to Subpart OOOOb), EPA prohibited the use of flaring associated gas absent an annual showing of technical infeasibility, and this technical infeasibility exception is only available in certain instances (and in some cases only for a two-year grace period). EPA instead required that associated gas be routed to a sales line or for another useful purpose.

23. MEC II's wells, like most oil wells in Michigan, are generally located in remote rural regions where sales lines are not available and do not produce enough associated gas to support the significant costs of a sales line.

24. Due to the Final Rule, MEC II has at least one already existing well that will immediately be subject to EPA's requirements under Subpart OOOOb.

25. Due to the Final Rule, MEC II has at least one well planned for drilling in the immediate future that will now either be subject to the Subpart OOOOb requirements or canceled due to the exorbitant costs of Subpart OOOOb compliance.

26. Due to the Final Rule, MEC II would likely be unable to make improvements (e.g., certain tank replacements or facility modifications), including to its existing marginal wells, without subjecting them to the Subpart OOOOb requirements.

27. Due to the Final Rule, MEC II has dozens of planned well modifications that will subject these wells to the Subpart OOOOb requirements or will be canceled due to the exorbitant costs of Subpart OOOOb compliance.

28. Due to the Final Rule, MEC II has effectively lost property rights and suffered lost property value for various properties acquired or leased for the purposes of installing oil and gas wells because the compliance costs will make wells on these properties no longer economically viable.

29. Due to the Final Rule's impacts, MEC II anticipates that the majority of its wells will be shut-in due to being no longer economically viable.

I declare under penalty of perjury that, to the best of my knowledge, the foregoing is true and correct.

Executed on this 9th day of May, 2024.

Drew Martin
Managing Partner and CEO, Miller Energy Company, LLC
Authorized Signatory for Miller Energy Company II, LLC

Exhibit B

Declaration of Joel R. Myler

May 8, 2024

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

MICHIGAN OIL AND GAS ASSOCIATION and MILLER ENERGY COMPANY II, LLC Petitioners, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY and MICHAEL S. REGAN, Administrator, U.S. EPA, Respondents.	)	Docket No. 24-1101

DECLARATION OF JOEL R. MYLER

I, Joel R. Myler, hereby declare and state under penalty of perjury as follows:

1. I am more than eighteen years old and am competent to testify. This Declaration is based on my personal knowledge.

2. I am the President of Muskegon Energy Company ("Muskegon"). I have held this position since 2018.

3. This Declaration addresses the consequences of EPA's final rule entitled "Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review," 89 Fed. Reg. 16820 (Mar. 8, 2024) (the "Final Rule").

4. Muskegon is a member of the Michigan Oil and Gas Association.

5. Muskegon owns interests in approximately 1,250 oil and gas wells.

6. The term "marginal well" or "stripper well" is defined in the federal tax code as a well with "marginal production" of not more than 15 barrels of oil equivalent per day ("BOPD") annualized.[1] Approximately 95 percent of Muskegon's wells are marginal wells.

7. Some of Muskegon's well sites and production facilities ("well sites") do not produce enough associated gas to support a flare, and these well sites would require the purchase and regular burning of propane gas to maintain a pilot for a flare.

8. For many of Muskegon's well sites, any associated gas that is not reused as fuel or for another useful purpose is economically and practically flared, or if *de minimis,* vented.

9. In the Final Rule, for wells constructed before December 6, 2022, with methane emissions of 40 tons per year ("tpy") or less, EPA mandated that states require associated gas to be routed to a flare or other device that achieves at least 95 percent reduction in methane emissions, regardless of how low the relevant methane emissions are. 89 Fed. Reg. at 16835. For wells constructed before December 6, 2022, with methane emissions over 40 tpy, EPA mandates that states require associated gas to be routed to a sales line, used as an onsite fuel or source or for another useful purpose, injected into a well, or routed to a flare if the well owner can annually demonstrate that the other options are "not technically feasible." *Id.*

10. Sales lines are not available for many of Muskegon's well sites due to the combination of marginal production volumes, the lack of available commercial purchasers, and geographic limitations.

11. Due to the Final Rule's flaring requirements, Muskegon would need to install new flares across many of its existing marginal well sites and the cost of such compliance will render marginal wells uneconomic and in need of plugging.

12. All of Muskegon's marginal well sites have contract personnel that physically monitor production and processing equipment and perform audio, visual, and olfactory ("AVO") assessments on a regular basis.

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[1] Internal Revenue Code § 613A(c)(6)(D)-(E).

13. In promulgating fugitive emissions monitoring requirements under the Final Rule, EPA categorized well sites based on equipment count and not based on throughput or emissions.

14. Under the Final Rule, for well sites constructed after December 6, 2022, EPA will require quarterly AVO monitoring surveys to be conducted for "Single Wellhead Only Well Sites and Small Well Sites" while quarterly AVO monitoring surveys and more expensive semiannual monitoring and repair using optical gas imaging ("OGI") is required for "Multi-wellhead Only Well Sites (2 or more wellheads)" and bimonthly AVO monitoring surveys and quarterly monitoring and repair using OGI is required for "Well Sites or Centralized Production Facilities that Contain Major Production and Processing Equipment." 89 Fed. Reg. at 168330. This latter category is defined to include well sites containing two or more pieces of certain equipment. 89 Fed. Reg. at 17134.

15. Under the Final Rule, for well sites constructed on or before December 6, 2022, EPA mandated that states require quarterly AVO monitoring surveys to be conducted for "Single Wellhead Only Well Sites and Small Well Sites" while quarterly AVO monitoring surveys and more expensive semiannual monitoring and repair using OGI is required for "Multi-wellhead Only Well Sites (2 or more wellheads)" and bimonthly AVO monitoring surveys and quarterly monitoring and repair using OGI is required for "Well Sites or Centralized Production Facilities that Contain Major Production and Processing Equipment." 89 Fed. Reg. at 168333-34. This latter category is defined to include well sites containing two or more pieces of certain equipment. 89 Fed. Reg. at 17217.

16. Most marginal well sites require a minimum of two or more pieces of equipment regardless of throughput or volume of oil produced at the well site. The majority of Muskegon's marginal well sites require two or more pieces of equipment despite their low throughput and production.

17. Due to the way in which EPA categorized well sites under the Final Rule (*i.e.*, categorizing sites based on equipment count and not based on throughput), many of Muskegon's well sites would be categorized as "Well Sites with Major Production and Processing Equipment and Centralized Production Facilities" under new Subpart OOOOb or as "Well Sites and Centralized Production Facilities" under new Subpart OOOOc despite being marginal wells with low throughput and production. 89 Fed. Reg. at 16830-34.

18. Due to the way in which EPA categorized well sites under the Final Rule (*i.e.*, categorizing sites based on equipment count and not based on throughput), the annual costs for surveying and monitoring for many of Muskegon's well sites will increase exponentially as compared against the surveying and monitoring costs that would be incurred if these marginal well sites were instead categorized as "Small Wellhead Sites."

19. In the Final Rule, for wells constructed, reconstructed, or modified after December 6, 2022 (*i.e.*, wells subject to Subpart OOOOb), EPA prohibited the use of flaring associated gas absent an annual showing of technical infeasibility, and this technical infeasibility exception is only available in certain instances (and in some cases only for a two-year grace period). 89 Fed. Reg. at 16832-33. EPA instead required that associated gas be routed to a sales line or for another useful purpose. *Id.*

20. Many of Muskegon's well sites, like most well sites in Michigan, are generally located in remote rural regions where sales lines are not available and do not produce enough associated gas to support the exorbitant costs and fees of connecting to a sales line.

21. Due to the Final Rule, all new wells Muskegon contracts for will immediately be subject to the Subpart OOOOb requirements or canceled due to the exorbitant costs of Subpart OOOOb compliance.

22. Due to the Final Rule, Muskegon will be unable to make certain modifications or improvements (e.g., certain tank replacements or facility modifications) to many of its existing well sites without subjecting them to the Subpart OOOOb requirements.

23. Due to the Final Rule, Muskegon has effectively lost property rights and suffered lost property value for various properties acquired or leased for the purposes of installing oil and gas wells because the compliance costs will make wells on these properties no longer economically viable.

24. Due to the Final Rule, Muskegon recently terminated negotiations for purchasing a group of existing wells after determining the Subpart OOOOc regulations and the Subpart OOOOb regulations (which would apply to the modification of the existing wells) made the project no longer economically feasible.

25. Due to the Final Rule's impacts, Muskegon anticipates that it will need to plug many of its wells due to being no longer economically viable.

I declare under penalty of perjury that, to the best of my knowledge, the foregoing is true and correct.

Executed on this 8th day of May, 2024.

Joel R. Myler
President, Muskegon Energy Company

Exhibit C

Comment of Independent Petroleum Association of America, *et al*.,

February 13, 2023

spilman thomas & battle

James D. Elliott
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February 13, 2023

The Honorable Michael S. Regan
Administrator
US Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460

Re: Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review

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

Dear Administrator Regan,

The following Comments are submitted on the above-referenced supplemental notice of proposed rulemaking ("Supplemental Proposal") on behalf of the following national and state trade associations: the Independent Petroleum Association of America ("IPAA"), Arkansas Independent Producers and Royalty Owners ("AIPRO"), Domestic Energy Producers Alliance ("DEPA"), Eastern Kansas Oil & Gas Association ("EKOGA"), Illinois Oil & Gas Association ("IOGA"), Gas & Oil Association of West Virginia ("GO-WV"), Independent Petroleum Association of New Mexico ("IPANM"), Indiana Oil and Gas Association ("INOGA"), International Association of Drilling Contractors ("IADC"), Kansas Independent Oil & Gas Association ("KIOGA"), Kentucky Oil & Gas Association ("KOGA"), Michigan Oil and Gas Association ("MOGA"), National Stripper Well Association ("NSWA"), North Dakota Petroleum Council ("NDPC"), Ohio Oil and Gas Association ("OOGA"), The Petroleum Alliance of Oklahoma ("The Alliance"), Petroleum Association of Wyoming ("PAW"), Pennsylvania Independent Oil & Gas Association ("PIOGA"), Texas Alliance of Energy Producers ("Texas Alliance"), Texas Independent Producers & Royalty Owners Association ("TIPRO"), and Western Energy Alliance (collectively, "Producer Associations").

Various members of the Producer Associations have been actively working with the Environmental Protection Agency ("EPA") since the New Source Performance Standards ("NSPS"), 40 CFR Part 60, Subpart OOOO regulations were proposed in 2011.[1] The Producer Associations appreciate the time and effort of EPA staff that have tried to understand the unique aspects of the oil and natural gas industry ("Oil and Gas Industry"). The reality is that the unique aspects of the Oil and Gas Industry, in terms of its production and related emissions, render EPA's traditional justifications/rationalizations proffered in the proposals on November 15, 2021 and December 6, 2022 arbitrary and capricious for certain subcategories (whether defined

[1] The Producer Associations incorporated by reference all of the comments submitted by the Producer Associations (or some subset of associations) in previous rulemakings and incorporate them as comments on the current Supplemental Proposal - see footnote 1 to the Producer Associations on the November 15, 2021 "proposed rule."

according to EPA or otherwise). The message the Producer Associations have consistently conveyed since 2011 is "one size does not fit all." Generally speaking, EPA's response has been to regulate exploration and production ("E&P") emission sources to the extent that EPA believes it can "survive"/continue to exist[2] – that is not the "best system of emission reduction" ("BSER") as required by Section 111 of the Clean Air Act ("CAA"). The following comments are intended to identify the most detrimental and unsupported proposals by EPA and provide alternatives that provide the equivalent or nearly the equivalent environmental benefits as substantially less cost and confusion to the Oil and Gas Industry, in particular the small business that are disproportionally impacted by these proposed regulations.

In addition to the comments filed here, the Producer Associations support those comments filed separately by individual members of the Producer Associations and those comments filed by the American Petroleum Institute.

[2] 87 FR 74818 (Dec. 6, 2022). Regulating industry to the brink of extinction is not EPA's charge nor is it how EPA should approach its "best system of emission reduction" ("BSER") analysis.

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY

The Producer Associations are committed to working with EPA to craft legally justified regulations that protect the environment and do not place unnecessary burdens on the Oil and Gas Industry. The Producer Associations provide the following summary:

- **Fugitive Emissions Monitoring of "Low Production Wells" Misses the Mark.**

  EPA's continued focus on "component" counts creates a number of problems for regulators and the regulated. State regulators and owners/operators do not make decisions based on component counts. Nonetheless, EPA relies on component counts to determine the type and frequency of fugitive emissions monitoring. EPA defines four categories of sources/sites: a fifth category is needed - an Intermediate Well Site. As proposed below, an Intermediate Well Site would allow certain wells sites, historically considered to be a "low production well", to utilize industry practices to identify leaks at substantially less cost than EPA's proposed framework. EPA's proposal places an economic burden on owners/operators of low production wells that is not justified or supported.

- **EPA Utilizes Inaccurate Data to Justify "Zero-Emitting" BSER for Pneumatic Controllers and Pumps.**

  Concurrent with this supplemental proposal, EPA has proposed revisions to its GHRP rules and acknowledges that current GHGRP rules yield inaccurate and poor-quality emissions data. Further, EPA acknowledges that this inaccurate data from historic GHGRP inventories was used to justify its cost-effectiveness evaluation for the “zero-emitting” proposed BSER for pneumatic controllers and pumps. EPA knowingly utilizes historical GHGRP Inventories that overstate methane emissions by as much as 96 percent for intermittent-bleed pneumatic devices to make the reasonableness determination work. Pneumatic controllers and pumps are not the problem EPA portrays them to be. EPA needs to withdraw the current “zero-emitting” BSER for pneumatic devices and consider the BSER alternatives proposed below.

- **The Super-Emitter Response Program Should be Revised to Address Unexpected Significant Releases, Without Subjecting Owners/Operators to Significant Expense.**

  Malfunctions happen and equipment breaks such that greater than anticipated emissions to the atmosphere occur. The owner/operator of such equipment should not be characterized as a "super-emitter" and the negative connotations associated with such a label. EPA should clarify that any information submitted by a "third-party notifier" cannot be used as the basis for enforcement. Additionally, third-party notifiers should be required to post a bond or other financial assurances that would compensate owners/operators for the cost associated with responding to an alleged unexpected significant release that is ultimately determined to not be an unexpected significant release.

II. FRAMING THE ISSUES

America's oil and natural gas producers recognize their responsibility to effectively manage the environmental impact of their operations. Clearly among these is the control of methane emissions from their operations. The goal here should be to develop and implement cost-effective regulations and voluntary programs to assure that methane emissions are controlled.

A. EPA's Effort to Regulate Existing Sources Failed to Differentiate Between Existing Sources and New Sources.

Since the initial development of 40 C.F.R. Part 60, Subpart OOOO ("Subpart OOOO") and through the creation of 40 C.F.R. Part 60, Subpart OOOOa ("Subpart OOOOa") in 2016 and its revisions in 2020, EPA proposed its regulations in the context of the NSPS for new and modified affected facilities. In 2016, EPA began to address the existing source issues with the promulgation of Control Technique Guidelines ("CTG") for volatile organic compounds ("VOC") creating reasonably available control measures ("RACM") for these guidelines to states. With the decision to regulate methane as the emission from these operations, existing source guidelines changed from RACM to a version of the NSPS Best System of Emissions Reductions ("BSER"). The current proposal for new Subparts OOOOb and OOOOc is the first federal effort to bring the full scope of regulation on new and existing sources of methane from oil and natural gas production operations. The consequences of this proposal on America's roughly one million existing oil and natural wells will be enormous, putting approximately 10 percent of American oil and natural gas production at risk at a time when the world faces significant pressures to provide adequate supplies of both commodities. The impacted 10% is predominately "small businesses" as defined by the Regulatory Flexibility Act and Small Business Regulatory Enforcement Fairness Act ("SBREFA"). Despite efforts by some to characterize low production wells and existing wells as owned and/or operated by non-small businesses, the companies owning primarily, if not exclusively, low production wells/existing wells are family owned/run organizations that are defined as "small entities" under SBREFA. The onus is on EPA to demonstrate compliance with SBREFA, not for small business to demonstrate disproportionate impact.

The Producer Associations have addressed this issue in past comments. However, the current proposal brings the issues to a much higher level of concern. Fundamentally, the challenge reflects multiple realities. First, while EPA has devoted most of its attention to developing requirements for new or modified sources, its data comes from measurements at existing sources that EPA extrapolates to assessments for new ones. Second, EPA has never found a way to develop an evergreen regulatory framework that reflects the nature of oil and natural gas production as each well declines over time. Historically, no matter how large initial production at a well may be, production will deplete as the well ages and the well will eventually become a low production well. Regulatory systems that appear cost effective during the early years of operation will cease being effective as the production, emissions, and economics of the well change. Consequently, the nature of the requirements needs to change as well. Third, while the development of unconventional oil and natural gas on current multiple well sites above multiple

layers of shale formations may alter the timing of these events, the vast majority of existing well sites are conventional wells. Fourth, the emissions studies typically used by EPA to assess the framework for its regulatory actions only incidentally collect data on low production wells with the Department of Energy Quantification of Methane Emissions from Marginal (Small Producing) Oil and Gas Wells ("DOE Study") being the notable exception.

These factors have influenced the past deliberations on NSPS proposals because of the CAA mandate to use the "best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated" has been hotly debated, particularly regarding the demonstrated adequacy of the technology. Since the initial Subpart OOOO regulations in 2012, innovative efforts have developed new, emerging technologies. The challenge for EPA has been to judge whether these technologies are truly available and durable in the operating environment of oil and natural gas production. Conversely, EPA also faces the challenge of not prohibiting more cost-effective technologies from being available as they emerge. There are two notable examples in the current proposals demonstrate the challenges. In one, EPA wants to move away from the use of natural gas activated pneumatic controllers but the options it has proposed do not have a history of use in the context of oil and natural gas production operations, which differ from other industrial operations. In another, EPA is trying to accommodate the fast-changing development of methane monitoring options. Here, however, it continues to tie its base to technologies that are costly, burdensome, and stagnant. EPA needs to create options that allow for the further development of the accuracy of emerging technologies without requiring another NSPS revision to permit new options. EPA also needs to take care that the methods used to establish compliance with standards are the same as the methods used to establish the standards, which won't be possible without substantially more field experience (i.e., with establishing workable programs for using OGI in lieu of Method 21-based LDAR programs).

B. EPA's Emission Guidelines Unnecessarily Subject Small Sources of Methane to Excessive Regulation.

While EPA continues to grapple with the proper framework for its NSPS requirements, its proposal of Emissions Guidelines ("EG") for existing sources produces challenges in addressing both the specific technology decisions and the interaction of the EG with state regulatory programs. This is the second time that EPA has addressed the application of emissions controls to existing oil and natural gas facilities. Its first effort was the creation of CTG in 2016 for VOC emissions in ozone nonattainment areas. These CTG were largely the application of Subparts OOOO and OOOOa requirements with the notable exception of fugitive emissions requirements for low production wells (15 barrels of oil equivalent ("boe") per day or less). The pending proposal is nationwide and applies for all requirements to all existing wells and well sites.

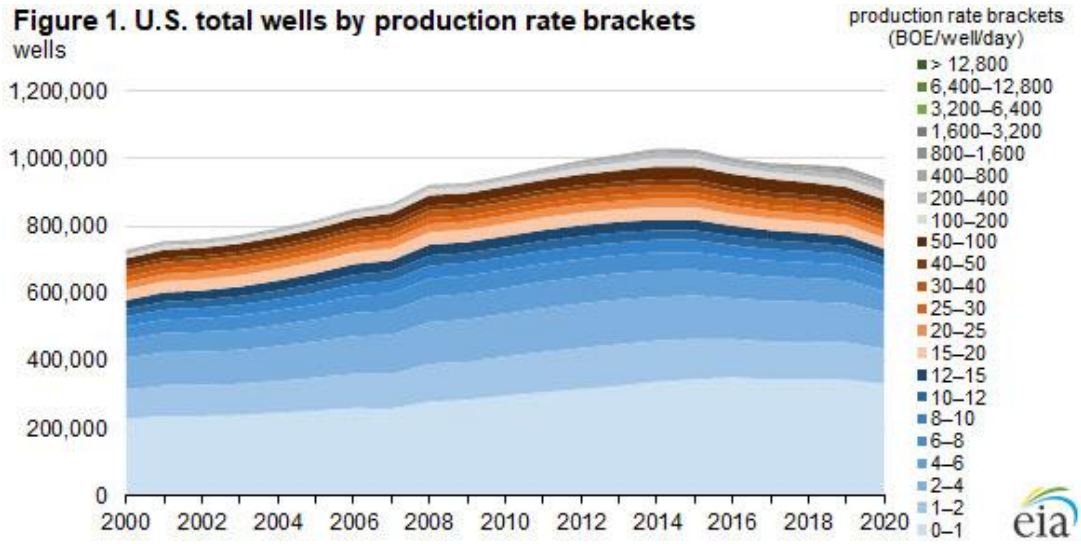
The magnitude of coverage of these requirements can be assessed in the following table from the Energy Information Administration ("EIA") summary statistics for 2020. There are over 937,000 existing oil and natural gas wells in the United States. Of these, about 733,000 meet the 15 boe/day threshold. However, the distribution below that threshold is important in understanding the potential burden on oil and natural gas producers. Of the low production wells:

- 45 percent in the 0-1 boe/day,
- 14 percent in 1-2 boe/day,
- 15 percent in 2-4 boe/day,
- 9 percent in 4-6 boe/day,
- 6 percent in 6-8 boe/day,
- 4 percent in 8-10 boe/day,
- 3 percent in 10-12 boe/day, and
- 4 percent in 12-15 boe/day.

These numbers tell key stories. For example, 83 percent of the burden of complying with the EG will fall on wells in the 0-6 boe/day range. Wells decline quickly from 15 boe/day to 10 boe/day but can remain in the 0-2 boe/day range for an extended period of time. Figure 1 below from the EIA Report, U.S. Oil and Natural Gas Wells by Production Rate, January 13, 2022, shows the historical pattern of U.S. production over the past 20 years.

EIA -- United States Oil and Natural Gas Well Summary Statistics, 2020			
Total wells			
Production Rate Bracket (boe/day)	Number of Total Wells	Annual Oil Production (MMbbl)	Annual Natural Gas Production (Bcf)
0–1	332453	16.9	129.6
1–2	103692	21.3	176.7
2–4	107861	42.9	374.1
4–6	63211	40.2	389.8
6–8	42814	37.1	380.6
8–10	31309	35.3	357.5
Subtotal <=10	681340	193.6	1808.3
10–12	24048	32.8	338
12–15	27688	46.6	476.5
Subtotal <=15	733076	272.9	2622.9

15–20	32528	72.3	712.8
20–25	22253	64.5	628.6
25–30	16902	60.3	579.5
30–40	23427	105.5	1023.3
40–50	15563	90.2	880.5
Subtotal ≤50	843749	665.7	6447.6
50–100	35583	336.8	3085.2
Subtotal <=100	879332	1002.6	9532.9
100–200	22903	455.9	3977.6
200–400	16698	701.4	5544
400–800	10716	839.1	6454.8
800–1,600	4753	477.2	5733
1,600–3,200	1820	157.7	5131.9
3,200–6,400	585	176.1	2900.1
6,400–12,800	147	239.5	1153.1
> 12,800	30	88.9	170.9
Total	936984	4138.5	40598.3



The pool of existing sources is changing while much of the data that EPA uses to assess emissions has not and the existing regulations fail to recognize this dynamic. Despite repeated comments by the Producer Associations, EPA's current proposals fail to recognize this dynamic as well. Most of the studies used by EPA in the past and to support these proposals are based on data predominantly taken prior to 2015 which means that it predates the Subpart OOOOa regulations and was at the beginning of the implementation of the Subpart OOOO regulations. The Producers Associations have submitted information on this issue in prior comments demonstrating that the turnover in wells means that most of the existing source pool that exceeds 15 boe/day will be from Subpart OOOO/OOOOa well sites. While the brunt of the impact of the EG will fall on low production wells as a result, this proposal by using the November 2021 effective date also creates the anomalous issue of requiring sources complying with prior NSPS requirements to replace equipment and processes at considerable expense to owners/operators under the EG. EPA has not evaluated the impact on the original BSER/cost-effectiveness evaluation and justification for various requirements under previously enacted NSPS for the Oil and Gas Industry.

Returning to the implications of the EG on low production wells, EPA's recurring conclusion that designated facilities under the EG should be the same as affected facilities under the NSPS fails to understand the implications of inherent production depletion on the economics and emissions from smaller wells. There are fundamental factors that are not adequately considered in the EPA assessments. As oil and natural gas wells undergo their inherent depletion, the reduced volumes of production limit the amount of emissions that can be generated. Within the well itself, one key factor is the reduction of the internal pressure of the well. Lower well pressure may compel actions like the addition of pumps to pull the liquids out of the well bore, as well as the addition of compressors to pull gas from the well bore. Even natural gas-powered pneumatic controllers and pumps may not be able to function if the well pressure drops below the level needed to run the controller or pump, and consequently the well does not produce as a function of negative pressure. As a result, well sites must be reconfigured to reflect their aging operations. All these factors also influence the magnitude – even the possibility – of emissions. A natural gas well with a booster compressor is typically operating under negative pressure - trying to pull gas from the well. As opposed to "leaking" the system would be pulling ambient air into the gas product

stream, not having it leak from flanges and valves. As wells diminish, they do not necessarily operate – or emit – daily. Small wells may only operate a few days a week when the pumper comes to the site to operate the equipment to produce oil from a well bore that has slowly filled over the previous days. These factors affect the realistic design of regulations – including the potential definitions of designated facilities – that EPA has not addressed in the EG.

The additional regulations that EPA is proposing on existing oil and natural gas production can negatively impact low production wells. Most of the wells are operated by small businesses that are not able to distribute the additional compliance cost across a large number of wells or high volume of production. These regulations can disproportionately impact small businesses in every oil producing state, and the service companies that support the operators. Most of the small operators do not have the technical resources to be able understand EPA's requirements and implement the required programs. EPA will need to provide resources to assist the small businesses with compliance.

Supply disruptions occur around the world at a regular frequency. The disruptions may last for a few months (i.e., a terrorist bombs a transportation pipeline and the pipeline needs to be repaired) to several years (i.e., economic penalties enacted to encourage Iran to abandon their nuclear program). In some cases, the supply disruption only serves to redirect where oil is processed (the United States cannot purchase Venezuelan crude oil, but other countries such as China may process the crude oil). Unlike a supply disruption, when low production wells are plugged, the production will never be recovered.

If low production wells are shut down, this will take approximately ten percent of the American oil production and natural gas production offline, and approximately one percent of world oil production offline. This change in production will have long term, negative consequences for the American economy from higher energy prices and from the loss of jobs. When low production wells are plugged, this production is lost forever.

EPA needs to consider these negative consequences in the economic analysis of the proposed regulation. For example, the direct lost revenue to oil and natural gas companies and royalty owners if American oil production is diminished will be almost $30 billion per year (1,000,000 barrels of oil x $80/barrel x 365 days per year). This does not include the secondary financial loss to service companies or other businesses that derive revenue from oil and gas production (such as restaurants, automotive companies, accounting companies, office supply stores, and legal firms). Forcing the shutdown of one million barrels of oil production and hundreds of thousands of cubic feet of natural gas (and all the lost jobs) needs to be considered also. In addition to the lost revenue, lost jobs, and impact on secondary businesses, EPA also needs to consider the negative impact that the loss this production will have on the American economy.

Historically, when the crude oil supply and demand balance has been disrupted by two to three percent, there have been large changes in the price of crude oil. While the United States does not have specific controls in place to manage the balance of supply and demand (it permits market forces to drive the supply and demand balance), the Organization of the Petroleum Exporting Countries ("OPEC") actively controls production to balance supply and demand. OPEC only has 3 million to 5 million barrels/day of spare capacity to manage the supply and demand changes. The supply and demand balance is typically controlled within one to three percent of worldwide

crude oil production. Permanently removing a million barrels of production will have a measurably negative impact on the long-term supply of crude oil. The negative impact will be measured by higher crude oil prices. EPA needs to consider the worldwide impact that may occur if a million barrels per day of oil are removed from the world market because of this proposed regulation.

Similarly, as natural gas has become more of an internationally traded commodity – one that has critical implications today in Europe due to the Russian invasion of the Ukraine – loss of American natural gas in the world market can disrupt its stability both nationally and internationally.

EPA's proposed approach to regulating existing sources under Section 111(d) subordinates these critical questions in its assessment of technology. Moreover, it constrains states from appropriately taking these issues into account.

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Many of these issues are better understood by state regulators that have experience with the well operations and reservoirs in their state. If the proposed regulations were in the form of CTG where the flexibility to design RACM allows the state to readily address its distinctions, as contemplated by Section 111(d) such issues could be addressed more effectively. Ascribing to the Section 111(d) obligation to be prescriptive in regulation would be at odds with the intention that it would be applied to a small number of facilities that resulted from the regulation of emissions that were neither criteria pollutants nor hazardous air pollutants. Greenhouse gases ("GHG") were never envisioned at the time of the development of the CAA. Now, these EG involve almost one million sources – more when the multiple designated facilities definitions are considered. At the same time, EPA is proposing interpretations of the language of Section 111(d) – particularly the interpretation of remaining useful life and other factors ("RUELOF") – that handcuff the states flexibility to alter the EPA model regulations in the EG.

III. FUGITIVE EMISSIONS MONITORING

A. EPA's BSER Analysis Fails to Account for Declining Production/Emissions.

EPA revises the Subparts OOOOb and OOOOc proposals for fugitive emissions in several key areas in the Supplemental Proposal. Before addressing specific issues and recommendations related to the revised proposal, it is pertinent to provide a perspective on EPA's development of its fugitive emissions concepts.

A critical challenge in developing fugitive emissions regulatory programs for oil and natural gas production facilities relates to establishing a cost-effective structure. Except for its CTG model

regulations in 2016, EPA has presented its fugitive emissions regulations in the context of NSPS requirements. This context has distorted the deliberations on fugitive emissions policy since it surfaced in the Subpart OOOOa regulations. One the one hand, whatever has been done to develop NSPS fugitive emissions regulations has always been a precursor to its impact on existing source facilities that were never directly addressed in the NSPS regulations. Even the CTG only adopted the basic fugitive emissions regulatory framework for its model regulation. On the other hand, all of the information that EPA has used in its regulatory development – both emissions estimates and technology evaluations – comes from existing sources.

As a result, it is more appropriate to discuss the fugitive emissions proposal in the context of its role as an EG than as an NSPS proposal. These comments will therefore be dominated by an existing source assessment.

One of the primary cost-effectiveness issues with the fugitive emissions proposals arises from the failure of EPA's analysis to account for the impact of declining production reducing the potential magnitude of emissions from production facilities. The Producer Associations have addressed this dynamic in past comments with regard to both the EPA analyses and the distorted studies by environmental lobbying organizations presenting dubious emissions analyses.

There are many approaches to developing matrices to frame a series of fugitive emissions requirements that reflect the emissions profiles of oil and natural gas production facilities. The Producer Associations believe that the most straightforward approach would be to use production rates with some adjustments for specific onsite equipment. This approach would utilize information from DOE Study. However, EPA has an inordinately intense fascination with the use of component counts at facilities. This reliance on a system that uses component counts portends a potential complicated conflict implementing the EG because states have not used component counts in their current regulatory programs and could resist EPA's actions to force the approach on them. Nevertheless, these comments will address the issues in EPA's development of its fugitive emissions program proposal.

B. EPA Ignores Relevant Information From the DOE Study.

EPA creates four matrices of facilities for its different requirements. Details are shown below:

The affected facility is the collection of fugitive emissions components located at a well site or centralized production facility with no exemptions. Fugitive emissions component means any component that has the potential to emit fugitive emissions of methane or VOC at a well site, centralized production facility, or compressor station, including valves, connectors, pressure relief devices, open-ended lines, flanges, covers and closed vent systems not subject to §60.5411b (closed vent systems), thief hatches or other openings on a storage vessel not subject to §60.5395b (storage vessels), compressors, instruments, meters, and in yard piping. EPA is not maintaining the inclusion of natural gas-driven pneumatic controllers or natural gas-driven pneumatic pumps as fugitive emissions components. These devices are both separate affected facilities with separate standards identified as BSER. EPA is not defining control devices as fugitive emissions components.	
Fugitive Emissions Facilities	Monitoring Requirements

Single wellhead only well sites. a wellhead only well site is a well site that contains one or more wellheads and no major production and processing equipment	Quarterly AVO inspections
Wellhead only well sites with two or more wellheads	Semiannual Optical Gas Imaging ("OGI") (or EPA Method 21) monitoring and quarterly AVO inspections at wellhead only well sites with two or more wellheads.
Well sites and centralized production facilities with major production and processing equipment. Centralized production facilities include one or more storage vessels and all equipment at a single surface site used to gather, for the purpose of sale or processing to sell, crude oil, condensate, produced water, or intermediate hydrocarbon liquid from one or more offsite natural gas or oil production wells. This equipment includes, but is not limited to, equipment used for storage, separation, treating, dehydration, artificial lift, combustion, compression, pumping, metering, monitoring, and flowline. Process vessels and process tanks are not considered storage vessels or storage tanks. A centralized production facility is located upstream of the natural gas processing plant or the crude oil pipeline breakout station and is a part of producing operations.	Quarterly OGI (or EPA Method 21) monitoring and bimonthly AVO inspections at well sites and centralized production facilities with: (1) One or more controlled storage vessels or tank batteries; (2) one or more control devices; (3) one or more natural gas-driven pneumatic controllers; or (4) two or more pieces of major production or processing equipment not listed in items (1) through (3).
Small well sites are single wellhead well sites that do not contain any controlled storage vessels, control devices, pneumatic controller affected facilities, or pneumatic pump affected facilities, and include only one other piece of major production and processing equipment. Major production and processing equipment that would be allowed at a small well site would include a single separator, glycol dehydrator, centrifugal and reciprocating compressor, heater/treater, and storage vessel that is not controlled. By this definition, a small well site could only potentially contain a well affected facility (for well completion operations or gas well liquids unloading operations that do not utilize a closed vent system ("CVS") to route emissions to a control	Quarterly AVO inspections

device) and a fugitive emissions components affected facility. No other affected facilities, including those utilizing CVS (such as pneumatic pumps routing to control) can be present for a well site to meet the definition of a small well site.	

EPA creates three model facilities with detailed component count elements to define these matrix categories, but it uses emissions assumptions and emissions simulations using the Fugitive Emissions Abatement Simulation Tool ("FEAST") to create various control technology options. Essentially, EPA produces FEAST based on emissions levels related to throughput – one percent or 0.5 percent of throughput. For its single well only well site (single well site), its multiple well only well site (multiple well site), and its small well site (small well site) facilities, the production level would be below the threshold of EPA's earlier definition of a low production well – 15 barrels/day or 90 mcfd. For its large facility (large well site), the production level would be three times the level of a low production well. It is because of these assumptions that the model is really more pertinent to the EG since no producer would be planning to drill new wells with these levels of production.

A key question then is the validity of the assumptions that EPA has used for its inputs. EPA relies on two primary resources – the DOE Study and a Rutherford Study[3] – to test the validity of its FEAST results.

Taking the Rutherford Study first, there is no reason why EPA should use this data source. The genesis of the Rutherford Study relates to the ongoing disputes of differences in studies and inventories, such as the Inventory of U.S. Greenhouse Gas Emissions and Sinks ("GHGI"), which is bottom-up calculations and atmospheric studies. The Rutherford Study seeks to close the gaps by addressing the emissions factors used in the GHGI. It turns to the array of other studies and effectively cherry picks emissions factors from those studies to replace ones in the GHGI. Inherent in this effort is reliance on the same studies that have been used for prior analyses. The Producers Associations have addressed the shortcomings of these studies in past comments – limited sampling times, little or no information on the facility operation, and no certainty on quality control of the data. And, as in past situations, these reports only incidentally take data on the low production wells that are the focus of EPA's analysis. Finally, the Rutherford Study brings no new data to the analysis; it merely regurgitates old, inadequate material.

The DOE Study is a different story. It does provide new information with emissions data taken and with facility information at the time of the sampling. The issues with the DOE Study relate to EPA's interpretation. The DOE Study provides substantial new information on the emissions profile of low production wells, but EPA has chosen to limit the use of this material.

[3] *Closing the methane gap in US oil and natural gas production emissions inventories*, Nature Communications (Aug. 5, 2021).

For example, with its inordinate focus on component counts as the sole basis to regulate fugitive emissions, EPA immediately discounts how the DOE Study can be used to create a much simpler regulatory path. At this point, it is pertinent to bring into the discussion the use of Audio-Visual-Olfactory ("AVO") monitoring for fugitive emissions at oil and natural gas production sites. The Producers Associations have supported the use of AVO monitoring as an alternative to the costly Optical Gas Imaging ("OGI") and Method 21 LDAR that have been the primary basis for previous fugitive emissions programs. The Producers Associations support EPA's decision to embrace AVO in its regulatory framework. It is particularly significant for low production wells. Consequently, in assessing the material in the DOE Study, evaluating the emissions information in a post-AVO application context is imperative. That is, while there may be higher emitting components at a facility, in looking at how to assess regulatory options, those that would be eliminated by an AVO program should be excluded. (Similarly, if the higher emitting component is regulated under a part of Subpart OOOOc that is separate from the fugitive emissions program, it should be excluded.) The DOE Study demonstrated that low production well sites significant emissions resulted from predictable sources – tank vents or thief hatches, pneumatic controllers at separator vessels, open valves, or damaged piping. All of these can be identified with AVO. This reality is particularly clear for well sites producing 6 barrels/day of oil equivalent or less. Compared to the complicated matrix of well site options in the EPA proposal, this approach would be easily identifiable. Moreover, it would mean that 83 percent of the regulatory burden on low production wells would be managed in a straightforward program.

However, while EPA continues to believe that component count approaches should define its various regulatory matrices, its regulatory analysis is based on use of FEAST. The Producers Associations lack the resources to duplicate the EPA FEAST analyses or conduct an independent analysis of the model, but at this point the Producers Associations support the use of the model encourage EPA to utilize other models and accept additional modeling results produced after the close of the comment period. The Producers Associations, however, can address the FEAST results and the implications of EPA's assessment of those results.

As described above, EPA used two resources to justify the validity of its FEAST results – the DOE Study and the Rutherford Study. If EPA had relied on the DOE Study's actual data for low production wells for the single well site, multiple well site, and small well site analyses, it would need to shift its FEAST inputs. As EPA describes in its materials, the DOE study would have produced the following differences:

	EPA FEAST Emissions – 0.5% Leak Generation	**DOE Study – As Reported by EPA**
Single Well Site	1.27 tpy	0.26-0.56 tpy
Multiple Well Site	2.66 tpy	0.52-1.12 tpy
Small Well Site	1.27 tpy	0.20 tpy

Since the output from the FEAST analyses become the baseline for EPA's assessment of emissions reductions from various control strategies and the basis for the calculations of cost effectiveness, these differences that are two to six times the DOE Study values can produce significant changes in some of the determinations.

Because the EPA proposed control structures for both single wells sites and small well sites are quarterly AVO programs, the more clear-cut impact is on the multiple well site. This will be addressed first. Before going into the specifics of the application of the emissions baseline, the Producers Associations have concerns regarding the approach that EPA appears to have taken in developing its multiple well site regulatory strategy.

As EPA details in its preamble and support documents, it recognizes that the use of AVO can identify and correct the primary fugitive emissions sources, particularly for low production wells. The multiple well site model is a low production well, producing approximately 90 mcfd in its analysis and between 19 and 38 mcfd using the DOE Study values. Consequently, this category of wells would be well managed using AVO. For this reason, the Producers Associations believe that EPA should have developed its regulatory strategy by first applying an AVO control approach and determining its cost effectiveness. Next, EPA should assess the impact of adding an OGI component, like the semiannual proposal or perhaps an annual proposal. EPA should then evaluate the incremental costs per ton of these additions to determine whether such requirements were cost effective. In other words, the baseline for control would be a periodic AVO requirement and any OGI would be judged on its incremental costs and benefits.

This does not appear to be the approach EPA used. EPA appears to have used an OGI baseline and then substituted AVO for quarterly OGI to generate its OGI-AVO combination of requirements.

Next, EPA should have developed its analysis around the DOE Study. Examining the multiple well site calculations and using an average DOE Study methane emissions value of 0.82 tons/year and assuming a VOC emissions value of 0.23 tons/year, very different conclusions are evident.

OGI & AVO Combined Program				
Survey Frequency	**Baseline Methane Emissions (tpy)**	**Methane Emissions Reductions (%)**	**Methane Emissions Reductions (tpy)**	**VOC Emissions Reductions (tpy)**
AVO; 0.5%;				
No monitoring baseline	0.82			
Quarterly AVO baseline	0.48	42%	0.34	0.10
Semiannual OGI	0.27	67%	0.55	0.15
Quarterly AVO + Semiannual OGI	0.10	88%	0.72	0.20

Monitoring Frequency	Annual Cost ($/yr/site)	Methane Emission Reduction (tpy/site)	VOC Emission Reduction (tpy/site)	Cost-Effectiveness		Incremental Cost-Effectiveness*	
				Methane ($/ton)	VOC ($/ton)	Methane ($/ton)	VOC ($/ton)
Multi-Wellhead Well Sites: Includes additional travel costs Single Pollutant Approach							
Quarterly AVO	$830	0.34	0.10	$2,441	$8,300		
Semiannual OGI	$2,327	0.55	0.15	$4,231	$15,513	$6,805	$29,940
Semiannual OGI + Quarterly AVO	$2,651	0.72	0.20	$3,681	$13,255	$4,792	$18,210
Multi-Wellhead Well Sites: Includes additional travel costs Multipollutant Approach							
Quarterly AVO	$830	0.34	0.10	$1,220	$4,150		
Semiannual OGI	$2,327	0.55	0.15	$2,115	$7,757	$3,403	$19,970
Semiannual OGI + Quarterly AVO	$2,651	0.72	0.20	$1,841	$13,255	$2,396	$9,105
*The incremental cost effectiveness is calculated against the baseline of quarterly AVO.							

Based on using more accurate assessments of the emissions from multiple well sites, EPA's proposed approach fails to pass the cost-effectiveness threshold test of $2,165/ton of methane and the $5,540/ton of VOC. Consequently, the Producers Associations recommend that EPA use a quarterly AVO program only for its multi-wellhead well sites category like it proposes for the single well sites.

EPA has demonstrated through its FEAST analysis that emissions from low production oil and natural gas facilities are small. These comments that have relied on the DOE Study further demonstrate that low production well sites can be well managed through AVO programs targeting key emissions sources. Moreover, EPA has limited the scope of equipment that falls under the definition of its fugitive emissions program – separating controlled storage tanks and pneumatic controllers from the fugitive emissions facility. While EPA proposes to require all facilities to undergo some type of fugitive emissions detection, clearly, the vast majority of low production operations are below the 3 tons/year threshold that EPA proposed in 2021 as a threshold of concern and will be far smaller after the application of an AVO fugitive emissions program. At issue is whether EPA's matrix definitions for small well sites and large well sites provide the correct framework for low production wells.

C. EPA Should Create an Intermediate Well Site Category.

EPA is correct to separate requirements on small well sites from those at large well sites. However, the definition of a small well site appears to overly constrain the scope of sites that

should fall into it. For example, EPA estimates that 95,000 sites will fall within its small well site definition. As described previously, 83 percent of low production wells produce 6 boe/day or less. In total, there are over 600,000 wells in this category (over 330,000 are less than one boe/day and 200,000 are between 1 and 4 boe/day). While many will be single well or multiple well sites, it is highly likely that a sizable number of these wells will fall into EPA's large well definition. Because the large well matrix category captures everything above a threshold of not being a single well site, a multiple well site and a small well site, EPA needs to ensure that its threshold is appropriate. EPA notes in the preamble that the larger end of the DOE Study found wells that were emitting three to four tons per year. In its FEAST model analysis EPA uses an emissions threshold of 8.51 tons per year. This emissions rate translates into a well producing about 290 mcfd and is within EPA's concept of a large facility. However, a facility emitting three to four tons/year will essentially be at the top end of the low production well definition and its emissions will likely be consistent with EPA's small well site matrix category.

When EPA undertakes its cost-effectiveness analysis for its OGI based proposal, it again assesses the use of AVO as an addition to an OGI program. While this may be appropriate for truly large well sites, a more appropriate analysis for those sites on the borderline between small well sites and large wells would be the initial application of the small well site AVO program followed by the addition of an OGI requirement. This is particularly important because the shift between the requirements is from an all AVO quarterly program to a bimonthly AVO and quarterly OGI program – a fourfold cost increase. A more logical approach would be to move from an AVO small well program to an AVO/OGI mixed program for an intermediate well site to its AVO/OGI program for large sites.

Regardless of whether there is a gradual shift in requirements or a step change, it is imperative that EPA provide a reasonable definition of the facilities in the matrix components. Based on EPA's assessment of 95,000 facilities falling into the small well site category when hundreds of thousands are truly small well sites, EPA needs to establish better definitions to match a small site AVO fugitive emissions program with small well sites.

The Producer Associations recommend that EPA use a well site definition approach that combines production throughput and components to create simplicity and avoid inappropriate results. As much as EPA is attracted to component counts, it has no greater certainty to define well site cutoffs than production throughput and can lead to results that make no sense. For example, a well site producing 6 boe/day with two small uncontrolled tanks would be clearly a low producing well under the DOE Study and easily managed with an AVO program. However, under EPA's component only well site definitions, it would be a large well site subject to quarterly OGI. Consequently, the Producer Associations recommend the approach outlined in the following table.

Type of Well Site	**Criteria**	**Leak Detection Requirement**
Small Well Site/Booster Compressor	A booster compressor or a well site with production of 6 boe/day based on definition at 26 USC 613A(c)(2)(A) and no more than 220	Quarterly AVO

	components with no more than 2 uncontrolled tanks, no other component limitations.	
Intermediate Well Site	Production from 6 to 15 boe/day based on definition at 26 USC 613A(c)(2)(A) and more than 220, but not more than 612 components, and small well sites with more than 220 components or more than 2 uncontrolled tanks.	Quarterly AVO and initially semiannual OGI. If OGI showed no fugitive emissions that could not have been found through AVO, OGI would become annual. If annual OGI showed no fugitive emissions that could not have been found through AVO, future OGI would be at the discretion of the state
Large Well Site	Production greater than 15 boe/day based on definition at 26 USC 613A(c)(2)(A).	Bimonthly AVO and initially quarterly OGI. If quarterly OGI shows no emissions that could not have been found through AVO, OGI would become semiannual.
Site categorization would change based on well site production/component count. Alternative technologies would be available for OGI based on the alternative technology section.		

D. EPA Should Integrate "Evergreen" Elements to the Monitoring Requirements.

EPA also needs to provide "evergreen" elements to its fugitive emissions requirements for all matrix elements. First, EPA needs to provide that the appropriate matrix is used as wells decline. As a well site moves from the large facility category, its requirements need to change to the appropriate status – single well site, multiple well site, small well site, or intermediate well site. Second, when EPA requires OGI as part of the fugitive emissions program, there needs to be a mechanism to alleviate this requirement if it is adding little or no benefit. That is, if quarterly OGI is not identifying emissions issues that are not being found and addressed by the AVO component of the program, it needs to be revised to a semiannual requirement; if it adds no benefits as a semi-annual program, it needs to be revised to an annual program or eliminated. Third, EPA is making efforts to allow emerging technologies to be used in fugitive emissions programs. These new technologies are evolving constantly and whether they currently compare to EPA's assessment of its OGI program, the potential for future technologies cost effectively improving upon the current OGI technology capabilities is high. As a result, EPA's current mix of technologies and frequencies should change to reflect better methodologies. Producers should not be constrained to the use of outdated methods when better ones arise.

EPA's perspective on the life of a producing well seems to be that it operates daily and then it stops. In reality, it changes over time. As production declines, the nature of its operations changes as well as the equipment at the site. Instead of daily production, it may function several

days a week and then lessen. This changes the emissions profile. At some point the well may become inactive but not permanently shut down. States have programs that allow producers to stop operation for some period of time while deciding whether to return it to operation or plug it or sell it. During this time its emissions will be nonexistent or minimal. Eventually, the well will be plugged and permanently shut down. While EPA creates regulatory requirements for operating wells and for plugged wells, inactive wells are not addressed. They should be addressed through an AVO only program, perhaps semi-annually.

While comments related to the Section 111(d) state implementation process are included later in this document, there is a specific issue that is appropriate to address here regarding the structure of fugitive emissions program categories. While EPA is fixated on using component counts and model well sites to define its EG, states have not shown a similar mindset. Some states have used production rates or emissions estimates based on production rates to define their programs, but the use of elaborate component counts is absent in state regulatory programs. This is a major reason why the Producer Associations have repeatedly recommended using production rates – with the framework of the federal tax code as the calculation method – to define regulatory requirements. EPA's own efforts to try to develop a component count regulatory basis shows that the calculation process is imprecise. Moreover, despite EPA's dismissal of production rates as not being a precise link to emissions, no other approach has shown itself to be appreciably better. In reality, when dealing with a million existing sources that span a wide range of emissions profiles and where the emissions data on those operations are based on a small fraction of the operations, there will never be a structure that provide certainty. In the next phase of this regulatory process – the development of state plans – EPA is setting the stage for unnecessary confrontations with states over the drafting of regulations and the determinations of equivalency. EPA tries to minimize state flexibility by announcing that its analysis is so persistent that states will not be able to demonstrate alternative choices. But, each state has its own regulatory framework and EPA's threatening approach will not easily bend their will. The end result could be regulatory chaos; EPA could end up generating federal plans that it has neither the staff nor the skills to implement. Producers will be faced with two simultaneous regulatory programs which is a patently unfair situation and for small businesses likely crippling. EPA needs to address these predictable consequences now.

E. EPA's Proposed Well Closure Requirements are Unnecessary and on Questionable Legal Footing.

EPA is unnecessarily wading into a regulatory arena already occupied by the states with questionable legal authority and teeing up state/federal primacy issues. Ostensibly, since idle and/or abandoned wells may have emissions, some monitoring might be authorized under the CAA, but EPA has provided no BSER analysis to justify OGI when a well has been idled or plugged/abandoned. EPA provided no explanation of why AVO would not suffice. The economics dictate that a well that is being plugged/abandoned is more likely than not to be a low production well and that low production well is operated by a small business. Requiring OGI when a well is plugged would place a disproportionate cost on small businesses that is not justified.

The notice, recordkeeping, bonding, and closure plans are excessive and not sufficiently linked to reducing emissions to be warranted. Additionally, in most instances, they are duplicative

and/or potentially inconsistent with what states already require. States and the Bureau of Land Management currently occupy this regulatory space and EPA's proposal is unnecessary. More specifically the Producer Associations provide the following comments on short comings of EPA's proposal:

- EPA's requirement of submitting a well closure plan within 30 days of "cessation" of production. At a minimum, the term "cessation" is ambiguous and perhaps denotes a lack of understanding of the industry. The fact an owner/operate idles a well for 30 or more days does not mean it intends to plug/abandon the well. Wells are often temporarily shut in for mechanical considerations, wellbore issues, reworking or repair of surface facilities or government orders/enforcement.

- Many/most states require a final report of some sort related to plugging in order for their bond to be released. EPA's proposals are duplicative and likely inconsistent. EPA lacks authority to require financial assurances when the states have already established bonding requirements associated with plugging wells.

- EPA provides no justification or rationalization for requiring a description of the steps to close all wells at the well site when it is not uncommon for simply one well to be identified as uneconomical and thus slated for plugging while remaining wells remain in service.

IV. PNEUMATIC CONTROLLERS/PUMPS

EPA's analysis of BSER for pneumatic controllers and pneumatic pumps relies on information that overstates the emissions from these sources. It is particularly an issue for intermittent pneumatic controllers that are widely used at existing oil and natural gas production operations and therefore badly skews the cost-effectiveness analysis. There are several types of pneumatic controllers, each with varying amounts of emissions. Some of these controllers serve as a safety backup and are used very irregularly, sometimes only a few times per year. Other devices, on older facilities may only actuate a few times/day or even per week. Yet, the default 8760 hours are used when calculating their emissions. This leads to an inexplicable over-estimation of emissions. However, due to the alternative method of calculating emissions and lack of penalties for over reporting, operators have chosen to simplify calculations for GHG reporting

A. EPA's Supplemental Proposal's Reliance on GHGRP Undermines EPA's BSER Analysis for Pneumatics.

EPA bases much of its analysis on emissions factors from the Greenhouse Gases Reporting Program ("GHGRP"). However, these emissions factors are flawed and being reviewed by EPA for revision; even the revisions are at issue. Their use produces a faulty analysis.

In proposed revisions to the GHGRP rules found at Docket ID – EPA-HQ-OAR-2019-0424, EPA indicates on multiple occasions that existing GHGRP data and inventories have been used to inform other agency regulations and policy making decisions. At the same time and in the same comments, the agency acknowledges that historical GHGRP data is of poor quality and inaccurate. See excerpts below:

> **Further, the data collected under the GHGRP has also been used to inform other regulations, for example, proposed New Source Performance Standards (NSPS) and Emission Guidelines for the oil and gas industry** and for municipal solid waste (MSW) landfills under 40 CFR part 60.[4]
>
> A. Revisions To Improve the Quality of Data Collected Under 40 CFR Part 98 and Other Minor Revisions or Clarifications: The data collected under part 98 are used to inform the EPA's understanding of the relative emissions and distribution of emissions from specific industries, the factors that influence GHG emission rates, **and to inform policy options and potential regulations.** Following several years of implementation and outreach, the EPA has identified certain areas of the rule where updates to emissions factors or other default factors; improvements to calculation methodologies; collection of additional data on GHG emissions, emissions sources, or end uses; additions or revisions to data elements or other reporting requirements; and other technical amendments, clarifications, and corrections **would enhance the quality and accuracy of the data collected under the GHGRP**. These proposed changes include consideration of comments raised by stakeholders in prior rulemakings that would more closely align rule requirements with the processes conducted at specific facilities, consideration of data gaps identified in collected data where additional data would improve verification of data reported to the GHGRP, and consideration of additional data needed to help better understand changing industry emission trends. Overall, these proposed changes would provide a more comprehensive, nationwide GHG emissions profile reflective of the origin and distribution of GHG emissions in the United States and **would more accurately inform EPA policy options for potential regulatory or non-regulatory CAA programs.** The EPA additionally uses the data from the GHGRP, which would include data from these proposed changes, to improve estimates used in the U.S. GHG Inventory.[5]
>
> Following several years of implementation and outreach, the EPA has identified certain areas of the rule where updates to emissions factors or other default factors; improvements to calculation methodologies; collection of additional data on GHG emissions, emissions sources, or end uses; additions or revisions to data elements or other reporting requirements; and other technical amendments, clarifications, and corrections **would enhance the quality and accuracy of the data collected under the GHGRP**.[6]

The Producer Associations agree with EPA in its conclusion that historical GHGRP data, in many cases, is of poor quality and inaccurate, which supports the position stated above. To see an illustration of the absurdity, EPA need look no further than its own proposed requirements for pneumatic controllers and pumps, including intermittent-bleed pneumatic devices, which proposes a BSER of zero-emissions.

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[4] 87 FR 36925 (emphasis added).

[5] 87 FR 36926 (emphasis added).

[6] *Id.*

The proposed policy provisions and cost-effectiveness determination for this BSER largely hinge upon historical GHGRP inventories made up of data that is inaccurate and of poor quality. Beyond the agency excerpts above, EPA further acknowledges this through its proposed GHGRP revisions for calculating emissions associated with intermittent-bleed pneumatic devices, summarized below. Current GHGRP – Subpart W rules require reporters to calculate emissions from intermittent-bleed pneumatic devices by:

- Utilizing Equation "W-1", where:
- EF_t = 13.5 scf/hr/component for intermittent-bleed pneumatic device vents (from Table W-1A), and
- T_t = Average estimated number of hours in the operating year the devices, of each type "t", were operational using engineering estimates based on best available data. Default is 8,760 hours.

Proposed GHGRP – Subpart W revisions for calculating emissions from intermittent-bleed pneumatic devices allows one of two options:

- Utilize Equation "W-1A", where:
- EFt = 8.8 scf/hr/component for intermittent-bleed pneumatic device vents (from Table W-1A), **which represents a nearly 35% reduction compared to the current emissions factor**, and
- Tt = Average estimated number of hours in the operating year the devices, of each type "t", were in service (i.e., supplied with natural gas) using engineering estimates based on best available data. Default is 8,760 hours.

OR

- Utilize Equation "W-1B", which contemplates an entirely new proposed alternative calculation methodology allowing reporters that perform approved leak surveys (i.e., Leak Detection and Repair ("LDAR") surveys with OGI cameras) to identify properly operating versus malfunctioning intermittent-bleed pneumatic devices, and
- Proposes an EF of 24.1 scf/hr/component for malfunctioning/leaking devices and specifies the method for determining the amount of time a device was assumed to be leaking, and
- Proposes an EF of 0.30 scf/hr/component for properly operating devices and specifies the method for determining the amount of time a device was assumed to be operating. **This represents a nearly 98% reduction from the current required EF for intermittent-bleed pneumatic devices.**

Although many Subpart W reporters, including multiple Producer Associations' members, currently perform voluntary (and mandated) Subpart OOOOa compliant LDAR surveys utilizing OGI cameras, in-line with the proposed GHGRP revisions, and are able to identify properly operating devices versus malfunctioning devices, the current rules do not allow the data to be used. As such, it significantly overstates GHG emissions from intermittent-bleed pneumatic devices. These overstated emissions are included in historical GHGRP inventories.

B. EPA's Inaccurate Data Skew the BSER Analysis for Certain Pneumatics.

To demonstrate how GHG emissions from intermittent-bleed pneumatic devices are significantly overstated by the current GHGRP Subpart W rules versus proposed GHGRP revisions, it is presented in the tables below which is reflective of a current Producer Associations' member's operations and actual voluntary LDAR program results:

<table>
<tr><td colspan="2">Comparison of Methane Emissions Associated with Intermittent-Bleed Pneumatic Devices as Determined by Current GHGRP "Eq. W-1" v. Proposed GHGRP "Eq. W-1A" v. Proposed GHGRP "Eq. W-1B"</td></tr>
<tr><td colspan="2">Case study based on actual results of one Producer Associations' member's operations and associated LDAR program:
– Numbers rounded to nearest whole number for illustrative purposes
– Operator reports under the Production Segment of Subpart W
– Approximately 10,000 Intermittent-bleed Pneumatic Devices @ roughly 1,500 Locations with 4,000 wells
– Locations not subject to Subpart OOOOa
– Operator Performs voluntary Subpart OOOOa compliant OGI leak surveys at all 1,500 locations one-time per annum
– Approx. 100 malfunctioning (i.e., leaking) devices identified; a 1.0% leak rate (actual leak rate identified by operator less than 1% based on 2 years of voluntary LDAR surveys at all locations)
– Remaining 9,900 devices, verified to be operating normally
– Default of 8760 hours per device for "operating" (current rule) and "In-service" (proposed rule) times
– Default of 8760 hours per malfunctioning device for leak duration
– Operator produces dry gas with a 98% CH_4 Fraction and 0% VOCs
– Conversions performed at standard conditions, 60 °F and 14.7 psia.</td></tr>
<tr><td>Current – "Eq. W-1"</td><td>$$E_{s,i} = \sum_{t=1}^{3} Count_t * EF_t * GHG_i * T_t \qquad \text{(Eq. W-1)}$$

10,000 devices x 13.5 scf/hr/device x 0.98 CH4 % x 8760 hours = 1,158,948,000 scf CH_4 emissions

$$Mass_i = E_{s,i} * \rho_i * 10^{-3} \qquad \text{(Eq. W-36)}$$
Where:
$Mass_i$ = GHG_i (either CH_4, CO_2, or N_2O) mass emissions in metric tons.
$E_{s,i}$ = GHG_i (either CH_4, CO_2, or N_2O) volumetric emissions at standard conditions, in cubic feet.
ρ_i = Density of GHG_i. Use 0.0526 kg/ft^3 for CO_2 and N_2O, and 0.0192 kg/ft^3 for CH_4 at 60 °F and 14.7 psia.

1,158,948,000 scf CH4 * 0.0192 kg/ft^3 * 0.001 mt/kg = 22,252 mt CH_4</td></tr>
</table>

Proposed – "Eq. W-1A"	$$E_{s,i} = \sum_{t=1}^{3} Count_t * EF_t * GHG_i * T_t$$ (Eq. W-1A) **10,000 devices x 8.8 scf/hr/device x 0.98 CH4 % x 8760 hours = 755,462,400 scf CH_4 emissions** $$Mass_i = E_{s,i} * \rho_i * 10^{-3}$$ (Eq. W-36) Where: $Mass_i$ = GHG_i (either CH_4, CO_2, or N_2O) mass emissions in metric tons. $E_{s,i}$ = GHG_i (either CH_4, CO_2, or N_2O) volumetric emissions at standard conditions, in cubic feet. ρ_i = Density of GHG_i. Use 0.0526 kg/ft^3 for CO_2 and N_2O, and 0.0192 kg/ft^3 for CH_4 at 60 °F and 14.7 psia. **755,462,000 scf CH4 * 0.0192 kg/ft^3 * 0.001 mt/kg = 14,505 mt CH_4**
Proposed – "Eq. W-1B" **One OOOOa compliant LDAR survey per annum, leak durations of 8,760 hours**	$$E_i = GHG_i * \left[\left(24.1 * \sum_{z=1}^{x} T_z\right) + (0.3 * Count * T_{avg})\right]$$ (Eq. W-1B) **0.98 CH4 % x [(24.1 scf/hr/device x 100 leaking devices x 8760 hours) + (0.3 scf/hr/device x 9,900 non-leaking devices x 8760 hours)] = 46,186,224 scf CH_4 emissions** $$Mass_i = E_{s,i} * \rho_i * 10^{-3}$$ (Eq. W-36) Where: $Mass_i$ = GHG_i (either CH_4, CO_2, or N_2O) mass emissions in metric tons. $E_{s,i}$ = GHG_i (either CH_4, CO_2, or N_2O) volumetric emissions at standard conditions, in cubic feet. ρ_i = Density of GHG_i. Use 0.0526 kg/ft^3 for CO_2 and N_2O, and 0.0192 kg/ft^3 for CH_4 at 60 °F and 14.7 psia. **46,186,224 scf CH4 * 0.0192 kg/ft^3 * 0.001 mt/kg = 887 mt CH_4**

Proposed – "Eq. W-1B"	$$E_i = GHG_i * \left[\left(24.1 * \sum_{z=1}^{x} T_z\right) + (0.3 * Count * T_{avg})\right]$$ (Eq. W-1B)
Four OOOOa compliant LDAR surveys per annum, leak durations of 2,190 hours	**0.98 CH4 % x [(24.1 scf/hr/device x 100 leaking devices x 2190 hours) + (0.3 scf/hr/device x 9,900 non-leaking devices x 8760 hours)] = 30,669,198 scf CH_4 emissions**
FOR ILLUSTRATION ONLY	$$Mass_i = E_{s,i} * \rho_i * 10^{-3}$$ (Eq. W-36) Where: $Mass_i$ = GHG_i (either CH_4, CO_2, or N_2O) mass emissions in metric tons. $E_{s,i}$ = GHG_i (either CH_4, CO_2, or N_2O) volumetric emissions at standard conditions, in cubic feet. ρ_i = Density of GHG_i. Use 0.0526 kg/ft^3 for CO_2 and N_2O, and 0.0192 kg/ft^3 for CH_4 at 60 °F and 14.7 psia. **30,669,198 scf CH4 * 0.0192 kg/ft^3 * 0.001 mt/kg = 589 mt CH_4**
Summary – Based on the scenario above, current GHGRP requirements ("Eq. W-1") overstate methane emissions associated with intermittent-bleed pneumatic devices by approx. 35% compared to proposed GHGRP alternative 1 ("Eq. W-1A") and by approx. 96% compared to proposed GHGRP alternative 2 ("Eq. W-1B"). **If the same 1% leak rate was assumed AND quarterly LDAR surveys were performed, such that all leak durations were 2,190 hours vs. the default of 8,760 hours, GHG emissions would be overstated by approx. 97.4% when using proposed GHGRP alternative 2 ("Eq. W-1B").**	

The approximately 1,500 locations in this example are most analogous to "medium model plants" as that term is used in EPA's cost-effectiveness analysis, and virtually none of the locations has access to grid power. As such, based on EPA's projected cost estimates, this operator would have an initial total capital investment ("TCI") in the range of $57,661,500 to $180,000,000 to reduce 887 mt of methane emissions per year. Using the EPA's total annual cost ("TAC") projections and a 15-year equipment life span, the cost per ton of methane reduced would be in the range of $4,681 to $23,819, which is well outside of EPA's reasonableness threshold of $1,970/ton of methane reduced.

This example is one of many across the Oil and Gas Industry which demonstrates that EPA is well aware current GHGRP rules and associated mandated calculation methodologies, significantly overstate emissions for intermittent-bleed pneumatic devices. Yet, EPA largely utilized historical data from its GHGRP as the basis for policy development, such as the requirements in NSPS Subpart OOOOb and EG Subpart OOOOc, which will require the Oil and Gas Industry, amongst other things, to transition to zero-emitting pneumatic devices as the BSER.

EPA's cost-effectiveness analysis and determinations for this BSER are also based on the same historical GHGRP data and are therefore inaccurate. In fact, when comparing the calculated

methane emissions from the example above, utilizing proposed "Eq. W-1B", almost none of the proposed methods in EPA's cost-effectiveness evaluation for new sources are reasonable and NONE are reasonable for existing sources. And, this also assumes that the cost estimates used by EPA in the analysis are accurate and right-sized for the entire industry – which is almost certainly not the case. A comparison of the EPA's cost-effectiveness determinations, for both new sources and existing sources, compared to determinations utilizing proposed GHGRP revisions for pneumatic controller emissions calculations, based on the Producer Associations member scenario above, is provided below.

Comparison of New Source Cost Effectiveness for Pneumatic Controller Systems Not Driven By Natural Gas (Production Segment Only)

Table 28 (FR p.74768) v. IPAA Member Example Using "Eq. W-1A" v. IPAA Member Example Using "Eq. W-1B"

Single Pollutant (Methane)

	Table 25 (FR p. 74762)		IPAA Member Scenario Using "Eq. W-1A"		IPAA Member Scenario Using "Eq. W-1B"	
Segment/model plant	Cost effectiveness[a] ($/ton methane reduced)	Reasonable? (Y/N)	Cost effectiveness[b] ($/ton methane reduced)	Reasonable? (Y/N)	Cost effectiveness[c] ($/ton methane reduced)	Reasonable? (Y/N)
Production:						
Small—Electric controllers—grid	$ 162	Y	$ 131	Y	$ 2,147.69	N
Small—Electric controllers—solar	$ 238	Y	$ 192	Y	$ 3,134.16	N
Small—Compressed air—grid	$ 1,969	Y	$ 1,600	Y	$ 26,169.67	N
Small—Compressed air—generator	$ 2,673	N	$ 2,172	N	$ 35,524.24	N
Medium—Electric controllers—grid	$ 96	Y	$ 83	Y	$ 1,351.47	Y
Medium—Electric controllers—solar	$ 167	Y	$ 145	Y	$ 2,366.12	N
Medium—Compressed air—grid	$ 1,062	Y	$ 918	Y	$ 15,019.73	N
Medium—Compressed air—generator	$ 1,187	Y	$ 1,027	Y	$ 16,789.74	N
Large—Electric controllers—grid	$ 62	Y	$ 53	Y	$ 873.73	Y
Large—Electric controllers—solar	$ 130	Y	$ 112	Y	$ 1,839.35	Y
Large—Compressed air—grid	$ 593	Y	$ 513	Y	$ 8,394.02	N
Large—Compressed air—generator	$ 780	Y	$ 674	Y	$ 11,028.75	N

[a] For the production and processing segments, the owners and operators realize the savings for the natural gas that not emitted and lost. The cost effectiveness values shown do not consider these savings. Note that the consideration of savings does not impact whether the cost effectiveness of any of these options falls within the ranges considered reasonable by the EPA.

[b] Based on 1.45 tpy methane emissions per intermittent bleed pneumatic device from IPAA Member Scenario using proposed "Eq. W-1A" for 10,000 intermittent-bleed pneumatic devices, 98% methane fraction and default 8760 operating hours. Intermittent-bleed pneumatic controller counts per model plant match counts from Table 23 (FR p. 74761) - 4 per small model plant, 8 per medium model plant and 20 per large model plant.

[c] Based on 0.09 tpy methane emissions per intermittent bleed pneumatic device from IPAA Member Scenario using proposed "Eq. W-1B" for 10,000 intermittent-bleed pneumatic devices, 98% methane fraction, default 8760 operating hours, 1% malfunctioning ("leaking") rate, 1 OOOOa compliant LDAR survey per annum and default 8760 hours leaking time. Intermittent-bleed pneumatic controller counts per model plant match counts from Table 23 (FR p. 74761) - 4 per small model plant, 8 per medium model plant and 20 per large model plant.

Reasonableness determination based on a cost of $1970/ton methane reduced as specified in Supplemental Proposed Rule (FR p. 74718)

Comparison of Existing Source Cost Effectiveness for Pneumatic Controller Systems Not Driven By Natural Gas (Production Segment Only)

Table 28 (FR p.74768) v. IPAA Member Example Using "Eq. W-1A" v. IPAA Member Example Using "Eq. W-1B"

Single Pollutant (Methane)

Segment - model plant	Table 28 (FR p. 74768)		IPAA Member Scenario Using "Eq. W-1A"		IPAA Member Scenario Using "Eq. W-1B"	
	Cost effectiveness[a] ($/ton methane reduced)	Reasonable? (Y/N)	Cost effectiveness[b] ($/ton methane reduced)	Reasonable? (Y/N)	Cost effectiveness[c] ($/ton methane reduced)	Reasonable? (Y/N)
Production Segment:						
Small—Electric controllers—grid	$ 195	Y	$ 232	Y	$ 3,790.87	N
Small—Electric controllers—solar	$ 255	Y	$ 304	Y	$ 4,963.36	N
Small—Compressed air—grid	$ 1,524	Y	$ 1,811	Y	$ 29,611.05	N
Small—Compressed air—generator	$ 2,225	N	$ 2,643	N	$ 43,227.17	N
Medium—Electric controllers -grid	$ 158	Y	$ 167	Y	$ 2,728.30	N
Medium—Electric controllers—solar	$ 227	Y	$ 239	Y	$ 3,900.79	N
Medium—Compressed air—grid	$ 918	Y	$ 966	Y	$ 15,801.86	N
Medium—Compressed air—generato	$ 1,153	Y	$ 1,214	Y	$ 19,849.21	N
Large—Electric controllers -grid	$ 136	Y	$ 128	Y	$ 2,090.76	N
Large—Electric controllers—solar	$ 208	Y	$ 196	Y	$ 3,202.37	N
Large—Compressed air—grid	$ 603	Y	$ 567	Y	$ 9,272.27	N
Large—Compressed air—generator	$ 836	Y	$ 786	Y	$ 12,849.49	N

[a] For the production segment, the owners and operators realize the savings for the natural gas that not emitted and lost. The cost effective- ness values shown do not consider these savings. Note that the consideration of savings does not impact whether the cost effectiveness of any of these options falls within the ranges considered reasonable by the EPA.

[b] Based on 1.45 tpy methane emissions per intermittent bleed pneumatic device from IPAA Member Scenario using proposed "Eq. W-1A" for 10,000 intermittent-bleed pneumatic devices, 98% methane fraction and default 8760 operating hours. Intermittent-bleed pneumatic controller counts per model plant match counts from Table 26 (FR p. 74767) - 4 per small model plant, 8 per medium model plant and 20 per large model plant.

[c] Based on 0.09 tpy methane emissions per intermittent bleed pneumatic device from IPAA Member Scenario using proposed "Eq. W-1B" for 10,000 intermittent-bleed pneumatic devices, 98% methane fraction, default 8760 operating hours, 1% malfunctioning ("leaking") rate, 1 OOOOa compliant LDAR survey per annum and default 8760 hours leaking time. Intermittent-bleed pneumatic controller counts per model plant match counts from Table 26 (FR p. 74767) - 4 per small model plant, 8 per medium model plant and 20 per large model plant.

Reasonableness determination based on a cost of $1970/ton methane reduced as specified in Supplemental Proposed Rule (FR p. 74718)

This cost-effectiveness comparison, albeit based on one Producer Associations' member's operations, demonstrates that the proposed one-size-fits-all regulations, in fact, do not fit all and importantly do not satisfy the EPA's obligation to ensure promulgated rules are cost effective in reducing methane emissions.

C. Producer Associations Propose Alternatives to Unsupported "Zero-Emitting" Standard.

The Producer Associations recommend that EPA withdraw the current "one-size fits all" BSER of zero-emitting pneumatic controllers and pumps across the board, and consider the following BSER alternatives:

- New, Modified, or Reconstructed sources subject to proposed NSPS OOOOb:
  - Continuous-bleed Pneumatic Controllers (low and high bleed):
    - Required to be zero-emitting, consistent with current proposed BSER, if the BSER is determined to be "reasonable" based on a cost-effectiveness analysis performed by the operator of affected facilities. Reasonableness threshold of $1,970/ton methane emissions reduced or less.

      OR

    - If zero-emitting BSER is determined to be unreasonable/not cost effective, emissions must be routed to a control device with a

destruction efficiency of at least 95%. All existing and proposed requirements for destruction devices would apply.

- Intermittent-bleed Pneumatic Controllers:
  - Required to be zero-emitting, consistent with current proposed BSER, if the BSER is determined to be "reasonable" based on a cost-effectiveness analysis performed by the operator of affected facilities. Reasonableness threshold of $1,970/ton methane emissions reduced or less.

    OR

  - If zero-emitting BSER is determined to be unreasonable/not cost effective, and a control device with a destruction efficiency of at least 95% is currently available onsite, emissions must be routed to the control device. All existing and proposed requirements for destruction devices would apply.

    OR

  - If zero-emitting BSER is determined to be unreasonable/not cost effective, and no control device is currently available onsite, intermittent-bleed pneumatic devices required to be managed as part of proposed fugitive emissions requirements in Subpart OOOOb, including leak detection surveys, timely repairs, verifications, etc.
- Pneumatic Pumps:
  - Required to be zero-emitting, consistent with current proposed BSER, if the BSER is determined to be "reasonable" based on a cost-effectiveness analysis performed by the operator of affected facilities. Reasonableness threshold of $1970/ton methane emissions reduced or less.

    OR

  - If zero-emitting BSER is determined to be unreasonable/not cost effective, emissions must be routed to a control device with a destruction efficiency of at least 95%. All existing and proposed requirements for destruction devices would apply.

- Existing sources subject to proposed EG Subpart OOOOc:
  - Continuous-bleed Pneumatic Controllers (low and high bleed):
    - Required to be zero-emitting, consistent with current proposed BSER, if the BSER is determined to be "reasonable" based on a cost-effectiveness analysis performed by the operator of affected facilities. Reasonableness threshold of $1,970/ton methane emissions reduced or less.

      OR

- If zero-emitting BSER is determined to be unreasonable/not cost effective, and a control device with a destruction efficiency of at least 95% is currently available onsite, emissions must be routed to the control device. All existing and proposed requirements for destruction devices would apply.

  OR

- If zero-emitting BSER is determined to be unreasonable/not cost effective, and no control device is currently available onsite, pneumatic devices required to be managed as part of proposed fugitive emissions requirements in EG Subpart OOOOc, including leak detection surveys, timely repairs, verifications, etc.

- Intermittent-bleed Pneumatic Controllers:
  - Required to be managed as part of proposed fugitive emissions requirements in EG Subpart OOOOc, including leak detection surveys, timely repairs, verifications, etc.

    OR

  - Emissions routed to a control device with a destruction efficiency of at least 95%. All existing and proposed requirements for destruction devices would apply.

    OR

  - Zero-emitting, consistent with current proposed BSER
- Pneumatic Pumps:
  - Required to be managed as part of proposed fugitive emissions requirements in EG Subpart OOOOc, including leak detection surveys, timely repairs, verifications, etc.

    OR

  - Emissions routed to a control device with a destruction efficiency of at least 95%. All existing and proposed requirements for destruction devices would apply.

    OR

  - Zero-emitting, consistent with current proposed BSER.

The Producer Associations acknowledge that the proposed alternatives above include options to route emissions from natural gas-drive pneumatic controllers and pumps to existing or new control devices, which EPA specifically indicates that it considers to be a "viable option to achieve emission reductions", but due to the significance of emissions from this source, ultimately concluded this option was inappropriate. See excerpt from the FR below:

> Several commenters requested that the EPA include an option to collect the emissions from natural gas-driven controllers and route them to a flare or combustion device that achieves 95 percent reduction in methane and VOC.

> These comments stated that in many situations, an onsite control device already exists and that using it would be a cost-effective method of achieving significant emission reductions.
>
> The EPA acknowledges that this is a viable option to achieve emission reductions from natural gas-driven pneumatic controllers. However, as discussed above, we have determined that BSER for pneumatic controllers is use of one of the several types of controllers that have zero methane and VOC emissions. Thus, routing to an existing control device (i.e., achieving 95 percent reduction) would result in a less stringent standard than the BSER. In the 2021 Inventory of U.S. Greenhouse Gas Emissions and Sinks (GHGI), the estimated methane emissions for 2019 from pneumatic controllers were 700,000 metric tons of methane for petroleum systems and 1.4 million metric tons for natural gas systems. These levels represent 45 percent of the total methane emissions estimated from all petroleum systems (i.e., exploration through refining) sources and 22 percent of all methane emissions from natural gas systems (i.e., exploration through distribution). While we recognize that these emissions include emissions from existing sources, it is clear that pneumatic controllers represent a significant source of methane and VOC emissions. Allowing an option that results in 5 percent more emissions would be a quite significant increase.

87 FR 74765.

As demonstrated, in detail, by Producer Associations comments above, this stance from the EPA is misleading, mischaracterized, and inaccurate, at best AND willfully exaggerates emissions from pneumatic devices with clear undertones of a political agenda, at worst. As evidenced by the EPA's proposed revisions to its own GHGRP program rules, specifically those related to pneumatic device emission calculation methodologies in Subpart W, EPA acknowledges that historical GHG inventories, including those from the 2021 GHGI for 2019 emissions, are significantly overstated. Overstated by approximately 35% at least and over 90% or more at most for intermittent-bleed pneumatic devices, which represent a majority of the pneumatic devices in operation within the petroleum and natural gas system segments today. As such, a 5% difference in emission reduction by allowing the use of existing or new control devices is hardly a "significant increase" and should absolutely be an acceptable alternative BSER.

D. Producer Associations Responses to Specific Requests to Pneumatic Issues.

- Now that the EPA is proposing in this supplemental proposal to define the affected facility as the collection of natural gas-driven continuous bleed and intermittent vent controllers at a site, the EPA solicits comment on the proposed changed definition. 87 FR 74756.

  - The Producer Associations support this proposal opposed to defining each individual natural gas-driven pneumatic device as an affected facility.

  - **Shared Sites**: Assuming EPA proceeds to describe the collective of all controllers at a site as the "affected facility," it must revise its proposed regulatory text to make clear that regulated entities will not be responsible for equipment that they neither

own nor operate at shared production sites. As proposed, "modification" and "reconstruction" of a pneumatic controller affected facility can be triggered by installation of new pneumatic controllers at a "site."[7] The term "site" is undefined and creates uncertainty where, as is common, multiple companies operate in close proximity. Owners and operators cannot be responsible for equipment over which they have no control. EPA should revise the definition of "pneumatic controller affected facility" to read: "Each pneumatic controller affected facility, which is the collection of natural gas-driven pneumatic controllers *that you own or operate* at a well site, centralized production facility, onshore natural gas processing plant, or a compressor station." EPA should then replace references to "site" in the relevant definitions of modification[8] and reconstruction[9] with "pneumatic controller affected facility." EPA must also revise its proposed regulations for pneumatic pump affected facilities,[10] consistent with the foregoing. A similar clarification should be considered for all sections of the rule, so that it is made completely clear that the owner or operator is responsible only for the collectives of equipment that it owns at a site, even though a "site" might comprise equipment that is under separate ownership and control. This includes but is not limited to (1) the "affected facility" for fugitive emission control purposes, which, like "pneumatic controllers," is defined by refence to the totality of equipment at a site, and (2) the Super emitter response program, which purports to impose obligations on a site, when it need to be clear that the obligations are imposed on the owner or operator of the individual equipment item that is responsible for any alleged super-emitting event.

- **Modification**: Also consistent with the above discussion, EPA should revise its proposed definition of modification for pneumatic controller affected facilities to require an actual increase in emissions.[11] Under the NSPS program, a "modification" that converts an existing facility into a new facility requires not only a physical or operational change, but also a corresponding increase in emissions.[12]

- EPA solicits comment on this proposed two-year rolling aggregation period for all continuous programs of pneumatic controller and pneumatic pump replacement (see Section IV.E.b.i. for a discussion of proposing the same approach for determining reconstruction for pneumatic pumps). EPA is particularly interested in comments regarding whether this approach will make it easier for owners and operators to determine reconstruction at their sites, whether using a set timeframe is reasonable and feasible to put into practice, whether two years is an appropriate timeframe, and whether a rolling basis for the two-year timeframe is a reasonable calculation (for example, see Scenario 5 below). EPA is also interested in understanding how frequently controllers and pumps are typically replaced. 87 FR 74758.

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[7] *See* Proposed § 60.5365b(d).

[8] Proposed § 60.5365b(d)(1).

[9] Proposed § 60.5365b(d)(2).

[10] *See* Proposed § 60.5365b(h).

[11] Proposed § 60.5365b(d)(1).

[12] *See* 40 C.F.R. § 60.14(a).

- The Producer Associations support the concept of a fixed two-year aggregation period, but NOT a rolling two-year period. The administrative burden of keeping-up with a rolling two-year period outweighs the benefits of the approach.

- EPA specifically solicits comments on whether the two-year timeframe should be implemented on a rolling basis or as a discrete time period. 87 FR 74758.

  - See comments above, the Producer Associations support a fixed two-year time period.

- EPA is specifically requesting more detailed information on the use of generators at sites without access to the grid to power pneumatic controllers, primarily to power instrument air systems. EPA is also interested in receiving more information on the costs associated with this equipment. Table 24 provides the updated pneumatic controller systems not driven by natural gas costs. This table also provides the costs from the November 2021 analysis for comparison. 87 FR 74762.

  - Consistent with the Producer Associations' comments above, a "one-size fits all" approach to cost estimates does not accurately represent the costs for any of the methods that could be used to achieve "zero-emitting" pneumatics, including generators at locations without access to grid power. The Producer Associations recommends that the agency allow operators of affected facilities to perform their own cost-effectiveness evaluations specific to their equipment, geographic location, and other unique operational complexities. The problem is acknowledged for Alaska-based sites, but the same issues of remoteness can affect almost every basin in which domestic production occurs. Providing relief only for one state is of questionable legality and fairness.

- We are interested in information to support this understanding that routing emissions from pneumatic controllers to a process achieves a 100 percent reduction in emissions. 87 FR 74763.

  - The Producer Associations agrees that routing emissions from natural gas-driven pneumatic devices back to a process is one method of achieving the zero-emitting BSER proposed. That said, as supported in detail within our comments above, Producer Associations disagrees that this BSER is reasonable, across the board, from a cost-effectiveness perspective.

- EPA is interested in information that may dispute the conclusion that there is a technically feasible option that does not emit methane or VOC available for all sites in all segments. 87 FR 74766.

  - See Producer Associations' comments above, while there may be technically "possible" ways to achieve the zero-emitting BSER for natural gas-driven pneumatic devices at all site and across all segments, there are many instances where it is absolutely NOT feasible…especially when you consider the inflated estimate of emissions from intermittent-bleed pneumatic devices that the agency used in its cost-effectiveness evaluations.

- As a result, EPA is particularly interested in understanding whether there are site characteristics that would make every zero-emitting option (electric controllers powered by the grid or by solar power; instrument air systems powered by the grid, a generator, or by solar power; collecting the emissions and routing them to a process; self-contained controllers, etc.) technically infeasible at the site. 87 FR 74766.

    - There are many characteristics that could cause every zero-emitting option to be infeasible at a site. One example is that the actual emissions from devices at a site are much lower than the overstated emissions EPA used in its cost-effectiveness determinations.

V. SUPER-EMITTER RESPONSE PROGRAM

The Producer Associations support the establishment of a program where owners/operators of well sites and other sources of methane can be made aware of malfunctions or other events that do not represent normal operations where emissions of methane and/or VOCs are occurring at a rate not designed or anticipated – a so-called "super-emitter" event. The Producer Associations understand the benefit of identifying and addressing malfunctioning or broken equipment resulting in emission rates to the atmosphere that do not represent normal operating conditions. Characterizing, perhaps sensationalizing, these events, and by association, the owners/operators, as a "Super Emitter" seems unnecessary. Instead of "super emitter," EPA could consider whether it would be more accurate and less charged to refer to the "event" (as opposed to implying an entity responsible), as an Unexpected Significant Release ("USR").

A. Producer Associations Seek Clarification on Purpose of "SERP".

EPA needs to unequivocally state they are not deputizing third parties to enforce the CAA. EPA needs to unequivocally state that the information/data submitted by third parties will not be the basis for enforcement action by state or federal regulators. Congress has spoken as to when third parties can engage in enforcement of the CAA and the process is set forth in Section 304 of the CAA. Noting in Section 111 of the CAA hints at utilizing third parties to provide regulators data to serve as the basis for enforcement of the CAA. Clarity on this issue from EPA would benefit all stakeholders.

B. EPA Should Hold Third Parties to Same Standards as Owners/Operators.

Without any justification or analysis, EPA deemed three detection methodologies for identification of super-emitter emissions events: remote-sensing aircraft, mobile monitoring platforms, or satellite. "Third-party notifier(s)" would need to apply/demonstrate to EPA that they possess the technical expertise to utilize the detection methodologies and EPA would maintain a list of approved qualified third-party notifiers. EPA solicited comments on approval criteria. Producer Associations recommend that the criteria for third-party notifiers be as stringent and equivalent to the criteria required of owners/operators submitting data to state or federal regulators to demonstrate compliance with applicable standards, e.g., results/data certified by a professional engineer or appropriate in-house professional.[13] Additionally, EPA

[13] The results/data submitted by the third party need to be certified by a professional engineer or another qualified individual with relevant experience. Said individual should be required to provide a certification as to the accuracy

should not simply deem these three detection methodologies sufficient/adequate/warranted without input from the general public and/or stakeholders. EPA should provide their basis and justification for these methodologies for the general public to evaluate, instead of simply picking three methodologies and asking the general public/stakeholders for the criteria – the "burden of proof" should be on EPA to demonstrate these methodologies are appropriate, not the other way around.

C. EPA Must Be the "Gatekeeper" Regarding Submitted Information.

EPA must be the "gatekeeper" and control the process of disseminating information submitted by third-party notifiers. EPA's proposal to almost immediately post "data" associated with alleged super-emitter events on a publicly available website without any validation by EPA is unwarranted and reckless – subjecting owners/operators to conviction by the court of public opinion before any effort is made by regulators to determine the validity of the data submitted. Validating the data and attributing the emissions to a particular source and whether the emissions represent a super-emitter event is not an easy undertaking. Issues not addressed by EPA's proposal include:

- How does the third-party notifier and/or EPA pinpoint the source and to the extent, how do they identify who owns or has responsibility for the source?

- How does the third-party notifier and/or EPA know what regulations, in any, apply to the "source" in question – if the "source" is not an affected facility or designated facility, Section 111 is not violated?

- How does the third-party notifier and/or EPA know the emissions are a function of a leak or malfunction – versus a permitted process which allows emissions to be vented or released for a period of time?

- EPA needs to evaluate the accuracy and sufficiency of the data submitted – validated against the same standards and conditions required by owners/operators when demonstrating compliance with emissions standards/limits.

D. EPA's Definition of |"Super-Emitter" Event is Insufficient.

EPA's definition of a super-emitter event, i.e., 100kg/hour is problematic on a number of fronts. From a basic engineering perspective, the measuring units are not typical/utilized by the industry. Additionally, the basis for this threshold is unclear as EPA has identified significantly different thresholds as super emitting events in other regulatory programs.[14] EPA fails to justify or explain the inconsistencies. Of much greater concern is EPA's lack of discussion associated with duration and frequency or repeatability of emissions emitted at the triggering rate. Will one "fly-by" measurement extrapolated out to an hour be sufficient to trigger EPA's requirements on owners/operators? If EPA is using an hourly based emissions rate, and it would seem unlikely

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of the data that is equivalent to, if not the same as, that required of professional engineers or other qualified individuals are required in other sections of this Supplemental Proposal.

[14] 87 Fed. Reg. 36920, 36982 (June 21, 2022).

that a shorter time would be sensible, then data taken to identify the super-emitter incident is both of that duration and persistence. For example, measurements must be longer than one hour such as either multiple hours over a single day or hourly over more than one day. Past history of data collection using the methods EPA has identified for this program have generated not just hourly emissions but annual emissions based on data taken for ten minutes or less. This type of short duration data collection must not be allowed. The burden of proof that the source is emitting at a rate of 100kg/hour needs to be on the third-party notifier – a snapshot in time is not sufficient. EPA should establish criteria for the third party to demonstrate that there is some reasonable likelihood that there is potential event at the facility such that excessive rates of methane are occurring for an extended period of time. Examples of requirements that EPA could require include, but are not limited to, continuous actual measurement for a period of time or repeated snap-shot measurements, periodically, over a period of period, e.g., three measurements separated by 12-hour intervals.[15]

E. EPA Fails to Reflect the True Cost of the Proposed SERP.

EPA's leniency with regard to third-party notifiers submitting inaccurate information skews EPA's "cost-effectiveness"/BSER analysis. First off, requiring a third party submitting inaccurate information three times at the same source/location before a third-party notifier loses its certification is unacceptable. "Three-strikes and you're out" is not appropriate when you are dealing with existing sources, often operated by small business. Who is going to compensate the owner/operator for the costs associated with conducting a root cause analysis (a concept not defined or described by EPA in its proposal), when it is determined that the third-party notifier made a mistake? EPA fails to account for the costs associated with the SERP when the third party gets the data wrong. To suggest that a third-party notifier can submit an owner/operate to the expenses associated with the SERP three times, with no ramifications to the third-party notifier is simply unfair. The Producer Associations suggest that third-party notifiers post a bond sufficient to cover the cost associated with an owner/operator responding to the SERP. If the third-party's data is inaccurate, the bond is released to the owner/operator and the third-party notifier is required to post twice the bond amount which would be released to the next owner/operator if/when the next time the third-party notifier wrongly accuses an owner operator of a super-emitter event. If EPA is insistent on requiring "three strikes", then the bond should be tripled after the second erroneous submittal. The third-party notifiers need to have skin in the game and owner/operators need to be compensated for erroneous submittals.

Related to EPA's leniency to reporting inaccurate/false information and removing third-party notifier's certification, third-party notifiers that violate federal, state or local ordinances in the attempt to gather information/data on alleged super-emitter events should have their certifications revoked for no less than a year and the particular third-party notifier and any/all affiliates should be prohibited from the ability to allege future super-emitter events at the underlying source/facility.

[15]The cost of multiple flights/verification should not be a consideration as EPA does not consider the costs of flights associated with advanced methane detection technologies.

VI. ADVANCED METHANE DETECTION TECHNOLOGIES

The Producer Associations support EPA's efforts to provide owner/operators additional flexibility by proposing to incorporate advanced technologies as a regulatory option. The Producer Associations support the use of a matrix that takes into consideration inspection frequency and minimum detection sensitivity. The Producer Associations are strongly supportive of EPA's consideration of compliance mechanisms in lieu of required surveys using only OGI, Method 21, and/or AVO. Technologies on the market today such as aerial screening and monitoring technologies are capable of detecting fugitive emissions from affected sources as well as periodic surveys using OGI or Method 21. In certain instances, aerial technologies can detect certain types of emissions that OGI has missed.

The Producer Associations are concerned that, like the four categories for well sites and associated monitoring, EPA's matrix is too restrictive to be of real benefit to the Oil and Gas Industry. The Producer Associations appreciate EPA's willingness to adopt a matrix approach, but as proposed will likely be of limited benefit – the concept is sold, but the implementation falters.

The Producer Associations are not in a position, at this point, to opine on EPA's use of FEAST modeling to demonstrate equivalency with the statutory requirement of BSER. The Producer Associations encourage EPA to continue to consider/accept other models. Consistent with the Oil and Gas Industry's position that EPA should not regulatory lock in a particular technology, like OGI, EPA should retain flexibility to encourage innovation. As part of this update for the Final Rule, we recommend EPA also consider whether additional combinations of detection limits and sample frequency detections can enable a broader range of technologies if they can demonstrate equivalency to EPA's determined BSER. For example, EPA could include additionally frequencies and combinations of technologies to encourage the deployment of technologies that can demonstrate equivalency with BSER.

Three more targeted recommendations relate to common sense revisions to the use of OGI for "follow-up" survey requirements, as recommended by Pioneer Natural Resources:

1. Change the full-site follow-up OGI survey requirement to a follow-up OGI survey only over the spatial extent corresponding to the verified localization performance of the detection technology.

2. Exclude from the follow-up OGI survey requirement those emission sources corresponding to normal permitted (i.e., allowable) operating process emissions or emission events that are otherwise confirmed to no longer exist.

3. If any degree of OGI follow-up remains a requirement, a leak detected with aerial technology must be confirmed by a second fly over pass before it is deemed an actionable event that triggers the follow up.

VII. COMMENTS ON GUIDELINES FOR STATES AND EXISTING SOURCES

As a part of the Subpart OOOOc proposal, EPA includes a framework of the application of Section 111(d) for oil and natural gas production facilities. Separately, after this proposal, EPA

has released a separate proposal revising its Section 111(d) implementing regulations. These two proposals need to be assessed together because EPA has indicated that for those issues not directly addressed in the Subpart OOOOc proposal, the provisions of the general regulations would apply. This creates an immediate problem because they are two different proposals on different completion schedules. Regardless, there are issues that must be addressed.

The intent of Congress in crafting Section 111(d) was to create a program to fill the potential gaps regulating existing sources of emissions when new source regulations were created for pollutants that were neither criteria pollutants nor hazardous air pollutants, both of which have existing source provisions. Because Section 111(d) was written long before EPA decided to regulate GHG, it did not envision a circumstance where there would be a million existing sources to address. This difference is substantial regarding the structure of state programs and the structure of EPA's Section 111(d) requirements. Some of these issues are inherent in the challenges of regulating so many sources; others result from EPA putting its thumb on the balance to limit state options.

There are several elements of the EPA proposal that are designed to maintain control by EPA and limit states. It begins with something as simple as the definition of "satisfactory" in the context of approving state plans that provide for less stringent regulations of sources based on Congress providing that:

> Regulations of the Administrator under this paragraph shall permit the State in applying a standard of performance to any particular source under a plan submitted under this paragraph to take into consideration, among other factors, the remaining useful life of the existing source to which such standard applies.

EPA has characterized the authority to consider RULOF. As EPA notes: CAA Section 111(d)(2)(A) authorizes the EPA to promulgate a Federal plan for any state that "fails to submit a satisfactory plan" establishing standards of performance under CAA Section 111(d)(1). Accordingly, the EPA interprets "satisfactory" as the standard by which the EPA reviews state plan submissions. Consequently, EPA presents this strained assessment of the definition of "satisfactory":

> Additionally, while states have discretion to consider RULOF under CAA section 111(d), it is the EPA's responsibility to determine whether a state plan is "satisfactory," which includes evaluating whether RULOF was appropriately considered. The relevant dictionary meaning of "satisfactory" is "fulfilling all demands or requirements." The American College Dictionary 1078 (C.L. Barnhart, ed. 1970). Thus, the most reasonable interpretation of a "satisfactory plan" is a CAA section 111(d) plan that meets the applicable conditions or requirements, including those under the implementing regulations that the EPA is directed to promulgate pursuant to CAA section 111(d), including the provisions governing the application of RULOF.

Why EPA has chosen this particular 1970 dictionary as the relevant dictionary is mysterious. Other contemporary dictionaries such as the 1975 American Heritage Dictionary define "satisfactory" as "giving satisfaction; sufficient to meet a demand or requirement; adequate".

The contemporary Merriam-Webster Online Dictionary definition is "adequate". The Oxford American English Dictionary Online definition is "good enough for a particular purpose". Given this substantial difference in definitions, one can only assume that EPA wants to establish a different standard to constrain the state flexibility that Congress chose to establish. Similar issues arise elsewhere in the Section 111(d) proposal.

One of the challenges in analyzing the EPA proposal relates to putting it into a realistic framework. EPA presents its discussion at a largely theoretical level but, since it would apply to oil and natural gas production facilities, it needs to be discussed in that context. The RULOF issues that must be addressed will be related to low production oil and natural gas wells, those producing 15 boe/day or less. This has always been the issue with over 700,000 of these in the United States and thousands in each producing state. The effect of regulation on these facilities will be the most compelling.

A. EPA's Proposed Application of RULOF is Impractical.

Here is where the RULOF decision making process needs to be considered. EPA proposes in both this rulemaking and the general rulemaking of Section 111(d) that state plans should include source by source decisions on the application of RULOF. Such an approach would be impractical. First, at the same time these individual decisions would be considered, the state would be developing its overall plan and would not know whether EPA would approve it. This is no small matter. As described previously, EPA's framework for its proposal does not track with state regulatory approaches. For example, no state appears to use EPA's component count approach to define well categories for fugitive emissions programs. Similarly, EPA has divided wells sites into different facilities – e.g., pneumatic controllers, pneumatic pumps, storage vessels, and fugitive well sites. If states use different approaches, there is a built in federal state conflict that must be resolved.

Second, EPA proposes that:

> …the proposed rule would only allow that cost unreasonableness be considered in a state's demonstration that a source's remaining useful life based on its retirement date reasonably warrants a less stringent standard for the following types of designated facilities: oil wells with associated gas, storage vessels, pneumatic controllers, and pneumatic pumps. A cost unreasonableness determination would not be allowed for any other designated facility types.

87 FR 74823. This is an arbitrary position that reflects EPA's efforts to limit state flexibility. Increasing operating costs for small wells can have a significant impact on their economic viability. Consequently, fugitive emissions requirements or liquids unloading requirements can produce comparable cost unreasonableness, too. This raises a more fundamental question. EPA's approach to assessing RULOF appears driven by the assumption that it applies to facilities that have a predetermined end of life less than the cost recovery period associated with the application of the Subpart OOOOc regulations. If so, states can consider less stringent requirements for the facility until it shuts down – but it must shut down in a finite and prescribed period. This framework, however, ignores the more realistic situation facing low production wells; it is the new Subpart OOOOc requirements that make the facility uneconomic and drives it

to shut down. Many low production wells can continue to operate for decades at production rates that may be in the less than 2 boe/day range. They pose minimal methane emissions threats. Federal regulation should not be the cause of their demise and states should have the authority to provide for a regulatory framework that allows their continued operation until their normal end of life. This situation is ignored by the proposed interpretation of RULOF.

Third, if states must make source by source RULOF interpretations, the 18-month schedule to develop state plans will be inadequate. States will need far longer and the more low production wells in a state, the longer it will need to be. EPA needs to create a clear process that would allow states to present a process by which it would assess RULOF for oil and natural gas production facilities in its state and for approval of those processes. States could then get approval for a state plan in a timely manner while making its source by source determinations thereafter.

Fourth, EPA raises then dismisses the possibility of states getting plan approval for a mix of regulations that embrace parts of the Subpart OOOOc proposal and supplementing those elements with other regulations that produce a comparable overall methane management program. However, in its proposed general revisions to Section 111(d), EPA supports programs for compliance flexibility including trading and other mechanisms that provide for state flexibility. EPA should not preclude such options under Subpart OOOOc plan development.

Fifth, EPA seems inordinately concerned that different states could create different RULOF approaches for similar facilities. However, the nature of oil and natural gas production results in different production challenges that do not appear evident from casual comparisons. EPA has observed these differences in its programs and should recognize that they can result in consequences to emissions management and economic implications. As a part of the federal state partnership, EPA must not try to impose uniform regulatory requirements on state plans after the state has addressed the different operations under its jurisdiction.

Sixth, EPA should make the compliance date with these new state regulations based on the approval of the state plans rather than their submission. In its general revisions to the Section 111(d) program, EPA gives itself 12 months to approve state plans. Since states and the regulated community will not know if the state regulations will be approved or whether EPA will be proposing a federal plan until EPA acts, compliance should be based on final EPA action.

In another instance of EPA trying to limit state ability to develop regulatory approaches – including RULOF decisions – EPA proposes that states must use EPA's BSER development approach. However, there is no absolute guarantee that EPA's analytical approach is sound or accurate for every state. Moreover, as shown previously with regard to the fugitive emissions analysis, EPA is so wedded to its component count approach that it distorts results. States may choose to assess issues differently and thereby produce different approaches based on their experience – which in the context of regulating existing sources is far more comprehensive than EPA's experience since its authority is primarily directed at new sources. Perhaps more significantly, EPA has effectively applied its NSPS BSER analysis to its Section 111(d) assessment where existing sources are affected. This transposition of a new source analysis to existing sources fails to follow the Congressional intent evident throughout the CAA that existing sources need to be treated differently than new ones. EPA rather cavalierly concludes

that its new source BSER applies to existing sources without ever making a full analysis. In these regulations applying to oil and natural gas production operations, the Producer Associations has consistently presented information to EPA that the declining nature of oil and natural gas production requires EPA to assess low production wells differently because – at a minimum – the ability of these sources to absorb additional costs differs significantly from new sources. Congress went further than just distinguishing between new and existing sources by adding the RULOF process to address even more unique problems. EPA fails to meet the task demanded of it in addressing existing source BSER and needs to revise its assessments.

VIII. EPA COMPLIANCE WITH THE ADMINISTRATIVE PROCEDURES ACT ("APA") AND RELATED CAA PROVISIONS IS DUBIOUS

A. EPA is Forcing an Arbitrary and Unwarranted Rulemaking Timeline.

Many trade associations, including the Producer Associations, individual companies and states requested an extension of the comment period on the Supplemental Proposal. On January 31, 2023, EPA provided a one page letter response that indicated EPA is "not planning to extend the comment period." No justification for the decision was provided. If anything, EPA's letter only provided additional justification for the extension citing "more than 470,000 written comments" and 300 speakers providing testimony during public hearings. As the Producer Associations and others pointed out, there was no statutory deadline or court ordered deadline to finalize rules. Additionally, what was published in the November 15, 2021, Federal Register was not a "proposed rule." At best it was an "advanced notice of proposed rulemaking" characterized as a "proposed rule" to meet a political agenda associated with the 2021 Conference of the Parties to the UNFCC in Glasgow, Scotland. While the Producers Associations are not currently in a position to prove this, they believe it is accurate to state that few if any rule package proposed by EPA has the potential to regulate as many actual/existing sources as EPA's Supplemental Proposal. It is not disputed that the Supplemental Proposal, when finalized, will set in motion the process of controlling approximately one million sources – a large majority of which have not been previous controls. EPA's Supplemental Proposal also will impose a Herculean task on state regulator agencies utilizing antiquated provisions pursuant to Section 111(d). Granted, EPA is proposing to change those regulations as they pertain to the Oil and Gas Industry specifically while simultaneously proposing to make changes more generically for CAA section 111(d) at 40 CFR, Part 60, Subpart Ba.[16] The comment period for that rulemaking closes February 27, 2022. While closing two weeks after the comment period on the Supplemental Proposal "EPA intends to finalize that rulemaking before finalizing this oil and gas rulemaking."[17] While the potential for "moving the goal posts" for states is great, EPA was unwilling to grant states and stakeholders even an additional two weeks to comment and coordinate the close of the comment period on two rulemakings that are clearly related and intertwined. EPA's response to stakeholder's request for additional time was very much akin to a parent's response to a child questioning the parent's directive: "because I said so!" While that

[16] 87 FR 79176 (Dec. 23, 2022).

[17] 87 FR 74813 (Dec. 6, 2022).

may be an acceptable response from parent to child, the Producer Associations question whether such a decision, in and of itself, is not arbitrary and capricious.

B. EPA Cannot Pick and Choose What Issues are "Open" for Comment in This Unorthodox "Rulemaking" Process.

Another aspect of that Supplemental Proposal that seems peculiar if not contrary to the Administrative Procedure Act is that "EPA is not reopening for comment any aspect described in the November 2021 proposal that the EPA is not proposing to substantively address or update in this supplemental proposal."[18] No legal basis or justification for taking such a position is provided. The Producer Associations question whether EPA can pick and choose what aspects of the November 15, 2021, publication to "reopen" for comment. Such a position would be dubious with a "supplemental proposal" when the original "proposal" actually provided proposed regulatory language. The appropriateness/legality of such position is even more in question when no regulatory language was provided in the original "proposal." How is it not arbitrary and capricious for EPA to tell stakeholders what portions of a "proposal" is or is not open for comment?

C. EPA Cannot Have it Both Ways.

If EPA persists with its position that it has the authority/ability to choose what portions of a "proposal" are reopened for comment, then EPA should be precluded from responding to comments provided on the original "proposal" that were not addressed in a response to comment document placed in the docket prior to or concurrent with the supplemental proposal or addressed in the supplemental proposal preamble. Various legal and technical arguments were raised by the Producer Associations, other trade associations, and certain states. In the supplemental proposal, EPA has elected to address some of the comments and has failed to address others while also indicating only certain issues would be open for additional comment during the limited 60-day comment period on the Supplemental Proposal. If one were cynical, one could argue that EPA's selective response to comments on the original "proposal" is an effort keep "its power dry" on certain issues and have industry further reveal its positions/arguments via a supplemental proposal to a "proposal" that had no regulatory language in the first place.

IX. EPA CONTINUES TO NOT UNDERSTAND LIQUIDS UNLOADING

A. EPA's "Proposal" is an Information Collection Request.

EPA is attempting to use the proposed regulation to significantly increase their understanding of the gas well liquid unloading by including an overly broad and poorly defined affected facility definition and by including wells that do not vent during liquid unloading. EPA defines liquid unloading as: "[l]iquids unloading means the unloading of liquids that have accumulated over time in gas wells which are impeding or halting production."[19] This broad definition will lead to a variety of interpretations concerning which production techniques, among the dozen or so

[18] 87 FR 74810 (Dec. 6, 2022).

[19] https://www.epa.gov/system/files/documents/2022-11/8510_OilandGasClimate_OOOObRegText_Supplemental_20221005.pdf, page 303.

employed in industry, this should apply to. This will lead to poor consistency in the interpretation of what type of production techniques constitute liquid unloading which will create regulatory compliance uncertainty among reporters. EPA acknowledges this by specifically asking the following "EPA has yet to reach a conclusion on whether certain types of liquids unloading events could be an operational change to a well. The EPA is therefore requesting comment on operational scenarios where a well liquids unloading event could constitute a modification." 87 FE 74782.

Furthermore, as previously commented liquid unloading techniques will change over the potential 30 or more years producing life of wells. If venting is required at a particular time in a well's life subsequent techniques may not vent. Put another way, just because a well vents through the application of a certain liquid unloading technique now, future techniques may not vent. For example, the installation of a field wide gas lift system, or the addition of wellhead compression, or the reduction in gathering line pressures may occur in the later phases of well life that may not vent during liquid unloading.

EPA's attempt to use their current definition of liquids unloading for source applicability is ambiguous. Each type of liquid unloading activity may require a unique and thorough assessment to formulate appropriate regulations as potential emission sources. EPA should understand these differences and develop regulations with enough specificity to avoid such ambiguity.

The proposed regulation, as it pertains to wells that do not vent while liquid unloading, seems more like an Information Collection Request than a regulation to control emissions. EPA needs to develop regulations specific to each type of liquid unloading technique and needs to ensure it is consistent with the other forms of regulations associated with the equipment and techniques that could be part of these unloading activities. If EPA requires further understanding of these techniques, they should not use this regulation to acquire such information by requiring significant reporting burdens for activities with no emissions.

EPA states

> [f]urther, since each well liquids unloading operation is conducted based on the site-specific circumstances at the time the operation is planned, the EPA is concerned that a well might fluctuate between falling within and out of the scope of the standards if the standards only applied to well liquids unloading operations that result in vented emissions. Therefore, for ease of implementation to the owner or operator, the EPA is proposing to apply the proposed standards to all well liquids unloading operations regardless of if the operation results in vented emissions.

87 FR 74782. Ease of implementation from a reporter's perspective is certainly questionable. It would be much easier, and more emission focused for the standards to only apply to wells that vent. EPA should develop emission regulations for facilities that vent emissions, not for facilities that would only vent emissions if something goes wrong

or not as planned. In these situations, EPA should develop regulations that would apply then.

EPA should not be attempting to regulate Liquid Unloading Events that do not vent any emissions. Previous comments from the Producer Associations and other trade associations were clear in this regard. "The EPA is, however, specifically requesting further comment and any additional information regarding co-proposed option 2, where standards only apply to wells with well liquids unloading operations that result in vented emissions." 87 FE 74782. This is an overreach as proposed and would be an extreme reporting burden. As detailed in the EPA cited study by Dr. Allen, University of Texas, Environmental Science & Technology, December 9, 2014, *Methane Emissions from Process Equipment at Natural Gas Production Sites in the United States: Liquids Unloadings*, "[s]ome wells with plunger lifts are automatically triggered and unload thousands of times per year." Just a single well with thousands of unloading events per year, this creates a significant reporting burden, and when wells do not vent this reporting should not be required.

B. Economic Considerations are Not Reflected in the Proposed Regulatory Language.

The Supplemental Proposal acknowledges that economic feasibility can be factored in to determining when is appropriate to utilizing an unloading method that vents to the atmosphere: "[a]dditionally, for wells that utilize methods that vent to the atmosphere, the proposed rule would require: (1) Documentation explaining why it is infeasible to utilize a non-venting method due to technical, safety, or economic reasons."[20] However the proposed regulatory language in the context of record keeping and certification makes no mention of economic feasibility:

> I certify that the technical and safety infeasibility justification of needing to use a non-zero emitting liquids unloading method for all liquids unloading events at the well affected facility was prepared under my direction or supervision. Based on my professional knowledge and experience, and inquiry of personnel involved in the infeasibility justification, the certification submitted herein is true, accurate, and complete.[21]

There are limited instances where an engineer or qualified professional would certify "infeasibility" – pour enough money at a particular issues, most technical and/or safety issues can be resolved or are "feasible." The "economic" considerations allowed for the Supplemental Proposal must be included in the rule language for the certification.

Regarding Certification: EPA is proposing the following requirements: (1) Written justification needs to include supporting information justifying why it is infeasible to utilize a non-zero emitting liquids unloading method at the well affected facility due to technical or safety reasons

[20] 87 FR 74782.

[21] Page 250 of the Proposed Regulatory Text at https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry/epa-issues-supplemental-proposal-reduce.

(e.g., related to a well's operating conditions and reservoir energy with respect to well-bore liquid management) and (2) Technical and safety reasons provided as support need to be certified by a professional engineer or another qualified individual with expertise in liquids unloading operations.

EPA should provide additional supporting documentation about what would be considered acceptable "Written Justification". EPA does not provide a single example of what level of detail a certifier should use, provides no minimum set of requirements, no specific economic input criteria, and has created a level of ambiguity regarding this very exacting statement. Professional Engineers or another qualified individual with expertise in liquids unloading operations will be reluctant to provide such a statement without more specificity about the criteria for such a statement. If EPA cannot provide such detail, there will be considerable challenges within the industry for qualified certifiers and this requirement should therefore be withdrawn.

EPA needs to define more clearly what would be considered "zero emitting". The routing of vented emissions to flare or a control device should be considered zero emitting in this context as it is often the best solution for emission reduction.

X. PRODUCER ASSOCIATIONS STILL CONCERNED WITH APPENDIX K

The Producer Associations generally support the proposed changes to Appendix K, particularly with the narrowed applicability. That said, the Producer Associations still has various concerns with Appendix K that EPA should address in the final rule and more specifically recommend the following changes to the proposed version of Appendix K:

- Section 3.0 Definitions:
    - For clarity, consider adding a definition for "OGI camera operator/camera operator/trained OGI camera operator". An "*OGI Camera Operator/Camera Operator/Trained OGI Camera Operator"* is a camera operator that does not yet meet the definition of a "Senior OGI camera operator" but has completed the training specified in Section 10.0.
- Section 9.7:
    - Section 9.7.1 and 9.7.2 seem to contradict each other as written. For clarity, consider revising Section 9.7 as follows:

"The site must have a procedure for documenting fugitive emissions or leaks found during the monitoring survey according to 9.7.1 or 9.7.2 one of the following approaches. If no emissions are found, no recorded footage is required to demonstrate that the component was not leaking."

- Section 8.0 Camera Specification Confirmation and Development of the Operating Envelope:

- In Section 8.5.3, please clarify the training requirements for the "observers" discussed in the section 8.5.3. This is of interest as having four (4) trained OGI camera operators in the same location may be difficult for most, if not all, operators.

These are not monumental changes/clarifications but for those still subject to Appendix K, these revisions would be beneficial with no reduction in environmental protection.

If there are questions regarding these Comments, please contact me, counsel for the Producer Associations.

Respectfully submitted,

/s/ James D. Elliott

James D. Elliott

Counsel for Producer Associations

cc: Joe Goffman, EPA
Peter Tsirigotis, EPA
David Cozzie, EPA
Karen Marsh, EPA
Amy Hambrick, EPA

Exhibit D

Request for Stay of EPA's Final Rule for Methane,

May 1, 2024

Clark Hill

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May 1, 2024

Hon. Michael S. Regan
Administrator
United States Environmental Protection Agency
Office of the Administrator (1101A)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

Re: Request for Stay of EPA's Final Rule for Methane

Dear Administrator Regan:

On April 29, 2024, the Michigan Oil and Gas Association ("MOGA") and Miller Energy Company II, LLC ("MEC") (collectively the "Petitioners") petitioned the United States Court of Appeals for the District of Columbia Circuit for review of the Environmental Protection Agency's ("EPA'") final rule entitled, "Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review," 89 Fed. Reg. 16,820 (Mar. 8, 2024) (the "Final Rule"). *See* Case No. 24-1101. In so doing, Petitioners joined a list of other entities with Final Rule challenges now pending before the D.C. Circuit. *See* Case Nos. 24-105 & 24-1059.

Petitioners hereby request that EPA immediately stay the effect of the Final Rule pending the outcome of the legal challenges to the Final Rule, including both the current cases before the D.C. Circuit and any subsequent appeal(s) to the U.S. Supreme Court. In the alternative, Petitioners ask that EPA stay the Final Rule specifically as it pertains to owners and operators of smaller producing "marginal" wells (*i.e.*, wells that produce less than 15 barrels of oil per day and less than 90 Mcf of gas per day).

As you know, when promulgating standards of performance under Section 111 of the Clean Air Act, EPA must "tak[e] into account the cost of achieving [any] such [emission] reduction and any nonair quality health and environmental impact and energy requirements" and must also determine that such standards have "been adequately demonstrated." 42 U.S.C. § 7411(a)(1). *See also* 89 Fed. Reg. at 16866 (noting the same). And EPA cannot enact standards that impose "exorbitant," "unreasonable," or "excessive" costs, *Lignite Energy Council v. EPA*, 198 F.3d 930, 933 (D.C. Cir. 1999); *Sierra Club v. Costle*, 657 F.2d 298, 383 (D.C. Cir. 1981), or costs that are "greater than the [regulated] industry could bear and survive." *Portland Cement Ass'n v. Train*, 513 F.2d 506, 508 (D.C. Cir. 1975). In promulgating the Final Rule, however, EPA has ignored its statutory obligation to adequately consider the costs imposed on marginal well owners and operators. Indeed, EPA's Regulatory Impact Analysis ("RIA") even admits that it "cannot estimate the impacts of the final regulation on the owners or operators of marginal wells." U.S. EPA, *Regulatory Impact*

Analysis of the Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review (Dec. 2023), EPA-452/R-23-013, at pp. 4–10. By failing to adequately consider these impacts, EPA failed its statutory duties under the Clean Air Act and the Final Rule is arbitrary and capricious. *See Motor Vehicle Mfrs. Assn. of United States, Inc. v State Farm Mut. Council, Inc.*, 463 U.S. 29, 43 (1983). Thus, for those and other reasons, the agency should stay the Final Rule in order to allow EPA time to correct its error.

As explained in comments submitted by MOGA and numerous others, the Final Rule's impacts on the oil and gas industry will be significant. That is particularly true with respect to owners and operators of marginal wells—hundreds of thousands of which will likely be closed as a result of the Final Rule. Specifically, the Final Rule's requirements pertaining to the flaring or rerouting of associated gas will prove extremely cost prohibitive to these smaller, marginal wells, especially in Michigan where these wells are often located at geographically remote locations where saleable lines are nowhere to be found. The Final Rule's impacts would also have a major chilling effect on the development of new wells in Michigan and other states, where the exorbitant costs of addressing associated gas under the Final Rule make it economically infeasible to develop new wells. The collective impacts will not only cause major economic harm to marginal well owners but also will cost numerous employees their jobs and livelihood, deprive landowners of property rights and revenue, and jeopardize the stability of the public's energy supply.

EPA has statutory authority to stay the Final Rule pursuant to 5 U.S.C. § 705 (authorizing EPA to postpone effective dates of agency actions when "justice so requires"), and Petitioners ask that EPA exercise that authority here. Petitioners are aware that a coalition of states challenging the Final Rule also submitted a similar request to EPA and received no response. Accordingly, in light of the existing deadlines on the States' request for a stay in the now-consolidated matter, if Petitioners do not receive a favorable response to this request from EPA within the next several days, we will be seeking a stay of the Final Rule pending judicial review from the D.C. Circuit.

Sincerely,

CLARK HILL

Anthony P. Campau

Anthony P. Campau

APC

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Exhibit E

Comment of Pennsylvania Independent Oil & Gas Association,

February 13, 2023

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February 13, 2023

Via Federal eRulemaking Portal: https://www.regulations.gov
and
Email: a-and-r-docket@epa.gov
The Honorable Michael S. Regan
Administrator
US Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460

Re: Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review

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

Dear Administrator Regan:

The Pennsylvania Independent Oil & Gas Association (PIOGA) submits the following Comments on the above-referenced proposed rulemaking (Supplemental Proposal) published in the Federal Register on December 6, 2022. PIOGA is also a part of a coalition of twenty-one associations that represent primarily independent oil and natural gas producers situated across the country – from Pennsylvania to Wyoming. This coalition has identified themselves as the "Producer Associations" and PIOGA hereby incorporates by reference their comments. PIOGA has been actively involved in all aspects of the New Source Performance Standards (NSPS) rulemaking activities since the Environmental Protection Agency (EPA) proposed Subpart OOOO regulations in 2011.

PIOGA is a Pennsylvania nonprofit trade association that, through its predecessor organizations, has been representing Pennsylvania's independent oil and natural gas producers since 1918. The EPA was created in 1970. Respectfully, PIOGA has over 100 years of experience on EPA when it comes to understanding how the oil and natural gas industry operates.[1] PIOGA appreciates the opportunity to comment on the Supplemental

[1] Point in fact, certain wells in Pennsylvania that are still producing gas – "conventional" wells as defined under Pennsylvania law – were drilled decades before EPA existed and lack cemented casings because that was not required at the time. Some of these older wells, also known as

Proposal. PIOGA, perhaps more so than any other state or state association, has a broader perspective on the oil and natural gas industry. The Drake oil well – the first commercial oil well in the United States – was drilled in Pennsylvania, and the "shale boom" started with the successful use of directional, horizontal drilling and high volume/high pressure hydraulic fracturing ("fracing") in the Marcellus organic shale formation in Pennsylvania. PIOGA represents owners/operators of both conventional wells that have been in operation for decades and owners/operators of unconventional wells that started the shale boom. The relevance to the current Supplemental Proposal and our Comments is that PIOGA members have perspective and experience that many other associations may not have. PIOGA encourages EPA to consider the following Comments that, if adopted, would considerably reduce the unreasonable economic burden the Supplemental Proposal would impose on conventional sources in Pennsylvania and across the country, while not reducing the environmental benefits associated with the Supplemental Proposal.

PIOGA's mission includes participation in rulemaking processes and otherwise protecting the rights of natural gas and crude oil producers to develop and produce natural gas and crude oil in the Commonwealth of Pennsylvania by supporting members confronted with unjustified legal or regulatory actions concerning natural gas or crude oil operations. Most of PIOGA's conventional producer members are small businesses. PIOGA producer members' operations at conventional and unconventional oil and gas wells and well sites result in emissions of volatile organic compounds (VOCs), including methane, that differ significantly in scope, scale and magnitude.

I. EPA's Reliance On "Component" Counts Fails to Appreciate the Reality of Low Production/Marginal Wells.

As discussed in the comments submitted by the Producer Associations, EPA needs to create an "Intermediate Well Site" category based on a combination of throughput and component count, and the associated monitoring should be more heavily based on Audio, Visual, Olfactory (AVO) surveys, with perhaps an initial optical gas imagery (OGI) survey, which is phased out or not at all necessary if no leaks are detected. The reality is that EPA's proposed definition of a small well site fails to understand typical conventional/vertical wells sites in Pennsylvania and much of Appalachia. Most conventional wells in this region involve one well (occasionally two), one or two brine tanks, a separator, and/or possibly one controller. Nonetheless, these sites typically will have two pieces of equipment that EPA has deemed "major production and processing equipment." Most of these single well, or even two well, sites provide 1-3 barrel of oil equivalent (BOE) per day – if that. Sites producing more than 8 BOE a day are the exception. For example, one

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"vertical" wells, may emit trace emissions of methane at the surface. Nothing has changed in terms of the operations of these wells. Despite previous PIOGA comments explaining the difference between conventional and "unconventional" wells on other EPA proposals, EPA again makes no effort in this rulemaking to understand the evolution of our industry and these operational differences.

family run company with approximately 50 employees owns/operates approximately 1,900 low (very low) production wells. Approximately 90% of their wells would fall into the "large category" because they have more than one piece of "major production and processing equipment."[2] This is also a problem for conventional "centralized production facilities" as well. One PIOGA member reported they operated approximately 21 "centralized productions facilities" that typically have 20 or more wells "feeding" the production facility, and yet *all* of them are under EPA's previous exemption threshold of 15 BOE a day. The previous low production well exemption was a reasonable compromise and would have allowed most low production wells to operate – but perhaps that was why EPA shifted away from the production-based exemption. As the comments from the Producer Associations discuss, the Department of Energy study on emissions from low production/marginal wells demonstrated that lowering the throughput from 15 BOE to 8 or perhaps even slightly lower would have had minimal adverse impact on emission reductions but would have allowed hundreds of thousands of existing low production/marginal wells to continue to operate. Again – perhaps that is why EPA shifted away from basing requirements on throughput. Regardless, the Producer Associations have proposed yet another compromise that is more realistic utilizing both "component count" and throughput.

EPA's definition of "major production and processing equipment" begs the question if certain policy decisionmakers have ventured outside the DC Beltway. Folks from the "city" driving through Clarion County or Indiana County in Pennsylvania might not even notice the periodic "major production" well site tucked into the hillside. The "well site" consists of a well head, tank, meter, and perhaps a separator, all confined within perhaps a 25 foot diameter. EPA's characterization of this as "major production and processing equipment" is just nonsensical. It would almost be laughable, except that the adverse economic consequences to the family-run, "small business" as defined by the Regulatory Flexibility Act is anything but funny. These businesses are their livelihoods. EPA has abandoned terminology accepted by the industry – and regulators – that often characterized these truly small well sites as "marginal wells." That terminology aptly describes the economic reality of these wells - their existence is marginal. Unnecessary costly quarterly OGI requirements will make many of these wells uneconomical to operate. As the Producer Associations point out in their comments, there is a middle ground that can be reached that strikes a better, more equitable, balance between environmental protection and economic existence. The members of PIOGA and the families and local economies that

[2] This is not an isolated example. An operator with a similar number of wells reported over 80% of their wells would trigger the quarterly OGI requirements despite an average gas production of 5 mcf/d and oil production of 0.6 BOE/d. Another family owned business reported that, of their approximate 550 wells, approximately 98% are low production wells with an average production of 4 mcf/d – anything less than 90 mcf/d or 15 BOE/d is considered a low production or marginal or stripper well.

depend on the continued operation and existence of these low production wells ask that EPA sharpen its pencil and find a more fair and workable solution.

EPA's Supplemental Proposal also creates another disincentive to operators of low production wells. EPA has abandoned the traditional definition of "modification" that typically requires an increase in emissions associated with a "modification" to trigger new source performance standards. A not-so-hypothetical hypothetical for owners/operators of low production wells/facilities is where there may be a few small oil wells that periodically vent as part of the normal production process. Those emissions could be controlled by tying the venting of those wells into a central production facility and ultimately reducing emissions, but EPA's Supplemental Proposal would deem such changes a "modification" even though that control method results in emission reductions. EPA's proposed definition of "modification", without linking it to an increase in emissions, creates a huge disincentive for operators of low production wells to make changes that benefit the environment and their small business's bottom lines. For example, older conventional, or "legacy", oil and gas wells often produce far less gas than the capacity of the smallest available reciprocating compressor, which is about 3 horsepower (hp). Having one small compressor to draw from multiple wells is more practical, produces lower emissions, uses less energy, and is easier to maintain and more economical, but EPA's Supplemental Proposal would discourage/punish such changes. A very small centralized compressor should be treated the same as a single well wellhead compressor because it has far less emissions, uses much less energy, and reduces pressure over the whole system, lowering the chance of leaks. A centralized compressor of 20hp or less, or handling 100,000 cubic feet per day (or 100 mcf/d) should be treated as a single well compressor.

II. PIOGA Members are Responsible Stewards of the Environment & Have a Pure Economic Motivation to Be So.

EPA's pollution is PIOGA members' product – there can be no more pure economic incentive to capture and not waste every molecule of methane. EPA paints a picture with its discussion of "super-emitters" as if the owner/operators of low production wells are scofflaws that do not care if something breaks and there are uncontrolled emissions to the environment. Nothing could be further from the truth. The owners/operators of wells visit well sites frequently – and the more productive the well, the more frequently they visit. One small business in Pennsylvania reported over 70% of their wells are visited weekly, if not daily. Again, all of these wells are still below the low production/marginal/stripper well exemption threshold, but the more productive wells are visited multiple times a week. Even the least productive wells are typically visited at least monthly. Owners/operators are looking for signs of leaks – whether smelling gas, hearing gas or seeing signs that a connection is leaking (discolored vegetation), and to the greatest extent possible, they fix leaks on-site and confirm they are fixed – often with simple soap and bubbles – an OGI camera is not needed. To the extent the issues cannot be addressed onsite when leaks or malfunctions are identified, owners/operators will normally close-in or make process

changes to minimize or eliminate the leaks – they are protecting the environment and their product.

Environmental groups have made much of the fact that existing sources have not been subject to regulation under Section 111(d) and they often engage in rhetoric that existing sources are not regulated. At least in Pennsylvania, that is inaccurate. All wells are subject to annual mechanical integrity inspections and reports that are filed with the Pennsylvania Department of Environmental Protection (PADEP). A key aspect of these inspections and reporting focuses on pressure that, despite EPA's unwillingness to acknowledge the relationship between pressure/flow rate and emissions, correlates directly to leaks – or the lack thereof. Additionally, vertical unconventional wells are also subject to quarterly emission surveying, while horizontal unconventional wells are subject to even more monitoring for emissions and/or permitting. To say that conventional wells are unregulated is ridiculous, and contrary to reality.

III. EPA's Mission-Creep with Regard to Well Plugging is Unnecessary.

Simply stated, owners/operators in Pennsylvania are already regulated in terms of demonstrating financial assurances and responsibly plugging wells. EPA's proposed foray into this arena is unnecessary and is likely only to create inconsistent and/or duplicate requirements. Pennsylvania requires well owners to post a bond or bonds for their wells. PADEP requires plugging with Class A Cement Column. PADEP also has detailed reporting requirements associated with plugging wells, including having PADEP personnel onsite during the plugging operation and requiring the equivalent of a closure report. The reality is each plugging operation is different because the well bore conditions are different, and unknown with certainty. PIOGA members work with PADEP personnel onsite to determine the best way to plug the wells. Respectfully, EPA dictating additional requirements and paperwork provides no additional environmental benefit and creates inefficiencies for owners/operators. The Supplemental Proposal's requirement of an OGI survey for every closed well is excessive and not cost-justified. In addition to lacking technical/environmental justification for its proposed requirements, EPA has not provided any legal justification for proposing its plugging requirements. EPA should entirely withdraw its proposal with regard to well plugging – it is unnecessary and unjustified.

IV. Conventional Operators and PADEP are Ill-equipped to Comply with the Emission Guidelines Proposed in Subpart OOOOc.

While PIOGA understands that the compliance deadline for existing sources subject to Subpart OOOOc is years away, PIOGA is not confident that the industry and the regulatory structure will be prepared to comply. Without any apparent concern for state regulators, EPA is proposing in the Supplemental Proposal a regulatory program dependent on essentially component counts, which is not something either PADEP or existing sources have tracked or the basis for a regulatory framework. The industry already experiences difficulties with getting permits from PADEP in a timely manner. The Supplemental

Proposal will bring thousands, if not tens of thousands, of sources under PADEP's regulatory authority. PADEP does not have the work force to address that additional responsibility. PADEP's typical response to a shortage of people to do the work is to increase permitting fees – placing additional financial burdens on the sources least capable of absorbing the additional costs. These additional costs on owners/operators of conventional wells is not at all accounted for in EPA's Best System of Emissions Reduction (BSER) analysis.

V. It Appears EPA has Failed to Consider or Evaluate the Impact of the Supplemental Proposal on Communities that Rely On the Conventional Oil and Natural Gas Industry.

EPA's Supplemental Proposal would require states to engage in enhanced community engagement with the laudable intent of engaging communities that have historically been disenfranchised and perhaps disproportionally impacted negatively by "industry." Any requirements placed on the states related to enhanced community engagement need to understand and account for the positive impacts of the oil and natural gas industry in rural communities. Often, the oil and natural gas industry, particularly the conventional, or low production, well portion of the industry, is the primary, if not only economic driver for the region. In most situations, the landowner where the well is drilled is provided "free gas" or "house gas". Often the landowner is provided a certain royalty associated with the gas that is removed from the property. In the case of low production wells, the economic benefit to the land owner may not appear to be much, but in the end, it could be the difference between "selling the farm" and not. Additionally, certain rural communities are not served by "big oil" or unconventional natural gas wells and interstate pipelines. Without the conventional low production wells, families would lose the ability to utilize natural gas to heat their homes and/or run their business, and would have to rely upon energy sources with greater emissions than natural gas. PIOGA is unaware of any effort by EPA to capture or quantify the impact of the Supplemental Proposal on rural communities where these wells are located. Any requirements associated with enhanced community involvement must be balanced, *i.e.*, EPA and the states should be just as focused on the benefits the industry brings to the community as they are on potential negative ramifications.

PIOGA appreciates EPA's consideration of our Comments and is happy to discuss any and all issues addressed above as well as any other issues and concerns EPA has that we may have overlooked.

Respectfully submitted,

Kevin J. Moody, General Counsel
PIOGA

Exhibit F

Comment of Ohio Independent Oil & Gas Association,

February 13, 2023

February 13, 2023

VIA E-FILING

Michael S. Regan, Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
EPA Docket Center, Docket ID No. EPA-HQ-OAR-2022-0875

Re: Comments of the Ohio Oil and Gas Association on U.S EPA's 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

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

Dear Administrator Regan:

On December 6, 2022, U.S. EPA published a supplement to its November 2021 Proposed Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources from the Crude Oil and Natural Gas source category (the "Supplemental Proposal"). 87 FR 74702. The Ohio Oil & Gas Association ("Association" or "OOGA") submitted comments on U.S. EPA's November 2021 Proposed Rule[1], and the Association appreciates the opportunity to submit the following comments on the Supplemental Proposal.

INTRODUCTION

The Ohio Oil & Gas Association (OOGA) is one of the largest and most active state-based oil and natural gas associations in the United States and has been the representative of Ohio's oil and gas producing industry since 1947. OOGA's members are involved in all aspects of the exploration, development, production and marketing of crude oil and natural gas resources in Ohio. The Association's members often rely on OOGA as their primary source of information on industry trends, activities, tax changes, legislation and regulatory issues. OOGA frequently participates in federal and state regulatory actions affecting the oil and gas industry.

U.S. EPA's intended purpose of the Supplemental Proposal is made clear in the very first sentence of the rule summary: "to update, strengthen, and expand the standards . . . to significantly reduce emissions of greenhouse gases and other harmful air pollutants from the Crude Oil and Natural

[1] See Comment ID # EPA-HQ-OAR-2021-0317-0803.

Gas source category." 87 FR 74702. The Agency's intent is carried out through several key components of the Supplemental Proposal including, but not limited to, mandating a compliance timeline back to November 2021; expanding the scope of sources subject to leak detection monitoring for fugitive emissions; establishing a "super-emitter" response program that effectively "deputizes" third-parties to monitor compliance with emissions standards; setting standards for pneumatic pumps at existing sources equivalent to the standards applicable to new and modified sources, and prohibiting flaring of associated gas; proposing a presumptive zero methane emissions standard for liquids unloading operations at existing wells; imposing well closure requirements for certain wells; and prescribing Emissions Guidelines governing existing sources (Subpart OOOOc) for States to implement.

The Association has been actively involved in U.S. EPA's development of the regulatory framework governing emissions from oil and gas sources since the New Source Performance Standards ("NSPS"), 40 CFR Part 60, Subpart OOOO regulations were first proposed in 2011. Over the course of this decade-plus rulemaking effort, two overarching themes have remained consistent: (1) the unique aspects of the oil and gas industry's operations and related emissions profiles do not translate to a one size fits all regulatory scheme such as U.S. EPA's NSPS program; and (2) U.S. EPA does not fully understand the uniqueness and diversity of the emissions sources in the oil and gas industry, and this lack of understanding combined with an unwavering effort to force a square peg into a round hole (i.e. apply the traditional principles of the NSPS program to oil and gas industry) has resulted in an unreasonable and unsupported regulatory framework.

Many of the Association's members have operations that will be subject to and directly affected by the Supplemental Proposal, with many others indirectly affected. Concerned with the impacts of misguided and arbitrary regulations on Ohio's oil and gas industry, OOGA submits the following comments on select aspects of the Supplemental Proposal that will have the most significant negative impact on OOGA's members, particularly small businesses. The Association hereby further supports, adopts, and incorporates by reference herein the comments submitted by the Independent Petroleum Association of America (IPAA) and supporting Producer Associations, the American Petroleum Institute (API), and the American Exploration and Production Council (AXPC).

GENERAL COMMENTS

A. U.S. EPA failed to provide sufficient time for meaningful review and comment on the Supplemental Proposal.

The Supplemental Proposal consists of nearly 150 pages of Federal Register text with hundreds of footnotes and references to several highly technical documents (some of which are also hundreds of pages long) related to the Supplemental Proposal. U.S. EPA provided just 69 days for interested parties to submit comments on the Supplemental Proposal and related material. The comment period, which spanned three federal holidays, was unreasonable as it fell far short of providing

sufficient time for meaningful review, analysis, and comment on the Supplemental Proposal. Moreover, U.S. EPA still has not addressed all of the comments submitted on its November 2021 Proposed Rule.

In an effort to alleviate the burden imposed on the Association's members due to the inadequate timeframe provided to comment on the Supplemental Proposal, the Association submitted a request to extend the comment period on January 11, 2023[2]. The state of Ohio, along with 19 other states also requested an additional 60 days to comment on the Supplemental Proposal.[3] U.S EPA did not grant an extension.

The unreasonableness of the timeframe provided to comment on the Supplemental Proposal was further compounded by U.S. EPA's separate, albeit intrinsically related, issuance of proposed changes to the regulations implementing Clean Air Act (CAA) Section 111(d) on December 23, 2022 (the "111(d) Proposal")[4]. Certainly the first-ever Emissions Guidelines for existing sources in the oil/gas sector established under the Supplemental Proposal (Subpart OOOOc) pursuant to Section 111(d) of the CAA must be considered in conjunction with the 111(d) Proposal, as the 111(d) Proposal will ultimately govern how the Emissions Guidelines are implemented by States. U.S. EPA has acknowledged as much, indicating that it is taking an integrated approach with respect to considering comments on the two proposed rules. Yet, U.S. EPA has maintained separate comment deadlines for the Supplemental Proposal (February 13, 2023) and the 111(d) Proposal (February 27, 2023). At the very least, U.S. EPA should have granted a two-week extension to submit comments on the Supplemental Proposal such that the deadline for submitting comments on the Supplemental Proposal would be aligned with the 111(d) Proposal – i.e. February 27, 2023.

It is our understanding that U.S. EPA, in recent conversations with other national and regional industry trade groups, has indicated that it will consider comments submitted after the February 13, 2023 deadline. The Association urges U.S. EPA to do so, but questions why U.S. EPA would not do so formally via publishing notice of an extended comment period. Notwithstanding, the Association notes that if U.S. EPA considers any comments submitted after the February 13, 2023 deadline, it must consider *all* comments submitted after the deadline. With that, to the extent that IPAA, AXPC or API submit comments after the February 13, 2023 deadline, the Association supports, adopts, and incorporates by reference those comments herein.

B. The unreasonable emissions standards and related compliance requirements under the Supplemental Proposal disproportionally impact small businesses and will stifle oil and development in Ohio.

[2] See Comment ID # EPA-HQ-OAR-2021-0317-1645.
[3] See Comment ID # EPA-HQ-OAR-2021-0317-1663.
[4] 87 FR 79176.

One of the critical flaws of the Subpart OOOO regulations, including Subpart OOOOb and OOOOc under the Supplemental Proposal, is the failure to properly account for the declining production of oil and natural gas from a well over time, and the corresponding decline in emissions in connection with various operational changes at the well site associated with the decline in production. While initial production at a well may be significant, it will deplete as the well ages and eventually become a low production well. The failure to properly account for this change skews the fundamental basis of the entire Subpart OOOO program – i.e. the cost-effectiveness analysis for establishing the Best System of Emissions Reductions ("BSER") for each source that is subject to the program. The magnitude of this fundamental flaw is most significant in the resulting Emissions Guidelines (Subpart OOOOc) for existing sources, which have a disproportionate and detrimental impact on low production wells and small businesses.

A significant portion of the approximately 62,000 wells in Ohio meet the definition of a low production well (i.e. produce at or below 15 barrels of oil equivalent per day) and, in fact, produce far less. About 60% of the wells in Ohio involve private contractual relationships between the producer and landowner to take a limited amount of natural gas for the lessor's private domestic use. This means that there are approximately 36,700 rural Ohio families who have direct access to natural gas because of operating oil and gas wells. Many of these wells are owned by a landowner or a small business. The Supplemental Proposal is replete with stringent emissions standards and related compliance requirements that are impractical, technically infeasible, cost-prohibitive, overly burdensome, and otherwise unreasonable. The impacts of such requirements are disproportionately borne by small businesses and operators of low production wells.

The fundamental flaw in U.S. EPA's Subpart OOOO regulations (discussed above) has resulted in a misguided BSER determination for existing sources that effectively regulates existing sources the same as new and modified sources. That is, the Supplemental Proposal is based on the assumption that existing facilities can be retrofitted at a reasonable cost to meet the same emissions standards applicable to new and modified sources. U.S. EPA made a gross miscalculation in this regard. Many of OOGA's members lack the financial capital to retrofit existing sources with the equipment necessary to comply with the emissions standards under the Supplemental Proposal and/or do not have technical staff and legal advisors to assist with understanding and complying with the myriad of requirements that they will be subject to, including AVO inspections, conducting root cause analyses and fixing leaks, recordkeeping and reporting (not to mention the significant costs associated with conducting those activities). Even assuming operators *could* pay for costs to retrofit, as a well approaches the end of its useful life, there is a point at which it is no longer economic to make the necessary retrofits. Whereas U.S. EPA assumed compliance to be feasible and cost-effective, the reality is that the stringent emissions standards under the Supplemental Proposal will render many existing operations, particularly low production wells, economically infeasible and drive many small business and operators of low production wells out of business, including landowners of the approximately 5,300 wells that provide oil/gas to single-family residences in Ohio.

Small businesses being forced to "close shop" presents a scenario that is inherently contrary to the Supplemental Proposal – i.e. there may be thousands *more* abandoned wells that may or may not be properly closed. Notwithstanding the challenges that small businesses face and the consequences related thereto, the Supplemental Proposal will threaten the continued viability of the oil and gas industry as a whole in Ohio. The economic ramifications of a rulemaking that potentially halts further development of oil and natural gas in Ohio cannot be ignored as the industry generated approximately $97 Billion in investments in Ohio since 2011[5], and provides nearly 200,000 Ohio jobs[6]. Relatedly, the areas in which the oil gas industry predominantly operates and, in turn, provides necessary and critical services – i.e. overburdened and underserved rural communities (e.g. southeast Ohio) – are the areas that will suffer the economic consequences stemming from the Supplemental Proposal. This effectively results in "inverse" environmental justice in these communities. That is, rural families and farmers whose homes are heated by the oil/natural gas supplied directly from a production well lose the direct energy source when wells are closed, and are forced to bear the costs of switching to other energy sources; jobs are lost; tax revenues are lost; and investment in critical infrastructure comes to a halt.

The Association also notes that the Emissions Guidelines will impose a significant burden on Ohio EPA, the state agency that will be primarily responsible for implementing the Emissions Guidelines. Specifically, Ohio EPA will be responsible for the permitting, compliance/enforcement actions, and other planning efforts for the 62,000 oil and natural gas wells in Ohio. The costs and resources (e.g. administrative staff, office space, and training) necessary to implement the Emissions Guidelines exceed Ohio EPA's current budget and personnel several times over. Add the 2-year compliance timeframe on top of everything else, and a herculean order becomes an almost certain impossibility.

C. The proposed compliance date of November 15, 2021 is unwarranted.

The Association objects to U.S. EPA's proposed compliance date of November 15, 2021, particularly given that regulatory text was unavailable as of the proposed compliance date. U.S. EPA maintaining the November 15, 2021 compliance date is unwarranted and will result in companies having a large back-log of new and modified sources that may be subject to Subpart OOOOb. For example, the storage vessel affected source was expanded from individual tanks to tank batteries under the Supplemental Proposal. If such new/modified storage vessel sources dating back to November 15, 2021 are subject to Subpart OOOOb, companies will need additional time to meet the initial compliance requirements. The Association also notes that applicable compliance date of November 15, 2021 will likely result in supply chain shortages.

SPECIFIC COMMENTS

[5] https://cdn.bfldr.com/AHJE351Z/at/jrb837bsbpc3gn3x5zksgtpc/Shale_Dashboard_Q3Q4_2021_FINAL_45_.pdf
[6] https://ohiolmi.com/_docs/OhioShale/2021AnnualShale.pdf

A. BSER for fugitive emissions monitoring is unsupported and overly burdensome.

The Supplemental Proposal makes several changes to the November 2021 Proposed Rule, which are driven by the definition of the "fugitive emissions component" affected/designated facility. Fugitive emissions component means " any component that has the potential to emit fugitive emissions of methane or VOC at a well site, centralized production facility, or compressor station, including valves, connectors, pressure relief devices, open-ended lines, flanges, covers and closed vent systems not subject to §60.5411b (closed vent systems), thief hatches or other openings on a storage vessel not subject to §60.5395b (storage vessels), compressors, instruments, meters, and in yard piping." From this definition, U.S. EPA establishes a matrix consisting of four sub-categories fugitive emissions facilities with corresponding monitoring requirements that vary by method and frequency depending on the number of wells and associated production equipment.

The Association appreciates U.S. EPA's creation of a less rigid fugitive monitoring program that is more aligned to the varying emissions profiles of source configurations typically utilized in the oil and gas industry. OOGA also acknowledges the Agency's proposal to require quarterly audio, visual, and olfactory (AVO) inspections, and supports the ability to use AVO as opposed to optical gas imaging (OGI) at single wellhead only well sites. However, the Association objects to other aspects of the fugitive monitoring program under the Supplemental Proposal.

As an initial matter, the Supplemental Proposal expands fugitive emissions monitoring to all oil and natural gas well sites. The fugitive emissions inspections, be it AVO or OGI, are labor-intensive and expensive. Thus, the requirements unduly burden small business and operators of low production wells with nominal emissions reductions in return. The Association urges U.S. EPA to retain the exclusion of low producing well sites that was provided in the November 2021 Proposed Rule. At the very least, U.S. EPA should create a fifth (intermediate) source category via the expansion of the components in the "small well site" facility, including increasing the count of major production equipment from one to two, to further differentiate the requirements applicable to the lowest of the low production wells and ensure that higher producing, albeit still "low production", wells are not regulated as a "large well site". The Association notes that a separator and storage tank minimum necessities for well site operations. Limiting a "small well site" to only one of those pieces of equipment inherently – albeit inaccurately – disqualifies true mall well sites from the "small well site" classification. AVO inspections should apply to this "intermediate" source category.

Next, as discussed above, U.S. EPA's BSER for fugitive emissions fails to properly account for the impact of declining production reducing the potential magnitude of emissions from production facilities. This results in inflexible and, thus, unreasonable monitoring requirements under the Supplemental Proposal. The Association requests that U.S. EPA provide for flexibility in the fugitive monitoring requirements such that as production declines and a well site moves from the large well facility category to the small well facility category, the requirements applicable to the

facility should change accordingly to the appropriate facility status – i.e. single well site, multiple well site, small well site or intermediate well site.

Finally, the Association suggests that fugitive monitoring matrices should be based on production rates (rather than flawed component counts) with adjustments, as appropriate, to account for onsite equipment.

B. The Ohio Department of Natural Resources already administers a comprehensive regulatory program governing well plugging and abandonment. U.S. EPA's proposed well closure requirements are superfluous and unwarranted.

The Association strongly opposes U.S. EPA's involvement in and regulation of the plugging and abandonment of oil and gas wells. As an initial matter, any U.S. EPA regulation of the plugging and abandonment of wells is superfluous and, thus, unwarranted, as state agencies already perform this function. In Ohio, the Ohio Department of Natural Resources, Division of Oil and Gas (ODNR) is the agency vested with statutory authority to regulate all aspects of the permitting, location, and spacing of oil and gas wells and production operations, including, *specifically*, the plugging and abandonment of wells in Ohio.[7] ODNR's regulatory program governing the plugging and abandonment of wells in Ohio is robust and adequately addresses the concerns that U.S. EPA raised regarding the need for a well closure program in the Supplemental Proposal. As noted in the Association's comments on the November 2021 Proposed Rule, notable provisions of Ohio law and ODNR's regulations include the following:

- Ohio law imposes obligations on well owners that prevent wells from falling into disrepair. R.C. 1509.12(A) provides that: (1) No person shall construct or operate a well, that causes damage to other permeable strata, underground sources of drinking water, or the surface of the land or that threatens the public health and safety or the environment; and (2) No owner of a well shall permit a well to leak fluids or gases.

- Furthermore, if a well is discovered to be defective and/or inadequately constructed, "the person that owns the well or that is responsible for the well shall notify the chief of the division of oil and gas resources management within twenty-four hours of the discovery, and shall immediately repair the casing, correct the construction inadequacies, or plug and abandon the well." R.C. 1509.12(A)(3).

- Ohio law prohibits wells from remaining idle/dormant for extended periods of time. R.C. 1509.062(A)(1) states, "The owner of a well that has not been completed, a well that has

[7] See Ohio Revised Code (RC) 1509.02. "Production operation", as defined in R.C. 1509.01(AA), means "all operations and activities and all related equipment, facilities, and other structures that may be used in or associated with the exploration and production of oil, gas, or other mineral resources that are regulated under this chapter, including operations and activities associated with site preparation, site construction, access road construction, well drilling, well completion, well stimulation, well site activities, reclamation, and plugging."

not produced within one year after completion, an existing well that is not a horizontal well and that has no reported production for two consecutive reporting periods as reported in accordance with section 1509.11 of the Revised Code, or an existing horizontal well that has no reported production for eight consecutive reporting periods. . . shall plug the well in accordance with section 1509.12 of the Revised Code,[8] obtain temporary inactive well status for the well in accordance with this section, or perform another activity regarding the well that is approved by the chief of the division of oil and gas resources management."

- A well may not approved for temporary inactive status unless ODNR "determines that the well that is the subject of the application poses no threat to the health or safety of persons, property, or the environment." R.C. 1509.062(D). If approved, temporary inactive status expires 1 year after the date of approval. R.C 1509.062(D).

- Detailed plans must be prepared and implemented to prevent emissions from temporary inactive wells. Upon approval of temporary inactive status, R.C. 1509.062(C) states that "the owner shall shut in the well and empty all liquids and gases from all storage tanks, pipelines, and other equipment associated with the well. In addition, the owner shall maintain the well, other equipment associated with the well, and the surface location of the well in a manner that prevents hazards to the health and safety of people and the environment. The owner shall inspect the well at least every six months and submit to the chief within fourteen days after the inspection a record of inspection." Additionally, an application to renew a well's temporary inactive status must include "a detailed plan that describes the ultimate disposition of the well, the time frames for that disposition, and any other information that the chief determines is necessary." ORC 1509.062(D).

- Ohio law also requires well owners to establish financial assurance for wells approved for temporary inactive status. Specifically, Ohio law authorizes ODNR to require the owner to provide a surety bond in an amount up to $10,000 for each of the owner's wells that has been approved for temporary inactive stratus. This bond is separate and in addition to the bond that is required in conjunction with a permit to drill a new well that is conditioned on compliance with site restoration requirements and plugging requirements. R.C. 1509.07(B)(1).

As discussed above, ODNR is the state agency responsible for regulation all aspects of oil and natural gas production operations, including the plugging and abandonment of oil/gas wells, in Ohio. ODNR's existing statutory authority and regulatory framework governing abandoned wells is robust, and adequately addresses U.S. EPA's concerns regarding such wells. The Association,

[8] To ensure wells are properly plugged to prevent risk to human health and the environment, Ohio law requires any person plugging a well to first obtain a permit to the plug the well (R.C. 1509.12), and ODNR regulations specify procedures, methodologies and performance criteria that must be satisfied (Ohio Administrative Code Chapter 1501:9-11).

whose members operate in several other states, notes that other states have programs regulating abandoned wells similar to ODNR. Accordingly, U.S. EPA need not and should not insert itself into this state-led regulatory arena.

Should U.S. EPA proceed with the redundant well closure requirements under the Supplemental Proposal, the Association offers the following comments on certain elements of U.S. EPA's proposed well closure requirements. First, the applicability of the well closure requirements being triggered by the "cessation" of production operations is ambiguous. A cessation in production does not necessarily mean that a well is destined for or otherwise needs to be plugged and abandoned. A *temporary* cessation in production is quite common in the oil and gas industry and occurs for a variety of reasons including mechanical evaluations, reworking or repair of surface facilities, and to comply with government orders. The Association requests that the word "cessation" be struck from the rule, and that U.S. EPA clarify that the development and implementation of a well closure plan be required only for wells planned for plugging and abandonment. Second, the plugging and abandonment of one well at a multi-well site should not require the plugging and abandonment of all wells at the well site. Finally, U.S. EPA should allow for scheduling flexibilities in completing the well closure activities and eliminate the requirement to conduct an optical gas imaging to confirm no emissions from the well post-closure.

C. The proposed approach for utilizing alternative leak detection technologies is unworkable and lacks support.

The Association appreciates U.S. EPA authorizing alternative leak detection technologies under the Supplemental Proposal. However, the approach for implementing such alternative technologies is based on a matrix of requirements that incentivizes operators to not use any alternative technologies. That is, the Supplemental Proposal allows the use of alternative technologies in place of OGI but with increased monitoring frequencies. U.S. EPA's approach lacks justification and may not be cost effective. The Association also notes that the technology certification process is unworkable (another disincentive) and that the basis for the continuing monitoring thresholds lacks justification.

D. The regulatory framework for the proposed Super-Emitter Response Program needs further development.

Under the Supplemental Proposal, a "super-emitter emissions event" is defined as quantified emissions of 100 kg/hr or greater of methane. To address these significant emissions events, which U.S. EPA acknowledges are not expected to occur under normal operating scenarios, U.S. EPA proposes to authorize third parties to detect "super-emitter emissions events" through the use of remote-sensing technologies including aircraft flyovers, mobile monitoring platforms, and satellites and, upon analyzing the data and confirming a super-emitter event, to notify operators (and U.S. EPA) of the event. Once an operator has been notified, the operator is required perform a root-cause analysis and take corrective actions to address the emissions source at the site. The

Association has several concerns with the Super-Emitter Response Program under the Supplemental Proposal.

First, the establishment of the Super-Emitter Response Program exceeds U.S. EPA's authority under the CAA. Congress has already spoken to the "deputizing" of third parties for purposes of enforcing the requirements of the CAA - i.e. the CAA Citizen Suit provision (42 U.S.C 7604). Nowhere in the CAA did Congress authorize the Super Emitter Response Program that is contemplated under the Supplemental Proposal.

Notwithstanding U.S. EPA's questionable legal authority for establishing the Super-Emitter Response Program, the regulatory framework for the program needs further development. The Association suggests that U.S. EPA initiate the rulemaking process to approve each technology used by the third-party detectors so that industry has an opportunity to comment on the merit of each technology. The Supplemental Proposal does not provide adequate detail for stakeholders to provide comments as it only identifies the technology by name with no information about the technology and its limitation. Similarly, U.S. EPA should develop detailed criteria for the certification of qualified third-party detectors for public review and comment. The Association also requests that U.S. EPA address/clarify the following issues:

- Notification by the third-party detector to the operator must be in writing, and the contents of the notification must be sufficiently detailed for the industry and the general public to verify or reproduce (where possible) the underlying data used for the alleged super-emitter event.
- Events related to permitted or permissible releases (e.g. maintenance).
- The notification must be made as soon as practicable, but no later than 3 days after the alleged super-emitter event.
- Third-parties breaking any laws should be immediately decertified and removed from U.S. EPA's list of approved qualified third party detectors.
- Any technology used to identify a super-emitter event must be capable of quantifying the methane emissions rate without reliance on an assumed gas composition.

Finally, the Association is particularly concerned about the implications of "false positive" super-emitter events. The occurrence of a "false positive" can be due to several factors, including faulty equipment, insufficient and/or unreliable data, and incorrectly identifying the super-emitter source. Regardless of the cause, "false positive" super-emitter events will result in operators unnecessarily incurring significant costs, and also stigmatize the accused operator and the industry as a whole. The Association urges U.S. EPA to implement appropriate safeguards against the occurrence of "false positive" super-emitter events.

E. The proposed "zero emissions" standard for pneumatic controllers is unreasonable and lacks support.

The Supplemental Proposal requires all pneumatic controllers and pumps to have methane and VOC emissions rates of zero. While the Association agrees that routing emissions from natural gas-driven pneumatic devices back to a process is one method of achieving the zero-emissions standard, the Association strongly disagrees that this BSER is reasonable from a cost-effectiveness perspective. The comments submitted by IPAA and API include detailed calculations illustrating how the cost per ton of emissions reduced from pneumatic controllers and pumps exceeds U.S. EPA's reasonableness threshold, and the Association reached the same result by applying Ohio-specific data inputs in those calculations. Notably, the application of the same zero emission standard to existing sources under Subpart OOOOc will require existing sources to retrofit each and every pneumatic controller. Some facilities may even require complete reengineering and design in order to comply with these standards. Such compliance measures will likely be cost prohibitive, particularly for small business and operators of low production wells. There are also a multitude of technical limitations, such as low pressure, that make each proposed compliance option infeasible.

The Association urges U.S. EPA to consider alternative BSER, including but not limited to allow for low and properly functioning intermittent-bleed controllers in compliance with Subpart OOOOa, based on site-specific cost-effectiveness evaluations that account for the facility's equipment, geographic location, and other unique operational conditions. The properly functioning pneumatic controllers should be assessed through AVO inspections. The Association also requests that U.S. EPA align the requirements for pneumatic controllers with the requirements for pneumatic pumps including, specifically: allowing emissions to be routed to a control device if it is technically infeasible to route to a process; excluding natural gas pneumatic controllers that operate for less than 90 days per calendar year from the affected facility. Such alignment is needed to allow for the use of temporary equipment during flowback operations and initial production stages when air supply is typically not in use, and to allow for the use of natural gas as a backup power source in the event of power outages (generator or grid). Further, temporary gas use allows for the safe continuation of pneumatic operations without becoming an affected facility.

F. The proposed emissions standards for associated operations are unreasonable.

Under the Supplemental Proposal, associated gas cannot be routed to a flare or other combustion device unless the owner or operator demonstrates that each of the four compliance options are infeasible due to technical or safety reasons, and that demonstration is approved by a certified professional engineer. This is a significant change from the November 2021 Proposed Rule that places additional burden on operators which may be unworkable as a practical matter. The Association also suggests that the definition of "associated gas" should be limited to gas generated in the first stage of separation.

With respect to the emissions standards for liquids unloading, the Association notes that the preamble to the Supplemental Proposal allows for economic feasibility determinations when

utilizing liquids unloading methods that vent to the atmosphere: "Additionally, for wells that utilize methods that vent to the atmosphere, the proposed rule would require: "(1) Documentation explaining why it is infeasible to utilize a non-venting method due to technical, safety, or economic reasons."[9] However, the rule text makes no mention of economic feasibility, limiting infeasibility determinations to technical and safety-related justifications. This apparent limitation on feasibility determinations in the rule text is unreasonable and renders the infeasibility demonstration impractical. A technical feasibility review can take a significant amount of time to complete. The review time would result in lost production due to the well having to be shut in. In order for an operator to keep pace with required well unloads, significant additional staffing would be needed to complete the required reviews. Additionally, there are very few scenarios that an engineer or qualified professional would certify a technical or safety infeasibility justification. Without a certified justification and allowance for unloading without a zero emissions method, wells would ultimately just be shut in until the well rebuilt pressures to produce on its own, resulting in lost production or the well never returning to production. The Association urges U.S. EPA to revise the rule text to include economic infeasibility as a justification for needing to use a non-zero emitting liquids unloading method. This would provide necessary additional opportunities for justifying the use of a non-zero emitting liquids unloading method, especially for low producing wells. The Association also suggests the Supplemental Proposal be revised such that recordkeeping and reporting of non-venting event are not required.

G. The proposed control device testing and monitoring requirements are unworkable.

The Association is concerned that the proposed testing and monitoring requirements for control devices are unworkable. Enclosed Combustion Devices (ECDs) are commonly used at oil and natural gas production facilities that have associated storage tanks. These ECDs control VOC and methane emissions that result from the collection of well liquids during production activity. During natural gas production, well liquids are brought to the surface periodically and are routed to a storage tank. This activity occurs intermittently and often unpredictably. For many well facilities, the resulting off gassing of the collected liquids, also known as "flash gas", directs these emissions to an ECD resulting in low flow rates near ambient pressure. The inherent nature of this operating scenario leads to several technical issues related to the proposed test methods for conducting performance testing on these ECDs.

Specifically, the Association is concerned that many of the test methods required under the Supplemental Proposal may be incapable of yielding reasonably representative data under conditions as described above. Additionally, the short duration of certain of these venting events may be less than the response time of a test method.

For example, inlet flow measurement on ECDs with intermittent operation can be problematic due to short duration and low flow velocity. EPA Methods 2, 2A, 2C, and 2D, which are proposed for

[9] 87 FR 74782 (emphasis added).

flow measurement, are likely to result in inaccuracy due to the random and unpredictable nature of the venting process. This uncertainty in effectively employing any of these methods will result in inaccurate measurement. As an alternative, Method 2B could potentially be employed in these low flow, intermittent flow situations to provide more representative data.

EPA Method 4 also has limitations as the intermittent nature of the normal operation of these ECDs would interfere with the ability to obtain the required minimum sample volume. Additionally, the ability to capture a representative sample of the actual moisture content of the flash gas is limited due to the inherent non-instantaneous response time for activating the sampling train simultaneously with a venting event.

Finally, EPA Method 18 may have similar limitations as Method 4. The test equipment response time may not allow for a representative sample to be obtained, given the nature of the described process.

EPA has faced similar control device testing challenges in the past. In particular, for compliance testing purposes, the National Emission Standard for Hazardous Air Pollutants Subpart HH allows an "end of stack" method to demonstrate compliance. The Association urges U.S. EPA to consider and allow alternative test methods that would be better suited for low pressure, low flow, intermittent emission sources similar to the example described above.

The proposed rulemaking would also require monthly Method 22 opacity observations of ECDs. As with performance testing concerns noted above, production facilities that have intermittent and unplanned operation of ECDs will be challenged by this requirement. Well facilities are often widely distributed over large areas. Even if an operator is in the general vicinity of an ECD, given the intermittent and unplanned operation of the process, the operator may not be able to receive an indication that the ECD is in operation, travel to the ECD location, and conduct a Method 22 observation before the unit discontinues operation. Furthermore, many well production facilities are unmanned, thus making the ability to be present during operation of this type of ECD process for conducting Method 22 impracticable. We ask EPA to clarify that Method 22 opacity observations for these intermittent sources be conducted on an "as found" basis.

CONCLUSION

The Association strongly supports reasonable and fair regulations along with efforts to improve air quality and protect public health. However, the emission standards, monitoring, and recordkeeping requirements under the Supplemental Proposal are based on a flawed cost-effectiveness evaluation, are overly burdensome, unnecessary and/or duplicative, and will stifle the continued development of oil and natural gas resources in Ohio. Such a result will have a substantial negative impact on small businesses, particularly in underserved rural communities in Ohio. U.S. EPA should reconsider its BSER determinations under the Supplemental Proposal to

accurately account the unique operational circumstances and emissions profiles of the oil and gas industry.

The Association appreciates the opportunity to comment on and suggest revisions to the Supplemental Proposal. We look forward to continuing to work with U.S. EPA in its development of rules governing VOC and methane emissions from the oil and gas sector that are reasonable, technically supportable, and consistent with the Clean Air Act.

Sincerely,

Stephanie Kromer

Stephanie Kromer
Director of Legislative & Regulatory Affairs
Ohio Oil & Gas Association

Exhibit G

Comment of The Petroleum Alliance of Oklahoma,

February 13, 2023

THE PETROLEUM ALLIANCE OF OKLAHOMA

February 13, 2023

Submitted via http://www.regulations.gov

U.S. Environmental Protection Agency
EPA Docket Center
Docket ID No. EPA-HQ-OAR-2021-0317
Mail Code 28221T
1200 Pennsylvania Avenue N.W.
Washington, DC 20460

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

Dear Madam or Sir:

The Petroleum Alliance of Oklahoma ("The Alliance") appreciates the opportunity to provide comments to the Environmental Protection Agency ("EPA") regarding the proposed rule, Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review ("Proposed Rule"), Docket ID No. EPA-HQ-OAR-2021-0317.

The Alliance represents more than 1,400 individuals and member companies and their tens of thousands of employees in the upstream, midstream, and downstream sectors and ventures ranging from small, family-owned businesses to large, publicly traded corporations. Our members produce, transport, process and refine the bulk of Oklahoma's crude oil and natural gas.

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

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

1. **EPA's "one-size-fits-all" Proposed Rule is not appropriate for existing facilities, especially low producing, marginal wells.** EPA's Proposed Rule provides stringent, "one-size-fits-all" regulations for new and existing oil and gas wells. Essentially, EPA is placing the same requirements on facilities that produce thousands of barrels of oil per day in the same category as a marginal well that produces 1.4

barrels of oil per day (Bpd) while claiming the requirements are cost effective for these lower producing, marginal wells. A one-size-fits-all rule that applies to all wells is not appropriate or reasonable, is an inefficient use of manpower and funds, and fails to understand the unique aspects of the lifespan of an oil and gas well as production declines over time. The expansive regulations provided in the Proposed Rule will lead to service and equipment availability issues that will unnecessarily increase costs for the low producing, marginal well operator, and it may limit the ability of operators to comply with the Proposed Rule and/or continue to operate. Supply chain issues are still a significant issue for our members, and it is more difficult for smaller operators to secure services or equipment (as compared to larger companies).

Tax code provisions define a low producing well as one producing 15 barrels per day ("Bpd") of oil equivalent or less. The Interstate Oil and Gas Compact Commission ("IOGCC") defines a marginal well as a well that produces 10 barrels of oil or 60 Mcf of natural gas per day or less.[1] In Oklahoma, there are approximately 28,000 marginal oil wells (with an average production of 1.43 Bpd) and approximately 45,000 marginal gas wells (with an average 18 thousand cubic feet per day [Mcfpd]); however they contribute approximately 9.5% and 12%, respectively, to Oklahoma's total production.[2] These types of wells are important to our members and the state's economy, and they are typically operated by small businesses. Small businesses in the Mining, Quarrying, and Oil and Gas Extraction industry in Oklahoma employ over 20,000 people, or over 50.5% of the private workforce employed in that sector in 2017. Many of these small oil and gas businesses may be negatively impacted if the Proposed Rule is implemented as proposed. Additionally, marginal wells provide a significant share of the U.S. domestic oil and natural gas output and economic contributions. The IOGCC states that since approximately 2006, marginal wells have produced oil and natural gas valued at nearly $30 billion annually, or approximately 10 percent of the total value of oil and natural gas produced domestically. It is important that EPA understand and recognize the importance and benefits of marginal wells to the U.S., the State of Oklahoma, small businesses, and rural environmental justice communities that depend on the oil and gas industry, in its rulemaking process.

EPA's regulatory impact analysis does not address how a well(s) producing an average of 1.43 Bpd and/or 18 Mcfpd can be economically viable under the new multiple source requirements in the Proposed Rule. The Proposed Rule will impact existing wells, especially low producing, marginal oil and gas wells that provide the state with direct revenue in the form of royalties, taxes, and indirect economic benefits through employment and other economy-enhancing activity.

In EPA's 2021 Proposal[3], thresholds were provided at which fugitive emissions monitoring would no longer be required. In this Proposed Rule, EPA removed that proposal and is now proposing to require fugitive monitoring, recordkeeping and reporting for the life of all wells. Production rates and pressures play a significant role in fugitive emissions. The Department of Energy Report provides data showing that marginal well sites overwhelming fall below the 3 tons/year of methane emissions (as provided in the 2021 Proposal) based on actual sampling.[4]

[1] IOGCC, Marginal Wells: Fuel for Economic Growth, 2016.
[2] ibid.
[3] *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) ("2021 Proposal").
[4] U.S. Department of Energy, National Energy Technology Laboratory, Quantification of Methane Emissions form Marginal (Low Production Rate) Oil and Natural Gas Wells, April 28, 2022.

Action Requested. We request EPA incorporate in the Proposed Rule thresholds at which the requirements for fugitives emission monitoring no longer applies. These thresholds should use terminology that is understandable, and useable by small oil and gas businesses so they can easily comply, avoiding the need to hire consultants which will increase the cost of compliance. As an alternative, EPA could develop a framework that provides smaller operators the option to use in lieu of conducting detailed calculations to determine if the methane emission at their site exceed the proposed thresholds. This would benefit state delegated agencies to better manage the large number of existing facilities in their state. Additionally, we request EPA incorporate into the rule a regulatory framework that reflects the nature of oil and natural gas production i.e., well production/emissions decline over time.

2. **Super-emitter Program.** The Proposed Rule contains provisions for a (federal and state) super-emitter response program where an owner or operator must investigate and take appropriate mitigation actions upon receiving approved third-party notifications of detected emissions that are 100 kg/hr of methane or greater. We expressed significant concerns in our comments on the 2021 Proposal, and these concerns remain.
   a. **EPA lacks statutory authority for the super-emitter program.** EPA provides no statutory authority that allows it to "farm out" it's and/or the state's regulatory duties to third parties. This is unwarranted and a drastic departure from long-standing established processes and protocols that require the EPA and/or the delegated state agency to manage compliance of a regulated entities. Typically, states are in the best position to address this issue, have citizen reporting processes in place and are familiar with the regulated entities in their state. As such, we don't think a separate super-emitter program that bypasses EPA and/or states delegated regulatory jurisdiction is warranted.

      Action Requested: EPA states its 2021 Proposal and this Proposed Rule contain standards and requirements that, if implemented correctly, would **prevent or detect and mitigate** most of these large emissions events. [87 Fed. Reg. 74747, emphasis added] EPA should remove the super-emitter provision from the rule. As an alternative, EPA could provide states funding (e.g., Inflation Reduction Act) to enhance its existing program or develop its own state-specific program to address super-emitter emissions.

   If EPA maintains this super-emitter program as proposed, we provide the following comments.

   b. **Safety Concerns** – The Alliance submitted comments to EPA's 2021 Proposal on this issue. We still have concerns that the super-emitter program invites safety and trespass issues even though EPA states they are allowing the use of remote-sensing aircraft, mobile monitoring platforms, or satellites to identify super-emitter events. For example, the use of mobile monitoring may encourage entities to drive on oil and gas locations to collect emission information, thinking it is safe and acceptable. These entities may not be aware or trained on the many safety risks associated with a well site or that's it is an illegal trespass without the operator's approval.

   c. **Approval Process of Third Parties –** EPA is proposing that any third-party seeking approval would have to demonstrate technical expertise in the use of the detection technology and interpretation, or analysis, of the data collected by the technology. The Proposed Rule does not define the criteria or level of knowledge, experience and expertise that would meet the qualifications of being a third party,

nor does it provide if the third party (as a whole) or everyone within the third party is required to have the requisite qualification.

Action Requested. We request EPA provide the public the criteria used to select third parties. Additionally, the knowledge, experience, expertise, and abilities of everyone within the third party should be made available to the public and each event report should identify the individuals that identified the event. The requirements for third-party notifiers should be as stringent and equivalent to the criteria required of owners/operators submitting data to state or federal regulators to demonstrate compliance with applicable standards, e.g., results/data certified by a professional engineer or appropriate in-house professional.

d. Disqualification – The EPA seeks comment on whether it should establish a procedure for owners and operators to suggest that EPA reconsider the approval granted to a third-party notifier. One type of procedure EPA has considered would be based on information provided by the owner or operator that demonstrates they had received more than three notices at the same site and from the same third party for super-emitter emissions events which the owner or operator demonstrates, after opportunity for response by the third party, that the notifications contain meaningful, demonstrable errors, including, for example, that the third party did not use the appropriate methane detection technology, or that the emissions event did not exceed the threshold. Where such demonstrable error is identified, the owner and operator would not be obligated to conduct the root-cause analysis and corrective action discussed later in this section and could, instead, submit a report indicating the error. EPA states that in its discretion, it may remove that third party from the pre-approved list of third-party notifiers upon demonstration by the owner or operator and/or a finding by the EPA that more than three notifications to that same owner or operator were made in error. EPA goes to say that it would not allow use of this type of mechanism to dispute the accuracy of technologies that have been approved by the EPA.

Action Requested. Third parties or the technology used should not be above reproach. We request EPA establish a transparent process whereby operators can submit a complaint that a technology or the third party should be reconsidered for good cause. This process would include a response and resolution by EPA in a timely manner. This process should include the ability for operators to appeal EPA's decision. EPA should make public its findings and resolution of the issue.

e. Technology - The Proposed Rule does not provide any details of the technologies that will be used by third parties (other than general information i.e., remote sensing aircraft, mobile monitoring platforms or satellites), whether these same technologies are allowed to be used by operators instead of optical gas imaging ("OGI"), the associated level of accuracy, reliability, and sensitivity of the technology, nor the quality or accuracy (errors and false positives) of data generated by the technology.

Action Requested. EPA super-emitter program should make available to the public the type of technology being used, the accuracy, reliability, and sensitivity of the technology, and the quality or accuracy (errors and false positives) of data generated by the technology for each event on its website. EPA should allow the public the opportunity to review and comment on the technology before being approved for use by a third party. Also, any technology used by third parties should be allowed to be used by operators in lieu of OGI.

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f. Data Collection and Quality - EPA is proposing to define a super-emitter emissions event as quantified emissions of 100 kg/hr or greater of methane. EPA does not provide any information on sample collection process or timeframes to confirm the event is real, ongoing and/or persistent emission that demonstrates there is something wrong at the facility.

Action Requested. EPA's super-emitter program should identify the sampling timeframes and protocols to ensure the emission event is ongoing and/or persistent. EPA should establish quality assurance/quality control requirements for each technology and for the data collection effort. All data and notices from approved third parties should first go to EPA and/or the state to review. EPA and/or the state delegated agency would contact the operator of the facility to verify the event and take corrective actions if appropriate. EPA and/or the state delegated agency should review the data and operator's findings for each super-emitter event before any information is released to the public.

g. Notifications and Operator Actions

EPA states that the approved third party detecting a super-emitter emissions event would notify the responsible owner or operator. EPA request comment on a time frame as to when notifications would be required by the third party to the operator once a super-emitter event is detected, and how can third parties identify operators of a facility where the event occurred. In many states operators are required to notify the state of an emission event within 24 hours and subsequent reports within 30-60 days.[5] However, we understand there may be a delay in downloading aerial or satellite data and subsequent review and validation.

Action Requested. EPA should require third parties report an event to the EPA and/or state delegated agency for review. This should be completed no later than 5 calendar days after the event. EPA and/or the state delegated agency would then notify the operator to verify a release and take corrective action, if needed. Only an event that has been verified and corrective action taken would be made available to the public on EPA's or the state delegated agency's existing website.

EPA is also proposing that operators initiate a root cause analysis and take corrective actions within 5 calendar days of an owner or operator receiving the notification of the super-emitter emissions event, and completion of corrective actions within 10 days of the notification. EPA is proposing operators submit a written report within 15 days of completing the root cause and corrective action to EPA and/or the delegated state delegated agency's authority. These time frames are inadequate as some locations are remote in nature or in some instance, may require longer time frames to obtain equipment or schedule service companies to complete the corrective action. Additionally, it is unclear what EPA means by root-cause analysis. This may mean a simple identification of a leak and actions taken to stop the emission or it could mean an in-depth engineering analysis. We request EPA use different terminology such as a technical investigation rather than root-cause analysis. Operators should not be required to conduct a detailed root-cause engineering analysis of an event (e.g., an open tank hatch) when a site visit can easily identify the problem and a remedy the situation.

Action Requested. As previously stated, EPA and/or the state delegated agency should be the entity to notify the operator of an event. Operators would then begin a technical analysis

[5] Oklahoma Administrative Code 252:100-9 and Texas Administrative Code Section 101.201.

(not a root cause analysis) and take corrective actions, if possible, within 5 calendar days. EPA should allow final repairs and report to EPA and/or state delegated agency within 30 calendar days. If corrective actions take longer than 30 days, operators could submit a corrective action plan to the EPA and/or the state delegated agency. This would align with other types of emission event reports required by state delegated agencies.[6]

h. Public Information. EPA states it will make available in a document repository of the notices to operators that the EPA receives, as well as the reports sent to the EPA by owners and operators in response, so that notifiers, communities, and owners and operators have quick access to the information submitted to the EPA under the super-emitter provisions. Third parties may also make such reports available to the public on other public websites. EPA states it would generally not verify or authenticate the information in third party reports prior to posting. [87 Fed. Reg. 74750] The EPA would maintain a public list of approved qualified third-party notifiers so owners and operators can verify approval before being required to act on a notification.

The Proposed Rule does not discuss what will be included in the report that will be placed on the website or how this information will be provided in easy, understandable format. Any monitoring data should be fully transparent e.g., identify who collected it, how it was collected, when it was collected, what technology was used, accuracy information, and other pertinent information. EPA states that it would generally not verify or authenticate the information in third party reports prior to posting and it does not discuss any requirements for quality assurance and quality control before the information is made available to the public. It would be up to the operator to verify and validate and/or disprove an emission event. Inaccurate emission data released to the public will harm the regulated community and create unnecessary work and costs on the operator to provide documentation that an event was not valid, and/or repair its reputation after the fact.

Action Requested. As previously stated, EPA should require third party notices of an event be sent to EPA and/or the state delegated agency first. EPA and/or the state delegated agency would review this information and contact the operator to verify the event and take corrective action, if needed. Only after the event is verified and corrected should the event information, be made available to the public on EPA's or the state delegated agency's website.

i. Compliance and Enforcement – The Proposed Rule is unclear on how super-emitter events will be used by EPA and/or state delegated agency as it relates to enforcement.

Action Requested. EPA should clearly explain how and when the super-emitter program data may be used in compliance and enforcement actions.

j. Other – The Proposed Rule fails to address several issues. For example, it lacks information on how multiple third parties will avoid monitoring the same area and creating multiple notices to the operator for the same event, it fails to address how third parties will know if an emission is permitted or not, or even if it's an affected facility.

Action Requested. EPA should structure its super-emitter program to address these issues.

[6] Ibid.

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3. **Fugitive Emissions**
   a. **Monitoring Frequencies and Repairs –** EPA proposes varying monitoring frequencies and repair time frames for different types of well sites. First, the proposed categories for monitoring are very limiting based on equipment at the site, pushing a low production, marginal well into more frequent and complex monitoring requirements. The proposed monitoring timeframes (e.g., quarterly, bimonthly and monthly AVOs) and repair frequencies (e.g., within 15 days of inspection vs. first attempt at repair within 30 days and final repair within 30 days of first attempt) are confusing and may lead to non-compliance. Finally, EPA does not establish an option for operators to reduce or cease monitoring if fugitive emissions monitoring results are not detecting emissions.

      Action Requested. We request EPA reconsider its well categories for monitoring an incorporate a throughput component into that process that would prevent low production, marginal wells from being automatically included in a category that requires more frequent and complex monitoring requirements. We request EPA simplify monitoring frequencies and align repairs timeframes (e.g., for all categories of wells, first attempt at repair within 30 days and final repair within 30 days of first attempt) for existing well facilities. In addition, EPA should include a process whereby operators of existing facilities can reduce or cease monitoring if fugitive emissions monitoring results are not detecting emissions or there is little to no benefit.

   b. **Reporting and Recordkeeping.** EPA states that owners and operators would be required to use the appropriate spreadsheet template to submit information to CEDRI for annual and semiannual reports. EPA states that a draft version of the proposed templates for these reports was included in the docket for this action. The EPA specifically requests comment on the content, layout, and overall design of the templates. We were not able to find this document.

      Action Requested. We request EPA make this document available for public review and comment.

   c. **Removal of Appendix K for well sites and centralized production facilities is appropriate.** The Alliance had significant concerns with Appendix K as provided in its 2021 Proposal, and we submitted comments to EPA on that issue during the comment period. In this Proposed Rule, EPA is proposing to require OGI monitoring for well sites and centralized production facilities following the monitoring plan required in proposed 40 CFR 60.5397b instead of requiring the procedures being proposed in Appendix K for these sites. We support this change.

   d. **EPA's proposed well closure requirements are outside its statutory authority.** EPA proposes to require owners and operators to develop and submit a well closure plan within 30 days of the cessation of production from all wells at the well site or centralized production facility. The plan would include: (1) The steps necessary to close all wells at the well site, including plugging of all wells; (2) the financial requirements and disclosure of financial assurance to complete closure; and (3) the schedule for completing all activities in the closure plan. The EPA is also proposing to require that owners and operators submit a notification to the Agency 60-days before beginning well closure activities. Additionally, EPA is proposing to require owners and operators to report, through the annual report, any changes in ownership at individual well sites so that it is clear who the responsible owners and operators are until the site is plugged and closed and fugitive emissions monitoring is no longer required. The EPA solicits comment on this additional reporting requirement, including other mechanisms for obtaining this information.

Action Requested. This type of information is provided to the state under existing oil and gas programs. The requirement for this information or similar types of information is outside EPA's statutory jurisdiction. We request EPA remove the well closure requirements from the Proposed Rule and work with states to obtain existing available information.

4. **Alternative Monitoring.**
   a. The goal of emission monitoring technologies is to find and fix leaks quickly. We support the use of alternative monitoring technologies that allows operators flexibility in using technologies tailored for their site-specific conditions. However, EPA's proposed matrix is too prescriptive focusing on frequency and sensitivity - the less sensitivity a technology, the more frequently it should be used and visa vise while requiring the use of overlapping technologies. However, this matrix is more stringent than the use of OGI. We are concerned that the Proposed Rule will stifle new technology development and limit flexibility. There are multiple ways to achieve monitoring and EPA should not limit or prescribe a technology when a variety of technologies would suffice to find and fix leaks.

      Action Requested. We request EPA reconsider and revise its matrix that encourages the development of new technologies that can be used interchangeably by operators (based on site specific conditions) to find and fix leaks quickly and economically.

   b. EPA states that it retains authority to rescind approvals of any alternative monitoring technology. It is unclear how EPA will view companies using a technology that EPA later rescinds approval.

      Action Requested. We request EPA clarify that companies using a technology that EPA later rescinds approval for will not be held in violation.

5. **Pneumatic Controllers.**
   a. EPA states that a pneumatic affected facility now includes (1) Controllers where the emissions are collected and routed to a gas-gathering flow line or collection system to a sales line, used as an onsite fuel source, or used for another useful purpose that a purchased fuel or raw material would serve (i.e., generally characterized as "routing to a process"); and (2) self-contained natural gas pneumatic controllers. This change disincentivizes operators to take positive steps to eliminate emissions, and it potentially disincentivizes new technology development. If equipment, such as a self-contained natural gas pneumatic controller is designed and operated with zero emissions and monitoring shows no emissions then it should not be an affected facility. Regulating these types of controllers is excessive and unwarranted.

      Action Requested. We request EPA remove these types of pneumatics from regulation in the Proposed Rule. As an alternative, the pneumatic controllers could be regulated under the fugitive emissions monitoring program.

Modification. EPA states that in 40 CFR 60.14(a), a "modification" is defined as "any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant." Then, EPA goes on to state that a modification is the addition of one or more pneumatic controllers making the collection of pneumatic controllers at the site a pneumatic controller affected facility. If an operator can provide information that emissions have not increased with the addition of one or more controllers at the site, then EPA should not consider this a modification.

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Action Requested. We request EPA include a provision in the Proposed Rule that allows operators to provide information showing that if emissions have not increased by the addition of a pneumatic controller, then it does not constitute a modification that makes the entire collection of pneumatic controllers at the site a pneumatic controller affected facility.

b. EPA's states that its proposed change to a site-wide pneumatic controller affected facility definition would allow the replacement of existing high-bleed controllers with low-bleed controllers without becoming an affected facility, **provided that 50 percent or less of the controllers are replaced at the same time. [Fed. Reg. 74758, emphasis added]** This would be beneficial step to reduce emissions and it is unclear why EPA is limiting operators from replacing high-bleed controllers for low bleed controllers.

Actions Requested. We request EPA include a provision that allows operators to replace high-bleed controllers with low-bleed controllers without becoming an affected facility.

c. EPA is requesting more information on pneumatic controllers associated with temporary operations before it can make a determination on whether to provide an exemption for them. Temporary tanks may be needed on site if a well is surging. Pneumatics used in these scenarios are portable and temporary and cannot be connected and routed to a process, sales line or to an onsite control device.

Action Requested. We request EPA include an exemption in the Proposed Rule for temporary pneumatic controllers.

d. The Proposed Rule does not allow operators to route emissions from a pneumatic controller to a control device. However, in many situations, onsite control devices exist that would be a cost-effective solution. EPA has requirements for control devices to obtain a 95% reduction in methane and VOCs emissions. Even, EPA acknowledges that this is a viable option to achieve emission reductions from natural gas-driven pneumatic controllers. Additionally, EPA's use of emission factors and methodologies overestimates emissions from these devices which has led to excessive requirements.

Action Requested. We request EPA allow emissions from pneumatic controllers to be routed to a control device.

e. The Proposed Rule does not acknowledge the remote nature of many onshore Lower 48 well locations that lack access to grid power. Many wells drilled prior to the New Source Performance Standards ("NSPS") OOOOa used the industry standard for pneumatic controllers at the time, which was natural gas operated. The design of new well sites has evolved to include the use of air driven or electric pneumatic controllers in the original design. To retrofit existing well location(s) that do not have existing onsite power requires the installation of generators to power either electric driven or air driven devices. Additionally, due to differences in pressure, it is not possible to route the discharge from pneumatic controllers back to processes with higher pressure without additional equipment.

Action Requested. As previously stated, EPA's one-size-fits-all requirement for existing facilities is not appropriate. We request EPA establish a separate standard for pneumatics at existing locations, especially low producing, marginal wells. The Proposed Rule allows sites in Alaska to use low bleed continuous pneumatic controllers where onsite power is not available. Converting high bleed devices to low bleed devices is a commercially available option at a fraction of the cost of replacing the entire device.

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6. **Pneumatic Pumps.** There are situations in which pneumatic pumps are used for chemical injection. These types of pumps operate at very low pressures, have minimal emissions, and should be exempt.

   Action Requested. We request EPA allow operators an exemption for these types of pumps or provide an option where technical information could be provided to justify why they should be exempt for replacement and/or retrofitting.

7. **Wells and Associated Operations.** EPA proposes to allow owners and operators four compliance options to reduce or eliminate emissions of methane and VOC from associated gas from oil wells. These options are: (1) Recover the associated gas from the separator and route the recovered gas into a gas gathering flow line or collection system to a sales line, (2) recover the associated gas from the separator and use the recovered gas as an onsite fuel source, (3) recover the associated gas from the separator and use the recovered gas for another useful purpose that a purchased fuel or raw material would serve, or (4) recover the associated gas from the separator and reinject the recovered gas into the well or inject the recovered gas into another well for enhanced oil recovery. EPA goes on to state that associated gas cannot be routed to a flare or other combustion device unless the owner or operator conducts a detailed analysis and demonstrates that all four options discussed above are infeasible due to technical or safety reasons, and that demonstration is approved by a certified professional engineer. EPA is requiring this demonstration be provided in the first annual report. Operators would be required to report changes at the site and whether those changes impacted the infeasibility analysis. If the change did not impact this feasibility a revised demonstration and certification would be required.

   Action Requested. For those situations where the operator is connected to a sales line and there are instances where the gas needs to be routed intermittently to a control device for equipment maintenance, repairs, emergencies or other similar situations, this type of flaring should not have to undergo repeated onerous infeasibility determinations and detailed recordkeeping requirements. A one-time feasibility determination should suffice. The requirement to have a certified professional engineer conduct the feasibility analysis is excessive as well. In-house engineers with the knowledge, experience and understanding of the site conditions should be allowed to conduct the technical infeasibility demonstration. Also, EPA should recognize the characteristics and limitations of low producing, marginal wells. The production of these wells is declining. Repeated, onerous technical infeasibility analysis, and detailed recordkeeping should be eliminated from the Proposed Rule.

8. **Liquids Unloading.** EPA states that in the event that it is technically infeasible or not safe to perform well liquids unloading with zero emissions, the EPA proposed to require owners and operators to establish and employ best management practices to minimize emissions. Elsewhere in EPA's Proposed Rule, technical infeasibility analysis can be conducted by a qualified professional engineer or an in-house engineer. In addition, EPA definition of liquids unloading would regulate liquids unloading events that do not emit.

   Action Requested. As allowed elsewhere in EPA's Proposed Rule, we request EPA clarify that technical infeasibility for liquids unloading can be accomplished by a professional engineer or an in-house engineer. EPA should remove any requirements for liquid unloading events that do not emit emissions.

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9. **Control Devices.**
   a. **Flares and Enclosed Combustion.**

EPA is proposing to include requirement for flares and enclosed combustion devices to demonstrate they meet a 95% VOC and methane destruction efficiency, comply with 40 CFR 60.18 for all flares regardless of facility type (except for pressure assisted flares), be tested to determine flow and net heating value ("NHV") requirements to achieve 95% destruction efficiency, have a continuous burning pilot recorded by a monitoring system at least once every 5 minutes, and have parametric monitoring to ensure the requirements for flow rate and NHV necessary to achieve 95% destruction are met (unless NHV can be demonstrated sufficient at all times).

For older wells and facilities with low or intermittent vapor flow to a flare or combustor, there often is not enough gas produced by the well to keep a pilot continuously lit or to produce enough tip velocity to meet the flow rate requirements and promote the mixing of gas and air necessary to achieve 95% destruction efficiency in a flare or combustor. For this reason, many states have provisions for using automatic ignition systems that spark every few seconds to ensure a flame is initiated when gas is present, and/or pit flares for low emitting facilities. If a continuous burning pilot were required for such a site, it would be necessary to purchase additional natural gas, propane, or butane to maintain the pilot at all times, regardless of whether gas was being sent to the flare or enclosed combustion device. This would unnecessarily create more emissions than an equivalent flare with an automatic ignition system, and often the additional emissions from the continuous flame would exceed the emissions of a less efficient combustion system that only combusted when gas was present.

When wells are shut-in, tank emissions are reduced to breathing emissions which are very minimal and often there is not enough flow to the flare or control device to prevent flashback and an explosion, which create greater environmental and safety impacts than the minimal breathing emissions. After multiple tank fires in North Dakota, the North Dakota Department of Environmental Quality acknowledged this risk and issued guidance that allows for tank vapor flares and control devices to be bypassed when a well is shut in to minimize the risk. In these cases, the hatches may need to be left open to relieve breathing pressure due to temperature fluctuations throughout the day. Further, it is common to isolate a tank that needs repair, empty the tank, and leave the hatch open to vent vapors to allow for repair. This can take several days. Finally, if a vapor recover unit and flare are not required at a facility, then tank emissions are understood to be vented to atmosphere in their entirety, regardless of whether the emissions occur from tank vents, openings, conservation vent valves, pressure relief valves, or a thief hatch.

Low pressure vapor flow monitoring is very difficult and expensive to accurately and consistently measure and will lead to wells being shut in before their associated reservoirs are depleted. Further, the Proposed Rule is not clear on whether each device would require a test. Operators should be able to use engineering methods to establish a "model" piece of equipment and apply the test results elsewhere under like conditions, flow, BTU, etc., instead of conducting tests on each combustion device. This would reduce unnecessary costs on operators.

Finally, it is possible for a higher producing facility to temporarily decrease production such that the minimum flow rate to a combustor or flare are temporarily not met. This is especially true when a facility is being shut in or started up. In such a condition, if a flare or combustor has a flame, then it

is burning vapors, and a temporary low flow condition should not be considered a violation if its temporarily not possible to meet a minimum flow rate requirement. Texas recognizes this and has provisions in its HRVOC control program for a flare which temporarily does not meet the conditions of 40 CFR 60.18 to be calculated as having a 93% destruction efficiency, based on observations from the 2010 TCEQ Flare Study. Without such a provision, an operator would be forced to choose between 95% and zero % destruction for short-term periods of low flow, neither of which is correct.

Action Requested. We request:

- An exception for low emitting or intermittent gas producing facilities to utilize automatic ignition systems and/or a pit flare if a continuous burning pilot and a 95% efficient flare or combustion device if technically infeasible due to consistently low or intermittent flow and/or would require additional purchased gas as determined by an in-house engineer.
- An exception for shut-in facilities such that flares and/or combustors are not required to be operated when the associated wells are not producing or when liquid is not flowing to the associated tanks.
- A provision for operators to use engineering methods to establish a "model" piece of equipment and apply the test results elsewhere under like conditions, flow, NHV, etc., instead of conducting tests on each combustion device as determined by an in-house engineer.
- A provision for a lower destruction efficiency of 93% to be recognized during temporary reductions of flow that cause vapor flow to a flare or combustor to fall under the minimum required flow for demonstrating 95% reduction.

10. Storage Vessels.

a. Reconstruction. EPA states that for a tank battery which consists of a single storage vessel, it may be possible that the cost of replacing the thief hatch, pressure relief device or other depreciable components could exceed 50 percent of the cost of an entirely new storage vessel, therefore the EPA is proposing that the provisions of 40 CFR 60.15 would apply. The EPA requests comment on this assumption that the costs of replacement of all depreciable components on a single storage vessel could exceed 50 percent of the cost of an entirely new storage vessel. Typically, tank components such as tank hatches and pressure relief devices would not exceed 50 percent of the cost of an entirely new storage vessel. Additionally, EPA solicits comment on whether to similarly set a specific time period (or rolling time period) within which replaced storage vessels in an existing tank battery will be aggregated towards determining whether the 50 percent replacement threshold has been exceeded, and if so, whether a 2-year time frame or another time frame is appropriate for determining reconstruction to a tank battery with more than a single storage vessel. We think this provides operators clear way to determine if reconstruction has been triggered. We support this requirement.

b. Modification. EPA is proposing that a modification occurs to an existing tank battery located at a well site or centralized production facility when the tank battery receives additional crude oil, condensate, intermediate hydrocarbons, or produced water throughput and the potential for VOC or methane emissions increases above the applicable thresholds. Separately, the EPA is proposing that a modification occurs to an existing tank battery located at a compressor station or onshore natural gas processing plant when the tank battery receives additional fluids which cumulatively exceed the throughput used in the most recent determination for VOC or methane missions (e.g., permit) based on the design capacity of such tank battery. In addition, in EPA's 2021 Proposal, modification is also

triggered by the following two events: (1) A storage vessel is added to an existing tank battery; and/or (2) one or more storage vessels are replaced such that the cumulative storage capacity of the existing tank battery increases.

Action Requested. EPA should allow operators the option to provide information that shows if emissions are not increasing, a modification has not been triggered.

c. EPA solicits comment on including a requirement to equip thief hatches with alarms, automated systems to monitor for pressure changes, or use of automatically closing thief hatches. First this would be impractical as hatches are accessed to gauge tanks and conduct routine maintenance and repair. It would be difficult to monitor tanks that have low pressures. Additionally, industry is not aware where such equipment has been installed and operated successfully.

Action Requested. Until such technology has been adequately designed, tested, and the costs and results are known, EPA should not consider this a requirement in the Proposed Rule.

11. Covers and Closed Vent Systems ("CVS"). EPA is proposing that CVS include upfront engineering (Professional Engineer or in-house engineer) design analysis and certifications, an emissions limit that requires design and operation with "no identifiable emissions", initial and periodic inspections of the CVS, and continuous monitoring of CVS bypass systems (unless equipped with a seal or closure mechanism).

The "no identifiable emission" standard is basically a zero-emission standard. This is not feasible or realistic for equipment located outside, subject to harsh conditions and undergoing continuous wear and tear of operations. There is the potential for the intrusion of foreign objects preventing re-seating of seal surfaces, e.g., dirt or ice interfering with the sealing surfaces of tank hatches, particularly on vacuum seals. Emission from such a scenario is not an indication of inadequate CVS design. Also, when wells are shut-in, tank emissions are reduced to breathing emissions which are very minimal and often there is not enough flow to the flare or control device to prevent flashback and an explosion, which create greater environmental and safety impacts than the minimal breathing emissions. After multiple tank fires in North Dakota, the North Dakota Department of Environmental Quality acknowledged this risk and issued guidance that allows for tank vapor flares and control devices to be bypassed when a well is shut in to minimize the risk. In these cases, the hatches may need to be left open to relieve breathing pressure due to temperature fluctuations throughout the day. Further, it is common to isolate a tank that needs repair, empty the tank, and leave the hatch open to vent vapors to allow for repair. This can take several days. Finally, if a vapor recovery and flare are not required at a facility, then tank emissions are understood to be vented to atmosphere in their entirety, regardless of whether the emissions occur from tank vents, openings, conservation vent valves, pressure relief valves, or a thief hatch.

Requested Action. We request EPA remove the no identifiable emission standard and include CVS under the leak detection and repair monitoring program. EPA should allow exceptions for tank hatches, open vent lines, and other similar operational situations.

EPA is also proposing that any leak detected would be subject to repair, with a first attempt at repair at 5 days and final repair within 30 days. The first attempt at repair within 5 days may too short a time frame to obtain equipment or service companies to make the necessary repairs. If alternative monitoring technologies (e.g., flyovers) are being used, it may take time to download information, review reports, and

then prioritize emission findings. A short repair time frame may disincentivize the use of alternative technologies. Also, any hydrogen sulfide at the site may complicate first attempt of repairs within 5 days.

Action Requested. We request EPA change the first attempt at repair from 5 days to 10 business days.

EPA states that if the CVS is equipped with a bypass, the bypass must include a flow monitor and sound an alarm to alert personnel that a bypass is being diverted to the atmosphere or it must be equipped with a car-seal or lock-and-key configuration to ensure the valve remains in a non-diverting position. It is unclear what EPA means by "bypass". We assume that open tank hatches are not considered a bypass.

Action Requested. We request EPA clarify that a bypass does not include an open tank hatch.

12. State Plans

By dividing regulatory authority under Clean Air Act Section 111 into separate programs for new and existing sources, Congress clearly recognized that existing sources are less able to comply with new regulatory requirements than new sources. EPA is unnecessarily burdening state delegated agencies with excessive requirements if they don't adhere to the Proposed Rule's presumptive standards for existing sources ("OOOOc"). State delegated agencies would be required to conduct lengthy analysis and write major regulations or face imposition of a federal plan. Basically, EPA is forcing states to "accept" the proposed OOOOc. We think this is inappropriate and "flies in the face" of federal and state cooperation.

a. **There are significant Federalism issues with the Proposed Rule** – In the Proposed Rule, EPA did not lessen the requirements on states as compared to the 2021 Proposal, but stated that it updated, strengthened, and/or expanded the 2021 Proposal for methane emissions from existing designated facilities that states would have to implement [87 Fed. Reg. 74705]. Under its analysis of Executive Order 13132: Federalism, EPA states, "These actions will not have substantial direct effects on the states as defined in the Executive Order, on the relationship between the Federal Government and the States, or on the distribution of power and responsibilities among the various levels of government." [87 Fed. Reg. 74845]

   However, Oklahoma provided comments to EPA on its 2021 Proposal, where its states that, "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." Oklahoma goes on to state that the number of oil and gas permitted facilities would go from approximately 10,000 to over 200,000. Other states, like West Virginia provided similar concerns. There is a clear disconnect between EPA's analysis and what states communicated to EPA.

   Action Requested. EPA should coordinate with states, like Oklahoma, and incorporate ways to reduce process requirements to allow states the flexibility (as allowed by the CAA) to develop and implement state specific requirements for existing emission sources.

b. **The 18-month time frame for states to submit a plan to EPA is not reasonable.** EPA requests comments on the proposed 18-month state plan submission deadline upon publication of the final OOOOc. We do not think the 18-month time frame is reasonable for a state to submit a plan to EPA, especially if a state chooses to depart from the OOOOc. The administrative process (e.g., any new legislation needed, development of regulations, outreach to the public and environmental justice communities ("EJ"), or permit development) for a new program alone is time-consuming. Then,

EPA proposes significant source-by-source equivalency determinations and stringent standards regarding the remaining useful life and other factors ("RULOF") determination. States can provide the most accurate information on the amount of time needed to complete this effort. In addition, EPA has identified over 15,000 oil and gas owners and operators, around 1 million producing onshore oil and gas wells, about 5,000 gathering and boosting facilities, over 650 natural gas processing facilities, and about 1,400 transmission compression facilities. States will need to develop and draft plans covering these designated facilities that include the required components, such as standards of performance and implementation measures for such standards and adopt the plans through their required administrative processes before submitting them to the EPA. In addition, EPA should make the compliance date with the new state regulations based on the approval of the state plans rather than their submission. In its proposed rule, *Adoption and Submittal of State Plans for Designated Facilities: Implementing Regulations Under Clean Air Act Section 111(d),*[7] EPA proposes to give itself 12 months to approve state plans. Since states and the regulated community will not know if the state regulations will be approved or whether EPA will be proposing a federal plan until EPA acts, compliance should be based on final EPA action.

Action Requested. The 18-month time frame is not reasonable. EPA should work with states to identify a reasonable time frame, but it should be no less than 3 years. EPA should set the compliance date with new state regulations for existing sources based on the approval of the state plans rather than their submission date.

c. **Rural environmental justice communities reliant on oil and gas industry.** The State of Oklahoma submitted detailed comments to EPA regarding it's 2021 Proposal where it identified impacts to rural environmental justice communities reliant on oil and gas industry. These are real concerns for rural, small businesses. We incorporate those comments into this letter.[8]

13. **EPA overestimates emissions and reduction benefits.** EPA estimated the quantity of emissions and potential reductions using its data that contains emission factors ("EFs") and estimation methodologies that do not reflect actual emissions. In some instances, EFs and estimation methodologies significantly overestimate emissions from sources e.g., pneumatic and liquids unloading. EPA's use of inaccurate emission data has erroneously justified excessive requirements for existing wells. Congress recognized this issue and incorporated into the Inflation Reduction Act a requirement for EPA to revise its Greenhouse Gas Reporting Rule to allow reporting entities to collect and submit empirical emission data.[9]

Action Requested. We request EPA reconsider its emission data and the associated regulatory requirements for the various emission sources located at existing wells. In addition, EPA must update its emission factors and methodologies to reflect actual emissions from the oil and gas industry.

14. **Inadequate Comment Time Period.**

The Proposed Rule was published on December 6, 2022, just prior to the holidays. The Alliance (and many other entities) requested a 60-day comment period extension. The 60-day comment period is unreasonable for such a complex and lengthy rulemaking. It does not allow our members adequate opportunity to review the information and rationale for the Proposed Rule, and to provide meaningful and fully informed comments on the requested topics given the breadth of the issues raised. In response

[7] 87 Fed. Reg. 79176, December 23, 2022.
[8] State of Oklahoma, Office of the Secretary of Energy & Environment, comment submittal, January 25, 2022.
[9] Pub. L. 117-169, Sec. 60113, August 16, 2022.

to EPA's 2021 Proposal, we requested that EPA's forthcoming proposed supplemental rule provide at least a 120-day comment period. That did not occur.

Action Requested. We request EPA provide rationale and justification for limiting the comment period to 60-days.

15. The "Applicability Date" of the Proposed Rule should be December 6, 2022.

EPA's 2021 Proposal described its thoughts on potential emission requirements but did not include any proposed regulatory language that operators could review and comment on with any certainty. Yet EPA continues to justify why regulatory text is not needed. We have not seen any official proposed rule that did not contain regulatory text. In all practical situations, the 2021 Proposal was an advanced notice of proposed rulemaking.

Action Requested. The 2021 Proposal should not be characterized as a "proposed rule" in which the publication date of November 15, 2021, becomes the applicability date for this Proposed Rule. We request EPA revise the applicability date to align with the December 6, 2022, Federal Register notice of this Proposed Rule.

16. Social Cost of Carbon ("SCC") lacks the benefits of oil and natural gas to society.

EPA estimated the climate benefits of methane emission reductions expected from this Proposed Rule using the "Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under E.O. 13990 (IWG 2021)" published in February 2021 by the Interagency Working Group on the Social Cost of Greenhouse Gases (IWG). However, it does not consider the many benefits of oil and natural gas and how EPA's actions may have broad implications here in the U.S. and abroad. For example:

- Oil and natural gas play an indispensable role in providing products and solutions to improve human health and welfare, power the global economy, and make modern life possible,[10]
- Oil and natural gas companies play a significant role in state economies, contribute to state and local taxes, and royalties that pay for schools, universities, roads, and various essential services, provide good paying direct and indirect jobs, and improve the communities they work and reside in,[11]
- Oil and natural gas companies developing U.S. resources can provide the world affordable, reliable natural gas and crude oil in the most environmentally responsible manner as compared to oil and gas development elsewhere in the World, and
- Clean-burning natural gas has enabled the U.S. to become the global leader in greenhouse gas emissions reductions.[12]

Action Requested. We request EPA factor into its SCC cost benefit analysis the many benefits (as described above) of oil and natural gas.

[10] American Fuels and Petrochemical Manufacturers, website information on May 5, 2022.
[11] https://oerb.com/economic-impact/; https://www.txoga.org/2021eeir/; https://www.nmoga.org/natural_gas_and_oil_industry_critical_to_new_mexico_post_pandemic_recovery?utm_campaign=_icymi_new_report&utm_medium=email&utm_source=nmoga.
[12] Global CO2 Emissions in 2019, IEA, February 2020; U.S. Energy-Related Carbon Dioxide Emissions, 2019, U.S. Energy Information Administration (EIA), September 2020.

THE PETROLEUM ALLIANCE
OF OKLAHOMA

The Alliance appreciates the opportunity to provide comments to the EPA on the Proposed Rule. If you have questions, please contact me at angie@okpetro.com or 405-601-2124.

Sincerely,

Angie Burckhalter

Angie Burckhalter
Senior V.P. of Regulatory & Environmental Affairs

Exhibit H

Comment of Michigan Oil and Gas Association,

February 13, 2023

February 13, 2023

Michael S. Regan, EPA Administrator
U.S. Environmental Protection Agency, EPA
EPA Docket Center, Docket ID No. EPA-HQ-OAR-2021-0317
Mail Code 28221T
1200 Pennsylvania Ave., NW
Washington, DC 20460

Docket ID No. EPA-HQ-OAR-2021-0317-1460

Re: Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources:
Oil and Natural Gas Sector Climate Review

Dear Administrator Regan:

Please accept the following discussion provided by the Michigan Oil and Gas Association ("MOGA") with regard to the proposed *Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review* published on December 6, 2022.

MOGA is a trade organization that represents a large majority of small business entities engaged in the exploration, drilling, production, transportation, processing and storage of crude oil and natural gas within the State of Michigan. The vast majority of MOGA's constituents are considered "small businesses" or "very small businesses" by the United States Small Business Administration ("SBA"). To facilitate a cohesive and comprehensive reply, MOGA sought input from our constituents including producing companies, service firms and other small businesses engaged in the safe production, transportation, service and other tertiary aspects of oil and gas within the State of Michigan regarding the potential impacts of the aforementioned rule.

MOGA's correspondence is intended to provide much needed clarity for general ideas, concepts and impacts on small businesses regarding the proposed New Source Performance Standards ("NSPS") for new, reconstructed and modified sources under 40 CFR Part 60, Subpart OOOOa and future proposals for "Emissions Guidelines" ("EG") for existing sources under 40 CFR Part 60, Subpart OOOO(b) & Subpart OOOO(c).

MOGA urges the United States Environmental Protection Agency ("EPA") to listen to our small business industry segment prior to creating and finalizing technically and financially infeasible "one-size-fits-all" approach to regulations based on generalized production modeling and manipulative special interest groups without daily oil and gas operational knowledge and experience.

The following discussion summarizes specific topics pertinent to oil and natural gas production within the State of Michigan:

1. The Complexity of Rule & Response Timing

The most common response from MOGA's constituents regarding the proposed regulations published on December 6, 2022, was the allotted time for adequate time for meaningful response. MOGA supported the "Request for Extension" letter submitted on January 17, 2023, by the Attorney General of the State of West Virginia and signed by 19 additional state Attorney Generals. MOGA supported the Attorney General's rationale behind the request for extension and believes that previous extensions to the public comment periods provided in the November 2021 and past Subpart OOOO proposals set a precedent for allowing extensions to allow adequate time for a comprehensive evaluation of proposed regulations that will adversely impact oil and natural gas companies' ability to operate in a free-market economy. MOGA's member constituents are almost exclusively small or very small businesses without the staff or the time to read, comprehend, evaluate potential impacts and ramifications and provide sufficient comment to substantiate their questions and concerns. MOGA believes this inadequate lack of appropriate time and the denial of the 20 state Attorney General's request for extension greatly discriminates against small and very small businesses without staff to provide comment in a reduced timeframe. MOGA believes this will disproportionally harm small and very small businesses and erect barriers to fair competition in a free market economy.

A quick assessment of this harm could have major impacts on the surrounding communities where the corporate offices for these Michigan producers reside. The job losses would result from facility closures, layoffs of key personnel who keep the operations productive, marginal producing wells becoming uneconomic because of excessive regulatory obligations and the expense of those consulting charges to measure the nominal fugitive emissions or capital investments towards emission reduction. Once the producers close their doors and exit the small towns they support, the service companies have no clients to service, so they close their doors. This "snowball" effect results in once vibrant communities becoming ghost towns with only a stoplight to designate as an existing village.

2. Clarity of Proposed Regulations

The proposed regulations published by the EPA on December 6, 2022, did not offer a specific regulatory framework or text. Small business entities with minimal staff and limited resources need direct, well-defined and easily understood proposed regulations to evaluate for impacts and provide meaningful comment. Further, the approximately 500 pages in the current proposed regulations combined with reference to existing Subpart OOOO, Subpart OOOOa, the Methane Rollback Subpart OOOOa, the initial OOOOa, OOOOb and OOOOc proposal and references to an unpublished "presumptive standard" to be proposed in 2023 overwhelmed the majority of MOGA's constituents and made proposed regulations very unclear and not easily understood. MOGA's constituents commented that regulations need to be explicitly clear, easily understood and practically implementable. MOGA members commented that clear definition between what

specifically was being proposed, when juxtaposed to past regulations and unpublished future regulations, made the immediate understanding of proposed impacts to many small business' nebulas unattainable. Many of MOGA's members questioned the EPA's direction and asked whether the EPA had intended the proposed regulations to be "Advanced Notification of Future Rule-Making" since the EPA was soliciting numerous responses to questions, while simultaneously proposing non-specific and unclear future regulations. This lack of clarity and confusing language significantly prevented many of MOGA's constituents from fully understanding the proposed regulations and prevented meaningful and substantive comments on the potential short-term and long-term implications of proposed regulations that will affect small and very small businesses.

MOGA supports comments made by the Independent Petroleum Association of America's (IPAA) comments regarding issues of regulatory framework. MOGA recommends the EPA provide clear, well-defined and easily understood proposed regulations that can be understood by all businesses, including small and very small businesses without environmental and legal staff. This would include clear definitions of major equipment, calculation methodologies with samples, well-defined source definitions aligned with the 1979 Clean Air Act ("CAA") and clarification of exemptions.

MOGA also supports all comments regarding the lack of understanding of Kilograms per hour (kg/hr) vs. the industry standard of Standard Cubic Feet per hour (scf/hr) and Parts Per Million (ppm). MOGA's constituents commented on the lack of understanding of kg/hr and requested the EPA use the language of the industry. Many Michigan producers commented that scf/hr and ppm is the standard language and vernacular of the industry, and all related equipment is defined according to these standards. MOGA believes that the EPA should use the language of the industry to clearly communicate objects and standards. The use of kg/hr means nothing to the industry and prevented adequate understanding of the proposed regulations. Further, the short time period required to assess the short and long-term impacts to the industry and comment was complicated by the necessity to convert kg/hr to scf/hr or ppm.

3. EPA's Methane Rollback Rule Validity

MOGA's constituents requested that the EPA provided clarification of the validity of arguments made by the EPA in the 2020 Methane Rollback Rule published in the Federal Register regarding the ability of the EPA to regulate Methane under the CAA based on the premise that Methane was not listed as a known chemical detrimental to human health and the environment. MOGA commenters asked whether Congressional modification to the CAA was necessary to add Methane to the CAA? Since the EPA referenced the Methane Rollback regulations in the December 6, 2022, proposed regulations, MOGA believes that the EPA provided argument to the validity to the Methane Rollback rule and should provide explanation as to why the EPA now believes the EPA has legal authority to regulate Methane without Congressional modification to the CAA. Without Congressional approval from both the Federal House of Representatives and the US Senate, additions, removals or edits to the CAA are not considered binding. Also, MOGA is requesting clarification from the EPA regarding the permissible time allotments between any rule changes to the CAA. Review of the 1970 rule suggests significant

modifications to the rule may not be more frequent than 7-year cycles without Congressional approvals.

4. "One-Size-Fits-All" Approach

MOGA does not support the EPA's approach intimating that a "one-size-fits-all" is valid for application to all oil and gas-producing states. The "one-size-fits-all" approach proposed by the EPA does not allow for operational flexibility by producers to accommodate for uncontrolled variabilities like difficult ambient weather and annual weather patterns. The EPA's "one-size-fits-all" approach will adversely affect states like Michigan and prevent small businesses from competing on an equal and level playing field in a free-market economy because of its geographic location.

For example, Michigan wells are going to use additional equipment because of lower ambient winter temperatures that will impact small businesses' ability to compete in a free market compared to southern states like Texas or California. Also, the number of days of sunlight is going to be very different for each state depending on regional weather patterns and geographical latitudes. Historically, Michigan is one of the cloudiest states in the union during the winter. The proposed zero-bleed regulations are going to unfairly impact Michigan and prevent small businesses from competing in a free market because of variables outside of our producers' control. MOGA believes the EPA did not adequately address the cost-benefit analysis of proposing zero-bleed devices for all facilities across all states. Like the rationale for exemptions provided to Alaska, implementation of zero-bleed devices at all existing and new facilities in Michigan will be flawed and impossible to maintain because of the remoteness of many wells, annual snowfall and lack of necessary sunlight to provide adequate and consistent power.

MOGA believes the EPA has not considered all operational, market and industry variables when developing the current proposed regulations. The EPA must re-evaluate and develop emission reduction regulations that are flexible, practical and allow equal and fair competition within the marketplace.

5. Application & Economic Viability Concerns

MOGA questions the EPA's justification for proposing new regulations and capital investments to reduce emissions every 2 or 4 years. How can the EPA justify new regulations without a baseline to determine whether previous rules 40 CFR Part 60, Subpart OOOO ("Subpart OOOO") and the current rule 40 CFR Part 60, Subpart OOOOa ("Subpart OOOOa) have been successful?

MOGA argues that existing regulations for new wells including Subpart OOOO and Subpart OOOOa combined with natural production depletion (or Production Decline) will facilitate the EPA's emission reduction goals. MOGA evaluated three Michigan Basin producers reported 40 CFR Part 98, Subpart W annual reported Carbon Dioxide ("CO_2"), Methane ("CH_4") and Nitric Oxide ("NOx") emission over the 9-year required reporting period from 2011 through 2020. The table on the next page shows the initial 2011 reported data, the 2020 reported data and the percent change over 9 years:

3 Michigan Companies CO2, Methane & Nitrious Oxide reductions over last 9 years				
	Year	CO2	Methane	Nox
Company 1	2011	93837	952.98	0.202
	2020	32899	93.2	0.05
	% Change	**-64.94**	**-90.22**	**-75.25**
Company 2	2011	73354	2264	0.165
	2020	43459	1286	0.095
	% Change	**-40.75**	**-43.20**	**-42.42**
Company 3	2011	38523	2724	0.089
	2020	27198	1080	0.045
	% Change	**-29.40**	**-60.35**	**-49.44**
Average Reduction:		**-45.03**	**-64.59**	**-55.70**

From the data above, MOGA observed an average annual CO_2 reduction of 5.0%, an average annual methane reduction of 7.1%, and an average annual NOx reduction of 6.19% for the three companies, in aggregate. Further, MOGA observed a total CO2 emission reduction of 45.03%, a total CH_4 emission reduction of 64.59% emission reduction and a total NOx emission reduction of 55.70%, to date. The above-stated emission reductions will likely continue the current annual rate of decline as more facilities have modifications and become subject to the existing Subpart OOOOa regulations.

Given the above data, MOGA believes the EPA must justify the current proposed regulations by explaining why the current Subpart OOOOa regulations are not sufficient to meet emission reduction goals. At a minimum, MOGA believes the EPA must justify a "one-size-fits-all" approach to emission reductions when many producers are currently employing effective techniques and technologies from previous rulemaking efforts.

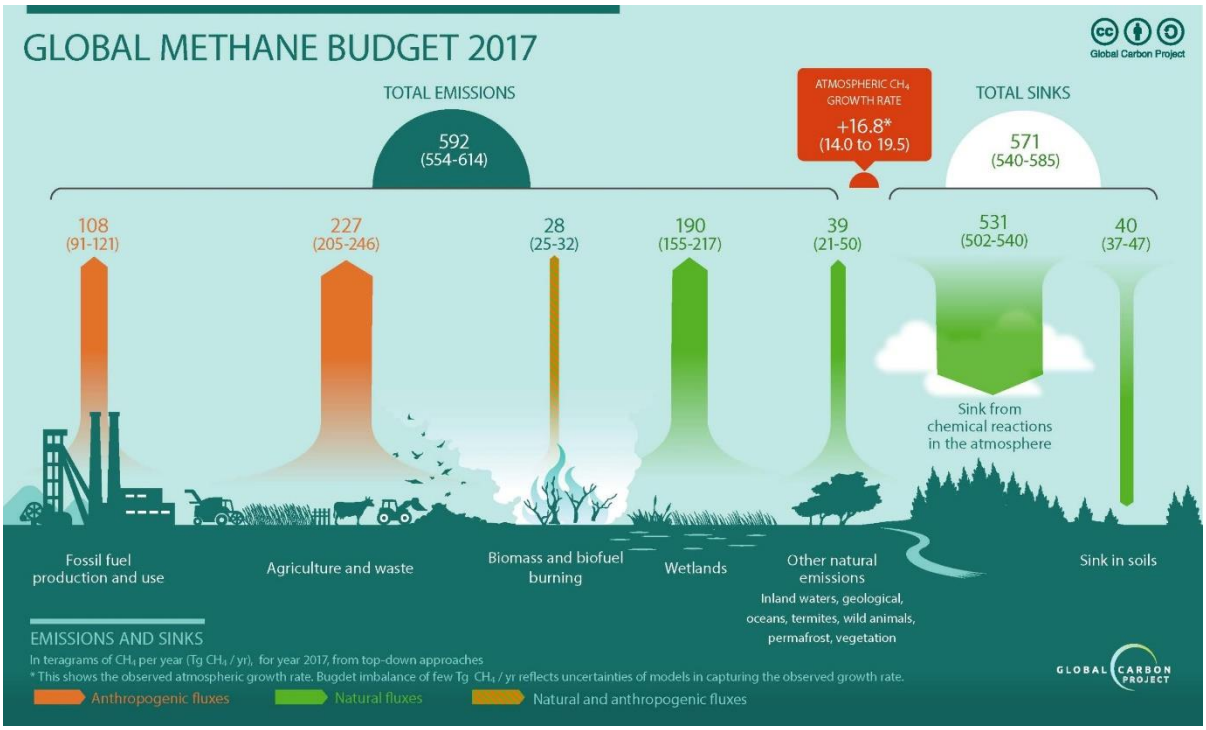
MOGA questions the EPA's justification for proposing new regulations without determining the effectiveness of prior regulations on emissions reduction.

6. Methane Regulation Narrative and Regulation Linearity

MOGA constituents questioned the EPA's narrative and rhetoric regarding the dangers of Methane to "climate change" when simultaneously proposed regulations regarding Methane sources are not linear to the EPA narrative of the dangers of Methane to human health and the environment. As noted in the January 17, 2023, letter requesting a public comment extension from 20 state Attorney Generals, the EPA had published concurrent revisions to both the December 6, 2022, proposed OOOO(b) and OOOO(c) and "water of the United States". The EPA's press release on December 30, 2022, indicated that the final "waters of the United States" was necessary to "protect people's health" by expanding the definition of "water of the United States" to "upstream water resources". MOGA questions the EPA's logic regarding expanding

protection of the "waters of the United States" and associated wetlands while simultaneously explaining the harmful effects of Methane on climate change.

As shown in the depiction below (Website: *https://newscenter.lbl.gov/2020/08/13/global-methane-emissions-soaring-but-how-much-was-due-to-wetlands/)*, Jackson et al. 2020 Environmental Research Letters indicated that Wetlands emit almost twice the amount of Methane to the environment than estimated oil and natural gas production emissions.



Many of MOGA's constituents question whether it is appropriate for the EPA to propose regulations for the protection of wetlands likely resulting in the creation and protection of additional wetlands when the EPA has gone to great lengths to explain the detrimental effects of Methane on human health and the environment. MOGA members are concerned with this logic and feel the EPA is "picking and choosing" logic and data to support an anti-oil and gas narrative.

MOGA's constituents also question the types of techniques that will be implemented for determining the crude oil and natural gas contributions to the fugitive emissions when production facilities and well production are constructed and located next to wetlands. When production companies begin to evaluate drilling potential sites, early geological investigations begin with the surface topography to project an anticipated formation deep below a targeted drilling location. Because of natural percolations of methane from wetlands, this hydrocarbon acts as a "natural indicator" that potential reserves deep below the surface and within the present area.

Related to the amount of Methane emissions from wetlands, MOGA also questions how the EPA's proposed "super-emitter" program and associated remote-sensing technologies will be able to account for wetlands adjacent to oil and natural gas operations. The EPA's proposed

third-party certification of technology for monitoring releases from oil and natural gas operations does not address the ability of technology to control for background sources of Methane from wetlands, cattle operations, etc. when determining fugitive emissions. MOGA constituents have provided numerous comments regarding the complexity of State of Michigan wetland protection rules often resulting in oil and natural gas wellheads and facilities being located immediately adjacent to both small and large wetland complexes. Naturally, Michigan has more wetlands than Texas, which once again, illustrates the one-size-fits-all approach is not valid across all oil and natural gas-producing states.

7. Other Implementation Issues & Considerations

MOGA spent considerable time contacting equipment manufacturers regarding the development of new replacement equipment similar to the existing devices (Ex.: process control valves, level controllers) and found it often takes 3 to 4 years to design, fabricate, test and certify new equipment. This process does not account for the future manufacturing, purchase, delivery, installation, operational cycles and assessment of whether the new equipment meets the new standards. If the equipment falls short of expectations, the field operators may require delivery of replacement parts, modification kits, component change-out or total abandonment until the manufacturer can isolate the problem, redesign the device, and manufacture the new replacement parts, which begins the evaluation process all over. Small businesses and marginal well operators do not have the luxury of continuous capital investment for new technology. During the Subpart OOOO and Subpart OOOOa rulemaking efforts, many of Michigan's small business producers spent significant capital investments in their operations without recovering the initial capital investment costs promised in the regulations. This aggregate and restrictive cost burden based on revolving regulations every 2 to 4 years, without an adequate baseline to assess the effectiveness, has become excessive and is not sustainable for small businesses with limited operating budgets.

MOGA's review of historic rule changes to the Clean Air Act ("CAA") found the act required changes in 1967, 1970, 1977 and 1990. These dates provided a large enough gap to go through the sequence of product changes and allow producing companies to recover initial capital investment before updating to a more effective device. More recently, the EPA has implemented new regulations or modifications to regulations in 2012, 2016, 2020, 2021 and now in 2023. Each prior regulation developed cost-based estimates to include an estimated time of return based on the capture and sale of emissions. MOGA believes the EPA must explain and include discussion and their rationale for revolving standards over a short period of time compared to historical changes to the CAA.

MOGA believes that many small businesses subject to emissions reduction requirements outlined in Subpart OOOO and Subpart OOOOa have succeeded in reducing emissions based on their implementation of the regulations and ask why these small businesses should now be penalized for their success? MOGA recommends the EPA provide small businesses with prior documented capital investment during recent and current regulations an "Exemption Classification" from new capital investment in the proposed regulations to allow cost recovery from promised, yet unrealized returns on capital investment.

MOGA also recommends the EPA consider including past estimates on cost recovery estimates to be honored from previous rulemaking justifications and allow small businesses the opportunity to recover capital costs before making future initial investments. As proposed, new regulations keep moving the standards beyond the reach of many small businesses that have diligently complied with previous rules.

8. Fugitive Emission Monitoring Considerations

MOGA suggests the EPA consider past small businesses' documented emission reductions as a factor in their required fugitive monitoring schedule. Once again, the EPA appears to be penalizing small businesses that have adhered to requirements outlined in the current Subpart OOOOa and previous Subpart OOOO rule. These small businesses feel "targeted" for their emission reduction efforts based on past regulations and now wonder if it will end? MOGA attended several meetings with the EPA during which, the EPA admitted the bulk of emissions come from a small group of sites and companies. For these reasons, MOGA believes the EPA should avoid penalizing small businesses with documented emission reduction efforts with an "Exemption Classification" for fugitive emission monitoring.

9. MOGA questions the EPA's use of 2019 emission data to justify the current proposed regulations. Based on historic rulemaking efforts, if the full implementation of Subpart OOOOa did not begin until roughly 2018 (considering the 2-year & 90-day court stay), how can the EPA determine the effectiveness of the Subpart OOOOa regulations and justify the new proposed regulations? As shown in the emissions reduction tables in Comment #2, Michigan producers have been successful in reducing emissions through Subpart OOOO and OOOOa regulations. These three small businesses have invested significant capital to achieve emission reduction without the EPA allowing enough time to recover costs.

Based on this data, MOGA believes that the EPA should allow more time to evaluate current regulations applied to new sources and future modifications of previously non-regulated sources before amending regulations resulting in another substantial economic burden on small business producers.

10. Industry & Small Business Comments & Concerns Integration with Proposed Regulations

MOGA believes the EPA has not considered or incorporated comments and concerns regarding the technical and financial infeasibility resulting from limited and condensed interactions with the small business segment of the oil and gas production industry before proposing new regulations.

MOGA participated as a small entity representative ("SER") on the Small Business Advocacy Review ("SBAR") Panel Process required under the Regulatory Flexibility Act ("RFA"), as amended by the Small Business Regulatory Enforcement Fairness Act ("SBREFA"). These

online Zoom meetings were hosted by the SBA & EPA on June 29, 2021, July 29th, 2021 and August 3, 2021.

Since the EPA has failed to acknowledge or respond to our previously stated concerns, MOGA is reiterating several of our final comments submitted to the EPA on August 12, 2021 to highlight our concern with the EPA's lack of consideration and incorporation of SER's concerns and comments prior to the publication of the current proposed regulations:

"MOGA hope that fruitful discussions and dialogue with the SBA and EPA will lead to a better understanding of why the small oil and gas producers and operators of Michigan and throughout the United States so vehemently oppose several components of the current 2016 NSPS Subpart OOOOa regulations based on pragmatic reasoning, operational considerations, cost/benefit analysis and limitations on marginal cost allocation. To further illustrate the potential impacts of the EPA's proposed actions, MOGA would like to highlight the following EPA data table provided to all SBAR panel participants in June, 2021.

The table on the next page indicates that approximately 98.8-99% of all oil companies are owned by small businesses and that approximately 92.9-93.7% of all natural gas companies are owned by small businesses.

NAICS	Description	Total firms	Small business percentage
211120	Crude Petroleum Extraction	4,461	98.8 – 99.0%
211130	Natural Gas Extraction	617	92.9 – 93.7%
213111	Drilling Oil and Gas Wells	1,725	98.1%
213112	Support Activities for Oil and Gas Operations	8,487	96.7 – 97.1%
486210	Pipeline Transportation of Natural Gas	128	31.3 – 39.8%

Potential effects of burdensome regulations on these small companies will have a large-scale ripple effect on the employment, income tax generation, private and government royalties, leasing contracts, restaurants, hotels, small communities and families. In Michigan alone, the MOGA membership constitutes around 650 members, many of which are small business and include oil and gas companies, environmental consultants, service and vendor companies, accounting and legal firms, general contractors, electricians, plumbers, welders and surveyors. In total, the oil and gas industry in Michigan directly or indirectly employs roughly 47,000 voting residents.

To initiate our response, MOGA thought a brief, bullet-point summary of our interpretations of the SBAR panel meetings would be appropriate. Several key issues were brought to light during the meetings and we felt obliged to comment.

MOGA felt that the applicability of the existing regulations discussed among the SERs from various regions, struggled to apply in a pragmatic fashion to the wide variety of producing basins characteristics and operational necessities. For example, a hydraulically fractured well in West Virginia or Kentucky is significantly different from a hydraulically fractured well in

North Dakota or Wyoming. Operational requirements, techniques and equipment used in Colorado for production can be substantially different from production in Pennsylvania. Operational and variable costs can be drastically different in Michigan versus Kentucky because of temperature, snowfall and general seasonal variation. Production downhole production pressures for a non-marginal well (i.e. > 15 barrel of oil equivalent (BOE)) can be dramatically different for each production region across the United States. The amount of flash gas generated by low or marginal production wells can be substantially lower than non-marginal wells and limits the ability to operate equipment required for current NSPS rules. For the above reasons, we felt that the sub-categorization of marginal and low-production wells from non-marginal wells may help alleviate confusion when trying to apply regulations written for non-marginal wells.

MOGA felt the EPA appeared unclear of the specific scope of intentions and focus regarding the proposed actions and regulations. When asked about the specific intentions of the Biden Administration, various EPA members were only able to reference Executive Order 13990 and could not further elaborate. This vagueness made providing adequate comment and response a daunting task given the short response time.

MOGA felt that a condensed response time to facilitate an adequate response to the EPA and SBA was much too short. During previous NSPS OOOO and NSPS OOOOa rulemaking events under the Obama and Trump administrations, the duration of response time was much longer and allowed a more in-depth analysis and comprehensive response.

MOGA felt that more time was necessary to address the concerns and comments of the participating SERs submitted on July 13, 2021 and following the initial SBAR panel discussion. The follow-up SBAR panel needed 2 separate meetings (July 29, 2021 & August 3, 2021) to discuss SER comments. Time constraints limited the EPA's response to SER comments and required skipping through material. MOGA would have preferred that adequate time would have been provided to address the various comments and concerns and to individually address each source category as it pertains to proposed changes.

MOGA felt a disconnect and general lack of understanding of the EPA's previous rulemaking intentions and how the SERs understood and implemented several of the source definitions and regulations. Specifically, there was a general discussion regarding the need to clarify the definition of "hydraulically fractured" well because various oil and gas producing regions interpreted the definition differentially based on specific operating parameters. The storage tank segment was particularly difficult to understand and implement. Several SERs had misunderstood the rulemaking intentions of the EPA and had been incorrectly interpreting what actions were and were not regulated.

During our last meeting, MOGA did not receive a response from the EPA regarding Bureau of Land Management (BLM) practices to determine oil production in Michigan. Several small-entity oil and gas producers in the State of Michigan have asked MOGA why the Mineral Leasing Act and updates to the BLM regulations highlight waste prevention including, limiting gas flaring, leak detection, reduced venting and gas capture when Michigan's small business operators are being asked to open tank hatches daily to "strap" the oil level in each tank

containing oil produced from BLM property. I realize many who will read this are not lease operators, geologists and/or engineers engaged in the daily production of oil and gas, but when a thief hatch is open, all working, standing and breathing losses (including methane & VOCs) are vented from the system. MOGA understands the frustration of Michigan's producers and the great financial and impractical operational burden additional regulations will place on already diminishing production, but BLM required daily venting of methane and VOCs from the entire tank system and vapor recovery piping to ascertain production within ¼ of an inch, while simultaneously imposing leak detection of possible leaks is hypocritical and completely invalidates the cost benefit analysis of methane and VOC reduction.

During our SBAR meetings, many small-entity oil and gas companies from all over the United States voiced their concerns regarding the expansion of NSPS Subpart OOOOa regulations to marginal and low production wells. MOGA did not receive an answer to whether the EPA had evaluated the long-term environmental costs regarding early plugging of producing wells and the correlated ripple effect on the environment resulting from the drilling of new wells. The exploration, site preparation and drilling of new wells will likely be expedited as marginal and low production wells are forced to be plugged and abandoned early by burdensome regulations. In MOGA's opinion, the responsible long-term management of existing oil wells would offset the tremendous costs and environmental impacts related to drilling new wells to replace the lost oil production from already drilled and constructed wells and facilities.

Pertaining to the topic above, MOGA was unable to voice questions and concerns regarding proposed actions to include low and marginal wells into regulations originally designed for high volume production operations. These proposed actions would create conflicting regulations to the State of Michigan's Natural Resources and Environmental Protection Act 451 of 1994, Section 324, Part 61504 law to prevent the waste of resources. The genesis of the State of Michigan's regulations were to prevent over production of well early in a well's lifespan, which can damage the producing formation and create isolated and un-recoverable pockets of oil and gas. Instead, Michigan's regulations require operators to throttle production to enhance the longevity of production and protect against un-recoverable and wasted resources.

Many participating SERs had concerns regarding the lack of an off-ramp in the 2016 NSPS Subpart OOOOa regarding fugitive emissions monitoring. MOGA's concerns parallel the concerns of our cohorts regarding the costs of maintaining a LDAR program, including the costs of surveys, data capture and collection, reporting and variable costs regarding repair as non-marginal well progress into the marginal and low production category. Low production and marginal wells cannot internalize the same regulatory costs as non-marginal wells.

MOGA agrees with many commenting SERs who questioned the EPA panel member's references to studies conducted in western states. Comparing Colorado production to Michigan or Kentucky is akin to comparing the weather. Oil and natural gas production is directly related to the producing formation, which dictates the type, amount and size of the corresponding equipment and facility design. Many participating SERs referenced the Department of Energy (DOE) funded survey which was specifically designed to assist the Federal government in efforts to update and design regulations for the varying production regions of the United States related

to component counts, leak scale, etc… MOGA would recommend including the results of this taxpayer funded study during the review and promulgation of new rules and regulations.

MOGA's only regrets were the time limitations to fully address all subject topics and the general lack of scope or clarity compared to previous NSPS rulemaking efforts under the Obama and Trump administrations."

Of particular emphasis included in the above statement, MOGA requests that the EPA utilize the full breadth of information present in the Department of Energy ("DOE") Marginal Well study rather than ignoring relevant information. MOGA believes the EPA is ignoring substantial and pertinent information from this taxpayer-funded study and supports the Independent Petroleum Association of America's ("IPAA") assertion that the EPA is relying too heavily on the estimates from the "Rutherford Study" and not considering the actual data collected during the DOE study. The use of estimated data proposed in the Rutherford study has a significant bearing on the incorrect assumption that marginal wells are substantial emitters of methane via fugitive emissions and emission sources.

11. EPA & Special Interest Group Industry Knowledge

MOGA is concerned with the EPA's apparent lack of knowledge, specious characterization and generalization of the oil and gas production environment. Major production equipment is not fragile. Vessels, tanks, lines, wellheads, etc. were designed to withstand the elevated pressures and greater flow rates, so their usefulness matched the production. Today, these same vessels, tanks, lines, wellheads, etc. maintain their integrity because they are properly serviced and maintained and can safely handle the corresponding natural operational decline of oil and gas production to levels far below the originally designed pressure and flow rates.

Depletion of the producing formation is critical to understanding the actual operational oil and gas production regime, economic viability and the associated potential for emissions. Without site visits and experience gained from daily engagement with operational parameters, equipment and knowledge of producing formation dynamics, a regulator or special interest group couldn't possibly know how the proposed rule changes will affect each production profile of the numerous production basins throughout the United States. MOGA feels the EPA is publishing rules that do not pertain to any realistic operations within the oil and gas production industry segment and is largely driven by special interest groups that do not have the experience and intimate knowledge of each production regime. Once again, a "one-size-fits-all" approach is discriminatory and would place a tremendous financial burden on small business operators based on incorrect assumptions and data.

12. EPA's Knowledge & Consideration of Existing Contracts

MOGA feels the EPA did not solicit comments from the oil and gas production industry and small businesses or attempt to understand the potential impacts of the proposed regulations on existing contracts. Before a well is drilled or a facility is constructed, surface and underground asset contracts are prepared and presented to the landowners for review, discussion, modifications and final authorization. These contracts allow the potential producing company to

enter the property for review, acknowledgment of the complication in the terrain and apply for additional permits and contracts, negotiate with the landowner for mineral rights, access fees and mineral distributions. Additional contracts with utilities, transportation companies, pipeline operators and regulators are prepared, reviewed and signed before a well is drilled and determined to be commercial and viable. All the above-mentioned contractual obligations become null and void if the well is not economically sustainable.

MOGA believes that the EPA needs to address the potential costs and problems associated with a breach of contract before expanding regulations to existing sources. Further, the EPA must include these costs and ramifications in their cost per ton of methane reduction to adequately represent the true costs of imposing future regulations on the industry.

13. Public Service Commissions

MOGA believes the EPA should review each individual state's Public Service Commission ("PSC") regulations and provide individual cost analysis and feasibility analysis prior to imposing regulations designed to capture associated gas for "useful purposes rather than flared". Every oil and gas producer within the State of Michigan would gladly bring associated gas to market or provide local landowners, farmers, businesses, homes, etc. that would otherwise be combusted. However, strict rules and regulations regarding the ability to bring associated gas to market prevent oil and gas producers from directing gas to a "useful purpose rather than flared". Until the EPA provides a comprehensive feasibility analysis to understand each state's PSC regulations and limitations, MOGA believes the EPA should avoid proposing technically infeasible restrictions on oil and gas producers.

14. Feasibility & Economic Analysis of Associated Gas to "Useful Purpose"

MOGA is providing further discussion regarding the innate issues regarding bringing associated gas to a "useful purpose rather than flared". As stated in Comment #9, every producer would like the ability to sell all produced assets. On most occasions, the ability and cost are not feasible because of conflicting regulations, landowner & community objections, PSC restrictions, and the associated cost of pipeline metering, compression and transfer gate installation.

Many wells drilled in the United States are not located at convenient spots. The inconvenient locations are in rural locations such as farmland, forests, and sparsely populated areas. Because these areas are remote and often isolated, transmission or gathering lines that collect gas are located closer to major distribution areas. The natural gas produced in these remote areas is referred to as "stranded gas". The term "stranded" is used because the value of the gas will not pay for the pipeline needed to move the gas to a distribution line. If multiple wells are located in a micro-geographic region, then connecting the flowlines to a distribution point, may justify the installation. However, landowners may object to having flowlines in their fields and local communities may not want subsurface piping down road easements, crossing driveways and stream crossings. So, the natural gas stays stranded, except for wellsite fuel or power generation. MOGA requests that the EPA discuss and clarify whether the Biden Administration is proposing financial, regulatory and political support necessary to install natural gas lines to move stranded gas to a "useful purpose rather than flared"?

The determination for flowline installation is based on economics for the estimated reserves. A producing company may consider, based on the current commodity price and volume of gas generated, the installation of a flowline to bring gas to market. However, the purchaser of the natural gas will evaluate their costs to install the same flowline but incorporate a profit margin of $2.00/MSCF or more and subsequently charge the producer for control equipment, emergency shut-off devices, custody transfer equipment and more. Because distribution companies are regulated by the federal trade commission and individual state public service commissions, these are over-designed for commercial and residential safety and are extremely expensive. MOGA provides an example of the cost difference between producer-installed flowlines and purchaser's flowline requirement costs:

	Producer Costs	**Purchaser Costs**
Control Valves (3)	$12,000	$36,000
Meter Run	$36,000	$110,000
Chromatograph	----	$71,000
Oxygen Sensor	----	$44,000
Remote Monitoring	----	$65,000
TOTAL	$48,000	$326,000

Not included with these charges are monthly maintenance expenses of approximately $3,600/month, any emergency callout expense and office charges for the monthly sales report. If the well is a marginal/stripper well producing 50 MSCF/D at today's gas price of $3.20/MCF, then the breakeven point would be estimated to be greater than 300 years. This cost-benefit analysis of the project is not economically viable because the estimated reserves would not cover the initial capital investment.

MOGA would also like to note, that the EPA does not consider the requirement of additional equipment including compression and dehydration required to make stranded gas "useful". The natural gas will require dehydration because of contract specifications. If the heating content of the natural gas is greater than the contract limitations, gas conditioning will have to be implemented to sell the gas. Compression will also be required to "boost" the gas pressure high enough to enter the sales and/or transmission line. Compressors typically cost roughly $50,000 per month to lease and service with an upfront cost of roughly $500,000 to transport and install. As MOGA has mentioned before, inevitable depletion and production decline will make the operation of this equipment uneconomical over time.

As outlined above, MOGA believes the EPA's estimates and feasibility for bringing stranded gas to market fall far short of the actual costs and the breakeven potential, if any.

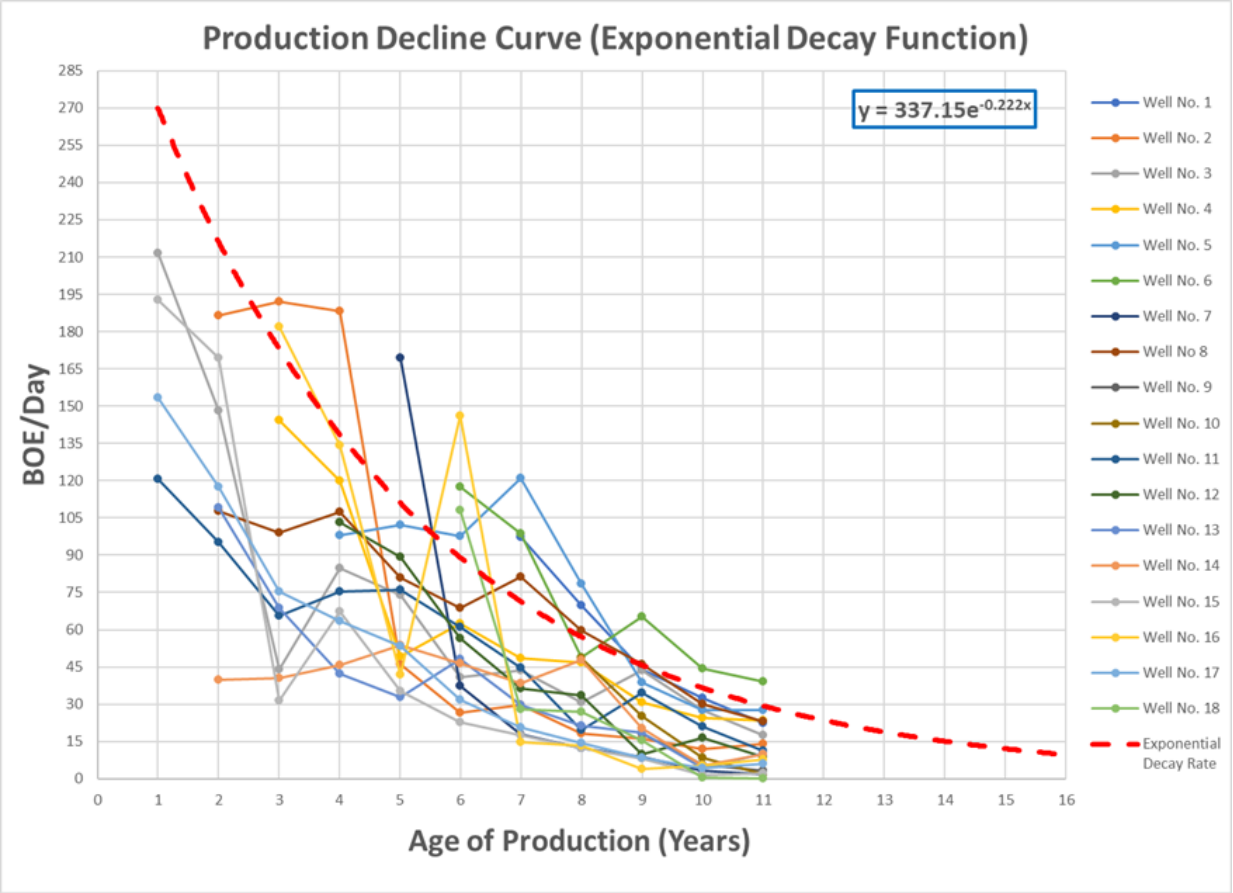
As discussed in this comment section, many state regulators with specific knowledge of the state's oil and gas production regulations and public service commission regulations are working hard to assist producers in bringing stranded gas to market or to local farmers, landowners, businesses and residential dwellings to make "useful".

MOGA would support federal regulations allowing oil and gas producers to bypass restrictive public service commission rules and regulations to directly sell production and associated gas directly to local landowners, farmers, businesses and residential dwellings.

15. Depletion or Production Decline

MOGA supported comments submitted by the IPAA regarding the EPA's lack of consideration for the cost-benefit analysis related to implementing Best System of Emission Limitations ("BSER"). Roughly 93% of Michigan's oil and gas wells meet the definition of "marginal wells" with an average of 2-3 BOE per day. MOGA supported previous regulatory efforts made by the EPA to institute a "trickle-down" approach to emissions reductions based on viable capital investment during initial facility design. Once a well/facility reaches marginal wells status, the ability to maintain profitability is dependent on responsible management of the depleting assets reduced operational pressures and production throughput. MOGA is providing additional comment on the impact of production decline on both profit margin and emissions reductions below.

Depletion or production decline is constant in oil and natural gas production. Depletion defines our industry and is crucial to understand before proposing regulations that may affect new and existing wells. In the Michigan Basin, initial oil and gas production from a new well can decline quickly. To illustrate this fact, MOGA evaluated the barrels of oil equivalent per day (BOEPD) for 18 oil wells drilled between 2007 and 2017. The graph below displays the rapid production decline over 10 years.



Statistical evaluation of the data using an exponential decay function suggests a BOEPD decline rate of approximately 20% annually over the first 10 years. However, as oil and natural gas well production advances in age, the production decline diminishes and begins to plateau as the geologic producing horizon reaches an equilibrium. In many cases, this stabilized production requires additional processes and associated cost increases to maximize the recovery of the remaining reserves.

The extrapolation of the exponential decay rate beyond Year 11 indicates that BOEPD achieves low-production status around Year 15 with future production directly tied to cost minimization. At this point, the negative correlation between production and costs creates an economic viability issue. Once a well reaches low-production status, continued production and viable life of the well are dependent on cost minimization. Many of the wells depicted above would continue to perform after the original 15 years with carefully managed costs focused on properly maintained operating equipment, formation analysis and production scheduling.

MOGA's constituents argue that the increase of additional costs associated with maximum resource extraction combined with unjustified, exorbitant and burdensome regulatory compliance costs of an expanded NSPS through emission guidelines will undoubtedly lead to wasteful management practices of plugging and abandoning of well assets. This will have a significant negative economic impact on all small business producers in the State of Michigan.

To further illustrate the tertiary impacts of declining production related to possible emissions, MOGA evaluated the working, standing and breathing emissions from storage tanks associated with production from the 18 Michigan wells shown in the table above. The following table displays the Well No., Age of Well on December 31, 2017, Total Hydrocarbon emissions in tons per year (tpy) calculated during the first 30-days of production, Total Hydrocarbon emissions from the last 30-days of production from 2017, and the percent change (decline) in Total Hydrocarbon emissions.

Well No.	Age of well (As of Dec 31, 2017)	E&P Tanks - 1st 30 days (Total Hydrocarbon tpy)	E&P Tanks - Last 30 days (Total Hydrocarbon tpy)	% Change
1	5	22.945	2.809	87.758
2	10	27.116	1.440	94.689
3	11	36.693	1.719	95.315
4	9	29.698	2.106	92.909
5	8	34.580	0.671	98.060
6	6	31.307	1.838	94.129
7	7	60.004	1.651	97.249
8	10	25.484	0.115	99.549
9	3	3.166	1.271	59.855
10	4	6.966	1.000	85.645
11	11	23.240	0.745	96.794
12	8	23.954	0.222	99.073
13	10	18.948	0.272	98.564
14	10	7.020	0.580	91.738
15	11	18.209	0.328	98.199
16	9	31.719	0.671	97.885
17	11	18.739	0.563	96.996
18	6	26.578	0.462	98.262
Averages:	**8.278**	**24.798**	**1.026**	**93.481**

MOGA used the Environmental Protection Agency (EPA) approved E&P Tanks, Version 3 emission estimating software to calculate potential working, standing and breathing emissions based on low-pressure oil samples collected according to the California Air Resources Board (CARB) methodology.

Production significantly declines within the first 8.5 years. The associated production decline is correlated with a 93% reduction in possible hydrocarbon tank emissions (including co-mingled methane). As a reminder, a 95% reduction from storage tanks is mandated in the 2016 OOOOa source category. Tank emissions would continue to decline until the well reaches a "dead oil" status. "Dead Oil" is an industry term that describes stable oil with minimal work, breathing or flashing emissions.

Real-life Scenario:

A small entity oil and gas producer in Michigan was subject to Subpart OOOOa regulations for tank emissions. The well and production facility utilized a flare to reduce tank emissions by 95%. The well experienced a rapid production decline and ultimately reached "dead oil" status in a couple of years. The well no longer produced enough gas to keep a constant pilot on the flare burning to meet the Subpart OOOOa regulations for the tank battery with minimal working, standing and breathing losses. In order to continue producing the now marginal well while meeting the required Subpart OOOOa regulations, the

small entity purchased and installed a propane tank to keep the pilot light burning. Over time, the cost of conducting semi-annual LDAR surveys, purchasing propane to keep a flare pilot lit and reporting costs for minimal to no tank emissions led the small entity producer to plug the well even though the well would likely produce at a marginal status for many more years.

In the "Production Decline Curve" graph shown on the previous page, marginal well (≤15 BOEPD) status is achieved around Year 15. The exponential decay curve would indicate continued production indefinitely along the decline curve. Assuming each marginal well experiences a stabilized decline rate of 5-10% annually, the feasible production horizon may be extended for an additional 15 years or more if operations are managed appropriately and costs are minimized. Declining production and maximum resource recovery have a negative correlation as costs to extract the remaining reserves increase, while production declines. During this crucial time in the production paradigm, the addition of costs associated with initial capital investment and ongoing annual monitoring and reporting costs will expedite the plugging and abandonment of wells that would otherwise realize an extended production horizon.

MOGA wonders why is the EPA electing to not acknowledge depletion or production decline as a natural limitation to potential methane and VOC emission? The data shown substantiates MOGA's conclusion that the EPA needs to consider an "off-ramp" for non-marginal wells transitioning to marginal wells and a complete exemption for marginal wells from proposed emission guidelines.

Since many small businesses are primary operators of marginal wells, the increasing cost burden of additional federal and state regulations correlated to the reducing production via depletion and the associated reduction in the potential for emissions will likely force many small businesses to plug wells. The effects of plugging wells will translate to reduced employees, a reduction in tax revenue, a reduction in royalties paid to landowners and a reduction in domestic oil production.

16. Production Decline Summary

As shown in the "Production Decline Curve" graph presented, initial production is significantly higher in the first years following completion. Higher initial production allows for the upfront consideration of long-term cost allocation, planning and implementation of new regulatory requirements such as determination, monitoring, calculations and reporting.

The proposed future emission guideline regulations under 40 CFR Part 60, Subpart OOOO(b) and Subpart OOOO(c), which include existing and marginal wells do not allow initial capital investment or longevity planning considerations during initial high-margin return-on-investment realization.

Many marginal wells in Michigan are often 3rd & 4th succession owner wells. The initial high-volume production was realized by previous owners. Each successive sale was based on an updated production formation reserve analysis and projected longevity of the marginal production. Should the EPA decide to include existing and marginal wells with the proposed NSPS regulations, small entity oil and gas producers with aging marginal wells would not have the associated production to substantiate an initial capital investment combined with ongoing annual costs based on diminishing economic return. This successive ownership paradigm

represents a significant majority of oil and gas wells in Michigan. In other words, the future proposed 40 CFR Part 60, Subpart OOOO(b) and Subpart OOOO(c) expansion of NSPS regulations will disproportionately impact Michigan small business sector leading to layoffs, loss of taxable income, loss of taxable royalties' income and substantial impact to domestic oil production.

17. Financial Impact Evaluation of Marginal Wells

As emphasized above, the ability of small business producers to operate wells when production drops below 15 BOEPD is directly tied to cost minimization. The addition of cost from the proposed NSPS and EG regulations will likely accelerate the plugging of wells with a remaining viable production horizon. To illustrate this effect, the following cost breakdown highlights the minimized economic returns from marginal and low-production wells and emphasizes the potential effects of implementing proposed NSPS and future EG regulations:

Estimated Gross Revenue Projection for a Typical Marginal/Low Production Well in Michigan	
Factors & Constants	
Remaining Reserves (Bbls)	1,200
Annual Decline Rate (%)	5.0%
Production Life (Years)	15
Initial Production Rate (Bbls/day)	10
Final Production Rate (Bbls/day)	2
Commodity Price per Barrel (Average)	$60.00
Royalites (%)	12.5%
Severance Tax ($/Bbl)	$3.00
Deduction for Quality of Crude ($/Bbls)	$3.00
Transportation Charges ($/Bbl)	$4.00
Fixed Operational Costs ($/Bbl)	$4.00
*Variable Operational Costs ($/Bbl)	$4.00
Months in Year	12
2016 EPA Estimated One-Time Initial Costs per well	$1,366.00
2016 EPA Estimated On-going Annual Costs per well	$2,804.00
*Estimated One-time Cost for Professional Engineering Certification	$3,500

Potential Gross Revenue over Remaining Well Life	$ 72,000.00
Royalities	($9,000)
Severance Taxes	($9,000)
Deduction for Quality of Crude	($3,600)
Transportation Charges	($4,800)
Fixed Operational Costs	($4,800)
*Variable Operational Costs	($4,800)

Potential Gross Revenue before Regulations	$ 36,000.00
2016 EPA Estimated On-going Annual Costs per well	($1,366)
2016 EPA Estimated Ongoing Annual Costs over remaining life	($33,648)
*Estimated One-time Cost for Professional Engineering Certification	($3,500)

Potential Gross Revenue after Regulations	($2,514)

The above-estimated costs for initial and ongoing annual costs were taken from the updated 2016 estimated costs for implementation of the 2016 NSPS, Subpart OOOOa regulations. MOGA believes the use of this data is appropriate considering the EPA extended their use of the 2016 model plant cost-based estimates in the December 6, 2022, proposed regulations. MOGA believes that prior to inflation and labor cost increases in 2022 and on, the EPA is underestimating their cost-benefit analysis based on current and future economic trends.

The above estimated one-time cost for Professional Engineering Certification required for each individual well site and facility is based on actual cost estimates from regional consulting firms.

The above Variable Operational Costs are specific to Michigan and include seasonal variations in requirements pertaining to snowfall, temperatures, travel restrictions, formation dynamics, operational agendas, resource recovery costs, land-owner contracts, royalties, etc.

The illustration of economic loss from typical marginal and low-production well in Michigan is shown in the financial breakdown table displayed above. This economic loss is driven solely by future proposed regulations outlined in Subpart OOOO(b) and Subpart OOOO(c) and would lead to the early plugging of wells and waste of State of Michigan resources. A waste of resources violates the State of Michigan's Part 615 rules and regulations regarding the early plugging of viable producing wells. The outlined cost burden increases are directly related to the EPA's proposed emission guideline regulations and will have a significant impact on small business oil and natural gas producers in Michigan and throughout the United States. MOGA views these proposed emission guideline regulations under Subpart OOOO(b) and Subpart OOOO(c) as exceptionally short-sighted, wasteful and having a significant impact on the State of Michigan's natural resources, small businesses and economic climate.

To further illustrate concepts related to small business economic loss, a significant one-time financial and environmental cost is required to drill a single well. Over-regulation of marginal wells, as proposed in Subpart OOOO(b) and Subpart (c), will lead to the early plugging of wells while the remaining assets are still economically viable to recover. This will prevent small business operators from recovering their initial capital investment. Also, the early plugging of marginal wells, while still economically viable, will likely exacerbate the need to drill additional wells to meet consumer demand. The unrecovered initial capital investment from drilling a well, combined with the demand to drill additional wells would yield a spiraling economic decline for small businesses by not allowing them to manage profit revenue from existing marginal wells for investment in new wells to meet future demand. This impact would have a rippling effect through our nation as oil, natural gas, gasoline and petroleum derivative prices would skyrocket based on declining supply and rising demand.

As a reminder, drilling a successful producing well is not a given. A significant amount of time and resources are required to locate commercially viable oil and gas reserves. Even the best prospects are not considered viable until they are drilled and tested. As more marginal wells are plugged, new wells will need to be drilled. The exploration and drilling of potential prospects will result in unnecessary stress, pressure and possible impacts on our local Michigan environments. MOGA urges the EPA to consider that the many small businesses that operate the vast majority of Michigan's oil and natural gas wells are family-owned businesses who live, work and play in the immediate vicinity of their production assets.

For these reasons, MOGA believes the EPA has not considered the broader economic and environmental impacts the early plugging of wells may have in Michigan. Further, the EPA has not provided a cost-benefit analysis showing a valuable correlation between any possible benefits

of expanding the NSPS regulations to the economic and environmental costs associated with additional drilling to offset lost production from the early plugging of wells.

MOGA implores the EPA to maintain the Marginal Well exemption published in the 2020 Technical Service Document. The operational viability of many small businesses is solely reliant on the efficient operation of production assets. This includes maintaining optimal staff, reduction of unnecessary overhead, careful control of operating variables, maximizing capture and sale of production and management of our remaining oil and gas reserves. When production data inversely crosses operating costs, the well is plugged. In our small business-dominated industry segment, a "leak" represents lost operating revenue and diminished profit margins.

18. MOGA Disputes the EPA's Updated 2016 Model Plant Costs

The EPA indicated that model plant cost considerations were carried over from the November 2021 proposed regulations. MOGA is concerned with the accuracy of these costs and is providing further evaluation and comment regarding the 2021 updated 2016 Model Plant Cost Considerations provided to the participating SERs under the SBAR Panel Process.

One-Time Initial Cost
The EPA's first-year total cost estimates of $2693 per Company with 22 well-sites would appear low. MOGA estimates that requirements stipulated in the updated 2016 NSPS would likely range from $4,000 to $10,000 for initial implementation.

In Michigan, many small entities' primary focus is the efficient operation, production and maintenance of their wells and facilities. Many of Michigan's small entity producers are unaware of the breadth and scope of the proposed regulation and would likely need to hire a 3rd party consultant to oversee the implementation of these proposed regulations. MOGA's cost estimate is based on the necessity to gather, transfer and educate personnel to facilitate the necessary in-depth understanding of each of the 22 well-sites in the EPA's model plant. The variability of these costs can be allocated to specific training, equipment and software purchases and functional knowledge and ability to correctly implement proposed regulatory requirements.

Ongoing Annual Costs
Evaluation of the EPA's updated 2016 Model Plant Cost considerations appeared accurate, but the EPA did not consider several factors that may effect the estimated annual cost per well site of $2,368. MOGA would estimate the annual cost per well site to range from $3000 to $6000 for the following reasons:

a. It would appear the EPA is providing an ongoing annual cost estimate based on in-house implementation and completion. As mentioned above, many small producers focus their operational and staffing emphasis on the efficient operation and maintenance of their wells and facilities. Many small producers do not have the operational budget to staff environmental specialists who are educated, trained and certified to properly handle the wide variety of requirements associated with the proposed NSPS regulations. For this reason, MOGA disagrees with the

EPA's estimate of $2,638 per well site and offers a more realistic cost range of $3000 to $6000 per well site.

b. The updated 2021 projected costs do not account for year-over-year inflation observed in 2022 and early 2023. Many economic indicators suggest a period of higher-than-average inflation will likely affect equipment and labor costs over the next several years during the implementation period. MOGA believes the EPA should provide updated cost estimates and re-evaluate the cost-benefit analysis of methane emission reductions to determine the long-term viability of the proposed regulations for producers.

c. The EPA did not consider stand-alone initial surveys required for a single well that is either new or has been modified or reconstructed and falls outside of normal schedule monitoring efforts. Single well monitoring using LDAR can range from $2500 to $3500 per site visit for monitoring efforts alone. Monitoring a single or remote well or well-site facility invalidates the EPA's model plant cost assumptions.

d. The EPA assumes a static production regime (fixed production) and a constant number of wells (22) as the basis for their ongoing annual estimates. The number of producing wells can be highly variable based on a plethora of variables including seasonal restrictions, formation dynamics, operational agendas to maximize resource recovery, oil and natural gas prices, land-owner contracts, etc. MOGA would suggest a more variable and fluid assumption of the actual production and operational dynamic when estimating ongoing annual cost estimates for monitoring to models ranging from a single, one well scenario to the provided 22 well model scenario.

e. The EPA's assumed annual repair cost per well of $158 shown in the 2016 updated cost considerations is significantly lower than MOGA would expect. On many occasions, the repairs are conducted by 3rd party contractors. A single repair, including parts for a small leak of less than 1 standard cubic foot per day (scf/day) would likely cost between $500 - $1500 per leak. This is particularly relevant with higher inflation and labor costs in 2023.

For both the one-time initial costs and the ongoing annual costs associated with the proposed expansion of NSPS and future EG regulations, the EPA should provide cost considerations for both in-house and 3rd party contractors and consultants. This would provide a true and reflective cost based on the wide range of small business criteria and applicability.

Lastly, the EPA makes an incorrect assumption in Section XII.A.1 of the proposed Preamble stating that semiannual monitoring will cost $3200 and quarterly monitoring will cost $4200. These costs are not on a sliding scale. If the EPA assumes $3200 for semiannual monitoring, the cost for quarterly monitoring will double to a cost of $6400 per well. MOGA requests that the EPA update their cost-benefit analysis per unit of methane to reflect this correction.

19. Conflicting Federal & State of Michigan Regulations

The State of Michigan views early plugging and abandonment of wells with remaining production horizons as waste. Part 615 of the state's regulatory framework stipulates the minimization of waste by efficiently managing operational endeavors to achieve maximum resource recovery. Many of Michigan's small entity producers facilitate this mandate by minimizing operational costs, negotiating production contracts, adjusting operational production schedules and minimizing all costs when available. Michigan's small entity and small business producers require flexibility to meet the State of Michigan's objective to maximize resource recovery. The proposed NSPS and EG regulations would burden Michigan's small business marginal well producers with significant costs to achieve less than the maximum resource recovery, which directly contradicts the State of Michigan's laws regarding the waste of state resources.

20. State Primacy over Subparts OOOO(b) & OOOO(c)

MOGA is concerned with several facets of the proposed future Subparts OOOO(b) & OOOO(c).

MOGA supports the EPA's decision to allow individual state's primacy over Emission Guidelines. From MOGA's perspective, all wells are permitted, reviewed, and managed by state agencies to protect the environment, land, surface water, drinking water and residences under each state's current State Implementation Plan (SIP). These agencies have local staff that visit sites, respond to residential concerns, monitor activities, review the state rules and hold the operators in check regarding all aspects of operations and compliance. Correspondence and file reviews of these operations and production volumes are provided to these agents familiar with the field production so any changes, modifications or community intervention can be handled immediately, thus protecting the community. Federal inspections and correspondence have historically, not provided quick responses and often allowed problems to magnify into greater, more impactful issues requiring costly long-term solutions.

MOGA is primarily concerned with the EPA's proposed minimum standards for Subparts OOOO(b) & OOOO(c). As highlighted in various comments above, individual states are better positioned to determine feasible regulations through intimate knowledge of their state's geology, producing horizons, oil and gas chemical characteristics, formation production efficiencies, pooling units, emissions potential, permitting requirements, enforcement regulations and waste prevention guidelines than the "one-size-fits-all" approach proposed by the EPA at the federal level.

If the EPA continues to pursue a "one-size-fits-all" approach to state level regulations, MOGA requests that the EPA provide a review of each state's regulatory rules regarding both oil and gas permitting and air quality requirements to ensure that federal oversight does not conflict with individual state regulations. MOGA feels this would ease the concerns of state's regulatory agencies and the small business oil and gas producers to ensure that the EPA has thoroughly understood each state specific rules and regulations necessary to facilitate proposed Emission Guidelines with the flexibility for each state to implement their respective rules and regulations with more specificity than a macro-level understanding at the federal level.

MOGA is also concerned with the issue of "Federalism" as referenced under Section XVII.E of the preamble which states:

"Under Executive Order 13132, the EPA may not issue an action that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, ***unless the Federal Government provides the fund necessary to pay the direct compliance costs incurred by State and local governments****, of the EPA consults with State and local officials early in the process of developing the proposed action…"*

MOGA reviewed the response letter from the West Virginia Department of Environmental Protection submitted to Docket ID. No. EPA-HQ-OAR-2021-0317 on January 14, 2022. MOGA agrees with the West Virginia Department of Environmental Protection and questions how the EPA will appropriate funding for individual states to acquire staff, training, equipment, etc. required to monitor, collect, inspect, review and enforce future Emission Guidelines proposed in Subpart OOOO(c)?

MOGA believes the EPA should be transparent and clear regarding how funding will be appropriated and how funding is going to be allocated so that state agencies, oil and gas producers and taxpaying citizens are informed prior to consideration of proposed regulations.

MOGA's primary concern is the potential for associated costs from unfunded federal programs imposed on state agencies via "federalism" that might be passed on to oil and gas producers in each state. MOGA would like the EPA to explain or provide certainties that state agencies will not solicit funding from oil and gas producers to implement unfunded federal regulations. The need for these clarifications and certainties is of paramount importance since the EPA did not consider these costs when estimating their cost-benefit analysis, including the financial cost feasibility analysis and justification of producer cost reduction burden per unit of methane or other emission constituents.

21. Well Site Compressor Exemption

MOGA recommends that the EPA continue the exemption of both centrifugal and reciprocal compressors "located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility" as provided in both 40 CFR Part 60, Subpart OOOO and 40 CFR Part 60, Subpart OOOOa. Well operators visit and service these wells and associated compressors daily to inspect for proper operation, leaks and to conduct maintenance and repair activities. Any necessary repairs are repaired as soon as possible to avoid product loss and to maximize profit returns. If the EPA wishes to propose monitoring for well site compressors, MOGA recommends the EPA allow the more feasible and cost-effective monthly Auditory, Visual & Olfactory ("AVO") inspection and documentation, similar to the requirements allowed under 40 CFR 60.5416a.

22. Environmental Justice Concerns

MOGA supports the concerns of the EPA and the proposed "robust and meaningful public engagement" with "underserved or overburdened communities" with limitations.

First, MOGA would like to remind the EPA that many of these "underserved or overburdened communities" are often located in rural areas where oil and gas drilling and production provide jobs and sustains local economies. To reiterate our concerns discussed above, the proposed future Subpart OOOO(b) and Subpart OOOO(c) will likely result in the early plugging of marginal wells that cannot absorb the initial implementation and ongoing costs of the proposed regulations. The plugging of wells will have a direct impact on associated small businesses, including hotels, restaurants, service, retail and other "mom and pop" stores that rely on the oil and gas industry to survive. MOGA would like the EPA to consider the economic impacts on these small rural "underserved or overburdened communities" when determining the cost benefit analysis for the minimal reduction of methane from marginal wells.

Second, MOGA implores the EPA to outline its explicit intention, direction and limitations when encouraging community engagement related to oil and gas production related facilities. MOGA's primary concern is safety. Michigan's oil and gas industry employees are arguably the most highly skilled, trained, insured and safety-oriented workforce in the United States. MOGA urges the EPA to clearly define its proposed "community engagement" intent and provide specific restrictions and associated guidelines to prevent injuries.

Third, MOGA has concerns with the proposed exemptions of Bureau of Land Management (BLM) properties from requirements applied to private land wells and facilities. This appears to be a double standard for emission reduction regulations when applied to current and future proposed NSPS and Environmental Justice initiatives. The exemption of emission on BLM lands shown in 43 CFR 3179.203 would allow thief hatches to be opened to accurately measure production. This would ensure the federal government is able to accurately assess production for consideration of royalty payments without operational pressures pushing storage tank volumes downward. This exemption does not parallel the EPA and Biden Administration's intent to reduce or eliminate fugitive emissions, nor does this rule adhere to or facilitate the administration's Environmental Justice initiative for under-served communities which includes tribal lands. These practices are not permissible for producers on private land and would violate current and future NSPS regulations in addition to proposed future EPA, Emission Guidelines for existing facilities. If the intent of the IRA and OOOO regulations is to reduce emissions and protect underserved communities like tribal lands, why is the EPA providing exemptions on BLM lands that lead to increased emissions on EPA-defined underserved communities?
Lastly, MOGA is concerned with how community data will be collected, the accuracy of the collected data and how the data will be used. MOGA believes that standards proposed in Appendix K to the proposed Subpart OOOOa and future Subpart OOOO(b) and Subpart OOOO(c) should be consistent and equal for both oil and gas small business and communities. MOGA believes that the EPA should very clearly determine and define the proposed "expansion of leak detection programs" to ensure consistent and repeatable results across the various platforms and data collection techniques used to collect data. MOGA would like clarification in

the proposed regulations with regards to how community collected data will be validated for accuracy and how local regulatory agencies will use the data.

Jason Geer

President & CEO

Exhibit I

Comment of U.S. Small Business Administration,

February 13, 2023

U.S. SMALL BUSINESS ADMINISTRATION
OFFICE OF ADVOCACY
REGULATION • RESEARCH • OUTREACH

February 13, 2023

VIA ELECTRONIC SUBMISSION

The Honorable Michael S. Regan
Administrator
Environmental Protection Agency
Washington, DC 20460

Re: Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review (Docket ID EPA-HQ-OAR-2021-0317)

Dear Administrator Regan:

On December 6, 2022, the Environmental Protection Agency (EPA) published a supplemental proposed rule titled "Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review."[1] This letter constitutes the Office of Advocacy's (Advocacy) public comments on the supplemental proposed rule.

Advocacy believes EPA has further opportunities to reconsider the likely burden on small businesses. As Advocacy said in our comment letter on the associated proposed rule, this rule will have a significant and disproportionate effect on a substantial number of small entities. EPA should consider additional flexibilities that can minimize these impacts while accomplishing the goal of reducing methane emissions from oil and natural gas production. Based on feedback from small oil and gas producers, Advocacy recommends changes to the proposal related to monitoring, pneumatics controllers and pumps, and the super-emitter response program.

[1] 87 Fed. Reg. 74702 (December 6, 2022).

I. Background

A. The Office of Advocacy

Congress established the Office of Advocacy under Pub. L. 94-305 to represent the views of small entities before Federal agencies and Congress. Advocacy is an independent office within the U.S. Small Business Administration (SBA). As such, the views expressed by Advocacy do not necessarily reflect the views of the SBA or the Administration. The Regulatory Flexibility Act (RFA),[2] as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA),[3] gives small entities a voice in the rulemaking process. For all rules that are expected to have a significant economic impact on a substantial number of small entities, the RFA requires federal agencies to assess the impact of the proposed rule on small entities and to consider less burdensome alternatives.

The Small Business Jobs Act of 2010 requires agencies to give every appropriate consideration to comments provided by Advocacy.[4] The agency must include a response to these written comments in any explanation or discussion accompanying the final rule's publication in the *Federal Register*, unless the agency certifies that the public interest is not served by doing so.[5]

Advocacy's comments are consistent with Congressional intent underlying the RFA, that "[w]hen adopting regulations to protect the health, safety, and economic welfare of the nation, federal agencies should seek to achieve statutory goals as effectively and efficiently as possible without imposing unnecessary burdens on the public."[6]

B. The Proposed Rule

On November 15, 2021, EPA published a proposed rule that would revise and update the New Source Performance Standards (NSPS) for Oil and Gas production under Clean Air Act (CAA) section 111(b) and Emissions Guidelines (EG) for existing Oil and Natural Gas production sources under CAA section 111(d). This proposed rule would directly regulate methane emissions from new and modified sources (NSPS) and establish standards for state regulation of methane emissions from existing sources (EG). Existing sources include some sources subject to EPA regulation under the 2012 NSPS (Subpart OOOO) and the 2016 NSPS (Subpart OOOOa) for this industry and some sources never before subject to EPA regulations. EPA convened a SBREFA panel for this rule in July 2021 and published an Initial Regulatory Flexibility Analysis with the proposed rule.

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[2] 5 U.S.C. §601 et seq.

[3] Pub. L. 104-121, Title II, 110 Stat. 857 (1996) (codified in various sections of 5 U.S.C. §601 et seq.).

[4] Small Business Jobs Act of 2010 (PL. 111-240) §1601.

[5] *Id*.

[6] *Id.*

On January 31, 2022, Advocacy submitted the attached public comments on the proposed rule.[7] Advocacy commented on EPA's compliance with the RFA, the disproportionate impact the proposed rule would have on small businesses and suggested additional flexibilities that EPA should consider in this supplemental proposed rule.

On December 6, 2022, EPA published a supplemental proposed rule to provide missing details in the proposed rule and propose further restrictions on methane emissions. This supplemental proposal expanded on the concept of third-party monitoring for "super-emitter" events. It also includes proposed implementing regulations and the consideration of "Remaining Useful Life and Other Factors" (RULOF) in the state plans required under section 111(d).

II. Advocacy's Small Business Concerns

Advocacy continues to have significant concerns with the impact this rule would have on small businesses in the oil and gas production sector. We recognize the work that EPA did between the proposed rule and supplemental proposal to improve its compliance with the RFA. However, Advocacy re-states its concerns in sections III and IV of its January 31, 2022, comment letter.

A. EPA's proposals put small businesses at a significant disadvantage.

Advocacy reiterates the concern raised in our previous letter: EPA's analytical support for this rulemaking inherently disadvantages small businesses. Calculations of cost-effectiveness rely on averages of costs across the whole industry, reflecting economies of scale for equipment and human resources that are not available to many small businesses. Compliance timelines assume priority access to equipment and materials that are not available to small businesses. In addition, annualization over the full lifetime of equipment assumes longer-term financing that is often not available to small businesses.

As we said in our comment letter on the proposed rule, Advocacy recommends that EPA consider and present explicitly the impacts of its rule on all small businesses, including those that are operating existing sites. EPA should consider how the disadvantages described above affect the cost-effectiveness of its proposal. This analysis should consider a range of different size categories.

B. EPA should consider additional flexibilities for small businesses.

1. EPA should consider a compliance option that requires more frequent Audio, Visual, and Olfactory Inspections in lieu of Optical Gas Imaging Inspections.

EPA's supplemental proposal eliminates the requirement that Optical Gas Imaging (OGI) contractors comply with the proposed Appendix K. While that does reduce costs of OGI overall, small entities remain concerned about the cost of this requirement and their ability to procure the services of OGI contractors, particularly within the timeframes that EPA's proposal would require. Although EPA's analysis is that OGI is cheaper than Audio, Visual, and Olfactory (AVO) inspection, the small businesses with whom Advocacy has consulted insist that AVO inspections are generally preferred. They can be done more frequently and without specialized

[7] Regulations.gov Document ID EPA-HQ-OAR-2021-0317-0924.

equipment, more people can be trained to perform them properly, and they are well-suited to detect the leaks most likely to occur at small sites.

One set of small entities suggested that their staff is present at their well-sites significantly more frequently than the frequency of AVO inspections that would be required by the supplemental proposal. EPA, however, appeared to develop this proposal from the assumption that small sites are visited infrequently. While this may be true for many sites, it serves to highlight the challenge of one-size-fits-all rulemakings across an industry that has wildly different characteristics across regions of the United States. EPA should consider a schedule of compliance alternatives based on more frequent AVO inspections and less frequent OGI or, in some cases, none.

EPA should also consider whether there can be a further subcategorization of well sites with major equipment such that some sites might have bimonthly AVO and semiannual OGI. Advocacy also suggests that EPA clarify that sites can change between subcategories, and thus change monitoring requirements, as equipment is installed and removed from the site.

2. EPA should allow existing facilities to maintain natural gas pneumatic controllers and pumps where electric service is not readily available.

Advocacy's position on EPA's proposal to require controllers and pumps that require electricity to operate is unchanged from the proposed rule. EPA relies on work by Carbon Limits and does not give due consideration to the concerns of small entities raised to Advocacy and in the public comments that these requirements are technically infeasible in some parts of the country. This is particularly problematic because the Carbon Limits 2021 update to its 2016 report relies on interviews with three suppliers and two unidentified oil and gas producers.[8] Suppliers are not unbiased providers of information about the products and services they sell, especially when they are not required to guarantee a standard of performance. The oil and gas producers who have successfully dispatched electronic pneumatic devices at their new and existing sites may be accurately representing their situation, but two companies cannot represent the whole of diversity in the industry, let alone the range of sizes of companies in the industry. Neither EPA nor Carbon Limits address the concern that EPA is mandating the replacement of approximately 1.7 million controllers in the transition period.

Advocacy reiterates its previous comment:

> Because controllers are crucial to oil and natural gas production operations, EPA should provide flexibilities in this requirement for those circumstances in which small entities cannot obtain and/or retrofit zero-emitting controllers. EPA should phase in any requirement for existing sources. After the phase-in period, EPA should allow states to

[8] *See* Carbon Limits, *Zero emission technologies for pneumatic controllers in the USA: Updated applicability and cost effectiveness*, November 2021, available at Regulations.gov Document ID EPA-HQ-OAR-2021-0317-1530.

grant extensions to small entities that can show a good faith effort to procure non-emitting controllers at a reasonable price.

In this supplemental proposal, EPA includes a way for state plans to provide some relief for existing sources, through consideration of RULOF in setting emissions standards less stringent than EPA's emission guidelines. EPA provides an example of a state using the RULOF provisions for pneumatic controllers.[9] However, this flexibility is limited. It requires the state regulatory authority to make findings for a specific facility or class of facilities and identify the facilities in the state plan submitted to EPA. This is much earlier in the process than many small businesses will be ready to engage with their state regulators. It also does not give the state and small businesses flexibility to phase in requirements based on market conditions. EPA should include these flexibilities directly in the emission guidelines.

3. EPA must design the proposed Super-Emitter Response Program to respect small businesses operating in good faith.

Small businesses have raised significant concerns about the proposed Super-Emitter Response Program. These operators want to ensure that the program's emphasis is on the response to these third-party reports, sent in good faith and to which they can respond in good faith, not on enforcement for methane emissions that are otherwise permitted. Further, these small oil and gas producers are concerned that third-party reporters could be motivated to impose bureaucratic costs unrelated to emissions or to their permit requirements to permanently reduce fossil fuel extraction in this country.

To address these concerns, EPA should design this program to make clear that EPA is not delegating enforcement authority and that the role of the third-party notifier is limited to the narrow specifications of this program. Towards that goal, Advocacy recommends the following specific provisions.

- Make a clear prohibition on trespassing on oil and gas production sites, with withdrawal of approval to third-party notifiers for repeated violations. Operators need assurances that third parties will not interpret their participation in this limited program as an invitation to engage in further investigation or conduct their own inspections.
- Require third-party notifiers to submit reports of super-emitter events to the relevant regulatory authority, not directly to the operator. There is no uniform reliable means to determine ownership of a site remotely, and operators should not be required to engage in costly regulatory compliance based a third-party's self-certification.
- Emphasize that reports of super-emitter events are not evidence of a violation of the Clean Air Act permit or the regulations.
- Provide a safe harbor against enforcement for methane emissions reported and resolved in response to a report of a super-emitter event.

[9] 87 Fed. Reg. at 74,820.

- Withdraw approval after three erroneous reports, whether to the same operator or not.

III. Conclusion

EPA's proposed NSPS and EG for methane emissions from the oil and natural gas sector will have significant and disproportionate impacts on small businesses. EPA should provide additional flexibilities for small businesses to reduce the likely burden. Based on feedback from small oil and gas producers, Advocacy recommends changes to the proposal related to monitoring, pneumatics controllers and pumps, and the super-emitter response program.

If you have any questions or require additional information, please contact me or Assistant Chief Counsel Dave Rostker at (202) 205-6966 or by email at david.rostker@sba.gov.

Sincerely,

/s/

Major L. Clark, III
Deputy Chief Counsel
Office of Advocacy
U.S. Small Business Administration

/s/

Dave Rostker
Assistant Chief Counsel
Office of Advocacy
U.S. Small Business Administration

Copy to: Richard L. Revesz Administrator
Office of Information and Regulatory Affairs
Office of Management and Budget

Attachment

Exhibit J

Comment of Miller Energy Company,

February 14, 2023

February 14, 2023

Michael S. Regan, EPA Administrator
U.S. Environmental Protection Agency, EPA
EPA Docket Center, Docket ID No. EPA-HQ-OAR-2021-0317
Mail Code 28221T
1200 Pennsylvania Ave., NW
Washington, DC 20460

Re: Docket ID No. EPA-HQ-OAR-2021-0317-1460

During Miller Energy's review of the **Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review**, several areas of concern were identified that we would like to bring to the EPA's attention.

Knowing the impact this bill can have on our community, employees, and oil-and-gas production, it is evident there was not adequate time to fully review and comment on Docket ID No. EPA-HQ-OAR-2021-0317-1460 to ensure all necessary factors were considered. An extension of the review period would have allowed for a more complete analysis and response. Without adequate time, Miller Energy's comment is touching on a few of the high-level concerns of grave importance to our operation. This is not all-inclusive. We urge the EPA to consider the comments submitted by the Independent Petroleum Association of American and the Michigan Oil and Gas Association as these comments have detailed explanations of the concerns our operations face should this bill be adopted.

One-Size-Fits-All Approach

The proposed bill takes a one-size-fits-all approach for regulating oil-and-gas production. This approach does not adequately account for the vast differences between a large-production well and a

marginal-stripper well. The EPA acknowledges that the majority of emissions comes from a small amount of "large-emitters".

The cost-benefit analysis did not consider Operators like Miller Energy that are comprised of marginal-stripper wells producing ½ to 2 barrels of oil per day on average. Our wells are vastly different from super emitters yet the bill recommends they be treated the same. With less production comes less emissions per well/facility. With smaller production outputs also comes less available profit margin to recapture the capital investments required to install the proposed monitoring and field equipment.

Miller Energy would like the EPA to consider excluding marginal wells from this regulation. If existing marginal wells cannot be excluded, Miller Energy would like to propose a tiered system that uses production quantities and potential emissions to determine the level of compliance requirements. With reduced production and emissions, marginal wells should require less monitoring and controls than the super emitters. The removal or reduction of regulation for marginal wells will not impact the EPA's goal to reduce methane emissions as they have a de-minimis impact. The removal will also reduce state and federal tax spending for the oversight required to manage this program.

Free-Market Economy

As a small business in Michigan with less than 50 employees and marginal-stripper wells, we do not have the same resources available to us as the big players in the industry. The proposed regulations would have a larger impact on our sustained operations than large businesses. The one-size-fits-all approach discriminates against small businesses and make fair competition in a free-market economy unattainable.

Miller Energy would like the EPA to consider the impact this regulation would have on small oil producers and our ability to compete with the big-industry players.

Energy Waste & Abandonment

An unintended consequence of regulating oil-and-gas production without regards to the life cycle of the well is wells being plugged or abandoned prior to fully producing the resource. Despite our societal initiatives for alternative-energy sources, oil and gas will remain a vital commodity for the future to come. Premature plugging of wells leaves valuable resources in the ground and is contrary to Michigan EGLE regulations to reduce waste.

Another unintended consequence would likely be an increased number of abandoned wells if small operators determine they cannot sustain operations with adequate profit margins. With less upside, some operators may decide to abandon operations and transfer their liability to the state or federal government. That liability transfer impacts tax dollars and resources the government could have used elsewhere.

Even with the state/federal bodies taking liability of abandoned wells, the wells likely do not receive the same attention by governmental officials as they do when managed by trained operators like Miller Energy. Lack of resources and knowledgeable oversight can create a large environmental impact on communities when releases occur.

Alternative Monitoring Equipment

The investment required to install fixed monitoring equipment on 600+ marginal wells would not be financially feasible. At Miller Energy, we have a hands-on, low-tech approach to ensuring our operations are environmentally sound. Our field staff visit sites daily and complete auditory, visual, and olfactory (AVO) inspections at each well and facility. If regular AVO inspections are not deemed adequate, the field staff may be able to utilize mobile devices on a reasonable schedule to confirm emissions are within regulation.

Miller Energy would like to encourage the EPA to consider low-cost solutions that would be sufficient for monitoring low-emission wells/facilities, specifically looking at mobile gas meters that can be used across the operation instead of fixed units per well.

Electrical Power Source Requirement

The EPA's proposed requirement to transition field equipment onto electrical power sources poses serious challenges in our rural field operations. Many rural locations do not have access to electric power. Additionally, the EPA's alternative suggestion of solar power has been tried without success. Solar options are not viable nor reliable throughout Michigan's seasonal weather conditions. The number of solar-qualified days is drastically reduced in Michigan compared to other states. Miller Energy has tried implementing various technology (such has tank sensors) powered by solar and even the vendors have discouraged use based on the number of cloudy days and snow buildup.

While some equipment may not require a reliable power source, many do. Power outages could cause serious environmental and safety concerns if equipment goes down unexpectedly. The proposed rules need to reflect the reality of access to alternative power sources and offer exceptions when reliable electricity is not viable.

Additionally, at Miller Energy we pride ourselves at recycling our field-gas waste stream by reusing it to power our field equipment. Should we be required to only use electricity, our emissions would increase as we would need to flare or vent all field fuel not used by our equipment. Plus, additional electrical energy would be consumed that would not have otherwise been needed.

Miller Energy would request the EPA consider removing the universal requirement to use electricity as the sole power source.

WTI Crude Prices not set by Operators

The oil-and-gas industry is unique from most in the fact we do not have the ability to dictate our selling price. Without an ability to push the cost of increased regulatory requirements downstream, many operators, like Miller Energy, will be unable to offset the capital-investment costs for the proposed monitoring equipment. This factor should be considered when the EPA considers the cost-benefit analysis for each production tier.

Conclusion

In addition to being a crude oil producer, Miller Energy provides jobs to nearly 50 Michiganders. We value our employees and the ability to provide them with a great workplace. Our employees work and live in the communities where we operate. Many of our employees have wells in their backyard. The Miller Energy employees have a vested interest, alongside Miller Energy Company, to ensure our operations do not negatively impact Michigan's air quality. We urge the EPA to consider if Operators like Miller Energy are really the target recipient of these regulations, and if not, make the necessary modifications to the bill to accommodate for oil production from marginal-stripper wells with minimal emissions.

Regards,

Laura Dyke
VP of Compliance & Regulatory

- Miller Energy Company, LLC
- Miller Energy Company II, LLC
- Miller Energy Partners LLC

Exhibit K

Declaration of Patrick Gibson,

May 9, 2024

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

MICHIGAN OIL AND GAS ASSOCIATION and MILLER ENERGY COMPANY II, LLC Petitioners, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY and MICHAEL S. REGAN, Administrator, U.S. EPA, Respondents.	)	Docket No. 24-1101

DECLARATION OF PATRICK GIBSON

I, Patrick Gibson, hereby declare and state under penalty of perjury as follows:

1. I am more than eighteen years old and am competent to testify. This Declaration is based on my personal knowledge.

2. I am the Chief Executive Officer of West Bay Exploration Company ("West Bay"). I have held this position since 2015.

3. This Declaration addresses the consequences of EPA's final rule entitled "Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review," 89 Fed. Reg. 16820 (Mar. 8, 2024) (the "Final Rule").

4. West Bay is a member of the Michigan Oil and Gas Association.

5. West Bay owns and operates approximately 80 oil and gas wells and is one of the largest producers in Michigan.

6. The term "marginal well" or "stripper well" is defined in the federal tax code as a well with "marginal production" of not more than 15 barrels of oil equivalent per day ("BOPD") annualized.[1] Approximately 58 percent of West Bay's wells are marginal wells.

7. The daily production rates of West Bay's marginal wells can be described over time as hyperbolic. The wells produce at high rates initially, and equipment is designed to address the higher rates, they then deplete to a point they attain marginal classification producing at low rates for a significant amount of time. Marginal wells in Michigan, due to their unique geology, produce low volumes of gas yet yield large volumes of production over time. Substantial increases in operational expenses render marginal wells uneconomic, resulting in premature abandonment and waste of resources.

8. In promulgating fugitive emissions monitoring requirements under the Final Rule, EPA categorized well sites based on equipment count and not based on throughput or emissions.

9. Equating equipment count to increased emissions is misleading and inaccurate as marginal wells are utilizing equipment designed for high initial production rates but do not have the potential to emit large volumes of methane.

10. Most marginal well sites require a minimum of two or more pieces of equipment regardless of throughput or volume of oil produced at the well site. The majority of West Bay's marginal well sites require two or more pieces of equipment despite their low throughput and production.

11. Under the Final Rule, replacing, modifying and/or updating certain equipment subjects wells to additional regulatory requirements under new Subpart OOOOb, therein adding additional economic burden to well operations.

12. West Bay estimates an additional burden of at least two thousand dollars per well per month will result in complying with the requirements of the Final Rule, and that it will need to plug some of its wells. Each well plugged will also adversely impact royalty payments and working interest owners, service providers, and local businesses.

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[1] Internal Revenue Code § 613A(c)(6)(D)-(E).

13. Due to the Final Rule, West Bay will be unable to make certain modifications or improvements (e.g., certain tank replacements or facility modifications) to its existing well sites without subjecting them to the Subpart OOOOb requirements.

14. West Bay has approximately twenty wells that will be immediately impacted by Subpart OOOOb due to planned tank replacements, retiring older equipment, and normal preventative maintenance.

15. Due to the Final Rule's impacts, West Bay will be giving careful consideration to drilling its extensive portfolio of undrilled prospects. West Bay anticipates a decrease in drilling activities will have an adverse trickle-down effect, resulting in the loss of revenue for its service providers, employees and partners.

16. Due to the Final Rule, West Bay has effectively lost property rights and suffered lost property value for various properties acquired or leased for the purposes of installing oil and gas wells because the compliance costs will make wells on these properties no longer economically viable.

I declare under penalty of perjury that, to the best of my knowledge, the foregoing is true and correct.

Executed on this 9th day of May, 2024.

Patrick Gibson
Chief Executive Officer, West Bay Exploration Company

Exhibit L

Declaration of Tom Pangborn,

May 9, 2024

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

MICHIGAN OIL AND GAS ASSOCIATION and MILLER ENERGY COMPANY II, LLC, Petitioners, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY and MICHAEL S. REGAN, Administrator, U.S. EPA, Respondents.	)	Docket No. 24-1101

DECLARATION OF TOM PANGBORN

I, Tom Pangborn, hereby declare and state under penalty of perjury as follows:

1. I am more than eighteen years old and am competent to testify. This Declaration is based on my personal knowledge.

2. I am the Chief Executive Officer of Savoy Energy LP ("Savoy"). I have held this position for over 25 years.

3. This Declaration addresses the consequences of EPA's final rule entitled "Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review," 89 Fed. Reg. 16820 (Mar. 8, 2024) (the "Final Rule").

4. Savoy is a member of the Michigan Oil and Gas Association.

5. Savoy owns and operates approximately 68 oil and gas wells.

6. The term "marginal well" or "stripper well" is defined in the federal tax code as a well with "marginal production" of not more than 15 barrels of oil equivalent per day ("BOPD") annualized.[1] Approximately 57 percent of Savoy's wells are marginal wells.

7. For many of Savoy's marginal well sites, any associated gas that is not reused as fuel or for another useful purpose is economically and practically flared.

8. Sales lines are not available for many of Savoy's well sites due to the combination of marginal production volumes, the lack of available commercial purchasers, and geographic limitations.

9. All of Savoy's marginal well sites have contract personnel that physically monitor production and processing equipment and perform audio, visual, and olfactory ("AVO") assessments on a regular basis.

10. In promulgating fugitive emissions monitoring requirements under the Final Rule, EPA categorized well sites based on equipment count and not based on throughput or emissions.

11. Under the Final Rule, for well sites constructed after December 6, 2022, EPA will require quarterly AVO monitoring surveys to be conducted for "Single Wellhead Only Well Sites and Small Well Sites" while quarterly AVO monitoring surveys and more expensive semiannual monitoring and repair using optical gas imaging ("OGI") is required for "Multi-wellhead Only Well Sites (2 or more wellheads)" and bimonthly AVO monitoring surveys and quarterly monitoring and repair using OGI is required for "Well Sites or Centralized Production Facilities that Contain Major Production and Processing Equipment." 89 Fed. Reg. at 168330. This latter category is defined to include well sites containing two or more pieces of certain equipment. 89 Fed. Reg. at 17134.

12. Under the Final Rule, for well sites constructed on or before December 6, 2022, EPA mandated that states require quarterly AVO monitoring surveys to be conducted for "Single Wellhead Only Well Sites and Small Well Sites" while quarterly AVO monitoring surveys and more expensive semiannual monitoring and repair using OGI is required for "Multi-wellhead Only Well Sites (2 or more wellheads)" and bimonthly AVO monitoring surveys and

[1] Internal Revenue Code § 613A(c)(6)(D)-(E).

quarterly monitoring and repair using OGI is required for "Well Sites or Centralized Production Facilities that Contain Major Production and Processing Equipment." 89 Fed. Reg. at 168333-34. This latter category is defined to include well sites containing two or more pieces of certain equipment. 89 Fed. Reg. at 17217.

13. Most marginal well sites require a minimum of two or more pieces of equipment regardless of throughput or volume of oil produced at the well site. The majority of Savoy's marginal well sites require two or more pieces of equipment despite their low throughput and production.

14. Due to the way in which EPA categorized well sites under the Final Rule (*i.e.*, categorizing sites based on equipment count and not based on throughput), many of Savoy's well sites would be categorized as "Well Sites with Major Production and Processing Equipment and Centralized Production Facilities" under new Subpart OOOOb or as "Well Sites and Centralized Production Facilities" under new Subpart OOOOc despite being marginal wells with low throughput and production. 89 Fed. Reg. at 16830-34.

15. Due to the way in which EPA categorized well sites under the Final Rule (*i.e.*, categorizing sites based on equipment count and not based on throughput), the annual costs for surveying and monitoring for many of Savoy's well sites will increase exponentially as compared against the surveying and monitoring costs that would be incurred if these marginal well sites were instead categorized as "Small Wellhead Sites."

16. In the Final Rule, for wells constructed, reconstructed, or modified after December 6, 2022 (*i.e.*, wells subject to Subpart OOOOb), EPA prohibited the use of flaring associated gas absent an annual showing of technical infeasibility, and this technical infeasibility exception is only available in certain instances (and in some cases only for a two-year grace period). 89 Fed. Reg. at 16832-33. EPA instead required that associated gas be routed to a sales line or for another useful purpose. *Id.*

17. Many of Savoy's marginal well sites, like most well sites in Michigan, are generally located in remote rural regions where sales lines are not available and do not produce enough associated gas to support the exorbitant costs and fees of connecting to a sales line.

18. Due to the Final Rule, Savoy has ten already existing wells that will immediately be subject to EPA's requirements under Subpart OOOOb.

19. Due to the Final Rule, Savoy will be unable to make certain modifications or improvements (e.g., certain tank replacements or facility modifications) to many of its existing well sites without subjecting them to the Subpart OOOOb requirements.

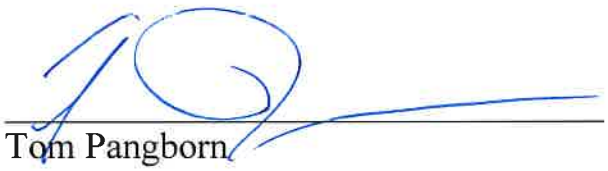
20. The Final Rule has the potential to drastically reduce Savoy's drilling activity, estimated by as much as 50%, because it will not be economically viable to explore for oil and gas due to compliance costs. Any reduction in exploration and drilling activity will have a direct corresponding negative impact on the domestic energy industry and supporting services.

21. Due to the Final Rule, Savoy estimates that its compliance costs will increase between 200% – 300%. This estimate does not include additional staff time that will be required to comply with additional recordkeeping and submissions requirements.

22. Due to the Final Rule's impacts, Savoy anticipates that it may need to plug some of its wells due to being no longer economically viable.

I declare under penalty of perjury that, to the best of my knowledge, the foregoing is true and correct.

Executed on this 9th day of May, 2024.



Tom Pangborn
CEO, Savoy Energy LP