February 13, 2023

Via electronic submission (http://www.regulations.gov)
Attn: EPA-HQ-OAR-2021-0317
United States Environmental Protection Agency
EPA Docket Center
WJC West Building, Room 3334
1301 Constitution Avenue NW
Washington, DC 20004

Re: EPA-HQ-OAR-2021-0317; Supplemental Notice of Proposed Rulemaking for Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector, 87 Fed. Reg. 74,702 (Dec. 6, 2022)

Dear Sir or Madam:

GPA Midstream Association ("GPA Midstream") appreciates this opportunity to submit comments on the U.S. Environmental Protection Agency's ("EPA") supplemental notice of a proposed rulemaking, 87 Fed. Reg. 74,702 (Dec. 6, 2022) (the "Supplemental Proposed Rule") regarding emission standards and guidelines proposed on November 15, 2021 pursuant to Section 111 of the Clean Air Act ("CAA") ("the November 2021 Proposal"). EPA claims that the Supplemental Proposed Rule is intended to further reduce air emissions from the Crude Oil and Natural Gas source category, which is of significant interest and importance to GPA Midstream.

GPA Midstream has served the U.S. energy industry since 1921 and has over 60 corporate members that directly employ more than 56,000 employees that are engaged in a wide variety of services that move vital energy products such as natural gas, natural gas liquids ("NGLs"), refined products, and crude oil from production areas to markets across the United States, commonly referred to as "midstream activities." The work of our members indirectly creates or impacts an additional 396,000 jobs across the U.S. economy. GPA Midstream members gather over 77% of the natural gas and recover more than 80% of the NGLs such as ethane, propane, butane, and natural gasoline produced in the United States from more than 380 natural gas processing facilities. In the 2019-2021 period, GPA Midstream members spent over $100 billion in capital improvements to serve the country's needs for reliable and affordable energy.

GPA Midstream members have extensive gas and NGL operations that will be significantly affected by many aspects of the Supplemental Proposed Rule. Many of GPA Midstream's concerns were previously expressed in our comments submitted to EPA on the November 2021 Proposal. *See* GPA Midstream, Comments on Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Climate Review, 86 Fed. Reg. 63,110 (submitted January 31, 2022). GPA Midstream, therefore, incorporates and asserts as if fully included here, those previous comments, which are attached for ease of reference as Exhibit A.

Executive Summary

GPA Midstream has welcomed the opportunity to engage meaningfully with EPA during this rulemaking and during prior related rulemakings so that the Agency may hear directly from the midstream industry and better understand our business and the technical aspects of midstream operations. A fuller understanding of the midstream industry will ensure regulations are founded on sound assumptions about the nature of our operations and how such operations may be affected by proposed regulatory requirements. GPA Midstream also appreciates important revisions in approach EPA has made in formulating this proposal, now spelled out in regulatory text for public review. However, there remain issues important to GPA Midstream that we urge EPA to reconsider and revise in any final rulemaking. More specifically:

- EPA should revise the subpart OOOOb applicability date to no earlier than December 6, 2022. The November 2021 preamble did not provide any regulatory text, which is essential for establishing an effective date. Preambles are designed to provide description and interpretation, but it is the regulatory text that specifies the governing regulations. EPA should not take this unprecedented step of claiming preamble language is sufficient.
- GPA Midstream urges EPA not to adopt its proposed definition of "legally and practicably enforceable." Rather than provide clarity, EPA's proposal is inconsistent with the long-standing definition, overly restrictive, excludes work practices and other control options, and effectively prohibits the use of permits by rule and general permits. EPA should not upend the state permitting process, which has long relied on the current understanding of legally and practically enforceable, as adoption of this legally-deficient proposed definition would prove unworkable in practice and would require significant time and resources to implement, for which EPA has not allotted in its proposal.
- EPA should remove the proposed mandatory "Super-Emitter Response Program," which would unilaterally grant unprecedented powers to private parties without authorization from Congress as neither the Clean Air Act, nor any other statute, authorizes EPA to create the program. Instead, EPA should first assess the effectiveness of new Subpart OOOOb and OOOOc regulations after the requirements have been implemented to determine whether additional measures would be needed to address larger emitting sources, within the bound of EPA's statutory authority. At most, EPA could establish a voluntary program to address so-called "super emitters."
- GPA Midstream renews its concerns regarding the feasibility and actual cost-effectiveness of EPA's proposal to adopt solar powered or electric powered pneumatic controllers.

Crucially, EPA's unsupported optimism in the wide-spread adoption of solar powered controllers and the use of electric controllers is misplaced, and EPA must provide appropriately for sites that have no reliable access to the electrical grid.

- EPA should revise the definitions of tank battery, centralized production facilities, and modification, base applicability determinations on actual data or valid engineering estimates, and provide a reasonable timeline for compliance with these new requirements for storage vessels.
- EPA should revise the proposed rules for control devices to provide appropriate flexibility and enhance clarity to avoid confusion, and EPA should fully consider costs and the limited availability of equipment in evaluating cost-effectiveness and setting deadlines for installation of devices in the midstream sector.
- EPA should revise proposed regulations governing reciprocating compressors and wet seal centrifugal compressors to ensure appropriate flexibility and provide additional clarity. Among other revisions, owners and operators should be allowed to combine flow across compressor cylinders, and work practice standards should be allowed, such as instituting a repair or replacement scheme, and allowing owners and operators to route rod packing emissions to a control device. These would alleviate significant technical difficulties involved in the proposed requirements. Further, EPA should defer the proposed standards for dry seal centrifugal compressors due to the absence of data supporting a technically feasible vent rate.
- EPA should revise the compressor station Leak Detection and Repair ("LDAR"), closed vent system, and alternative monitoring provisions to provide greater flexibility and reflect the practicalities of operations and monitoring.
- EPA should revise gas plant LDAR requirements and Appendix K to provide for a more reasonable monitoring framework. Among other changes, EPA should provide a more reasonable approach to dwell times, survey breaks, the operating envelope, and senior camera operator requirements in Appendix K.
- EPA's analysis of costs and benefits should be revised, as it includes significant errors and omissions regarding the midstream sector. In particular, owners and operators of gathering and boosting compressor stations do not own the gas that they process and, therefore, recoup no financial benefits from reducing lost gas as EPA assumed. Midstream facilities and upstream production facilities are not comparable for purposes of analyzing the cost-effectiveness of the proposed regulations, and EPA's cost analysis should be revised to reflect these differences. Further, several necessary costs were omitted, such as compressor monitoring costs, installation costs, and the need for vapor recovery units, and we urge EPA to consider these costs in determining whether regulatory requirements are cost effective.
- EPA should not rely on the social cost of methane for this rulemaking, as the interim values are deficient and have not been finalized. Significant comments were presented to the government interagency working group that set the interim values, and those comments have not been addressed by the working group or EPA. Those technical issues need to be considered and addressed, before relying on the social cost in this rulemaking.

- In a future rulemaking, EPA should include a reasonable interpretation of the waste emissions charge provisions of the Inflation Reduction Act. In particular, EPA should fairly apply the "exemption for regulatory compliance" provided in this new law, including by adopting a reasonable, common sense meaning of "facility" and "in compliance," and to provide a "notice and cure" process that would allow sources reasonable time to cure any material non-compliance before a waste emission charge is assessed.
- Lastly, EPA's proposed requirements for states to show their state plan is equivalent to EPA's OOOOc emissions guidelines are contrary to the Clean Air Act. By seeking to shift power to EPA from that granted to the States by the Congress, EPA's proposal is contrary to the plain language of the statute, settled case law, and the core principles of federalism established by Section 111(d) of the Act. In all events, EPA should address any potential changes to the process for states to develop state plans under EPA's separate, pending rulemaking to revise subpart Ba, not this rulemaking.

As always, GPA Midstream stands ready to discuss EPA's proposal and provide information to further help the Agency understand the effect of rules on midstream operations and to assist with reasonable and appropriate regulation of our industry.

I. EPA Should Revise the Subpart OOOOb Applicability Date to No Earlier Than December 6, 2022

We further request that EPA revise the applicability date for subpart OOOOb to be, at the earliest, December 6, 2022—the date EPA published the Supplemental Proposed Rule in the Federal Register. EPA did not in fact propose the actual "regulations" when it provided an initial proposal in 2021. Without any actual rules to guide, as a matter of law and basic fairness, EPA should not seek to make November 15, 2021 the effective date for OOOOb.

First, the Clean Air Act does not authorize EPA to make the effective date of OOOOb a year before it published the actual regulations. We recognize that in CAA § 111(a)(2) the definition of "new source" suggests that EPA may apply a "standard of performance" to a new source as of the date of "proposed *regulations*." [1] But here, EPA did not publish a clear "standard of performance" in "proposed regulations" in November 2021 – it provided preamble language, requested comment on the numerous suggestions it outlined in that preamble, and promised to publish the actual regulatory text. The preamble, however, does not set a "standard of performance" and is not the governing "regulations," but is designed to inform the public about the meaning of the *regulations* that are codified in the Code of Federal *Regulations*. *E.g.,* 1 C.F.R. § 18.12 ("Each agency submitting a proposed or final rule document for publication shall prepare a preamble which will inform the reader, who is not an expert in the subject area, of the basis and purpose for the rule or proposal."); *see* Administrative Conference of the United States, Guidance in the Rulemaking Process: Evaluating Preambles, Regulatory Text, and Freestanding Documents as Vehicles for Regulatory Guidance at 4 (May 16, 2014) (distinguishing preamble language as

[1] A "new source" is "any stationary source, the construction or modification of which is commenced after the publication of regulations (or, if earlier, proposed regulations) prescribing a standard of performance under this section which will be applicable to such source." 42 U.S.C. § 7411(a)(2); CAA § 111(a)(2).

"agency statements outside of those appearing in regulatory text that pertain to the meaning or interpretation of the agency's regulations or to advice about how to comply with the agency's regulations"). It has long been understood that those explanatory statements are distinct from the actual rules – and would be used by the courts and the public "in the interpretation of the agency's rules." United States Department of Justice, Attorney General's Manual on the Administrative Procedure Act at 32 (1947).[2] EPA cannot – and should not – seek to blur this long-settled distinction.

Second, in putting together the Supplemental Proposed Rule and preparing the regulatory text, EPA has added to and changed the approach it described in the November 2021 preamble. *See, e.g.,* Proposed Rule at 74,707 (summarizing changes made to Subpart OOOOb in response to comments received on the November 2021 Proposal). It would be grossly unfair and unsound policy for the agency to make a proposal retroactive, when sources and permit writers could not know even a general description of what EPA intended, let alone the regulatory text that would in fact govern. Indeed, in some cases, EPA did not even set out suggested outcomes, but only requested comment. For example, requirements for control devices on combustion sources were not in the 2021 preamble. The general request for comments for additional monitoring for control devices does not mean that flow meters and net heating value measurements and other requirements would be required, as EPA has now proposed. Moreover, unilaterally applying new regulatory text retroactively does not consider the practical implications, costs or burdens associated with retrofitting controls or monitoring equipment on existing controls in the segment.

Third, EPA's proposed November 2021 effective date runs counter to the U.S. Supreme Court's long settled rule against applying law retroactively. *Bowen v. Georgetown University Hospital*, 488 U.S. 204 (1988) ("Retroactivity is not favored in the law."). Congress must convey "the power to promulgate retroactive rules" "in express terms." *Id.* Nothing in the Act *expressly* provides EPA the authority to take the wholly unprecedented act of saying its preamble is sufficient. As such, by making OOOOb effective a year before EPA provided the public the regulatory text, it should be viewed as an impermissible retroactive application. *E.g., Marrie v. S.E.C.*, 374 F.3d 1196, 1207 (D.C. Cir. 2004) ("In the administrative context … 'a rule is retroactive if it 'takes away or impairs vested rights acquired under existing law, or creates a new obligation, imposes a new duty, or attaches a new disability in respect to transactions or considerations already past.'").

Fourth, even assuming for the sake of argument that EPA had the authority to apply its December 6, 2022 proposed regulations to sources that commenced construction after November 11, 2021, EPA should not do so. Good policy should afford affected facilities fair notice of the actual regulations – the regulatory text – before potentially being subject to those requirements. This is especially the case here, in light of the extraordinary complexity of the proposed regulations – layered onto the already confusing history surrounding the past decade of regulation of oil and

[2] That was the governing principle underpinning the requirement in the Administrative Procedure Act to require a "statement of basis and purpose of rules issued," so as to "with reasonable fullness explain the actual basis and objectives of the rule." H.R. REP. NO. 79-1980, at 259 (1946); S. REP. NO. 79-752, at 201 (1945), as available in ADMINISTRATIVE PROCEDURE ACT, LEGISLATIVE HISTORY, 79TH CONG., S. Doc. No. 79-248, 1944-46, 225 (1944-46). That statement is the explanation – not the "rule."

natural gas production, midstream, transmission and storage. Moreover, in the Supplemental Proposal EPA has proffered no actual justification for adopting this unprecedented approach. It makes no effort to consider the impracticality, burdens and costs imposed on sources that had no actual regulatory text to consider – and to weigh those against any purported benefits of this harsh retroactive approach. There is no data, analysis or other information. As such, we urge EPA to reconsider its intended effective date.

At the same time, GPA Midstream also recommends that EPA include provisions in the final rule that would allow and facilitate those owner/operators that have existing affected facilities covered by OOOOa to opt-in to OOOOb requirements for some or all of their facilities that are presently covered by OOOOa. This would be a voluntary measure for those owner/operators who wish to comply with what EPA determines in its final OOOOb regulation to be the current BSER for their facilities. Those owner/operators would opt-in because they are committed to achieving the reduced emissions and improved level of environmental performance that EPA would expect from implementing the expanded emission controls and other requirements in the latest BSER in OOOOb. It would also facilitate the work of regulators overseeing and permitting those facilities, which could otherwise have different requirements at the same location with some equipment subject to OOOOa and some to OOOOb, if certain affected facilities are modified or reconstructed. It would also streamline owner/operator compliance programs, which should likewise improve compliance and overall performance.

II. GPA Midstream Urges EPA Not to Adopt its Proposed Definition of "Legally and Practicably Enforceable"

GPA Midstream explained in detail in its prior comments that the preamble outline of a revised definition of "legally and practicably enforceable" in the November 2021 Proposal required substantial revisions, because it was inconsistent with existing definitions of the term and lacked any record support for revising the long established term. *See* Exhibit A at 12-17. EPA has now proposed regulatory text for Subpart OOOOb that proposes to define "legally and practicably enforceable" with the same flawed elements on which we previously commented. EPA has included this regulatory text without responding to the comments of GPA Midstream and others on this issue in any meaningful way, or providing additional justification for the departure from the long-applied definition of this phrase, except to assert that the proposed definition was intended to provide clarity. 87 Fed. Reg. at 74,800. Therefore, for the same reasons we outlined in our previous comments, GPA Midstream submits that EPA's proposed definition of "legally and practically enforceable limits" (found in regulations related to storage vessels in §60.5365b(e)(2) and §60.5386c(e)(2)) is unsound and unjustified.

GPA Midstream reasserts and adopts those previous comments and objections as if fully stated here. Briefly: First, contrary to EPA's suggestion that this is codification of previous policy, EPA previously defined and used the term differently.[3] Therefore, regardless of EPA's intent, providing a new and different definition does <u>not</u> provide "clarity to owners and operators claiming

[3] *See* 40 C.F.R. §§ 49.152, 49.167; 76 Fed. Reg. 38,748 (July 1, 2011); *see also* Prevention of Significant Deterioration and Nonattainment New Source Review: Debottlenecking, Aggregation, and Project Netting, 71 Fed. Reg. 54,235, 54,240 n. 13 (Sept. 14, 2006).

the storage vessel is not an affected facility in NSPS OOOOb, due to legally and practicably enforceable limits that limit their potential for VOC emissions below 6 tpy." 87 Fed. Reg. at 74,800.

Second, rather than provide clarity, EPA's proposed definition—including quantitative production and operational limits, averaging time, parametric limits on performance testing, continuous monitoring, and recordkeeping and reporting thereof[4]—is inconsistent with the long-standing definition, overly restrictive, excludes work practices and other control options, and effectively prohibits the use of permits by rule and general permits. *See* Exh. A at 13-15. EPA has not provided any reasonable justification for this shift from its previous position.

Third, EPA should not upend the state permitting process, which has long relied on the current understanding of legally and practically enforceable. Indeed, EPA has approved the state minor source permitting programs, which are part of the states' implementation plans. Based on those programs, sources have obtained permits and relied on the presence and operation of its controls to meet its regulatory requirements, such as the limit on VOC emissions from storage vessels. By substantially revising this definition – and apparently effectively assuming that controls are not in place – EPA would dramatically change the permitting landscape. Moreover, it is really putting the cart before the horse. If EPA believes state minor source programs generally require revision, there is a process for that and EPA should follow that process of generally revising state SIPs, as opposed to attempting to make changes in this regulation.

Fourth, adoption of this legally-deficient proposed definition would prove unworkable in practice and would require significant time and resources to implement, for which EPA has not provided in its proposal. *See id.* at 17. Among other concerns, these sources do not have methane limits in permits now. EPA's new approach offers no guidance on how to assess whether a particular set of parameters is legally and practically enforceable to achieve a methane limit in that case. Further, prohibiting the use of permits by rule and general permits would impose enormous burdens on sources and state permitting authorities, for which the proposal makes no provision. This would have a cascading effect on Title V determinations across numerous sources, imposing substantial additional burdens and complexities on sources and states.

Nevertheless, should EPA adopt such flawed text, EPA should recognize that sources in good faith went to the regulator and obtained a permit under the applicable state minor source program. Thus, at a minimum, EPA should provide flexibility by phasing in the requirement - applying the new definition only when a source needs to apply for a new or revised permit or a permit renewal. Moreover, crucially, for all existing sources, EPA should be clear that existing permits authorizing a source to operate remain fully effective, pending state processing of new permits.

[4] Proposed Regulatory Text, at § 60.5365b(e)(2)(i)(A)–(F).

III. The Proposed "Super-Emitter Response Program" is Not Supported by the Record, Contrary to Law, Would Impose Undue Costs Without Any Demonstrated Benefit, and Has Significant Implementation Challenges

We urge EPA to remove the proposed "Super-Emitter Response Program" from any final rule. 87 Fed. Reg. at 74,746-55. EPA's overall proposal includes significant new measures to regulate emissions from designated facilities that will impose substantial requirements on thousands of affected facilities. Through these new regulations, EPA has stated its intention to reduce emissions, increase monitoring to detect and respond to leaks and other sources of emissions, and expand reporting and recordkeeping. Yet, EPA has not demonstrated the need for mandating this type of extraordinary additional "super-emitters" measure on top of and in addition to the extensive new proposed regulations. Even more importantly, as proposed, the program is contrary to law as neither the Clean Air Act, nor any other statute, authorizes EPA to create the program, which would give extraordinary power to private parties to unilaterally require action by other private actors.

GPA Midstream supports appropriate, legal measures to address and mitigate excess emissions based on the administrative record. The proposed super-emitters program is neither lawful nor based on an established record. Instead, we submit that the prudent policy for EPA is to move forward without a mandatory super-emitters program and assess the effectiveness of the new regulations (as we urge them to be adjusted) after these new requirements have been implemented to determine whether additional measures would be necessary and appropriate to address larger emitting sources, provided those measures fall within EPA's statutory authority. At most, EPA should consider developing a voluntary framework that does not deputize third parties as outlined in the proposal.

A. EPA Has Not Identified a Need for a Mandatory Super-Emitter Response Program

To begin, EPA should not include a mandatory "Super-Emitter Response Program" in a final rule because it is an additional regulatory burden that is not supported by the record. The Supplemental Proposed Rule introduces "super-emitter" events as very rare and "typically caused by abnormal operating conditions or malfunctions."[5] EPA then states that "the November 2021 Proposal and this supplemental proposal contain standards and requirements that, if implemented correctly, would prevent … or detect and mitigate … most of these large emissions events."[6] Thus, EPA anticipates that implementing these new regulations would make "super-emitter" events

[5] 87 Fed. Reg. at 74,746-47; *see also id.* at 74,748 (the percentage of super-emitting sources is so small that "it is not cost-effective to impose additional inspection costs on every source"); *id.* at 74,749 (where a source is compliant with regulations "the EPA does not expect unintentional releases at these very high levels to occur in normal operations").

[6] *Id.* at 74747.

extremely rare.[7] That itself demonstrates that adopting this additional and extraordinary program is not justified by actual record-based evidence.

Moreover, regardless of how many larger emission events would remain, if any, a new quasi-enforcement program is not required to address them. EPA's proposal is not intended to address intentional venting as part of normal operations or maintenance. *Id.* at 74,747, n. 101. Thus, a "super-emitter" event would present an enforcement issue, not a new regulatory issue, as these events would only arise through violations of the regulations. *See id.* at 74,753 ("Where one of these facilities is determined to be the cause of a super-emitter emissions event, it is reasonable to assume that the emissions source is out of compliance and to require corrective action to bring the facility back into compliance with the applicable standard or requirement"); *id.* (where flares cause a super-emitter event they are not in compliance with existing regulations).

We recognize that EPA claims this extraordinary program is necessary as "a backstop to address the large contribution of super-emitters to the pollution from this sector." *Id.* at 74,747. However, EPA offers no supporting data and provides no reason why traditional federal, state, and citizen suit enforcement mechanisms would be unable to fully address these events, if any occur under a new set regulations once finalized. EPA found additional monitoring would not be cost-effective, and thus, EPA's proposed program would not increase the availability of monitoring capabilities or the likelihood that sources will be monitored. Instead, the Super-Emitter Response Program would only change how monitoring information may be handled if an alleged "super-emitter" is discovered. The Supplemental Proposed Rule provides no actual data or any other credible explanation of why monitoring information cannot be used for traditional regulator responses, as may be appropriate under the Clean Air Act.

The Supplemental Proposed Rule also infers that these events are somehow different than other potential regulatory violations because they are intermittent. *See*, *e.g.*, 87 Fed. Reg. at 74,747 (stating that "many such large emissions events are intermittent and can occur at different sites over time"). To the extent that EPA is claiming that the intermittent nature of these alleged events presents an unusual problem for traditional state, federal, or citizen enforcement, it provides no data or evidence to support such a claim. In fact, many types of alleged environmental violations occur on an intermittent basis, yet they have been addressed with existing enforcement tools – and without deputizing private parties well beyond the authority provided by the Clean Air Act. To the extent that a facility is out of compliance and truly causing significant methane emissions, traditional enforcement mechanisms are available.

B. EPA Should Consider Creating A Voluntary Program

While GPA Midstream opposes a mandatory program for the reasons outlined here, we are generally supportive of initiatives to identify other large emitting events (as defined in proposed revisions to subpart W regulations, 40 C.F.R. Part 98) using satellite, aerial, mobile, or other advanced detection platforms, and to stop them. GPA Midstream members have participated in

[7] This is the best description in the record available to the public, given that EPA has not identified how many alleged "super-emitters" there are under current conditions or estimated a reduction in "super-emitters" if measures like the proposed rules were promulgated and implemented.

numerous voluntary programs, such as The Environmental Partnership to respond to observations made by satellite and aerial remote sensing platforms. We would encourage EPA to consider a voluntary program instead of the proposed program. It would provide a demonstration of the concept before fashioning a regulatory program within the bounds of current law. A voluntary program would also allow time for new OOOOb regulations to be implemented, providing real data as to whether a program like that proposed is necessary.

C. EPA Has no Legal Authority For the Proposed Mandatory Super-Emitter Response Program

Nothing in the Clean Air Act authorizes EPA to create an entirely new third-party enforcement program that not only stands outside of the Act's citizen suit provision, but lacks the safeguards that Congress considered necessary for third-party enforcement. Further, as discussed in more detail below, the Super-Emitter Response Program is inconsistent with how Section 111 defines sources and source categories.

1. The Super-Emitter Response Program is not Authorized by Congress and Ignores Statutory Protections for Citizen Enforcement

Congress has not authorized EPA to adopt this program. The Super-Emitter Response Program establishes a quasi-enforcement system where EPA would unilaterally delegate to a private party the authority to obtain injunctive relief against another private party – all without any express authorization by Congress or an order from either a court or a regulatory agency. This new private party enforcement system lacks any basis in the Clean Air Act, and is precisely the type of agency legislating the Supreme Court struck down in *West Virginia v. EPA.*

In fact, it not only is not authorized by Congress, this program would be an end-run around the limitations that Congress either expressly established on third-party enforcement or that it knew to be imposed through formal legal proceedings when it passed the Clean Air Act. These include, among others, the citizen suit notice provision under 42 U.S.C. § 7604(b)(1)(A) and the diligent prosecution bar under § 7604(b)(1)(B), as well as the need for citizen plaintiffs to demonstrate an ongoing Clean Air Act violation, establish Article III standing, and demonstrate to an impartial judge that injunctive relief is warranted. Nothing in the CAA authorizes EPA to run roughshod over these statutory and constitutional requirements and create entirely new private rights.

In short, the Supplemental Proposed Rule, despite acknowledging that the Super-Emitter Response Program would enforce existing regulations, refuses to recognize it for what it is: a private-party enforcement program.[8] Authorization for such a private-party enforcement system is not found in the Clean Air Act, and EPA does not claim that the Program is justified by an

[8] The Supplemental Proposed Rule also appears to say that EPA and state agencies could also initiate the Super-Emitter Response Program to obtain corrective actions. 87 Fed. Reg. at 74,752. The Supplemental Proposed Rule, however, fails to describe such an enforcement action as being grounded in either the Administrator's emergency powers under 42 U.S.C. § 7603 or any form of enforcement authority identified in 42 U.S.C. § 7413. With respect to State agencies, the Supplemental Proposed Rule never considers whether the Super Emitter Response Program is consistent with State enforcement authorities or processes.

ambiguity in the statute. Instead, the Supplemental Proposed Rule simply creates an entirely new private-party enforcement mechanism out of whole cloth, despite Congress establishing robust systems for administrative, civil judicial, criminal, and citizen enforcement. 42 U.S.C. §§ 7413(b)-(d); *id.* § 7604. EPA should not embark on this extraordinary and unlawful endeavor.

2. *An Unauthorized Third-Party Enforcement Mechanism is not a "Compliance Assurance Measure"*

Nor can the Supplemental Proposed Rule disguise its new proposed enforcement scheme as a "compliance assurance" measure. 87 Fed. Reg. at 74,753. Under this theory, the proposal asserts that allowing a private-party (or any enforcement agency) to unilaterally issue an order "to require corrective action to bring the facility back into compliance with the applicable standard or requirement" is merely "a backstop – an additional compliance assurance measure." *Id.* The term "compliance assurance" is not found in the Clean Air Act or defined anywhere in 40 C.F.R., Part 60, let alone in any NSPS regulation. Thus, the Supplemental Proposed Rule's attempt to "interpret" a new and unauthorized enforcement scheme is not an act of interpretation. And even if it was, the Super-Emitter Response Program would be inconsistent with the types of monitoring, testing, recordkeeping, and reporting programs that the affected facilities must satisfy that one would consider to be "compliance assurance" requirements. *See*, *e.g.*, 40 C.F.R. §§ 60.7 (notification and recordkeeping requirements by affected facilities for construction and operational changes, recordkeeping for unit startups, shutdowns, and malfunctions, installation of continuous monitoring devices); 60.8 (performance test requirements); 60.11 ("Compliance with standards and maintenance requirements" that includes performance testing, opacity observations, or continuous opacity monitoring); 60.13 (standards for continuous monitoring devices). Allowing third-parties to issue unilateral compliance orders is not a "compliance assurance" measure and there is no evidence that Congress ever contemplated such a measure within the Clean Air Act.

3. Section 111 Does not Authorize Shifting Source Categories Based on Compliance Status

EPA cannot avoid the strictures of the Clean Air Act by designating a new (but temporary) "super-emitters" source category. 87 Fed. Reg. at 74,752. Under this approach, a source would transition from being an affected facility under the Crude Oil and Natural Gas Facilities category to an affected facility under the newly-created "Super-Emitter" category when one private-party unilaterally claims another private party incurred a "super-emitter event." *Id.* Assuming the third-party's information is correct and the new "Super-Emitter" affected facility implements a corrective action, it would then presumably transition back to a Crude Oil and Natural Gas Facilities source. Or, put another way, a Super-Emitter designated facility will only come into existence where a Crude Oil and Natural Gas Facility source violates a Crude Oil and Natural Gas Sector Facility emission or work practice standard, and then cease to exist once the violation ends. That cannot square with the notion of a source category under CAA § 111.

Moreover, that EPA's approach is not well founded is confirmed by the proposed Best System of Emission Reduction ("BSER") for super-emitters, which EPA proposes to define as the new super-emitter source merely coming back into compliance with whatever pre-existing Crude Oil and Natural Gas Facilities emission standards or work practices that was purportedly violated.

See id. ("the BSER for super-emitter emissions events would be to correct the malfunction or operational issues and resume normal operations consistent with the standards or requirements applicable to the source(s) of the super-emitter emissions event"); *see also id.* at 74,753 ("Where one of these facilities is determined to be the cause of a super-emitter emissions event, it is reasonable to assume that the emissions source is out of compliance and to require corrective action to bring the facility back into compliance with the applicable standard or requirement"). Requiring action to bring a source back into compliance with the applicable rules is not a system of emission reduction – it is an enforcement action.

This unprecedented approach is also inconsistent with Section 111. The Administrator may create new source categories under 42 U.S.C. § 7411 (b)(1)(A) or sub-categories based on "classes, types, and sizes … for the purpose of establishing such [performance] standards." *Id.* § 7411(b)(2). Nothing in the statute allows for the Administrator to create a new source category consisting solely of facilities already included in another existing source category that are violating existing regulations. Nor could the Administrator create a sub-category of such facilities as the sub-category would not be created "for the purpose of establishing" any "standards." The only BSER work practice standards the Supplemental Proposed Rule would impose is an order for a source to cure any alleged violation without so much as a notice of violation, much less any formal enforcement action and the accompanying statutory and due process protections.[9] The Supplemental Proposed Rule is not an attempt to interpret the meaning of some ambiguous statutory word or phrase; it is attempting to impermissibly create an entirely new type of enforcement program that sheds the Clean Air Act's procedural mandates.

Further, the Super-Emitter Response Program deviates from EPA's longstanding practice of designating specific equipment, such as tanks, turbines, or engines as "affected facilities" under Section 111. Even fugitive emissions requirements are tied to specific equipment types, such as valves, connectors, or flanges. Here, however, the "affected facility" would be an entire site, containing various categories of affected facilities, and subject to what is effectively an arbitrarily selected bubble limit or site-wide cap of 100 kg/hour, applying to both planned and unplanned emissions.[10] Nothing in Section 111 authorizes EPA to use such an approach.

4. A Super-Emitter "Source" Can Neither be a New Source Nor an Existing Source

EPA may only regulate two types of sources under Section 111: new sources (including modified sources) and existing sources. 42 U.S.C. §§ 7411(b), (d). A Super-Emitter Source, as the Supplemental Proposed Rule contemplates it, cannot be a new source under Subpart OOOOb because a new source must be either constructed or modified. *Id.* §§ 7411(a)(2) (a "new source" is

[9] Nor is the Supplemental Proposed Rule able to characterize the Super-Emitter Response Program as merely "an additional work practice standard," as work practice standards must "reflect[ ] the best technological system of continuous emission reduction." 42 U.S.C. § 7411(h). An order to cure alleged regulatory violations is not a "technological system of continuous emission reduction."

[10] The 100 kg/hour threshold is essentially an emissions limit, but EPA did not rely on any health-based or environmental drivers to establish it. The threshold appears to be based on current or pending satellite detection capabilities. *See* 87 Fed. Reg. at 74,749.

constructed or modified after the publication of the standard of performance regulations), (a)(4) ("modification" requires a "physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source"). Here, a Super-Emitter Source would be created by an emission event, not any construction or modification.

Nor can Super-Emitter Sources be existing sources under Subpart OOOOc as an existing source is typically constructed and operating before either the approval of a state plan with existing source standards or the issuance of federal existing source standards. 42 U.S.C. §§ 7411(d)(1), (2). Here, however, a Super-Emitter Source is only created by an emissions event. Even if the source itself is 20 years old, its existence as a Super-Emitter Source post-dates the issuance of any state or federal existing source standards. And yet, as described above, the absence of construction or modification activities means it cannot be a "new source" under Section 111 either. The Supplemental Proposed Rule never addresses this conundrum, which only arises because Congress never contemplated a source category-shifting scheme like the one proposed here.

D. The Supplemental Proposed Rule Fails to Consider the Full Range of Costs for the Super-Emitter Response Program

The Supplemental Proposed Rule mistakenly claims that "[t]o the extent there are additional costs associated with the investigation or mitigation of these [Super-Emitter] events, the EPA expects that the costs would be minor in relation to the benefits of stopping such huge emissions event, making them obviously cost-effective." 87 Fed. Reg. at 74,754. EPA offers no data, study, or other hard analysis to support this conclusory assertion. For that reason alone, EPA should reconsider its approach. Regardless, EPA apparently assumes that every source receiving a "Super-Emitter" compliance order will, in fact, be the cause of an alleged super-emitter event and can cost-effectively resolve the alleged emissions. However, while there have been improvements in satellite and airborne imaging, few can provide an accurate designation of a "Super-Emitter" source.

Even with such a highly developed imaging platform, third-parties will have significant difficulty pinpointing exactly which source is the alleged "super-emitter," and most third-parties must do with far less sophisticated equipment and software. As framed, nothing would constrain one private party from merely sending notices to multiple sources knowing that, at most, only one of the recipients is potentially responsible. On the contrary, EPA proposes to protect third-parties who are sending the notices in such a situation: "the failure of the operator to find the source of the super-emitter emissions event upon subsequent inspection would not be proof, by itself, of demonstrable error on the part of the third-party notifier." 87 Fed. Reg. at 74,750. Yet, each recipient would have to investigate their facility or facilities in response to the notice. This will mean diverting personnel, or having to hire new personnel or contractors, to investigate potential violations or malfunctions, often at remote unmanned locations (and some of which are difficult to access during the winter months), without any hard evidence those facilities are the source except the assertion of another private party. Despite EPA's conclusion that the Super-Emitter Response Program is "obviously cost-effective," 87 Fed. Reg. at 74,752, the Supplemental Proposed Rule seems to give the actual costs and burdens that would be involved minimal consideration. In fact, if a company receives multiple notices per week, regardless of whether those

notices are accurate or not, the time and resources required to respond would be immense. If EPA proceeds with this approach in some fashion, it should review fully and carefully the full range of costs associated with this type of program.

E. If EPA Proceeds With This Program, the Agency Should Develop a Program With Robust Governing Requirements

While GPA Midstream urges EPA not to proceed with a mandatory program, if EPA moves forward, there are important issues for EPA to consider before proceeding to finalize any regulation. Moreover, consistent with the requirements of the Administrative Procedure Act, EPA should afford the public an additional opportunity for comment before finalizing the details of any program.

1. *EPA Should Revise the Applicability Threshold and Nomenclature it Uses for the Program*

As an initial matter, GPA Midstream recommends that if the agency pursues this approach, it should align the threshold for notification with the proposed revisions to EPA's Greenhouse Gas Reporting rule, 40 CFR Part 98, which has a proposed reporting threshold for "large emission events" of 250 tonnes methane carbon dioxide equivalents (or 10 tonnes of methane). Applying a 24-hours timeframe for such events, this would result in a threshold of approximately 415 kg/hour. Should EPA increase the Subpart W threshold, we would recommend EPA aligning this program accordingly. Likewise, we suggest EPA align with the phrasing of "large emission events" in subpart W, in lieu of "super-emitter."

2. *EPA Should Be Clear That Notice May Be Given Only if the Observed Emissions Are Due to Unplanned Events of a Persistent Nature Warranting a Response*

As proposed, there is no validation that the observed emissions are unplanned occurrences or upsets of a persistent nature warranting the type of evaluation and response contemplated by the program. Singular observations of emissions from remote sensing technologies may constitute an observation of a planned or authorized activity that is part of normal facility operations, such as a blowdown or other authorized short term events (an engine startup) or short term malfunctions (a stuck dump valve) that vent gas at a high rate, but for a short period. Third-party observations may estimate these emissions as exceeding the threshold, but the actual estimated emissions may be well below the threshold.

Accordingly, EPA should provide that, operators/companies notified of an observation, should not be subject to reporting and corrective action if the event was a) associated with normal operations or maintenance activities and/or b) the observed emissions event is determined by the operator to not exceed the applicability threshold. To implement this, GPA Midstream recommends that for an emissions observation to be deemed as a persistent emission event for which a notice may be submitted, the observation must have been made between two distinct time intervals (such as 3 hours apart).

3. EPA Must Publicly Specify the Criteria Used to Approve Third-Party Notifiers and the Detection Technologies They Use

Under EPA's framework, the agency would designate "people with specialized equipment and expertise," 87 Fed. Reg. at 74,749, who could become third-party notifiers – but, EPA has not detailed fully in regulatory text the actual criteria that it would propose to use to make such designations. In the preamble description, EPA's approach is circular: third-party applicants would demonstrate their technical expertise by demonstrating their technical expertise. *See*, *e.g.*, *id.* at 74,750 (application would "demonstrate[ ] the potential notifier's technical expertise in the specific technologies and detection methods … [t]his demonstration would include technical expertise in the use of the detection technology and interpretation, or analysis, of the data collected by the technology"). This would leave approval to EPA's sole discretion without any real explanation of the criteria that EPA applied or why they approved any particular applicant.

We urge EPA to reconsider that type of approach. Instead, any program should provide the specific criteria for considering whether a third-party has the true "expertise" and qualifies for this role – and allow a notice and comment process to provide stakeholders the opportunity to comment on proposed third-party notifiers. That would be consistent with how EPA accepts applications, vets and allows for public input on proposed members of boards or for peer review. Further, GPA Midstream would urge EPA to be fully transparent about the criteria it is considering and allow for public comment before finalizing any criteria. Only by being fully open and public about the approval criteria, would the program have any potential credibility.

4. Third-Party Notifiers Should Have a Formal Affiliation with the Detection Technologies They Use to Have the Necessary Expertise

One criterion that EPA should adopt is that any third-party notifier must be employed by or directly contracted to, the company that makes or operates the monitoring technology that the notifier would use to monitor emissions. A strong affiliation with the manufacturer is necessary as few people outside of the company will understand accurately and fully how to use the highly specialized equipment that EPA is contemplating (*e.g.*, satellite imaging) or interpret their results. Although a person may be provided with basic training by the manufacturer, this is not true "expertise" in the technology and how detected data is translated into emissions data. Such expertise only comes with extensive experience and a real understanding of how the detection technology works, which would often involve an understanding of proprietary "black box" computational and analytical methods not available to the public. As such, EPA should specify that third party notifiers will not include individuals merely reviewing publicly available online data from outside sources (like Carbon Mapper or Climate Tracer) that then notify operators based on their observation of Carbon Mapper information.

As an alternative absolute minimum, EPA should require notifiers who meet other criteria to be certified in a specialized training program provided by the manufacturer of the technology, with demonstrated time in the field utilizing the technology overseen by a company expert to develop sufficient expertise to reliably measure and attribute relevant data. That is what EPA requires for other forms of testing and monitoring, and at a minimum, we urge EPA to be consistent and apply the same approach here.

Moreover, we also urge EPA to consider how unfair it would be for EPA to retain broad discretion to approve private parties, who would be granted extraordinary powers to require other private actors to take action and potentially expose other private parties to enforcement actions or negative public perception, without providing strict and transparent qualifications. It is particularly unfair given the stringent training requirements EPA imposes on industry personnel and their contractors on a wide range of matters – and in this area, the stringent standards EPA has imposed on the senior OGI camera operators that regulated parties must use.

5. EPA Should Impose Standards and Protocols for Detection Technologies on Par With Those Industry Must Follow

GPA Midstream would likewise urge EPA to develop and impose criteria on the third-party detection technologies that may be used under any Super-Emitter Response Program. At present, the proposal offers no criteria, leaving room for third-party detection equipment that is not reliable, and thus, could be used to compel another private party to invest substantial time and resources unnecessarily, as well as to create a public perception regarding an industry entity that is unfair and unjustified. Before finalizing these new criteria, EPA should make the proposed criteria available for public comment, as required by the APA.

Among other requirements, EPA should require approved third-parties to implement and document protocols established by equipment manufacturers for how they calibrate, use and regularly maintain detection equipment in a fashion similar to proposed Appendix K, which includes exceptionally detailed proposed mandates for OGI use (from maximum wind speeds to operator break times). Yet, as framed in the proposal, EPA appears to allow for approval of third-party detection equipment upon the barest showing of theoretical functionality – a standard that EPA does not follow for monitoring or compliance monitoring generally. New test methods or monitoring techniques must go through rigorous review by technical experts and public scrutiny before EPA allows their use – and often not until the technology or the technique has first gone through lengthy testing and review by knowledgeable standards setting bodies, such as ASTM and others. This type of rigor should be applied to any technology that would be used for a proposed program, along with a public process for review and comment on the technology. Any less rigorous approach would, again, not only lack credibility – but would arbitrarily impose requirements on industry that it would not impose on those bringing quasi-enforcement actions against industry.[11]

[11] Although GPA Midstream views the Super-Emitter Response Program as unlawful under both Section 111(b) and 111(d), EPA appears to believe that the program also will be applied to existing sources through Section 111(d) state plans. *See* 87 Fed. Reg. at 74,753 (stating that most super-emitters would be violating "the proposed NSPS OOOOb/EG OOOOc."). The Supplemental Proposed Rule never addresses how EPA will evaluate state plans implementing the Super-Emitter Response Program and the discretion state agencies may have in approving third-party notifiers and the detection technologies they use. EPA should not apply this program to existing sources unless and until it addresses these and other issues regarding extending this program in a separate proposal subject to public comment.

6. The Proposed Regulatory Text's Description of Detection Technologies Highlights the Need For a More Detailed Proposal

Where EPA has provided general descriptions of technologies that would be allowed under this proposed program, the draft regulatory text - specifically the categories of "Satellite detection of methane emissions," "Remote-sensing equipment on aircraft," and "Mobile monitoring platforms" – highlights the need for EPA to consider these technologies and their use further, offer a more detailed regulatory proposal, and allow for public input. Proposed §§ 60.5371b(a)(1)-(3).

First, the proposed text conflates the concepts of detection and quantification. All of the listed categories of technologies involve remote sensing technologies that detect methane emissions – but they do not directly measure emissions. At most, these technologies may rely on proprietary algorithms to estimate remotely sensed concentrations (commonly expressed in ppm-m) and convert those into a mass emissions rate (such as kg/hour). EPA should recognize that these technologies can only provide a rough estimated emissions rate. They do not provide a "quantified emission rate" as the proposed text asserts. *See* Proposed §§ 60.5365b(j), 60.5371b, 60.5371b(b)(4), 60.5371b(e)(ii)(D).

Second, while these technologies (if properly calibrated, operated, and maintained) may be able to detect methane emissions, each of these technologies have documented accuracy limitations.[12] EPA has provided no independent evaluation or other rationale for accepting the listed technologies as accurately detecting methane to a degree that they may be used as tools to compel investigations and corrective actions by affected facility owners and operators. Further, as noted above, it does not appear that EPA plans to impose any protocols on how these technologies are used or their results interpreted. For example, if the technology's field study data shows an error in emission estimates that ranged from -50% to 100%, a measurement should only be valid as it relates to this program if it is still over the 100 kg/hr threshold assuming the potential error. These types of nuances in data interpretation need to be thoughtfully considered and explained. OGI cameras are comparatively mature technologies, yet EPA would use proposed Appendix K to impose restrictive mandates on how they are used, and who may use them. The absence of any similar protocols for the technologies in Proposed §§ 60.5371b(a)(1)-(3) not only undermines confidence in their use, but effectively implements an arbitrary "no rules" policy for these technologies.

Accordingly, to improve the confidence in use of these technologies, EPA should create a detailed protocol through which these technologies prove their accuracy (including maintenance and calibration requirements) and provide assurance that changes made to proprietary algorithms are not made without agency approval. Further, in view of inherent limitations with certain

[12] The tools used to evaluate an emissions event have error bars for a single "measurement" ranging from +/- 17% at the most accurate end to +/- 70% for the types of events that occur in the field. Heltzel, R., *et al.*, Understanding the Accuracy Limitations of Quantifying Methane Emissions Using Other Test Method 33A, *Environments* 2022, 9, 47, https://doi.org/10.3390/environments9040047; Halley L., *et al.*, Assessment of Methane from Oil and Gas Production Pads Using Mobile Measurement, *Envt'l Sci. & Techn.* 2014 *48* (24), 14508-14515.

technologies (e.g., satellite/aerial detection capability is limited due to weather conditions), EPA should specify conditions under which these technologies are suitable for emissions detection.

Third, the term "mobile monitoring platform" is vague. EPA should provide the public with fair notice of exactly what platforms may be qualified for use by third-party notifiers and proffer specific guidelines on how each of the defined set of platforms may be used to support a notice under this program.

Further, if EPA intends "mobile monitoring platform" to mean that third-parties may use drones, we urge EPA to consider fully the implications of approving and encouraging the use of that technology, as the proposal provides no procedures or limitations on the use of drones. Private parties flying drones over or through a facility not only could be an illegal trespass, but it would undoubtedly present a major safety hazard, including at unmanned facilities. Accordingly, EPA should develop proper monitoring procedures to prevent third party notifiers from placing themselves or others at risk of personal injury or jeopardizing the security of an operator's property, including clear direction that third party notifiers must not be allowed to encroach on an operator's property to conduct monitoring.

7. The Supplemental Proposed Rule's Restrictions on Petitions to Disqualify Third-Party Notifiers is Unlawful and Should be Revised

In addition to establishing strict criteria for approving notifiers, GPA Midstream suggests that the process for petitioning to disqualify a third-party notifier be revised.

Currently, EPA has proposed that "[a]ny owner or operator that has received more than three notices of a super-emitter emission event at the same well site, centralized production facility, or compressor station from the same third-party may petition the Administrator to remove that third party from the approved list." Proposed § 60.5371b(a)(4). GPA Midstream commends EPA for recognizing that, by tendering enforcement powers to private parties without legislative direction, this extraordinary program could be abused and used as a tool for harassment. However, owners and operators should be able to petition EPA to disqualify a third-party notifier at any time and without respect to the limitations listed by the proposed regulatory text. *See id.* (petition permitted only after three notices at the same facility, petitions may not be used to dispute technology accuracy, disqualification limited to "meaningful, demonstrable errors" or failure to observe event threshold).

The proposed restrictions on submitting a petition violate the Administrative Procedure Act. That requires "[e]ach agency" to "give an interested person the right to petition for the issuance, amendment, or repeal of a rule." 5 U.S.C. § 553(e). The Administrative Procedure Act does not authorize EPA to limit, condition, or otherwise restrict the filing of such petitions. And the decision to approve a third-party notifier easily meets the definition of a rulemaking. Such decisions are not only final (as opposed to "merely tentative or interlocutory") but impose rights and obligations "from which legal consequences will flow." Bennett v. Spear, 520 U.S. 154, 178 (1997) (internal quotations omitted). Here, EPA will authorize specific third-parties to exercise enforcement rights that other members of the public may not. Once an affected facility receives a notice from such a party, the Super-Emitter Response Program would legally compel the owners

or operators of those facilities to undertake an investigation and response, including a potential corrective action. This makes EPA's approval of third-party notifiers a rulemaking under the Administrative Procedure Act and, as a consequence, EPA is prohibited from restricting the right of petition.[13]

At a minimum, we would urge additional revisions to the petition and review elements of any program. For one, as written, the ability to petition only applies after three improper notices at the same well site, centralized production facility, or compressor station. However, given that operators have multiple sites, GPA urges EPA to incorporate a cap across an entire operator's asset base, such as a maximum of six improper notifications per rolling 12-month period per parent company. Further, there should be clear provisions for restricting third parties that are ultimately removed from the approved list. EPA should make clear that individuals removed will be permanently prevented from reenrolling in the program. In addition, a provision should be included to cover an entity that may employ more than one notifier. So, where the third-party notifier is employed as part of a notifying entity, that entity should be removed from the approved notifier list for a period of at least one year. After the one year period, the entity may re-apply to be re-approved.

8. The Notification and Response Procedures Should Be Improved to Provide More Guidance to Both Notifiers and Sources

The Supplemental Proposed Rule's notification and response procedures require various revisions and significantly more detail to provide guidance to both third-party notifiers and those receiving a notice.

First, as noted, there needs to be validation that the observed emissions are of a persistent nature warranting the type of evaluation and response contemplated by the program. Absent data from two distinct time intervals, the notice should be deemed incomplete to which no response would be required.

Second, proposed § 60.5371b(b)(7) only requires a third-party to notify the owner or operator of the site "as soon as practicable." EPA does not define what is "practicable." This is a significant concern as the ability to verify any large emission event and, if verified, the cause of the event, will diminish greatly with time. Delays in receiving notice would therefore frustrate the owner or operator's investigation. GPA Midstream suggests that EPA require that notifications be submitted no later than five days after the third-party made the observation through a detection technology specified under any final rule – and only for observations that are made after the technology has been properly vetted under any final rule. This will ensure that the third-party provides actionable information to the affected facility so that the owner or operator may effectively and efficiently deploy resources to evaluate the notice. Moreover, a short timeline

[13] Of course, given that EPA's approval of a third-party notifier is a rulemaking subject to the Administrative Procedure Act, any proposed approval of a third-party notifier must be subject to the Act's public notice and comment process.

reduces the likelihood of unnecessary time and resources are invested in evaluating and reporting on an observation that a company/operator has already identified and abated.

Third, the Supplemental Proposed Rule provides no guidance on how third-party notifiers can accurately identify the owner or operator of an affected facility or provide any direction on notification. In the field, ownership and operation is often more difficult than anticipated given that co-located or adjacent facilities are common (*e.g.*, sites where both a production operator and a centralized production facility operator are on the same or adjacent properties), as are joint ventures where only one company has operational responsibility. If a third-party notifier can accurately identify the owner or operator, guidance on what constitutes an effective notice to the affected facility is important because the proposal would impose very short deadlines for evaluating the notice, and implementing a corrective action plan that are triggered by receipt of the notice. Without such guidance, however, owners and operators may end up exceeding these deadlines because the third-party notifier sent the notice to the attention of a general community relations employee that does not understand the significance of such a notice, former employees, employees on vacation, or any number of company contacts that are not designated to handle such environmental concerns.

Accordingly, EPA should provide guidance in a final rule on how the notifier is to know whom to notify at a company – and the method by which actual notice should be deemed to have been provided. Specificity is critical, given the responsibilities EPA is proposing. The rule should not, for example, allow notifiers to rely on phone numbers or other contact information posted on facility locations or general contact information as the formal contact for receiving official notice on behalf of the operator/company.[14] The contact could, for example, be the same person or contact that is the designated representative for Subpart W. EPA should also detail how changes to the company contact would be handled when the named contact(s) are not at work (PTO/Vacation/Sick leave) or have been reassigned or retired. The rule should also address co-located facilities to avoid undue confusion, given the short response time, and specify the responsible party for a joint venture - GPA Midstream recommends that the notice be provided to the operator.

Fourth, the Supplemental Proposed Rule provides no guidance as to how an owner or operator should respond to multiple notifications for the same alleged super-emitter event. Presumably, if an owner or operator receives, for instance, three separate notices of an alleged event, it should perform only one investigation or response applicable to all three notices. The proposed regulatory text, however, should be clarified to avoid a possible interpretation that would read the text as requiring a separate investigations into the same alleged super-emitter event. EPA should clarify that an investigation is tied to an alleged large emissions event, not to each notice of the alleged event.

Fifth, the Supplemental Proposed Rule does not contemplate what should happen where an owner or operator identifies and abates a potential emissions event and then subsequently receives

[14] The complexity of providing notice to a company or operator is a further reason why GPA Midstream had proposed in its previous comments that any private party notice should be handled through the regulators, not by a direct action from another private party. Notifications would come to the agency first and then sent to the company.

a third-party notice for this event. Such scenarios are certainly possible given that the Supplemental Proposed Rule's "as soon as practicable" standard means that affected facilities could receive notices weeks after an emissions event. GPA Midstream proposes that, in such instances, the affected facility should be able to respond with a letter identifying (1) the cause of the emissions event, (2) how it was abated, and (3) when it was abated. The affected facility should not have to waste its resources performing a *post hoc* mock investigation and corrective action under proposed §§ 60.5371b(c)(1)-(10) for an incident that was already resolved.

Sixth, proposed § 60.5371b(c) requires the recipient of a notice to initiate a "root cause analysis" within five days of receiving the notice and complete both the "root cause analysis" and an initial corrective action within 10 calendar days of receiving the notice.[15] References to "calendar days" should be changed to "business days." Unlike large petroleum refineries or chemical plants, which have employees working 24 hours a day, seven days a week, most midstream sites are unmanned. Engineering staff at the company's headquarters or a regional office would conduct the investigation. These are salaried employees, not shift workers, that typically work Monday through Friday (excepting federal and state holidays where offices are closed) during normal business hours. Further, investigation time may be consumed by time needed to travel to and from the sites, some of which are relatively remote. Therefore, EPA should afford owners and operators 10 business days (or two weeks) to complete their investigations.

Finally, GPA Midstream is concerned with the proposed process to have all notices sent by third-parties, and subsequent reports by the recipients, posted to a public website. 87 Fed. Reg. at 74,750. For one, EPA should not post any information about a third-party notice until the responding party's report is final – and no information related to the event should be publicly available. Moreover, EPA should include procedures to ensure that the database of publicly available notifications will be maintained to ensure the accuracy of provided notices. EPA should undertake its own review of the documentation before posting, as notifications deemed to be invalid or incorrect or made by a notifier deemed unqualified should not be posted. Indeed, fundamental fairness demands that, where a recipient cannot verify a third-party notice of a super-emitter event, or demonstrates that the notice was invalid (*e.g.*, was not an unplanned occurrence or upset but was due to normal operations, did not exceed the threshold, used an unapproved detection technology, identified the wrong source, *etc.*) it should not be posted or removed from the website if already posted.

F. The Term "Root Cause Analysis" is Inapt for Describing the Evaluation Required to Respond to a Notice

GPA Midstream recommends that EPA strike refences to a "root cause analysis" throughout the Supplemental Proposed Rule and regulatory text as a notice recipient is not actually required to conduct one. It is only required to conduct various inspections and to document various issues listed in proposed §§ 60.5371b(c)(1)-(10). This is not a "root cause analysis" in that it is not a formal systematic investigation, using multiple potential methodologies, into the potential causes of an incident that identifies corrective actions to reduce the probability of similar future incidents.

[15] As discussed below, the Supplemental Proposed Rule requires an investigation or response, not a root cause analysis.

See, *e.g.*, OSHA-EPA, Fact Sheet, The Importance of Root Cause Analysis During Incident Investigation (Oct. 2016);[16] Dep't of Energy, Root Cause Analysis Guidance Document, DOE-NE-STD-1004-92 (Feb. 1992).[17] Root cause analyses take significant amounts of time – far longer than the 10 days required by the Supplemental Proposed Rule. Therefore, EPA should remove all references to "root cause analysis" and replace them with a more generic and appropriate term, such as "investigation" or "evaluation," *e.g.* Revised Proposed 60.5371b(c)("Within 5 days of receiving the notification of a super-emitter emissions event, you must initiate ~~a root cause analysis~~ **an evaluation** to determine the cause of such emissions and to determine appropriate corrective action… The ~~root cause analysis~~ **evaluation** and initial corrective action …")

G. The Effective Date of the Program Should be Deferred Until EPA Completes a Process of Approving Notifiers and Appropriate Technologies

GPA Midstream also recommends that the effective date for implementing any program be deferred until EPA completes the process of approving notifiers and defining and approving appropriate technologies. As outlined above, EPA should defer any program until it has developed robust governing requirements in a supplemental rulemaking that allows the public a full opportunity to comment on those requirements. At a minimum, any final rule should state that only observations/identifications made no sooner than 180 days after the rule is final would be subject to the new requirements in the program. We suggest a minimum of 180-days to provide EPA with necessary time to review and approve certified third-party notifiers and to approve qualified technologies.

IV. GPA Midstream Renews its Concerns Regarding the Feasibility and Actual Cost-Effectiveness of EPA's Proposal to Adopt Solar Powered or Electric Powered Pneumatic Controllers and Pumps

Although GPA Midstream supports certain aspects of the proposed requirements for pneumatic controllers, the Supplemental Proposed Rule did not address several significant issues we raised in comments on the November 2021 Proposal. The most important of these concerns include EPA's unsupported optimism in the wide-spread adoption of solar powered controllers and the use of electric controllers despite many sites lacking reliable access to electricity. This will necessarily require the use of gas- or diesel-fired generators to power instrument air systems. Further, EPA continues to underestimate costs by assuming that midstream facilities, such as gathering and boosting compressor stations are analogous to oil and gas production well sites. We explain, at length, that midstream facilities and upstream production facilities are simply not comparable for purposes of analyzing the cost-effectiveness of the proposed regulations.

A. Zero Emission Controllers are not "Affected Facilities" Subject to Regulation

Since the applicable facility is the pneumatic controller itself, and a zero emitting controller is excluded from the class of applicable facilities regulated under proposed § 60.5365b(d), the

[16] *Available at*, https://www.osha.gov/sites/default/files/publications/OSHA3895.pdf.

[17] *Available at*, https://www.standards.doe.gov/standards-documents/1000/1004-std-1992/@@images/file.

installation of zero-emitting controllers would remove the site from regulation. In this scenario, an owner or operator would be able to use any means available to power zero-emitting controllers as there would be no regulatory restrictions on how those controllers may be powered. GPA Midstream requests that EPA confirm that any controllers that are not driven by natural gas (and are, thus, zero emission) are not subject to proposed § 60.5365b. Indeed, imposing requirements on sources that do not emit pollutants is unnecessary and beyond EPA's Clean Air Act authority. EPA's authority under Section 111 is to address new sources of emissions that "contribute significantly to, air pollution …." 42 U.S.C. § 7411(b). Likewise, a standard of performance is a "standard for emissions of air pollutants" that represents "the degree of emission limitation" that is achieved by "the best system of emission reduction." § 7411(a)(1). Clearly, where there are no emissions at issue, the source cannot and should not be subject to regulation.

B. GPA Midstream Supports Aspects of the Supplemental Proposed Rule's Pneumatic Controller Requirements

GPA Midstream supports the Supplemental Proposed Rule's definition of "modification" and "reconstruction." Further, GPA Midstream agrees that natural gas-driven pneumatic controllers should be treated in the aggregate as an "affected facility" and not individual gas-driving pneumatic controllers. We also support the proposed regulatory language allowing for like-kind replacement of existing individual pneumatic controllers without causing the controller to become an "affected facility."

C. EPA Should Limit Application to Facilities With Reliable Access to Grid Power

Sites, such as centralized production facilities and gathering and boosting facilities, would need reasonable access to available and reliable grid power in order comply with the controller requirements in Subparts OOOOb and OOOOc. Proposed §§ 60.5390b and 60.5390c would require pneumatic controller affected facilities to either use zero-emitting controllers (*e.g.*, electric drive control valve or instrument air with power supplied by either access to electricity or solar power) or zero-venting controllers (*e.g.*, self-contained and routed to a process). GPA Midstream requests that any final rule should limit applicability of these requirements to facilities with ready access to reliable offsite power, such as grid access.

From a practical standpoint, many new compressor stations and centralized production facilities are being installed in areas with access to grid power and are being designed to operate pneumatic controllers with instrument air. Where access to grid power is not present, for either new or existing affected facilities, many owners and operators would install diesel- or gas-powered generators in order to supply controllers with electric power and either instrument air-driven controllers or electric drive controllers and valves under voluntary or ESG-driving initiatives. As GPA Midstream detailed in our previous comments, the electric drive controller and valve option, and the solar power option, presents serious technical challenges that render them impracticable in nearly all instances. *See* Exh. A at 24-26. GPA Midstream also notes that relying on supplied or onsite power (*i.e.*, solar panels or on-site generators) poses a risk to operations in the event that power fails and results in a facility shutdown. Such a shutdown will effect upstream facilities, such as wells feeding into a compressor station.

A key element of this recommendation is determining what constitutes "readily available and reliable access to electricity." GPA Midstream recommends that to be "readily available" would mean that there is a nearby, operating electricity supply line with sufficient capacity for the site and would not require significant new construction by a third-party provider, such as a new tie-in or the installation of additional substations. With respect to "reliable access to electricity," GPA Midstream would recommend that this mean that a power source is not subject to frequent intermittent power losses (brownouts), as continuous power is necessary for safe, reliable operations. Further, a site also would be deemed to lack reliable access to power where the electricity service provider does not have the capacity to power facility operations. In many areas, GPA Midstream member companies are informed that electric service providers simply lack adequate capacity to provide power to our facilities.

Despite the importance of access to reliable grid power, proposed Subpart OOOOc does not recognize the clear distinction between existing facilities and truly new facilities, which have some flexibility in where they will be sited, and existing sources that do not. To address existing sources' lack of flexibility, GPA Midstream proposes that Subpart OOOOc requirements be subject to a site-specific technical and cost effectiveness review for connecting to the power grid or using onsite power generation, such as solar power or natural gas- or diesel-fired generator. It would also consider the costs of conversion, such as the installation of additional instrument air headers and piping. This type of review would be similar to the review for pneumatic pumps. If the review determines that these options are either technically infeasible or not cost-effective (*e.g.*, more than $5,540 per ton of VOC or $1,970 per ton of methane), then the owner or operator should be permitted to use natural gas-driving continuous low-bleed and intermittent-bleed controllers.

D. The "Carbon Limits" Report is Flawed and Cannot Support Requirements for Zero-Emitting Controllers

GPA Midstream does not believe that it is appropriate for EPA to rely so heavily on a single study, the "Carbon Limits" report, for the justification of zero-emitting controllers. As discussed in our January 2022 Comments, the Carbon Limits report has significant flaws in how it gathered information, preventing it from providing an accurate representation of the technical cost issues involved in using zero-emitting controllers at gathering and boosting stations. *See* Exh. A at 24-27. Neither the Supplemental Proposed Rule nor the November 2021 update to the Carbon Limits report addressed these flaws. Therefore, GPA Midstream incorporates its prior comments on the 2016 Carbon Limits report by reference.

GPA Midstream's overarching criticism of the Carbon Limits report is that it focuses almost entirely on the use of solar power at 22 production sites in Canada, Wyoming, Utah, and Peru. Further, the economic models it uses to support solar power and electronic controllers and valves are based on three model facilities with five, 10, and 20 pneumatic controllers at production facilities, *i.e.*, well pads. An evaluation of production sites is simply not representative of, or applicable to, midstream gathering and boosting operations which are significantly different from a well pad. GPA Midstream believes that the following issues also demonstrate that the Carbon Limits report is unreliable and cannot support the Supplemental Proposed Rule's requirements:

- The Carbon Limits report authors primarily gathered information through interviews with three technology providers and two oil and gas companies, both production-oriented companies with limited application of the technologies. There is no indication that the Carbon Limits report authors made any inquiry about whether solar power or electronic controllers and valves could be applied to midstream gathering and boosting operations. EPA has no rational basis to simply presume that these technologies will apply to gathering and boosting operations in the same manner as production operations, as gathering and boosting stations typically have a far larger footprint and substantially greater power needs.

- EPA should not require industry-wide adoption of technologies based on only 22 cases of adoption over three countries. This is simply too small of a sampling to support a determination that these technologies are technically feasible and cost-effective nationwide and in so many varying applications. Further, there is no indication that either the Carbon Limits report authors or EPA undertook any type of follow-up inquiry with the 22 sites in order to determine whether they had any challenges in using the technologies or whether they had stopped using them.

- The economic models supporting cost effectiveness are based on three well pad site configurations, ranging from five to 20 controller, with air compressors ranging from five horsepower to 20 horsepower, and generating between 2.5 and 60 cubic feet per minute instrument air. The Regulatory Impact Analysis appears to indicate EPA believes that gathering and boosting stations are analogous to the "large model facility" for production sites. Although the "large model facility" may apply to a small gathering and boosting station, moderate and larger gathering and boosting stations require far more. GPA Midstream members report the need for air compressors rated between 40 and 150 horsepower to generate instrument air at 400 standard cubic feet or more. This means that the needs of production well pads are simply not comparable to gathering and boosting stations. Additional operational and/or cost differences between production sites and gathering and boosting operations include the following:

    - The pneumatic devices used for the three model production sites are substantially smaller than most gathering and boosting compressor stations. These smaller scale cost metrics will not linearly scale up with larger facilities where new instrument air header and piping, additional pipe supports, or an extended pipe rack may be necessary.

    - The installation costs for a header to the pneumatic controllers, in Table 5 of the Carbon Limits report, is for a new installation. Retrofits often require the existing methane pipe header to remain in place as a source of fuel gas to on-site equipment, such as compressors, fired heaters, combustors/ thermal oxidizers, or flares. A new parallel air header needs to be run to all instruments, adding significant costs depending upon the location, site layout, available space, and the need for additional pipe supports. Put simply, the installation costs at a well site are not useful in determining the cost-effectiveness of retrofitting gathering and boosting operations.

    - The stated installation costs in the Carbon Limits report is much lower than what GPA Midstream member companies typically see. It does not appear that wire and miscellaneous electrical material were accounted for. Further, the installation labor time per each devices

does not appear for the time to pull wire to each device. This may not be significant at small production sites with only a handful of devices, but for larger equipment, this will involve significantly more time and higher costs to install.

- In the midstream industry, typical total project costs are three to four times the major equipment cost for brownfield facilities. The Carbon Limits report improperly assumed only two times major equipment cost. It is not clear if the report properly accounted for hydrovacing underground inside the fence line, work permits, additional safety and personal protective equipment costs, and other issues that add to overall brownfields project cost.

- For greenfield sites, total project costs are typically two to three times major equipment costs. For instance, one of our member company's New Mexico central gathering facilities has 34 shutdown valves, 70 other pneumatic devices, and 34 diaphragm pumps. The site will install 150 horsepower of air compression (two 75 horsepower flooded screw compressors) for this relatively large operation. GPA Midstream's vendor quotes indicate that the skid price for these compressors, the dryer, wet/dry air receiver, and off skid star air receiver is approximately $250,000. *See* Exhibit E. Total project cost is anticipated to be approximately $1,050,000, which includes roughly $175,000 to route sufficient utility power to a location if that is required. This is an installation factor of 3.5 times the major equipment cost (not including utility power costs).[18] Yet, the Carbon Limits report assumed a greenfield installation factor of 1.5 times major equipment costs without any adequate explanation.

- Table 9 of the Carbon Limits report provides a cost comparison for the Sample C Site, the larger productions site. For the site with no electricity and using solar power, the report calculates $2,200 per device with the controller accounting for $2,000 of that cost. This means that the Carbon Limits authors assumed that it would cost only $200 per device for installing the device, installing a new panel, purchasing wire and miscellaneous electrical materials, and pulling wire from the panel to the device. In the experience of our member companies, these costs are underestimated by one to two orders of magnitude, depending upon the site's size and complexity.

- The Carbon Limits report assumes that, for a new site with electricity, the electronic controller option is only $1,950 per device. It is not clear why the controller cost is less than that for a site with no access to electricity, but even assuming the lowest potential controller cost - $1,500 – it is implausible that a company can install the device for only $450 each. Given the labor and additional materials described above, $450 in installation costs is severely underestimated.

- For a new site with electricity, the Carbon Limits report also assumes that grid instrumentation will cost only $50,000 for a 20 horsepower air compressor, leaving approximately $31,000 for installation, This is two to three times lower than typical

[18] A second member looked back at projects over the past 2 1/2 years and found a similar installation factor for their projects.

installation costs, which including building a foundation, setting the instrument air skid and air receiver, grounding the skid, running a new air heading to 22 devices, and running power to the new air compressor skid.

- At a retrofit site with no electricity, the Carbon Limits report assumed approximately $2,900 to install solar power and electric controllers. As the Carbon Limits report assumes the controllers are $2,000 each, this leaves only $900 to retrofit each valve with an electric controller, install a new panel, purchase wire and miscellaneous electrical equipment, and pull wire from the panel to the device. The owner or operator may also have to excavate and remove buried lines. Further, retrofitting goes significantly slower than for new installations. This means that Carbon Limits' installation cost assumptions are underestimated by at least one to two orders of magnitude depending upon site size and complexity.

- In retrofitting a site with no electricity using solar powered electric controllers and new control valves, the Carbon Limits report estimates a cost of $4,700 per device with each controller costing $2,000 and each control valve costing $2,500. This leaves a mere $200 per device to install the controller, valve, new panel, purchase wire and miscellaneous electrical equipment, and pull the wire. The Carbon Limits report evidently did not consider the need to shut in, isolate, and blow-down the process to be able to physically install the new valves into the piping, then remove isolation valves, purge, and pressure up before putting the equipment back into service.

- In retrofitting a site with electricity, using the electric controller option and existing valves, the Carbon Limits report estimates a cost of $2,700 per device with the controllers costing $2,000 each. This would leave only $700 for installing each controller – a process that goes far slower than installation on a new source and may require excavating buried lines.

- Finally, the Carbon Limits report estimated that retrofitting a site with access to electricity using electronic controllers and new control valves would cost approximately $4,600 per device with each controller costing $2,000 and each control valve costing $2,500. This leaves only $100 per device to install each controller and valve, involving shutting in, isolating, and blowing down the process, removing isolation valves, purging the system, and then re-pressuring before putting the equipment back into service. This is simply not credible and demonstrates that the Carbon Limits report's authors lack the understanding of midstream operations necessary to apply its findings to the midstream industry.

- The Carbon Limits report focuses on the reliability of solar power systems in colder climates, not areas with limited sun exposure. The Canadian provinces cited in the study, Alberta and British Columbia, experience very large amounts of sunshine, supporting the idea that solar power generation works best in areas with more sun. The study does not support the reliability of solar powered systems in areas of limited sun exposure, such as West Virginia, or in canyons and mountain valleys.[19]

[19] EPA has properly recognized this as an issue by proposing to exempt Alaska from this requirement.

In sum, although GPA Midstream appreciates the effort to attempt to update the 2016 Carbon Limits report, the 2021 update fails to support the Supplemental Proposed Rule as applied to the midstream sector. The report's dataset is too limited in number and too different in character for application to gathering and boosting equipment.

E. Several Aspects of the Controller Options are Neither Technically Feasible or Cost-Effective

GPA Midstream's January 2022 comments provided a significant discussion on the technical and cost challenges associated with solar powered controllers, electric drive controllers/valves, and the use of instrument air (with and without offsite power) despite EPA failing to provide proposed regulatory text. Although EPA has now provided the proposed regulatory text, the Supplemental Proposed Rule preamble does not address or respond to our prior comments. Therefore, we again raise the issues discussed in those comments along with additional relevant information. *See* Exh. A at 24-26.

1. Electrically Actuated Controllers Perform Poorly and are Unduly Expensive

Electrically actuated controllers should not be required for midstream equipment as they lack the speed and performance of gas-powered or air-powered actuators. For instance, they tend to have inadequate duty cycle ratings and their torque ratings are typically too low for reliable performance. This significantly limits the utility of electrically actuated controllers. Even if they performed comparably to gas-powered actuators, electrically actuated controllers have a higher failure rate, especially for throttle service where the actuator is constantly adjusting based on process conditions to maintain a set point. Controller failures can result in overpressure events, releasing far more methane than that saved by electrically actuated controllers.

A controller failure is a serious concern for midstream operations, which have significant unmanned facilities. Hence, any repair requires sending personnel out to those facilities that are frequently found in remote locations. Further, electrically actuated controllers require the installation of a complex automated control system, which would require offsite monitoring using a Supervisory Control and Data Acquisition system—an additional cost that EPA does not appear to have included in its estimates. Any final evaluation of electrically actuated controllers should consider all costs associated with forcing a switch to electrical power. EPA should also allow midstream companies the option to continue to use, or install, a dual natural gas system as a backup for key controller functions. Such a natural gas backup system would be used in the case of air-actuated controller failure, loss of power, or other contingencies.

Although electrically actuated controllers can be installed in certain limited circumstances, they are more expensive with fewer options available on the market. Mandating their use would further drive up prices with manufacturers being unlikely to catch up to increasing demand until after the Supplemental Proposed Rule's compliance date.

2. Solar Powered Controllers are not Technically Feasible

The November 2021 Proposal asserted that "[a]t sites without electricity provided through the grid or onsite electricity generation, mechanical controllers and electronic controllers using solar power can be used." 86 Fed. Reg. at 62,203. At the time of the November 2021 Proposal, there was no indication that EPA had any information or experience with significant operational use of solar powered controllers on the scale that EPA was considering – literally at thousands of sites across the country in diverse geographic areas. Further, the November 2021 Proposal relied on the broad assertion that the Canadian provinces of Alberta and British Columbia have adopted non-emitting controller regulations. This, however, is highly misleading. British Columbia only adopted zero-emission regulations for newly constructed sources, while Alberta only requires that 90% of new sources use them, thus permitting some flexibility for new sites that cannot be constructed in a location that does not connect to line power. Moreover, neither province imposes a zero-emission requirement on existing sources. Rather, in both provinces, existing sources are subject to a 0.17 m^3/hr, or 6 scfh, limit. Not zero emissions.

The Supplemental Proposed Rule indicates that EPA remains just as optimistic about the use of solar powered equipment as it was in the November 2021 Proposal, claiming that "a solution based on solar energy would likely utilize a single array of solar panels to provide power to all the controllers at the site." 87 Fed. Reg. at 74,756. Yet, EPA has not acquired any additional information on solar powered controllers other than the update to the Carbon Limits report discussed above, which does not provide a reliable basis for imposing this requirement. Although the Supplemental Proposed Rule recounts and summarizes the significant number of comments criticizing solar powered controllers, 87 Fed. Reg. at 74,764, its only response was to reference the Carbon Limits report, which does not even attempt to address most of the issues that commenters raised.

EPA did offer that, where owners and operators are concerned about snow covering solar panels, the Carbon Limits report suggested that "these panels [be] placed vertically, eliminating snow cover on the solar panels." *Id.* EPA did not attempt to calculate how much sun exposure is diminished by vertical placement, whether this could also prevent ice accumulation, how much power generation would be diminished through snow pack, or whether solar panels could work with any placement in areas prone to blizzards and other serious winter weather. Nothing in the Supplemental Proposed Rule or the Carbon Limits report addresses the fact that reliance on solar power leaves sites subject to the weather and could be effectively shut down for days.[20]

What EPA has not considered is that, if a midstream site loses power, it can disrupt the entire upstream and downstream supply chain. Power loss at a site with electrical equipment raises environmental consequences, as well. Unplanned downtime can lead to additional emissions at both the midstream facility and the upstream well sites. Compressor stations can be forced to blow

[20] EPA's citation to a vendor's comment for the notion that zero-emission controller systems can successfully be used in all climates provides no support. 87 Fed. Reg. at 74,764, n. 151 (citing EPA-HQ-OAR-2021-0317-0838). The vendor's claim that solar powered air systems result in a 26% improvement in production is misleading as it is based on a single case study in the Wamsutter Basin of Wyoming during a month (January 2020) that was warmer than the comparison month (January 2019).

down equipment to the atmosphere or route blowdown emissions to a combustion device. In some circumstances, it may be forced to flare all incoming gas while the equipment is down in order to avoid a safety concern. Upstream well sites may be forced to vent or flare as well if a downstream compressor is not available. Also, shutting in wells generally does not happen immediately when there is midstream loss of power. It takes time to shut-in wells and until such time that the well is shut down, the gas must be vented or flared if it cannot continue to the downstream facility for processing and distribution. GPA Midstream asks EPA to reconsider this requirement and examine fully the technical difficulties, performance problems, costs, and consequences of power loss that will attend requirements to use solar powered controllers.

3. EPA's Cost-Effectiveness Analysis is Inadequate for Gathering and Boosting Facilities

EPA's cost modeling does not provide any reasoned basis to estimate cost-effectiveness for gathering and boosting facilities. The cost models only considered production and transmission facilities. They do not include gathering and boosting facilities – and to the extent that EPA claims to cover those facilities, the agency is inappropriately including gathering and boosting facilities as production facilities. They are not the same – and to treat them the same is arbitrary and capricious. Unlike production facilities, gathering and boosting facilities see no economic benefit from recovered gas. In addition, as explained above in detail, gathering and boosting facilities have much larger system requirements due to the larger number of controllers and the need for more powerful air compressors. Assuming that gathering and boosting facilities have roughly equivalent system requirements as production facilities dramatically underestimates costs. For instance, it appears that EPA is assuming zero high bleed pneumatic controllers, four low bleed devices, and 15 intermittent bleed devices for new facilities and one high bleed, four low bleed, and 15 intermittent bleed for existing facilities. These counts (19-20 pneumatic controllers) are only applicable to a relatively few number of very small gathering and boosting facilities.[21]

EPA's large plant model estimate $96,000 for a 20 horsepower air compressor to supply instrument air to 19 pneumatic devices. This severely underestimates the actual costs for gathering and boosting facilities. Based on GPA Midstream members' actual installation costs and vendor quotes, owners and operators of gathering and boosting facilities may spend $500,000 to $1,000,000 for instrument air systems at sites with available grid power. For sites that require onsite power generation, the cost could readily increase by an additional $400,000 to $1,000,000. GPA Midstream urges EPA to reconsider the costs for gathering and boosting stations – evaluating these midstream facilities as separate facility types, instead of treating them as being similar to much smaller production facilities.

[21] It is also unclear if EPA's pneumatic controller count included those used on emergency shut down ("ESD") devices. Many operators have installed ESD devices that utilize "intermittent" venting controllers. These devices only "vent" in an emergency and not routinely, like process controllers. However, the air system must provide adequate air to allow these devices to operate in case of an emergency.

F. Any Zero-Emission Requirement Should be Technology Neutral

Instead of requiring that midstream companies use specific types of equipment – despite significant performance and reliability issues – EPA should use a technology neutral standard. Since the Supplemental Proposed Rule did not consider, or respond to, GPA Midstream's January 2022 comments on this issue, we are incorporating those comments here by reference. *See* Exh. A at 26.

G. EPA Should Confirm that Diesel- or Gas-Fired Generators May Still be Used

GPA Midstream urges EPA to confirm in the final rule as it recognized in the November 2021 preamble that diesel- and natural gas-fired generators may be used to supply onsite power for instrument air systems or other electrical source needs (*e.g.*, electric valves, pumps, heat tracing, *etc*.).[22] Both of these types of generators are currently being installed to provide on-site power for instrument air systems, as allowed by states such as New Mexico. Although natural gas-fired generators are more commonly used, operators need flexibility in choosing which fuel source provides the more reliable and safer power generating option for the specific location. Issues affecting diesel- versus natural gas-fueled generators may include horsepower requirements, fuel quality, site elevation, access to fuel, available space for installation (diesel fuel requires additional storage vessel (s) for onsite fuel storage), *etc.* As addressed previously, relying on instrument air systems, or even solar powered systems, presents risks to facilities if the electricity supply is interrupted. Power loss can result in a facility shutdown impacting both the facility itself and upstream facilities. For these reasons, GPA Midstream requests that EPA expressly reconfirm that the final rule would allow both diesel- and gas fired-generators as options to supply power for instrument air systems for pneumatic devices or other electric devices (*e.g.*, valves).

H. EPA Should Define Several Terms Related to Pneumatic Controllers or Revise Those Definitions

GPA Midstream requests that EPA modify definitions for the following terms used in the proposed regulatory text for the pneumatic controller requirements: "intermittent vent natural gas-driven pneumatic controller," "natural gas-driving pneumatic controller," "non-natural gas-driven pneumatic controller," "pneumatic controller," "self-contained pneumatic controller," and "zero emissions controller." The absence of clear definitions for these terms can create confusion and potentially lead to unnecessary and unintended compliance issues.

- **Intermittent vent natural gas-driven pneumatic controller** means a **process control device that uses natural gas and** ~~natural gas-driven pneumatic controller that~~ is ~~not~~ designed to **not** have a continuous bleed rate but is instead designed and operated to only release natural gas to the atmosphere as part of the actuation cycle.

[22] 87 Fed. Reg. at 74,765 (EPA recognized that owner and operators may "elect to comply by installing and operating a generator").

- **Non-natural gas-driven pneumatic controller** means a~~n automated~~ process control device that utilizes instrument air or hydraulic fluid as the motive force to change valve position.

- **Pneumatic controller** means a~~n automated instrument~~ process control device used for maintaining a process condition such as liquid level, pressure, delta-pressure or temperature by changing valve position.

- **Self-contained pneumatic controller** means a natural gas-driven pneumatic controller ~~in which the motive gas is not vented to the atmosphere but captured in a closed vent system for process use or control such that there are no direct methane or VOC emissions from the controller~~ **that releases gas into the downstream piping and not to the atmosphere, resulting in zero methane and VOC emissions**.

I. GPA Supports the Exemption for Emergency Shutdown Devices But Requests Additional Clarification

GPA Midstream supports the exemption for controllers that act as emergency shutdown devices. *See* proposed §§ 60.5420b(c)(6)(i)(A); 60.5365b(d). However, we request that EPA clarify that the emergency shutdown device exemption is not limited to those devices at well sites, centralized production facilities, natural gas processing plants, and compressor stations. *See* 60.5365b(d) (defining pneumatic controller affected facility as being limited to these types of facilities).

J. GPA Supports the Proposed Definition of "Affected Facility" for Natural Gas-Driven Pneumatic Controllers That Allows for In-Kind Replacements

GPA supports the proposed definition of "affected facility" for natural gas driven pneumatic controllers that allows for replacements without triggering the modification requirements. Specifically, we understand that under this definition an "in-kind" replacement of a natural gas driven pneumatic controller would not be a modification "provided that less than 50% of the controllers are replaced at the same time." 87 Fed. Reg. at 74,758-59; Proposed § 60.5365b(d)(2)(ii) ("If the owner or operator applies the definition of reconstruction based on the percentage of pneumatic controllers replaced, reconstruction occurs when greater than 50 percent of the pneumatic controllers at a site are replaced … within any 2-year rolling period …") This is a reasonable approach, as if EPA did not allow this, operators would be discouraged from voluntarily replacing high-bleed natural gas-driven controllers with low-bleed controllers. We also believe that replacing a natural gas driven high bleed pneumatic controller with a natural gas driven low bleed pneumatic controller or intermittent bleed pneumatic controller would not be a modification (as no increase in emissions occurs). And we believe that retrofitting a natural gas driven low bleed pneumatic controller to a natural gas driven intermittent controller would not be a modification (again due to no increase in emissions).

K. EPA Should Not Impose Recordkeeping Requirements for Exempt Controllers

GPA Midstream stated in its January 2022 comments that EPA did not explain how it had authority to require recordkeeping for components exempted from regulation or why companies would need to maintain records for components that would be obviously understood as being exempt upon inspection (*e.g.*, those powered by solar panels or using instrument air). *See* Exh. A at 28. Since the Supplemental Proposed Rule did not address those comments, GPA Midstream incorporates them by reference. Indeed, GPA Midstream highlights this point again to underscore its request that EPA confirm that regulatory requirements do not apply to and will not be imposed on sources that do not emit air pollutants.

L. EPA Should Extend the Implementation Timelines for Controller Compliance with Subparts OOOOb and OOOOc

GPA Midstream explained in its January 2022 comments that the midstream industry would require at least five years to retrofit existing sources for compliance with the controller requirements under Subpart OOOOc. *See* Exh. A at 28-29. Since the Supplemental Proposed Rule does not address or respond to those comments, GPA Midstream incorporates them by reference herein.

In addition, EPA should allow more than one year from publication of a final rule for retrofitting "new" sources subject to Subpart OOOOb to comply with the zero emission controller requirements. Several GPA Midstream member companies with operations in New Mexico, which already requires zero bleed or zero emission controllers at new facilities, are experience significant delays in the availability and actual delivery of instrument air system and related equipment. Further, those members are finding it difficult to secure the necessary contractor services. GPA Midstream believes that, if EPA finalizes its proposed zero emission controller requirements, these supply chain and labor issues will only become worse as the standards are applied nationwide for both new and existing sources, not just new sources in New Mexico.

V. EPA Should Revise the Definitions of Tank Battery, Centralized Production Facilities, and Modification, Base Applicability Determinations on Actual Data/Valid Engineering Estimates, and Provide a Reasonable Timeline for Compliance With These New Requirements on Tanks and Storage Vessels

GPA Midstream raises three main concerns with the Supplemental Proposed Rule's provisions for tanks and storage vessels. First, EPA should implement relatively minor revisions to the definitions of "tank battery," "centralized production facilities," "modification." Second, applicability determinations should be based on actual data or valid engineering estimates instead of highly overstated assumptions regarding maximum site throughput. Third, owners and operators will need additional time to comply with the storage tank provisions should they be finalized.

A. EPA Should Revise Definitions Used in the Supplemental Proposed Rule

GPA Midstream supports the regulatory text defining "tank battery," which is greatly improved from the description EPA included in the November 2021 preamble. However, GPA

Midstream would urge EPA to improve this definition further, by eliminating a provision requiring manifolding for vapor transfer. In addition, the definition of "centralized production facilities" should be revised to more clearly exclude compressor stations that are not part of producing operations. Further, the definition of "modification" for compressor stations should also be revised to differentiate between compressor stations owned by the well site owner and compressor stations owned by third parties who lack any control or influence over the well sites that send production and would not know about operational issues prior to the custody transfer point.

1. *EPA Supports the Revised "Tank Battery" Definition, But it Should be Further Revised to Exclude Vapor Transfer or Remove the Requirement for All Tanks to Route to the Same Control Device*

GPA Midstream appreciates that, after considering public comments, EPA now proposes regulatory text that would not include the term "adjacent" in the definition of "tank battery." 87 Fed. Reg. at 74,800. As discussed in GPA Midstream's January 2022 comments, Exh. A at 9, the concept of adjacency is vague, does not provide additional guidance to owners or operators, and is not relevant where storage vessels are manifolded together for liquid transfer.

EPA's proposed requirement to manifold the vapor space for tank batteries, found at § 60.5395b(b)(1), unnecessarily dictates how storage vessels are routed to controls. The Supplemental Proposed Rule states "that these changes reflect our intent that a group of storage vessels which are manifolded together by liquid line operate as a system and, as such, share the same control device." 87 Fed. Reg. at 74,800 (emphasis added). However, the Supplemental Proposed Rule provides no explanation, and cites no record support, for requiring all of the tanks in a tank battery to share the same control device.

While it is not unusual for all storage vessels in a tank battery to be routed to the same control device, this will not always be possible, such as when vessels store different contents. This means that, under certain circumstances, more than one control device and closed vent system would be required to control storage vessels across a tank battery, especially for storage vessels at existing sites. An owner or operator could find itself unable to comply with conflicting requirements. For example, where steel and fiberglass vessels are forced to share a common vapor space manifold, static buildup and grounding deficiencies will result in a severe safety issue, including the risk of an explosion. Additionally, if storage vessels are not located near each other, it may be better to install two separate control devices. Using multiple control devices for storage vessels does not significantly affect emission rates and will result in the same total emissions from the tank battery. Therefore, GPA Midstream proposes the following revisions to § 60.5395b(b)(1):

(b) Control requirements.

(1) Except as required in paragraph (b)(2) of this section, if you use a control device to reduce methane and VOC emissions from your storage vessel affected facility, ~~you~~ **all storage vessels within the tank battery** must meet all of the design and operational criteria specified in paragraphs (b)(1)(i) through (iii~~v~~) of this section.

> (i) Each storage vessel in the tank battery must be equipped with a cover that meets the requirements of §60.5411b(b);
>
> ~~(ii) The storage vessels must be manifolded together with piping such that all vapors are shared among the headspaces of the storage vessels in the tank battery;~~
>
> (ii~~i~~) The tank battery must be equipped with a closed vent system that meets the requirements of §60.5411b(a) and (c); and
>
> (iii~~v~~) The vapors collected in paragraphs (b)(1)(ii) ~~and (iii)~~ of this section must be routed to a control device that meets the conditions specified in §60.5412b(a) or (c). As an alternative to routing the closed vent system to a control device, you may route the closed vent system to a process.

GPA Midstream believes that these minor revisions will meet EPA's desire to have these emissions controlled and avoid safety concerns and other conflicts without affecting total tank battery emissions.

2. *EPA Should Revise the Proposed Definition of "Centralized Production Facility"*

EPA should revise the definition of "centralized production facility," as used in proposed § 60.5430b, because it does not clearly exclude compressor stations that are not part of producing operations. GPA Midstream suggests that the last sentence of the definition be revised as follows:

> A centralized production facility is located upstream of the **compressor station,** the natural gas processing plant, or the crude oil pipeline breakout station and is a part of producing operations.

GPA Midstream is concerned that the current definition does not clearly distinguish between a compressor station, which will have associated storage vessels, and a centralized production facility which may have associated compression. Storage vessels located at compressor stations would provide a function similar to a centralized production facility but they are not "part of producing operations." Without the proposed revision provided above, GPA Midstream believes there would be significant confusion as to how applicability determinations would be performed for storage vessels and which LDAR monitoring program would apply.

Further, the definition should exclude independent centralized production facilities that are not part of producing operations, such as where the centralized production facility is owned by a midstream company separately from production assets. Where a centralized production facility is owned and operated by a midstream company, that company cannot know whether a well site added equipment or fractured a well because there is no obligation for the production company to inform downstream processing companies. EPA should clarify that a centralized production facility that is <u>not</u> part of producing operations is not included in the definition.

3. The Definition of "Modification" Should be Revised to Clearly Exclude Mere Increases in Throughput

The current proposed definition of "modification," as applied to tank batteries at compressor stations, centralized production facilities (possibly including independent centralized production facilities, as discussed above), and natural gas processing plants, includes the mere receipt of "additional fluids which cumulatively exceed the throughput used in the most recent … determination of the potential for VOC or methane emissions." Proposed § 60.5365b(e)(3)(ii)(D). As discussed previously, the owner or operator of midstream tank batteries at compressor stations or natural gas processing plants have no control over the receipt of fluids from upstream production facilities owned by third parties. Midstream companies take possession of liquids at the custody transfer point and lack information regarding the upstream exploration and production company's production volume prior to that point. Hence, quite simply, these modification requirements are not feasible, as the midstream owner/operator is not the producer.

Moreover, attempting to define a change in throughput as a modification is contrary to law. Under the Act, a mere increase in throughput without any capital expenditure, other physical change to the equipment, or change in the method of operation is not a "modification." *See* 42 U.S.C. § 7411(a)(3). The Supplemental Proposed Rule is not only inconsistent with the statutory definition of "modification," but it is inconsistent with EPA's prior interpretation that a "modification" requires some physical change to a tank. *See* Letter from Valdus Adamkus, EPA Region 5, to Bradley Miller, Hamilton County Environmental Services (Mar. 25, 1996) (increase in vapor pressure resulting in increased tank emissions was not a "modification" under 40 C.F.R., Part 60, Subpart Kb because there were no physical changes to the tank). GPA Midstream is concerned that, unless the proposed definition of "modification" is revised to require a physical change or change in the method of operations, midstream owners and operators could find their equipment "modified" solely based on the decisions of upstream third parties and without taking any action themselves.

B. <u>The Applicability Determination Methodology for Compressor Stations and Natural Gas Processing Plants Should be Revised</u>

The Subpart OOOOb proposed calculation methodologies for compressor stations and natural gas processing plants should be revised. GPA Midstream appreciates that EPA incorporated our suggestion to create separate applicability determination criteria for compressor stations, but we have some new concerns, as described below. Given the new interpretation of "legally and practicably enforceable limits," and the lack of certainty regarding the enforcement of state-issued permits, the existing text and approach is no longer appropriate. Under the proposal, emission calculations for these sources would be based upon the projected maximum daily average vessel throughput derived from the maximum gas throughput capacity of each facility. In most cases, this would significantly overstate actual tank battery emissions. The effect would be to premise applicability determinations on the site's design capacity, not actual emissions or even engineering estimates of throughput used for New Source Review permit authorizations of the site. A methodology based upon the maximum gas throughput capacity is used to calculate potential to emit thresholds for New Source Review permits. However, condensate production is not easily

estimated as it is a combination of liquid that drops out of field gas during compression and condensate that drops out of the gas along the pipeline to the station or plant. This is dependent on several factors, including weather conditions, that change throughout the year. EPA's methodology will ensure that many storage tank batteries would be deemed subject to OOOOb, even though they would be exempt based upon actual throughput data. As such, we urge EPA to allow for qualified engineering estimates, instead of design capacity.

For new compressor station sites, permit calculations are generally submitted prior to construction, based upon engineering estimates of liquid throughput based on expected gas design capacity. This is not the same as storage vessel design capacity, which may be much higher. For existing sites that are modified, existing throughput data is used in combination with engineering estimates of any expected throughput increase. In neither case would the maximum design capacity be used to estimate VOC or methane emissions from the storage tank battery. Engineering estimates based upon expected throughput are much more accurate than assumptions of maximum throughput capacity for the site. Additionally, in permitting hourly and annual emission limits, frequently the maximum hourly emission limit does not match the annual limit due to issues with variability in storage vessel throughput across an entire year.

Owners or operators must obtain a permit for any new tank battery, the reconstruction of a tank battery, or the modification of a tank battery (where a tank is added, total capacity will increase, or the actual throughput will exceed the current permit or most recent Subpart OOOOb determination). In each instance, owners or operators must submit an emissions estimate prior to startup. GPA Midstream suggests that engineering estimates, signed by a qualified individual or professional engineer involved with the project, be used in lieu of maximum design capacity. We understand that these estimates infrequently may underestimate the actual throughput once the site comes online. To account for this, we suggest that the throughput estimates be compared to actual operating data within 30 days of startup to ensure accuracy. This is consistent with current requirements under Subpart OOOOa and the definition of "maximum daily throughput."

C. Owners and Operators Need Additional Time to Comply With Storage Vessel Monitoring Requirements

The Supplemental Proposed Rule added monitoring requirements for storage vessel control devices than were not included in the Proposed Rule. The November 2021 proposal only provided general concepts for monitoring, recordkeeping, and reporting requirements but did not propose anything specific. *See generally* 86 Fed. Reg. at 63,201-02. Unlike with large, capital-intensive equipment, storage vessels can be put into operation quickly. In fact, a significant number of new storage tanks have been operating since EPA published the November 2021 Proposed Rule. These are currently operating without the newly proposed monitoring requirements, as those requirements were never explained in the November 2021 Proposed Rule. As we explain in these comments, as a general matter, EPA should not apply a November 2021 applicability date for any of these regulations. *See* Section I, *infra*. In the particular circumstance of storage vessels, if application of the monitoring requirements were to relate back to the November 2021 Proposed Rule, these sources would need to be retrofitted for compliance equivalent to an existing source as the equipment necessary for compliance with the new monitoring requirements could not have been incorporated into their initial design.

GPA Midstream requests that any date for storage vessel compliance be at least one year after the effective date of any final rule. This time is needed to determine what type of monitoring devices could be used for each specific application and budget for the additional equipment purchasing and installation. Given the large number of storage vessels used in the midstream industry, retrofitting will take a significant amount of time and resources.

VI. EPA Should Revise the Proposed Rules for Control Devices to Provide Appropriate Flexibility and Enhance Clarity to Avoid Confusion, and Should Fully Consider Costs and Availability of Equipment in Evaluating Cost-Effectiveness and Setting Deadlines

A. The Control Device Provisions Require Significant Revisions for Clarity

GPA Midstream appreciates EPA's intent to consolidate the proposed control device provisions into one section, but the resulting regulatory text requires some further clarification to ensure end users fully understand all of the requirements and do not unintentionally misunderstand monitoring and testing requirements. Accordingly, we suggest further streamlining and clarification to the control device section.

1. The Proposed Regulatory Text Should be Streamlined and Reorganized to Improve Overall Clarity

As a general matter, we urge EPA to consider streamlining and reorganizing the regulatory text to improve clarity. As written, the proposed regulatory language is extremely complicated and difficult to follow. As an example, proposed § 60.5417b explains "What are the continuous monitoring requirements for my control device?" This is an important section imposing binding obligations upon regulated owners and operators, however, the section has numerous layers of subsections. In this instance, the explanation of an owner or operator's obligations goes as far as § 60.5417b(d)(1)(viii)(C)(1). Further, constant cross-references to other sections and sub-sections makes it easy for readers to become lost, confused, or misinterpret the regulation's intent. For most of GPA Midstream's members, engineers and technicians manage regulatory compliance, not sophisticated legal counsel. Any finalized regulatory language should be in a more streamlined and simplified form, organized so that all of the requirements for specific control devices may be found in one place, and written so that those subject to the rules can clearly understand them.

2. EPA Should Clarify What May be an "Affected Facility" for the Control Device Requirements

The proposed regulatory text describes control device requirements for various "affected facility" types but that listing is incomplete. *See* Proposed § 60.5415b (including "well affected facility," "wet seal centrifugal compressor affected facility," "pneumatic pump affected facility" and others). Yet, there are multiple sections in the proposed regulatory text where a control device can be used to control emissions from a source, but it is not clear whether the source is subject to the testing requirements under § 60.18(d). GPA Midstream would like clarification on whether control devices used for those sources must be tested every five years.

Further, it is common for multiple equipment types, such as pneumatic pumps and rod packing vents, to be routed to a common control device. It is not clear if adding new equipment that are "affected facilities" under the proposed regulations to the common control device will make all equipment routed to the common control device affected facilities. EPA should clarify that equipment that is merely routed to the same control device as an "affected facility" will not cause existing equipment to become "affected facilities."

3. Proposed Regulatory Text Regarding Flare Requirements Should be Clarified

EPA should also clarify requirements for flares that control a mix of new and existing sources, such as where an affected facility installs a new pneumatic pump or compressor that is then routed to the same flare controlling other existing sources. The proposed regulatory text is not clear as to whether routing new sources to an existing flare would be authorized if the existing flare does not meet Subpart OOOOb monitoring requirements. To the extent that the Supplemental Proposed Rule expects midstream facilities to install new control devices for new affected facilities, EPA should understand that new control devices will create additional pollutant emissions. If the Supplemental Proposed Rule expects midstream facilities to modify existing control devices to accommodate both new and existing sources, then EPA should provide more time for compliance. Installing new flow meters, testing ports, or net heating value measurement tools on existing control device lines handling multiple units or sources involve "Hot Tap" safety protocols. This is specialized work that is typically handled by only a small handful of qualified contractors. In-house staff typically do not perform Hot Tap work. Therefore, if EPA expects an entire industry to modify existing flares, the compliance deadline must account for the relatively small labor pool available to perform that work.

GPA Midstream also requests clarification regarding flare testing requirements under proposed revisions to § 60.18(d). It is not clear if § 60.18(d) requires a formal test or some sort of certification that the flare meets applicable requirements. Nor is it clear whether all flares must meet a testing or certification requirement. If § 60.18(d) requires a formal test, GPA Midstream would like to ensure that adequate time for the necessary installation of ports to perform the flow and heating value requirements per the test methods in 60.18(d) on a live flare line.

GPA Midstream would also request confirmation that flares do not need to be continuously tested when they have a manufacturer's certification. We believe that EPA intended to exempt manufacturer-certified enclosed combustors from continuous testing, however, the regulatory text itself could be written to state that intent more directly. Accordingly, we ask that EPA clarify and confirm that manufacturer-certified control devices would only be required to meet the minimum and maximum flow requirements from the manufacturer to be compliant with Subpart OOOOb and Subpart OOOOc.

4. EPA Should Confirm That Carbon Regeneration Systems are Not Subject to Control Device Requirements

Some carbon absorption systems used in the midstream industry do not have access to a steam system, as frequently found at a chemical plant or refinery. In the gas production and processing industry, natural gas and heat exchange systems are used to regenerate the carbon beds instead of steam. These systems can be used when there is the potential for air to enter the system. A carbon bed does not have a direct fire source, limiting the potential for a fire in the system. The regeneration cycle is infrequent for these systems. GPA Midstream would like to confirm that the gas from these regeneration cycles would not be subject to any control requirements under the Supplemental Proposed Rule, if finalized.

5. Clarification Regarding Devices with Pressure Regulators

Because many flares and enclosed combustion devices rely on a pressure regulator, GPA Midstream would like to ensure that the emissions from any pilot, sweep, or purge gas required to prevent flame back flow will be exempt from any operating limit associated with control requirements. GPA Midstream believes that EPA intended such an exclusion while affected facility gas was not directly going to the flare. However, facilities may route affected gas to the fuel system which may end up at the flare as purge or pilot gas. Because many gathering and boosting facilities use field gas or waste gas as part of their fuel system to ensure these gases are not vented to atmosphere, GPA Midstream believes those streams should be exempted from the requirements while only these gases are going to the flare. This is important when pressure regulators are used on regulated streams to ensure flow minimums are met.

Further, GPA would like EPA to clarify and confirm that a pressure regulated flare does not need to meet the control requirements when using sweep and pilot gas. Sweep gas is needed to ensure the flare does not burn back into the stack and helps to prevent dead leg corrosion. Consistent with rules governing similar equipment at refineries,[23] EPA should likewise confirm that this practice is exempt from any operating restrictions in a final rule.

6. EPA Should Confirm the Scope of a Vapor Recovery Units as a Control Device

GPA Midstream requests that EPA confirm the scope of the use of Vapor Recovery Units as a control device, i.e., where the closed vent system ends and the fuel gas system begins. GPA Midstream believes that the closed vent system should be included up to the compressor unit as the fuel gas system can have a variety of different break points after it leaves the compressor and may not have another break point up to a heater or compressor. Once compressed, the gas is now at a higher pressure and should be considered recovered after it enters the recycle or fuel system.

[23] *See*, *e.g.*, 40 C.F.R. §§ 63.670(b) (pilot flame presence required only "when regulated material is routed to the flare"); 63.670(c) (visible emissions restriction only "when regulated material is routed to the flare"); 63.670(d) (flare tip velocity requirements apply "whenever regulated material is routed to the flare for at least 15 minutes.").

7. EPA Should Clarify Its Proposed "Leak Free Condition" Requirement

GPA Midstream would request that EPA clarify the meaning of ensuring "that each enclosed combustion control device is maintained in a leak free condition." *See* Proposed § 60.5413b(e)(7). GPA Midstream recognizes that the "leak free condition" requirement is not an entirely new concept, but owners and operators need additional clarity to ensure that inspections are completed properly to achieve compliance. GPA Midstream would submit this should be limited to checking for fugitive emissions on the line leading up to the enclosed combustion device, similar to the requirements on a closed vent system. However, if EPA intends to require other measures to demonstrate compliance with the "leak free condition" requirement, it should specify those and make those specifications available for review and public comment.

B. EPA Should Consider and Evaluate the Full Cost of Control Devices

GPA Midstream supports better monitoring for control device equipment but would like to ensure that any additional monitoring is done in a cost effective manner. GPA Midstream would also like to ensure that a proper cost-effective analysis is performed when considering control device requirements. As written, the Supplemental Proposed Rule would require the installation of thousands of flow meters, net heating value monitoring devices, and testing ports for compliance purposes. This monitoring equipment would cost the industry millions of dollars with costs expected to increase as short-term demand for this equipment dramatically increases as a result of the Supplemental Proposed Rule, and other rules, requiring similar monitoring equipment. We urge EPA to consider these costs fully before adopting any final rule.

1. EPA Should Consider the Additional Costs of Hot Tapping Flares

As discussed previously, installation of this equipment on existing flares will require a hot tap. This is specialized work that usually requires a third party contractor to perform. Because of the safety protocols that are required to perform this work, and the nature of the work, it is often a costly install. The cost of performing a hot tap will sometimes be as much as all of the other costs to install the equipment, depending on the location of the hot tap. These costs should be considered to assess the full costs of controls.

2. EPA Should Allow For More Flexibility in Flow Meters, as Requiring Flow Meters Accurate Up to 2% Maximum Flow Rates Unnecessarily Increases Costs

The purpose of the monitoring equipment that would be installed under the Supplemental Proposed Rule is to monitor general information on flares and ensure complete combustion. The equipment is not being used for complex calculations or controls that would be required by other rules such as MACT Subpart CC or the Ethylene MACT. The proposed Subpart OOOOb and OOOOc requirements would allow for a very large operating window under normal operations for most midstream control devices. Further, the midstream industry uses individual control devices for certain equipment, such as a device only for storage vessels. This means that many control devices see limited flow during a typical year.

The Supplemental Proposed Rule, however, would require that flow meters be accurate up to 2% at maximum flow rates. In most cases, such accuracy could only be achieved with an optical meter or an ultrasonic flow meter. These typically cost about $30,000 for basic models, however, there is no evidence in the record that, based on the Subpart OOOOb and OOOOc requirements, these precise and expensive flow meters will provide any benefits over less costly flow meters. As with many other types of flow meters, these also struggle with accuracy at lower flow rates such as when the device is only controlling breathing losses from tanks or pressure safety valve discharges at gas plants. As a result of these operating issues, even the most accurate flow meters will lose some accuracy. Accuracy at lower rates can increase with additional flow meter monitoring devices installed in tandem with the basic ultrasonic meter, however, this significantly increases the overall cost of this monitoring equipment. GPA Midstream would like to ensure that meters with an accuracy of up to 10% at maximum flows, such as thermal dispersion flow monitoring devices, can be used to show compliance with the proposed rule. Further, this accuracy should be warranted by the instrument provider.

C. EPA Must Consider Equipment Shortages in Providing an Adequate Lead Time for Compliance

GPA Midstream is also concerned about EPA providing enough lead time for installing the monitoring equipment required by the Supplemental Proposed Rule. This is complicated by potential supply chain issues that would be expected to arise as the entire industry orders thousands of new monitoring devices that would need to be installed over the next few years. This type of monitoring equipment has already started to see longer lead times as a result of global supply shortages. Further, the midstream industry is continuing to grow, meaning that more and more control devices are being installed every month, requiring the installation of more monitoring equipment. This does not include current demand for monitoring equipment from the production sector. Plant and compressor stations are currently being built without this monitoring equipment being part of the original plans because there was no reasonable way to anticipate these additional requirements. Therefore, they will require retrofits almost immediately. As a result, GPA Midstream would request at least one year to install the monitoring equipment for sources subject to Subpart OOOOb.

D. EPA Should Allow Alternatives to Demonstrating Compliance with Minimum Net Heating Value Requirements

Compressor station and gas processing plant waste streams generally have a net heating value that far exceeds the minimum values required under the Supplemental Proposed Rule. *See* 87 Fed. Reg. at 74,793.[24] Waste gas streams routed to control devices at midstream sources are largely comprised of natural gas and field gas, meaning that these streams are typically above 1,000 Btu/scf. Continuous monitoring requirements, and requirements to perform 10-day tests on control devices for storage tanks, pneumatic pumps, and compressor vents are unnecessary, imposing burdens and costs without any benefit. Instead, EPA should allow owners and operators to perform and maintain a design evaluation to ensure that waste gas streams will consistently

[24] GPA Midstream notes the exception of amine treater process vents, which tend to have a lower net heating value.

exceed minimum net heating value requirements. This would be similar to that provided in proposed § 60.5413b(c) for condensers and carbon absorption units, as well as for combustion device maximum flow rates in proposed § 60.5417b(d)(1)(viii)(D).

As an alternative, if a design evaluation is not sufficient, GPA Midstream proposes that a simplified sampling protocol be allowed for exempting a control device from continuous heat content monitored by allowing for samples to be taken twice a day for seven days. We believe that such sampling would demonstrate that streams have a relatively constant net heating value well exceeding the minimum requirements.

The Supplemental Proposed Rule would also require installation of net heating value equipment with a high-cost threshold for the expected emissions reductions. GPA Midstream asks that EPA ensure there is an allowance for monitoring options other than a calorimeter. The midstream industry has extensive experience using gas measurement and analytical tools as part of our fee-based business and believes that there are better tools available than a calorimeter. Options like gas chromatography and optical spectroscopy should be allowed for compliance purposes. Costs of this equipment can range from $75,000 to $100,000 each. For most control devices, the heating value of the gas would consistently be well above the 200 BTU/scf, or 300 BTU/scf, or 800 BTU/scf triggers, making this equipment very expensive for the expected heat content of the gas streams. As currently written, the Supplemental Proposed Rule's exemption option to the expensive and unnecessary continuous monitoring requirement would require extremely expensive short-term monitoring to obtain 240 samples and lab analyses, as well as specialized contractors to install and operate those monitors, to exempt a site from the heat content monitoring. With hourly samples taken over a ten day period, each sampling event would cost approximately $200,000 per control device due to equipment rental costs and the costs for contractors to be onsite analyzing the data during this period. This issue becomes more complicated when the facility is at a remote location where staff is not there to continuously catch samples or support the testing company analyzing the sample.

E. Flow Rate Monitoring is Problematic

GPA Midstream is concerned that the Supplemental Proposed Rule's flowrate monitoring requirements present significant technical difficulties and, in some cases, may not be possible. Many of these systems operate at, or slightly higher than, atmospheric pressure, meaning that only small volumes of gas will be sporadically released. These systems are not designed to provide three hours of continuous flow to the control device. Manufacturer tested emission control devices provide an inlet pressure requirement, which thereby mandates installation of a control valve and pressure monitoring. This as well as improved liquids handling leads to intermittent vapor routing making traditional performance testing, which consists of three one-hour runs, very difficult to complete. For example, a GPA Midstream member company compiled one month's worth of data on pressure actuating at a tank facility. The valve routing vapors to enclosed combustion device opened for an average of eight seconds per actuation. The total time that vapors were routed to the control device during a day was under seven minutes.

EPA should allow for the use of pressure monitors coupled with control valves in lieu of flow rate monitoring because pressure monitoring achieves the same goal- ensuring that a

sufficient volume of waste gas is going to the control device to ensure proper combustion. Many of the tank facilities that would be covered by the control requirements are already controlled by pressure monitors and control valves that route vapors to the control device only when tank pressure meets the manufacturer's set point for complete combustion and the safety setpoints on the tank pressure relief devices. For example, if a tank is rated to hold a pressure of 16 ounces, then a pressure transducer will open and allow vapors to the control device when the pressure reaches 10 ounces. It will close when pressure drops to seven ounces. Certain manufactures state that only one ounce of pressure is needed to achieve good combustion, making pressure monitoring an accurate and reliable alternative to flow rate monitors.

F. Temperature During Control Device Testing is the Best Indicator of Combustion Performance and Should be an Available Alternative to Continuous Monitoring

GPA Midstream proposes that temperature monitoring not be based on just a static number but on the temperature achieved during the initial performance testing that demonstrates required destruction efficiency set as a minimum temperature limit. The minimum temperature could be updated in subsequent performance tests if the required destruction efficiency can be met at a lower temperature. The temperature limit in proposed § 60.5414b(c) is unnecessarily high and would require a large amount of supplemental fuel gas to maintain continuous compliance with the limit generating additional greenhouse gas emissions from the combustion of supplemental fuel. Further, the proposed limit appears to be based on a temperature in the flame zone which many enclosed combustors cannot monitor. Most enclosed combustors have thermocouples installed above the flame zone in the combustion chamber, resulting in lower read temperatures due to the location. If the thermocouple is used during testing, however, the test should demonstrate that proper combustion is occurring. Therefore, GPA Midstream asks that EPA provide more flexibility in temperature testing to account for the differences inherent in enclosed combustor design.

G. EPA Should Maintain the Enclosed Combustor Concentration Limit

GPA Midstream would like to ensure the concentration limit for existing enclosed combustors should continue to be allowed as included in OOOOa. Destruction efficiency testing requires VOC sampling at the inlet and outlet of the control device. Many existing control devices do not have an inlet sampling port. Combined with the potential need to install additional monitoring equipment, allowing the use of a 20 ppm concentration limit will allow facilities that do not have intlet testing ports to have an alternative to meet compliance requirements for both Subparts OOOOb and OOOOc.

H. EPA Should Consider the Technical Difficulties in Testing Existing Storage Vessel Control Devices

GPA Midstream wants to ensure that EPA understands and considers technical difficulties in testing existing storage vessel controls. As discussed above, many of the closed vent systems do not have testing ports to accommodate monitoring. These existing systems have also never required certification by a qualified individual or professional engineer regarding maximum or minimum instantaneous flow rates. Further, testing these systems would involve significant technical difficulties as tank systems do not typically provide a high volume, continuous flow, and

even where flow may be at high volumes, those periods tend to be sporadic, rare, and for very brief periods of time. EPA must clarify how control device testing at maximum flow rate over the required three-hour period should be accomplished for storage vessels. GPA Midstream members are not aware of how to easily simulate storage vessel vapor composition for a continuous three-hour period.

I. EPA Should Allow for FTIR Testing as an Alternative to Method 25a

Finally, GPA Midstream requests that EPA allow owners and operators to use Fourier Transform Infrared ("FTIR") spectroscopy as an alternative to Method 25a. *See* Proposed § 60.5413b(b)(3). FTIR testing is commonly used for engines and turbines, and EPA previously approved the method for demonstrating compliance with 40 C.F.R., Part 60, Subparts IIII, JJJJ and KKKK and Part 63 Subpart ZZZZ. This is a more cost-effective testing method than Method 25a, because it can measure multiple pollutants at once with the same monitor, reducing mobilization costs. Accordingly, EPA should authorize FTIR testing as an option for owners and operators.

VII. EPA Should Revise Proposed Regulations Governing Reciprocating Compressors to Ensure Appropriate Flexibility and Provide Additional Clarity

GPA Midstream supports aspects of the proposed regulation provided in the Supplemental Proposed Rule, but urges EPA to make important changes to any final rule to ensure appropriate flexibility and provide additional clarity. As described in more detail below, GPA Midstream believes that allowing owners and operators to combine emissions across compressor cylinders, and implementing work practice standards, such as instituting a repair or replacement scheme, and allowing owners and operators to route rod packing emissions to a control device would alleviate the significant technical difficulties involved in the proposed requirements. Further, we ask that EPA resolve conflicting language in the proposed regulatory text regarding compliance dates and to provide further consideration of the technical challenges and costs involved in implementing the proposed regulations.

A. The Reciprocating Compressor Rod Packing Requirements Should be Considered a Work Practice Standard Instead of an Emission Standard

GPA Midstream submits that rod packing vent compliance must be regulated as a work practice instead of as a numeric emission standard. Unlike with stack-related emission sources subject to control devices, rod packing emissions result from equipment that deteriorates from normal use. Similar to the LDAR program, owners and operators would have to monitor the rod packing to determine if fugitive emissions have reached a threshold level and, if the threshold is reached, repair or replace the rod packing. 87 Fed. Reg. at 74,717. Such a situation accords with the statute's determination of when using a work practice standard is appropriate: where "a pollutant or pollutants cannot be emitted through a conveyance designed and constructed to emit or capture such pollutant." 42 U.S.C. § 7411(h)(2).

As an emission standard, the proposed rod packing requirements are unworkable. Operators would be forced to decide between continuing to operate out of compliance until a maintenance shutdown can be scheduled or shutting down the compressor immediately to conduct

the repair and venting or flaring gas that can no longer be compressed and transported during the unscheduled shutdown. A forced shutdown will likely result in significantly more emissions than continuing to operate until the next scheduled maintenance shutdown. For systems that are at capacity, shifting the incoming gas to another station is not a feasible or reliable option, resulting in additional flaring and venting, which is magnified given the time it takes to have producers shut-in wells.

Thus, the risks of additional emissions from an emissions standard significantly outweighs any purported benefits and support relying on a well-established work practice standard for rod packing vent emission control. Under a work practice framework, companies would be required to complete a corrective action within 720 hours of operation (equivalent to 30 days) and allow for delay of repair, similar to leak monitoring programs, of up to two years if repair goes beyond the replacement of rod packing. See separate comments below on delay of repair. Exceeding the vent rate threshold after the time for corrective action would be a deviation, but exceeding the vent rate within the time allotted to correct would not. Additionally, under either standard, companies that choose to replace rod packing annually (prior to 8,760 hours) should not be required to perform monitoring.

B. EPA Should Clarify That the Leak Rate is on a Per Rod Packing Vent Basis

GPA Midstream supports the Supplemental Proposed Rule's proposal to perform volumetric flow rate monitoring after 8,760 hours instead of performing such monitoring every calendar year. 87 Fed. Reg. at 74,797. However, GPA Midstream believes that it is important to allow reciprocating compressor owners and operators the option of using a combined emissions leak rate, based on the number of cylinders routed to a common vent stack, in meeting the 2 scfm per cylinder threshold. As explained in GPA Midstream's January 2022 comments, combining is appropriate because a single reciprocating compressor may have multiple cylinders (also referred to as compression cylinders, throws, or packing case vents) routed to a common vent stack, making rod packing-specific measurements impractical and unreasonable. *See* Exh. A at 30. Such a combining option, if included in proposed Section 60.5385b(a), would read as:

> § 60.5385b(a). The volumetric flow rate, measured in accordance with paragraphs (b) **or (c)** of this section, must not exceed 2 standard cubic feet per minute (scfm) **per cylinder, or a combined rod packing emission flow rate greater than the number of compression cylinders multiplied by 2 scfm**. You must conduct measurements of the volumetric flow rate in accordance with the schedule specified in paragraphs (a)(1) and (2) of this section.

Including a combined emission total provision and specifying 2 scfm per cylinder, such as the one described above, would be similar to that allowed under California law. *See* 17 CCR § 95668(c)(4)(D) (allowing for "a combined rod packing or seal emission flow rate greater than the number of compression cylinders multiplied by two (2) scfm").

C. EPA Should Include a Repair or Replacement Timeframe and a Delay of Repair Provision

GPA Midstream requests that EPA include a timeframe to replace or repair rod packing that exceeds the volumetric flow rate specified in §60.5385b(a). As currently written, it is not clear how compliance will be managed if the volumetric flow rate indicates that a compressor cylinder exceeds the 2 scfm standard. Adding a timeline to repair or replace the cylinder would be consistent with EPA fugitive monitoring programs and California regulations governing rod packing emissions. Those regulations state that a "compressor with a rod packing or seal with a measured emission flow rate greater than two (2) standard cubic feet per minute (scfm), or a combined rod packing or seal emission flow rate greater than the number of compression cylinders multiplied by two (2) scfm, shall be successfully repaired within 30 calendar days from the date of the initial emission flow rate measurement." 17 CCR § 95668(c)(4)(D). However, instead of providing 30 days to replace or repair the compressor cylinder, GPA Midstream believes that requiring replacement or repair within 720 operating hours would be more consistent with the hours of operation limitations in proposed Sections 60.5385b(a)(1) and (2).

GPA Midstream also requests an appropriate delay of repair option due to potential issues with obtaining necessary parts or equipment in the time required to make repairs or where weather makes compressors in remote areas inaccessible. This would be consistent with multiple federal fugitive monitoring programs and California regulations. *See also* 87 Fed. Reg. at 74,798 (acknowledging the need for a delay of repair option for "scenarios beyond the owner or operator's control"). Thus, a delay of repair option is a commonly used and well understood compliance option for certain scenarios. GPA Midstream requests a two year delay of repair timeline that matches the leak monitoring program for streamlining. Additionally, the time to repair rod packing has all similar repair timing constraints as fugitive components.

D. EPA Should Allow for Rod Packing Vents to be Routed to a Control Device

GPA Midstream recommends that EPA continue to allow an option for rod packing vents to be routed to a control device. It may not always be technically feasible to route rod packing vents back to the process, and this will be especially true for existing sources. Specifically, in many cases rod packing capture to process will require recompression and, depending on the location of the facility, may require a gas driven engine to achieve recompression. The engine's emissions could offset many of the emissions reductions the Supplemental Proposed Rule would purportedly achieve and such an offsetting increase in emissions from this requirement should be considered by EPA before finalizing any rule. Additionally, routing rod packing vents back to the process could introduce oxygen into the system, leading to safety concerns.

In addition, depending on the pressure differential between nearly ambient rod packing vents and pressurized piping, substantial horsepower may be required to achieve capture. The currently available rod packing capture systems that have been attempted by GPA Midstream members have not performed as intended and, in some applications, have not worked at all. Even if these systems were as effective as advertised, timing is a significant concern as the supply is not currently available to meet demand. Delay is further exacerbated by the need for engineering work. Capture to a process is not always straightforward and will require time for existing or modified

facility redesign, as well as for new facilities, assuming effective re-design is feasible. For instance, gas quality in the rod packing vents may not be compatible with the only technically feasible location in the process for the gas to be routed. Moreover, pressure differentials may be incompatible or sour gas from the rod packing vents could only be routed to the fuel gas system, but sour gas is often a poor candidate for fuel gas.

Due to the technical difficulties that can arise, GPA Midstream requests that EPA allow an option to route rod packing vents to a control device for new, modified and existing facilities. If permitted, GPA Midstream also recommends that, where rod packing vents are routed to a control device, they should be flow measured every 26,000 hours of operation. This will ensure that rod packing is appropriately maintained while overall emissions are greatly reduced.

E. Certain Conflicting Compliance Deadlines Require Clarification

GPA Midstream is concerned that portions of the proposed regulatory text include compliance dates that are inconsistent with other portions of the text that they cross-reference. We urge EPA to resolve these conflicting dates before issuing any final rule.

Proposed § 60.5370b(a)(1)(i) requires compliance with § 60.5385b(a)(1) on or before 12 months after publication of the final rule or 12 months after the source's initial startup, whichever is later. This is inconsistent with proposed § 60.5385b(a)(1) which requires owners and operators to "conduct your first volumetric flow rate measurements from your reciprocating compressor on or before 8,760 hours of operation after" the final rule publication date "or on or before 8,760 hours of operation after startup, whichever is later." (emphasis added) EPA should clarify that the compliance timeline referenced in proposed § 60.5370b(a)(1)(i) should be on or before 8,760 hours of operation after either the final rule publication date or the startup date, whichever is appropriate.

Proposed § 60.5370b(a)(1)(ii) requires compliance with proposed § 60.5385b(a)(2) within 30 days after compliance with proposed § 60.5385b(a)(1) (referenced above). This 30 day compliance date, however, is inconsistent with proposed § 60.5385b(a)(2). That requires owners and operators to "conduct subsequent volumetric flow rate measurements from your reciprocating compressor on or before 8,760 hours of operation after the previous measurement which demonstrates compliance with the 2 scfm volumetric flow rate." EPA should clarify that the compliance date referenced in proposed § 60.5370b(a)(1)(ii) should be 8,760 hours of operation, as identified in proposed § 60.5385b(a)(2).

Proposed § 60.5370b(a)(1)(iii) requires compliance with proposed § 60.5385b(a)(3) upon initial startup. However, there is no § 60.5370b(a)(3) in the proposed regulatory text. EPA should clarify whether § 60.5370b(a)(3) is missing or if proposed §60.5370b(a)(1)(iii) should be deleted. This would impact §60.5370b(a)(1) as well, which requires compliance with § 60.5370b(a)(1)(iii). If proposed § 60.5370b(a)(1)(iii) is deleted, that should be noted in proposed § 60.5370b(a)(1) by deleting the reference.

Finally, proposed § 60.5415b(g) requires that reciprocating compressors complying with proposed § 60.5385b(d) must demonstrate continuous compliance with §§ 60.5415b(g)(4) through (g)(6). However, there is no (g)(5) or (g)(6) in the proposed regulatory text. EPA needs to clarify

if (g)(5) and (g)(6) are real requirements that are missing from the regulatory text or if the text should be changed to only list (g)(4).

F. High-Volume Samplers Should be Calibrated According to Manufacturer Specifications

GPA Midstream suggests that EPA's detailed calibration requirements for high-volume samplers be removed and replaced with a more general requirement that samplers be calibrated in accordance with the manufacturer's specifications. Daily field calibration of methane concentrations and volumetric flow rate vary by manufacturer such that one set of calibration instructions is not appropriate for all high-volume samplers and should not be subject to a universal rule or standard.

G. Proposed Rules for Reciprocating Compressors Need to Consider the Full Costs and Technical Challenges With Retrofitting Monitoring Ports

Lastly, the proposed EG and NSPS fails to adequately consider the costs and technical challenges associated with retrofitting each existing reciprocating compressor cylinder for monitoring ports. As described above, each cylinder does not have its own vent. There would need to be alterations made to the piping to allow for monitoring to be conducted on a per-cylinder basis. The costs required to add new piping so each cylinder has its own vent and install monitoring ports have not been considered. Should EPA choose to move forward with a proposed rule, EPA should issue guidelines allowing a phased approach to adequately account for port installation.

VIII. EPA Should Defer or Adjust Proposed Standards for Dry and Wet Seal Centrifugal Compressors

A. EPA Should Defer Proposed Standards for Dry Seal Centrifugal Compressors Until it Obtains Additional Data From Subpart W Reporting

The Supplemental Proposed Rule's proposed emission threshold of 3 scfm for dry seal compressors is overly stringent and is not supported by the record. Specifically, the emission threshold appears to be based on a severely limited number of outdated dry seal measurements. This data is referenced in EPA's Natural Gas Star report, "Lessons Learned: Replacing Wet Seals with Dry Seals in Centrifugal Compressors" (2006), and in Annex Tables 3.6-2 and 3.6-6 supporting EPA's, "Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2020." This underlying data dates back to 1996 (EPA/GRI study[25]) with few studies being performed since 2000. EPA should not rely on such stale data to establish an emission threshold as it is neither accurate nor representative of dry seal centrifugal compressors. GPA Midstream recommends that EPA postpone establishing any type of quantitative threshold for dry seal centrifugal compressors until after it finalizes amendments to the Subpart W reporting rule. *See* 87 Fed. Reg. 36,920 (June 21, 2022) (proposed rule). Once implemented, EPA will have thousands of data points to give a

[25] Methane Emissions From the Natural Gas Industry, Volume 2: Technical Report EPA-600 /R-96-C80b (June 1996).

more accurate dry seal centrifugal compressor measurements that can be used for a subsequent emissions threshold.

Although GPA Midstream believes that EPA should wait for more accurate data, if it is intent on establishing a dry seal emissions threshold before receiving the Subpart W reports, GPA Midstream recommends relying upon the manufacturer's specified maximum leak rate for a particular unit. A recent review of dry seal leak curves from a major supplier of centrifugal compressors to the natural gas industry indicates that dry seal leakage rates can vary from 2 to 20 scfm per compressor (with 2 seals per compressor), depending on the make, model, and operating suction pressure of the compressor.[26] If EPA wishes to set one threshold applicable to *all* dry seal centrifugal compressors within the next year, GPA Midstream recommends that EPA set the threshold at 10 scfm per primary dry seal in order to allow for sufficient variability among existing dry seal leak rates.

Further, GPA Midstream recommends that dry seal centrifugal compressors be regulated through work practice standards. Under a work practice framework, companies would be required to complete a corrective action within two years if emissions exceeded the allowable threshold per primary dry seal. These corrective actions could include: (1) repair or replacement of the dry seal; (2) routing emissions to a control device from the covered dry seal gas tank through a closed vent system; or (3) routing emissions to a process from the primary dry seal vent through a closed vent system. If the dry seal compressor is routed to a process, then EPA should clearly state in any final rule that volumetric flow rate monitoring is not required.[27] If the corrective action cannot be completed within two years, then a corrective action plan with work scope and alternate schedule would be submitted to EPA. Exceedance of the emissions threshold after two years, or after the time stated in the corrective action plan, would result in a deviation. This is consistent with delay of repair requirements under Section 60.5397a(h)(3), requiring repair within two years, or the next scheduled shutdown (whichever is earlier) where repairs are technically infeasible, would require a vent blowdown, a compressor station shutdown, a well shutdown or well shut-in, or would be unsafe to repair. GPA Midstream asks that the same standard for Subpart OOOOb be applied here.

B. EPA Should Adjust Proposed Standards for Self-Contained Wet Seal Centrifugal Compressors

GPA Midstream supports EPA's development of a new "self-contained wet seal centrifugal compressor" category, since this type of compressor emits less methane compared to conventional wet seal centrifugal compressors. However, we also recommend to changes to the Supplemental Proposed Rule's approach to regulating these compressors.

[26] Solar Turbines, *Emissions from Centrifugal Compressor Dry Gas Seal System*, PIL 251 Revision 1 (May 22, 2020).

[27] If the dry seal compressor is routed to a control device, then it would be appropriate in a final rule to require volumetric flow rate monitoring once every 3 years. Recordkeeping and reporting requirements should be equivalent to those currently in place for conventional wet seal compressors. If the dry seal compressor is routed to a process, then EPA should clearly state that volumetric flow rate monitoring is not required.

First, GPA Midstream recommends that § 60.5380b(4)(i) be revised so that the volumetric flow rate not exceed three SCFM per primary seal. This would be in line with California regulations for wet seal compressors, which apply the same 3 scfm limit but on a per seal basis. *See* 17 CCR § 95668 ("A compressor with a wet seal emission flow rate greater than three (3) scfm, or a combined flow rate greater than the number of wet seals multiplied by three (3) scfm, shall be successfully repaired"). Based on actual annual measurements collected by GPA Midstream member companies under EPA's GHG Reporting Program, a 3 scfm per seal threshold is an effective indicator of a worn or damaged seal, or a malfunctioning internal wet seal gas recovery system.

Second, GPA Midstream recommends that self-contained wet seal compressors be regulated through work practice standards, similar to our recommendations with respect dry seal centrifugal compressors. Under that framework, where emissions exceed the 3 scfm per wet seal threshold, owners or operators would complete a corrective action within two years. These could include: (1) repair or replacement of the seal and / or internal seal gas recovery system; (2) routing emissions to a control device from the degassing vent through a closed vent system; or (3) routing emissions to a process from the degassing vent through a closed vent system. Exceedance of the emissions threshold after two years, or after the time stated in the corrective action plan, would result in a deviation.

Third, GPA Midstream suggests that EPA's detailed calibration requirements for high-volume samplers, in proposed Section 60.5386b(c)(5)(i)(B), use a more general requirement that samplers be calibrated in accordance with the manufacturer's specifications. Daily field calibration of methane concentrations and volumetric flow rate vary by manufacturer such that one set of calibration instructions is not appropriate for all high-volume samplers and should not be subject to a universal rule or standard.

Lastly, GPA Midstream seeks clarification on what industrial segments are included, and what industrial segments are excluded, under EPA's definition of "centrifugal compressor affected facility" at proposed Section 60.5365b(2)(b).

IX. EPA Should Revise the Compressor Station LDAR / Closed Vent System / Alternative Monitoring Provisions to Provide Greater Flexibility and Reflect Practicalities of Operations and Monitoring Development

A. EPA Should Continue to Exclude Devices Intended to Vent From the Definition of "Fugitive Emissions Component"

GPA Midstream submits that EPA should not adopt a revised definition of "fugitive emissions component," *see* proposed § 60.5430b and § 60.5430c, as the revisions could present substantial confusion and potentially unduly broaden the scope of fugitive emissions to include emissions from equipment designed as part of the process to vent emissions. We urge EPA not to make this revision.

The current definition states: "Devices that vent as part of normal operation, such as natural gas-driven pneumatic controllers or natural gas-driven pumps, are not fugitive emissions

components, insofar as the natural gas discharged from the device's vent is not considered a fugitive emission. Emissions originating from other than the device's vent, such as the thief hatch on a controlled storage vessel, would be considered fugitive emissions." 40 C.F.R. § 60.5430a. The current definition thus makes a logical and critical distinction between fugitive emissions that arise from operating equipment and process emissions that vented from a stack as part of normal operations.

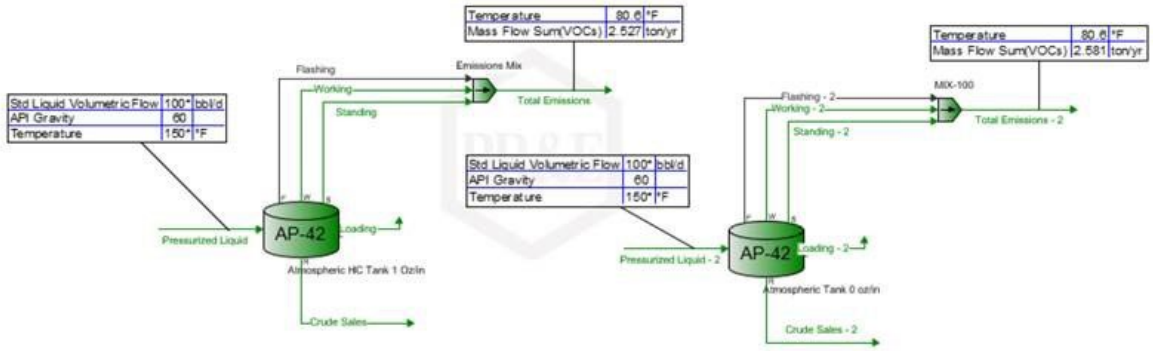
In the supplemental proposal, EPA would remove the quoted language from the current definition above. This would create significant confusion and compliance uncertainty by potentially seeking to regulate equipment as "fugitive emissions components" that do not have fugitive emissions. EPA provided no rationale for altering the longstanding definition and did not either acknowledge the revision or the change in interpretation that appears to significantly expand the types of equipment considered to be "fugitive emissions components."[28] Any final rule should restore the language discussed above to the definition of "fugitive emissions components."

B. EPA Should Restore the Word "Controlled" to the Definition of "Fugitive Emissions Component"

In addition, EPA deleted the word "controlled" from the definition of "fugitive emission component" without any explanation. The definition under 40 C.F.R. § 60.5430a currently includes "thief hatches or other openings on a **controlled** storage vessel not subject to § 60.5395 or § 60.5395a." Fugitive emissions from thief hatches or openings on uncontrolled tanks are expected as the tank breathes in and out through these vents to prevent the tank from rupturing. EPA should acknowledge that the vents on uncontrolled tanks are expected to vent and should not be considered fugitive emissions.

GPA Midstream recognizes that even uncontrolled, atmospheric tanks are operated under a slight amount of pressure, often at approximately one ounce. GPA Midstream ran a generic process simulation in ProMax comparing uncontrolled tanks with one ounce of pressure and uncontrolled tanks with zero pressure. Assuming all other inputs are the same, the total tank emissions were nearly identical with only a two percent difference (2.53 tons per year vs. 2.58 tons per year).

[28] Despite changing the definition of "fugitive emission components" to include thief hatches and other openings, EPA's Technical Support Document does not account for them. It expressly states that the "analyses for fugitive emissions from compressor stations included in the November 2021 proposed TSD has not changed." EPA, Supplemental Background Technical Support Document for the Proposed New Source Performance Standards (NSPS) and Emission Guidelines (EG), EPA-HQ-OAR-2021-0317-1578 (Oct. 2022) ("TSD") at 5-1.



The Technical Support Document's discussion of model production facility plants further supports GPA Midstream's position. That discussion states that "Model Plant 3 contains tanks, but as they are uncontrolled, the emissions from these tanks are allowed to vent to the atmosphere. Controlled tanks in Model Plant 4 must be vented through a closed system to a control device. Here, an open thief hatch or leak in the closed vent system could require action to repair the leak." Coburn-Strott Memo at 14. The TSD's Table 1 showed zero tanks for Model Plant 3 because there are zero controlled tanks.

Table 1. Model Production Sites.

Model Site Name	Description	Number of Fugitive Equipment Components	Number of Tanks	Number of Large-Emitters
Model Plant 1	Single wellhead only	112	0	1
Model Plant 2	Dual wellheads only	220	0	1
Model Plant 3	Typical production site; uncontrolled tanks	612	0	2
Model Plant 4	Typical production site; controlled tanks	612	4	2

This, along with the discussion noted above and the TSD's failure to account for the additional costs that midstream facilities would occur monitoring and potentially repairing uncontrolled tanks indicates that EPA failed to realize the importance of the definitional change, the proposal has made the change without providing any explanation. Conversely, if EPA intended to require leak detection monitoring for components that are no longer part of a closed vent system, then the agency must explain the rationale for this regulation and define the benefit EPA claims this could possibly yield. Otherwise, GPA Midstream requests that EPA expressly state that it will apply the definition of "fugitive emission component" currently found in 40 C.F.R. § 60.5430a to Subparts OOOOb and OOOOc.

C. EPA Should Provide 180 Days for Initial Compliance Monitoring

GPA Midstream proposes that EPA provide 180 days to conduct the initial fugitive emissions monitoring for affected facilities under proposed § 60.5397b. Conducting compliance monitoring is a lengthy process requiring the development, coordination, and scheduling of internal and contracted services. Often, these monitoring services must be planned and scheduled more than 90 days in advance. Here, affected facilities and service contractors must first develop and update required systems and plans under proposed §§ 60.5397b(b)-(d) for newly affected facilities. Then they – along with the rest of the industry – must attempt to schedule contractors for the initial fugitive emissions monitoring. EPA should accept the initial fugitive monitoring results performed in accordance with Subpart OOOOa for sites constructed after the applicability date of Subpart OOOOb as those sites had to meet Subpart OOOOa requirements until Subpart OOOOb was finalized. Further, the fugitive monitoring requirements under both subparts are effectively the same.

D. EPA Should Allow 30 Days After an AVO Inspection to Attempt a First Repair

Proposed § 60.5797b(h)(2) requires a first attempt at repair for any leaking fugitive emission components detected through audible, visual, or olfactory ("AVO") inspection within 15 days of discovery. EPA does not explain why it would provide half as much time for a first attempt at repair of leaking fugitive emission components detected by AVO, as opposed to leaks detected by other means. For instance, when a leaking component is detected through Method 21 or OGI inspections, owners and operators must complete a repair within 30 days. Proposed § 60.5398b(b)(4)(iii). There is no obvious reason why the detection method could impact the time required to order parts and make the repair, for which at least 30 days is essential in today's economy (with continuing supply chain challenges) and with the expected increased demand associated with the new regulations. Should EPA finalize the rule, it should allow for 30 days to attempt a first repair of any leaking component detected through an AVO inspection. EPA should not be concerned about the repair being outstanding during the next scheduled AVO inspection. When moving to a frequency like monthly, it is unreasonable for EPA to assume there will not be overlap in surveys and repairs.

E. The Periodic Screening Option Should be Revised

The proposed regulatory text offers the option of periodic screening, but if a leak is detected, the owner/operator would be required to conduct a full survey of every fugitive emission component. *See* Proposed § 60.5398b(b)(4)(ii)(4). This would practically be the same monitoring requirement found in proposed § 60.5397b. Thus, the periodic screening option not only provides no real benefit over quarterly monitoring with an annual OGI inspection, but it adds the cost of periodic screening – which would be a significant additional cost, where an owner or operator must also conduct bi-monthly or monthly screening. To make the periodic screening option meaningful, GPA Midstream proposes that, for owners or operators that choose the periodic screening option, follow-up inspections be focused on the identified source of the leak instead of the entire facility.

F. EPA Should Not Refer to Leak Investigations as a "Root Cause Analysis"

As proposed, §§ 60.5398b(b)(4)(iv) and 60.5398b(b)(5) would require owners or operators to complete a "root cause analysis" in five days, whenever a leak is detected from a control device failure or closed vent system cover. EPA does not define what is meant by a "root cause analysis" or what documentation it expects such an analysis to produce. As discussed in more detail below, a root cause analysis involves a formal systematic investigation, using multiple potential methodologies, into the potential causes of an incident that identifies corrective actions to reduce the probability of similar future incidents. *See* Section VII, *infra* (discussing root cause analysis requirement for the super-emitter program). Root cause analyses typically involve several specialized team members and take far longer than the five days specified in the proposed regulatory text. EPA has not considered the costs or the time required to perform a formal root cause analysis. GPA Midstream recommends that EPA use a more generic and appropriate term, such as "evaluation," in describing the examination and determination described in the proposed regulatory text. Even as to an evaluation, EPA should allow a minimum of 30 days to make the necessary assessment. If a "root cause analysis" is retained, EPA should allow at least 90 days to complete that more formal and complex analysis.

G. EPA Should Exclude Welded Pipe Seams From AVO Inspections

Under proposed § 60.5416b(a)(1), the Proposed Supplemental Rule would require annual AVO inspections of welded pipe seams on closed vent systems. EPA should exclude welded pipe seams from inspections. Subpart VVa has never included welded seams as fugitive emission components, and for good reason. Once welded, these seams must meet all pressure and leak tests associated with the original pipe and are, in fact, structurally similar to the pipe. Further, inspecting them presents practical difficulties as welded sections are not tracked on P&IDs or any other inventory. Owners and operators would have to undertake an unusually time-consuming and burdensome survey of all pipe welds in the facility. This should not be necessary. The Supplemental Proposed Rule provides no rationale for requiring weld inspections, such as claims that these welds leak in any way. Absent a rational basis for imposing such a requirement, EPA should exclude welded pipe seams from AVO inspections.

H. Typographical Errors

Proposed § 60.5398b(c)(1)(i) states that the "sensitivity of the system must be such that it can at least measure an order of magnitude less than the action-level defined in paragraph (c)(4)(iii) of this section." The proposed regulatory text does not contain a § 60.5398b(c)(4)(iii).

Proposed § 60.5398b(d) contains a link to EPA's Emission Measurement Center webpage (https://www.epa.gov/emc/oil-andgas-approvedalternative-test-methods). This link does not work.

Finally, several sections of the proposed rule require differing accuracy, with some requiring four decimals of a degree, *see*, *e.g.*, proposed § 60.5398b(c)(2)(i) and others to five decimals of a degree. *See* proposed § 60.5398b(b)(1)(i). Whether EPA intended to require four decimals or five decimals, it should correct those that are inconsistent.

X. EPA Should Revise Gas Plant LDAR and Appendix K to Provide for a More Reasonable Monitoring Framework

A. The Absence of a Methane or VOC Threshold Would Make Leak Detection and Repair Unnecessarily Burdensome Without a Corresponding Benefit

As GPA Midstream explained in its prior comments, EPA should retain the "in VOC service" requirement and 10% VOC by weight threshold, as well as establish a similar 1% threshold for equipment in methane service. Exh. A at 35-36. However, the proposed regulatory language accompanying the Supplemental Proposed Rule imposes no threshold for either VOCs or methane for leak detection monitoring purposes, asserting that "[e]ach piece of equipment is presumed to have the potential to emit methane or VOC unless an owner or operator demonstrates" otherwise. Proposed Section 60.5400b(a)(2). EPA should reconsider what is effectively a proposed zero threshold standard for both VOCs and methane.

Gas plants contain many streams, such as acid gas, wastewater, and recycled water, where VOCs and methane are present but so low that they would not be detected by flame ionization detectors (FIDs). GPA has attached several redacted examples of natural gas processing plant streams that contain little VOC or methane content.[29] Yet, because the VOC or methane content of these streams are not zero, and presumably have a theoretical potential to emit, owners and operators would waste substantial resources to conduct LDAR monitoring on components that will always result in non-detects. The Supplemental Proposed Rule offered no actual data to the contrary. Thus, the proposed regulatory language would wastefully impose costs and burdens on owners and operators with no potential benefit. GPA Midstream reiterates that a 10% VOC threshold, along with a 1% methane content threshold, is appropriate in determining which streams should be subject to an LDAR program and that such threshold requirements are consistent with EPA's longstanding practice.

B. The Supplemental Proposed Rule Provides no Basis to Increase Monitoring for Closed Vent Systems

EPA would require initial and bi-monthly optical gas imaging inspections in accordance with proposed Appendix K for closed vent systems and covers at onshore natural gas processing plants or, as an alternative, quarterly Method 21 monitoring to ensure there are no detectable emissions. EPA, however, has provided no rationale for either increasing closed vent system monitoring frequencies from the current initial Method 21 monitoring and annual AVO inspections under Subpart VVa or requiring optical gas imaging inspections instead of Method 21 monitoring. Closed vent systems have extremely low leak rates, larging owing to the small number of components and the lack of constantly moving parts, such as valves. Hard piping or duct work will not suffer the type of deterioration, and potential leaks, as moving parts that endure friction. EPA should either withdraw this proposed requirement or provide some explanation regarding the basis for increasing monitoring frequency, including a description of what environmental benefit could be expected by more frequent monitoring of equipment that rarely leak.

[29] See Exhibit C (data from acid gas sample), Exhibit D (amine still gas sample).

C. EPA Should Further Revise Appendix K

GPA Midstream's January 2022 comments raised numerous concerns with Proposed Appendix K. *See* Exh. A at 33-41. We incorporate those comments by reference, as EPA does not appear to have addressed those comments in the Supplemental Proposed Rule. Here, GPA Midstream wishes to emphasize several issues that must be addressed in any final rule: dwell times, survey breaks, the operating envelope, and senior camera operator requirements. As GPA Midstream previously discussed in its January 2022 comments, the changes to OGI monitoring protocols in Appendix K would impose introduce significant disincentives to using OGI monitoring for natural gas plants and compressor stations. *See* Exh. A at 36. These include increased time due to minimum universal dwell times and break requirements and the need to perform surveys six times per year. This not only reduces the incentive for owners and operators to move away from Method 21 but, as noted in our January 2022 comments, EPA still has not provided any reasoned basis for the dramatic changes to how OGI monitoring would be performed.

1. Appendix K Discourages OGI Camera Use

The midstream industry and EPA share the goal of advancing the use of emerging technologies because they offer the possibility of being accurate and more efficient tools. The midstream industry views OGI as a valuable tool, however, Appendix K is drafted in a way that would discourage its use over Method 21 monitoring at gas plants. For instance, Section 9.3.2 would require expending significant time and effort to "develop visual cues (*e.g.*, tags, streamers, or color-coded pipes) to ensure that all regulated components were monitored." Establishing a new set of component tags throughout gas plants (and keeping them updated over time) offers no advantage over Method 21 and discourages OGI camera use. Further, as described below, Appendix K approach is overly rigid with respect to everything from dwell times to break times, robbing it of any improved efficiencies over Method 21.

2. EPA Should not Dictate a Uniform OGI Dwell Time

GPA Midstream appreciates that the Supplemental Proposed Rule reduced the dwell time per angle from five seconds to two seconds, 87 Fed. Reg. at 74,839, which appears to address the Proposed Rule's inconsistent description of minimum dwell times. *See* Exh. A at 39. However, we believe that the concept of establishing a minimum dwell time is still too restrictive and does not take full advantage of the equipment's ability to make OGI the preferred option at a gas plant. A two second dwell time does not allow for a camera operator's experience to come into play. The only study on operator ability and dwell time that GPA Midstream is aware of is Zimmerele, *et al.*, Detection Limits of Optical Gas Imaging for Natural Gas Leak Detection in Realistic Controlled Conditions, *Environ. Sci. Technol*. 2020, 54 (18), 11506-11514. In that study, a scan speed is observed on the unit level (well head, separator, tank) and not on the individual component level. Each unit could have a varying number of components, as defined in Appendix K. Zimmerele, *et al.* (2020) recommends a greater than three minute per inspection time on a per unit basis, not a dwell time on an individual component basis.

Appendix K should leave judgments regarding dwell times to the experienced camera operator. This is particularly true when groups of equipment are viewed as this does not lend itself

to a rigid dwell time. Gas plants will have very similar component groupings at common process units and operator experience with how to view these groupings, including the time required, will develop quickly. One of the current advantages of using OGI cameras under Subpart OOOOa is that individual component counts are not necessary. Under Appendix K, however, a component-driven time requirement that disregards a camera operator's experience significantly diminishes the benefits of using an OGI camera.

3. *EPA Should Increase the Time Between Survey Breaks*

GPA Midstream previously explained that requiring five minute survey breaks for every 20 minutes of monitoring lacked a record basis and would be unnecessary and unjustified for midstream facilities, which are far less complex than other facilities, such as oil refineries. Exh. A at 40. We do appreciate that EPA is now proposing a 10 minute break after every 30 minutes of monitoring, 87 Fed. Reg. at 74,839, however, this proposal raises the same concerns discussed in our January 2022 comments.

Although GPA Midstream agrees that OGI camera operators generally need breaks to avoid eye and mental fatigue, experience with field monitoring indicates that operators frequently receive breaks while walking through midstream facilities, which typically have a lower density of components requiring monitoring than at other types of facilities. Therefore, breaks should either be at the discretion of the camera operator, which will account for actual monitoring demands at a particular facility, or be increased to a 30 minute break after every two hours of monitoring. This will allow the OGI camera operator to develop a monitoring rhythm and more effectively survey larger facilities instead of requiring a stop every 30 minutes. During the two hour period the camera operator is likely to make smaller breaks from operating the camera. Some of these would include, drinking water, documenting a leak, performing a repair, or moving to another survey location.

4. EPA Should Eliminate or Revise Aspects of its "Operating Envelope"

GPA Midstream previously raised significant concerns with the Proposed Rule's camera performance criteria, termed "Operating Envelope conditions," as Proposed Section 8 of Appendix K would not be suitable for surveying locations in the remote or rural areas where gas plants often operate. *See* Exh. A at 40-41. The Supplemental Proposed Rule did not address these issues.

GPA Midstream further notes the contradictions between the detection requirements listed in Appendix K Section 6.1.2 and the initial performance verification requirements under Section 8.3 and 8.4. These letter two sections would require the establishment of an operating envelope that, contrary to Section 6.1.2, would require the establishment of operating envelopes for potentially hundreds of different configurations. Each configuration would not only require time to establish the operating envelope, but each one must be tested and documented under Section 8.6. This not only defeats the purpose of establishing the parameters listed under Section 6.1.2, but needlessly bogs operators down in recordkeeping requirements and actively discourages the use of OGI cameras.

Lastly, EPA should revise Section 6.1.2, which requires the OGI camera to be able to detect methane emissions of 17 grams per hour at a viewing distance of two meters. OGI cameras should be calibrated to accurately view methane emissions from farther away than two meters. An advantage of OGI cameras is that it reduces the need to elevate monitoring personnel by two meters or more to monitor "difficult to monitor" components. Section 6.1.2 would still require monitoring personnel to be elevated by two meters or more to monitoring components, erasing a significant advantage that OGI cameras would otherwise have.

5. *The Proposed Revisions to Senior Camera Operator Qualifications Do Not Resolve Concerns with the Likely Shortage of Qualified Operators*

GPA Midstream appreciates that the Supplemental Proposed Rule considered comments on senior camera operator requirements and proposed some revisions to proposed Appendix K based on those comments. 87 Fed. Reg. at 74,837-39. However, we urge EPA to make further revisions to the proposed Appendix K. Changing the senior camera operator requirements from 500 site surveys (with at least 20 site surveys in the prior year) to 1,400 survey hours (with 40 survey hours in the past year) does not alleviate the serious practical concerns GPA Midstream has with respect to the scarcity of operators that could qualify as senior camera operators. *See* Exh. A at 38-39. Not only do these requirements hinder midstream industry in-house personnel from qualifying as senior camera operators, but the auditing, training, and survey work that only senior camera operators can perform, and the initially small number of qualified operators available, would make senior camera operators very costly, if they are available at all. Even with the revised 1,400 hour requirement, it will likely take years to qualify enough senior camera operators to meet regulated industries' training, auditing, and survey needs under EPA's proposal.

GPA Midstream had previously surveyed their OOOOa OGI contractors and estimated an Appendix K survey would cost from two to three times more than an OGI survey under the current OOOOa standard. The modest changes to Appendix K requirements in the supplemental proposal do not make material changes that would reduce the substantial increase in expected costs for these types of surveys under proposed Appendix K. As proposed by EPA, this would remain a highly specialized position with significant training requirements, and it would take substantial time to ensure there are sufficient qualified operators to meet the demand resulting from the requirements established in this proposal. EPA should reduce the unduly burdensome requirements imposed in Appendix K – or it must factor in these real-world considerations and costs to these rules, which the record to date indicates have not been considered.

XI. EPA's Analysis of Costs and Benefits Includes Significant Errors and Omissions

EPA's cost and benefits review for the Supplemental Proposed Rule includes significant oversights with respect to the midstream industry. As explained in more detail below, owners and operators of gathering and boosting compressor stations do not own the gas that they process and, therefore, recoup no financial benefits from reducing lost gas as EPA assumed. Further, several necessary costs were omitted, such as compressor monitoring costs, installation costs, and the need for vapor recovery units. Overall, the analysis is incomplete and we urge EPA improve upon this analysis before making any determination on whether certain regulatory requirements are cost effective for the midstream industry.

A. EPA Should Examine Cost-Effectiveness on a Single Pollutant Basis

In reviewing whether control costs for the midstream sector are reasonable, EPA should look at the full cost of control as applied to each pollutant – VOCs and methane. Each pollutant should be evaluated separately as to whether the system would or would not be cost-effective in determining whether to require the control. Here, based on our review to date, when the proper set of costs are considered, it is plain that controls for centrifugal compressors at gas plants are not cost-effective.

EPA has long looked at whether the cost of a particular system of control is reasonable by considering the costs associated with such control, including capital costs and operating costs, determining the emission reductions that the control can achieve, and then evaluating whether a particular control achieves that emission reduction cost effectively. In this context, EPA has calculated a control's "cost-effectiveness" by taking the annualized cost of implementing an air pollution control option divided by reductions realized annually for that pollutant.

In this rulemaking, EPA has looked at cost-effectiveness using a single pollutant approach, but has also considered a "multi-pollutant" evaluation that divided control costs between VOCs and methane and then evaluated the cost-effectiveness of the control based on that reduced cost. 86 Fed. Reg. 63155 (Nov. 15, 2021). We urge EPA not to apply the so-called multi-pollutant approach in this case. Rather, in evaluating whether a particular "standard of performance" is appropriate here, EPA should look at each pollutant separately. This hews most closely to the direction of Congress. Section 111 requires EPA to consider a standard that reflects the degree of emission reduction achievable through the best system of emission reduction "taking into account the cost of achieving *such reduction*" as well as other factors. 42 U.S.C. § 7411(a)(1). In this case, the cost of achieving "such reduction" of methane is the full cost of control, not an apportioned cost or shared cost. The fact that there may be other benefits from installing the controls does not change the statutory requirement.

Not only is this approach consistent with the statutory language, it is the right policy choice here. The fundamental purpose behind EPA's regulation is reducing methane emissions, and thus it is the cost-effectiveness of the system of reduction for that particular pollutant that should be evaluated. *E.g.* 87 Fed. Reg. 63113 (Purpose of the Regulatory Action). But for the presence of methane emissions, it seems highly improbable that EPA would be embarking on this expansive effort to develop new regulations. Nor does this result in double counting of the cost of controls as others have suggested – it merely evaluates each pollutant on its own merits to assess whether "such reduction" meets the cost criteria in the statute.

B. EPA Should Correct its Cost-Effectiveness Analysis for Midstream, Because Gathering and Boosting Compressors See No Financial Benefits

In several locations throughout the Supplemental Proposed Rule, Regulatory Impact Analysis, and TSD, EPA asserts that gathering and boosting facilities own the natural gas in their systems and would directly benefit from capturing gas that would otherwise be lost. This is incorrect. Gathering and boosting facilities, and other midstream facilities, are typically paid a fee to prepare it for delivery to an interstate pipeline system. This is true even in large integrated

companies that own both the production facilities and midstream facilities (*e.g.*, gathering and boosting compressors, processing plants). The production segment and the midstream segment are separate business units and the production segment still pays a fee to the midstream segment for processing. This makes the midstream segment much more like transmission and storage segment facilities instead of production facilities.

Because the Clean Air Act requires EPA to take "into account the cost of achieving" emission reductions, 42 U.S.C. § 7411(a)(1), EPA should revise and update its cost estimates to reflect the lack of financial benefits to the midstream sector. Given EPA's focus on the alleged benefits from enhanced recovery of methane, it is critical for EPA to correct its analysis and revise its cost effectiveness determination as applied specifically to the midstream sector. This is an issue GPA Midstream has raised previously, and we urge EPA to correct the record and redo its analysis for this proposed regulation. *See* Exh. A at 6-7.

C. EPA's Cost-Effectiveness Analysis is Incomplete, Because it Excludes Monitoring Costs For Compressors

EPA should likewise revise its analysis because it failed to include certain monitoring requirements for each compressor. In estimating the Supplemental Proposed Rule's cost effectiveness for compressors, EPA only considers a $15,000 annual repair cost for maintaining a dry seal compressor with an emission rate at or below the 3 scfm requirement. *See* TSD at 2-16. The Supplemental Proposed Rule, however, imposes annual flow monitoring requirements for each compressor. EPA does not account for any monitoring costs in its calculation. GPA Midstream members estimate that each gathering and boosting compressor station monitoring event costs approximately $4,290. With the average gathering and boosting compressor having four engines, this means that monitoring costs will exceed $16,000 – more than 100% of the costs EPA considered in its review. GPA Midstream members estimated that annual monitoring costs at processing plants will be approximately $6,750. With an average of four compressors, the annual costs per compressor should be increased to at least $16,500. This means that EPA's cost effectiveness review considers less than half of the actual costs imposed by the Supplemental Proposed Rule. EPA should revise its calculations and reconsider whether the Supplemental Proposed Rule is cost-effective.

D. EPA Should Collect Additional Information Regarding the Cost of Installing Zero Emission Pneumatic Devices at Gathering and Boosting Compressor Stations

As explained above, EPA incorrectly equates gathering and boosting compressor stations with oil and gas production facilities for purposes of analyzing cost effectiveness, dramatically underestimating the number of controllers required, the compressed air requirements, and other errors. To ensure that EPA accurately understands the costs imposed, it should gather additional information to create a representative gathering and boosting compressor station model plant.[30]

[30] GPA Midstream previously brought this problem to EPA's attention in its January 2022 comments with respect to the number of components that must be monitored for gathering and boosting compressor stations when compared to petroleum refineries. *See* Exhibit A at 36-37.

GPA Midstream would be pleased to discuss with EPA how it can obtain the information necessary to create a representative model gathering and boosting compressor station so that it may accurately estimate industry costs. However, GPA Midstream has endeavored to provide rough estimates of those costs here. They include the following differences from EPA's assumptions in the TSD:

- As discussed above, gathering and boosting compressor stations typically have many more than 20 controllers and require air compressors larger than 20 horsepower, as EPA assumed in the "Large Model Plant" for production sites.

- Based on data received from GPA Midstream member companies, the total capital cost for installing an air compressor for new controllers with grid power is between $250,000 and $1,000,000, depending upon the compressor station's size, layout, and the number of devices.[31]

- In Table 3-4 (solar powered devices) and Table 3-5 (grid powered devices) of the TSD, EPA appears to assume that any existing source switching from gas-driven devices to electric devices can still use the same valves. This is incorrect. In most cases, new valves would be required due to actuator setup changes.

The tables below (with changes highlighted) reflect more accurate costs for switching to electric devices:

[31] The $1,000,000 estimate was for a gathering and boosting compressor station requiring approximately 100 controllers replaced. Assuming a mostly linear relationship, this equates to approximately $10,000 per device. Even if EPA's Large Model Plant was applicable, the cost of installing 20 controllers would be approximately $200,000, not the $165,550 as EPA assumed.

TABLE 3-4. SOLAR					
	2021$	2019$	Small Model Plant (4 controllers)	Medium Model Plant (8 controllers)	Large Model Plant (20 controllers)
New Sites					
Capital Investment ($)					
Electric Controllers with Valves	$4,000	$3,432	$13,729	$27,458	$68,644
Control Panel	$4,000	$3,432	$3,432	$3,432	$3,432
140 W Solar Panel	$400	$343	$343	$686	$1,373
100 Amh battery	$200	$172	$686	$1,373	$3,432
Solar Equipment Total			$18,191	$32,949	$76,881
Installation Costs			$9,095	$16,475	$38,441
Total Solar System Cost			$27,286	$49,424	$115,322
Cost of NG-driven controllers[a]	$2,595	$2,227	$8,907	$17,813	$44,533
Cost of NG-driven controller installation			$1,548	$3,096	$7,740
Total NG-driven costs			$10,455	$20,909	$52,273
Total Net Total Capital Investment			$16,831	$28,515	$63,049
Annual Costs ($/yr)					
Capital Recovery			$1,848	$3,131	$6,922
Maintenance		$80	$320	$640	$1,600
Replace Solar Panel		$34	$34	$69	$137
Replace Solar Batteries		$43	$172	$343	$858
Total Solar System Cost			$2,374	$4,183	$9,518
NG-Driven Maintenance		$140	$560	$1,120	$2,800
NG-Driven Replacement		$173	$692	$1,384	$3,460
Total Net Annual Costs			$1,122	$1,679	$3,258
Existing Sites					
Capital Investment ($)					
Electric Controllers with Valves	$4,000	$3,432	$13,729	$27,458	$68,644
Control Panel	$4,000	$3,432	$3,432	$3,432	$3,432
140 W Solar Panel	$400	$343	$343	$686	$1,373
100 Amh battery	$200	$172	$686	$1,373	$3,432
Solar Equipment Total			$18,191	$32,949	$76,881
Installation Costs			$18,191	$32,949	$76,881
Total Capital Investment			$36,381	$65,898	$153,763
Annual Costs ($/yr)					
Capital Recovery			$3,994	$7,235	$16,882
Maintenance			$320	$640	$1,600
Replace Solar Panel			$34	$69	$137
Replace Solar Batteries			$172	$343	$858
Total Solar System Cost			$4,520	$8,287	$19,478
NG-Driven Maintenance			$560	$1,120	$2,800
NG-Driven Replacement			$692	$1,384	$3,460
Total Net Annual Costs			$3,268	$5,783	$13,218

TABLE 3-5. ELECTRIC					
New Sites	2021$	2019$	Small Model Plant (4 controllers)	Medium Model Plant (8 controllers)	Large Model Plant (20 controllers)
Capital Investment ($)					
Electric Controllers with Valves	$4,000	$3,432	$13,729	$27,458	$68,644
Control Panel	$4,000	$3,432	$3,432	$3,432	$3,432
Electric Equipment Total			$17,161	$30,890	$72,076
Installation Costs			$8,581	$15,445	$36,038
Total Electric System Cost			$25,742	$46,335	$108,114
Cost of NG-driven controllers[a]	$2,595	$2,227	$8,907	$17,813	$44,533
Cost of NG-driven controller installation			$1,548	$3,096	$7,740
Total NG-driven costs			$10,455	$20,909	$52,273
Total Net Total Capital Investment			$15,287	$25,426	$55,842
Annual Costs ($/yr)					
Capital Recovery			$1,678	$2,792	$6,131
Maintenance		$80	$320	$640	$1,600
Grid Electricity		$4	$16	$31	$78
Total Electrical System Cost			$2,014	$3,463	$7,810
NG-Driven Maintenance		$140	$560	$1,120	$2,800
NG-Driven Replacement		$173	$692	$1,384	$3,460
Total Net Annual Costs			$762	$959	$1,550
Existing Sites					
Capital Investment ($)					
Electric Controllers with Valves	$4,000	$3,432	$13,729	$27,458	$68,644
Control Panel	$4,000	$3,432	$3,432	$3,432	$3,432
Electric Equipment Total			$17,161	$30,890	$72,076
Installation Costs			$17,161	$30,890	$72,076
Total Capital Investment			$34,322	$61,780	$144,153
Annual Costs ($/yr)					
Capital Recovery			$3,768	$6,783	$15,827
Maintenance			$320	$640	$1,600
Grid Electricity			$16	$31	$78
Total Electric System Cost			$4,104	$7,454	$17,506
NG-Driven Maintenance		$140	$560	$1,120	$2,800
NG-Driven Replacement		$173	$692	$1,384	$3,460
Total Net Annual Costs			$2,852	$4,950	$11,246

EPA should revise its cost estimates based on this additional information.

E. EPA Should Consider Compressor Emissions Created by Routing Pneumatic Controller Emissions to a Process

In Section 3.4.2 of the TSD, EPA incorrectly assumes no emissions would be associated with routing pneumatic controller emissions to a process. EPA states that these emissions streams would be at atmospheric pressure and would need a compressor to reach the sales gas or other process streams at a site. This is correct, but the agency further assumes that the compression needed would not result in emissions. This is incorrect. The compressor would result in direct emissions from a gas-fired engine driver or in indirect emissions from an electric driver. Either way, air emissions would be created to capture these pneumatic streams and send them to a process stream. EPA should update this paragraph even if the emissions are not calculated in the TSD so that future rulemakings will capture this option accurately.

F. EPA Should Include the Cost of a Vapor Recovery Unit, Because a Pneumatic Pump Requires a Vapor Recovery Unit to Capture and Route Emissions

In Section 4.3 of the TSD, EPA questions whether a Vapor Recovery Unit ("VRU") was needed for pneumatic pump emissions, as the emissions are similar to sales gas composition. *See* TSD at 4-2 to 4-3 ("since the emissions from pneumatic pumps are of the same composition as the natural gas in the "sales line," the EPA questions whether a VRU is needed to be able to process the gas and route it back to the sales line or otherwise use it in a process."). As a result, EPA did not consider the costs of installing a new VRU to control pneumatic pump emissions. *Id.*

This statement in the TSD is incorrect, as it comment misunderstands the purpose of a VRU at an oil and gas facility, including facilities in the midstream sector. A VRU captures low pressure vapors (atmospheric, in the case of pneumatic pump emissions) and increases the pressure so that stream can be routed into the sales or process stream. It is not used to change gas composition, as the TSD suggests. As such, EPA must include the necessary cost of installing and operating a VRU to capture and route pneumatic pump emissions to a sales or process stream. This VRU will most likely operate with supplied electricity and a screw compressor based on the volumes from pneumatic pumps; however, if no power is available onsite, the facility may need to install a gas- or diesel-fired engine to drive the VRU compressor. GPA Midstream would be pleased to work with EPA in gathering the necessary information to revise the pneumatic pump emission costs in the TSD.

G. EPA Should Further Revise its Cost Calculations, as the TSD Underestimates Other Costs for Routing Pneumatic Pump Emissions to a Control Device

Aside from the need to include the cost of installing and maintaining a VRU, the TSD underestimates other costs. For instance, GPA Midstream member companies' engineers when surveyed estimate that the costs for routing pneumatic pumps to an existing control device ranges from $150,000 to $300,000. This is far more than the $6,102 EPA estimated in Tables 4-7 and 4-10 based on oil and gas production well costs. Using the estimated lowest capital costs ($150,000) for gathering and boosting compressor stations, the cost effectiveness numbers are significantly different than what EPA has estimated for this rulemaking. As shown in the table below, the single

pollutant and multipollutant cost effectiveness for methane and VOCs exceed the reasonable threshold level for each scenario listed. EPA should include these updated costs in the TSD, and for any future rulemakings, to make clear this control option is infeasible.

Control Option	Pump Type	Emissions Reduction (tpy)		Capital Cost	Without Savings				
					Annual Cost ($/yr)	Cost Effectiveness ($/ton)		Multipollutant Cost Effectiveness ($/ton)	
		VOC	Methane			VOC	Methane	VOC	Methane
2. Routing to Combustion if Zero Emissions is Technically Infeasible									
b. Route Emissions to an Existing Combustion Device	One Diaphragm	0.91	3.29	$150,000	$21,357	$23,372	$6,497	$11,686	$3,249
b. Route Emissions to an Existing Combustion Device	One Piston	0.10	0.36	$150,000	$21,357	$212,804	$59,160	$106,402	$29,580
b. Route Emissions to an Existing Combustion Device	One Diaphragm + One Piston	1.01	3.65	$150,000	$21,357	$21,059	$5,854	$10,529	$2,927

XII. EPA Should Not Rely on the Social Cost of Methane for This Rulemaking, as the Interim Values are Deficient and Have Not Been Finalized

EPA relies on the February 2021 Interim Social Cost of Methane ("SCM") figures, along with supplementary materials, in order to estimate the purported projected climate and health benefits from the Supplemental Proposed Rule. As EPA recognizes, these figures are *interim* values, released pursuant to Executive Order 13990,[32] and have not been finalized. The Administration has not responded to public comments submitted by GPA Midstream and others identifying significant deficiencies associated with these interim values.[33] Indeed, recognizing the values require further scientific study, EPA and other agencies have begun an expert peer review of the administration's social cost analyses.[34] Until that peer review process is conducted and subject to public review and comment, it is inappropriate for EPA to consider the interim values to support its Supplemental Proposed Rule.

XIII. EPA Should Include a Reasonable and Commonsense Interpretation of the Waste Emissions Charge Provisions

EPA has requested comment on how to implement aspects of the "waste emission charge" under the CAA's Methane Emissions and Waste Reduction Incentive Program for Petroleum and Natural Gas Systems imposed as part of the Inflation Reduction Act (IRA). GPA Midstream supports EPA's request to consider public input and provide stakeholders direction on the implementation of the IRA framework, which could present an undue impact on the midstream sector. In particular, EPA should include direction on how to fairly apply the "exemption for regulatory compliance" provided in this new law, which encourages compliance as a way to minimize the financial charges that may result from the law. CAA § 136, 42 U.S.C. § 7436. Moreover, we support EPA's intention to provide a separate draft proposal on this topic to allow

[32] Exec. Ord. 13,990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, 86 Fed. Reg. 7,037 (Jan. 25, 2021).

[33] GPA Midstream, Comments Submitted on 86 Fed. Reg. 24,669 (May 7, 2021) (submitted June 21, 2021). GPA Midstream incorporates those comments here by reference. A copy is attached as Exhibit B.

[34] https://www.epa.gov/environmental-economics/scghg-tsd-peer-review

stakeholders to comment on specific regulatory text before issuing any final regulations. 87 Fed. Reg. 74720-21.

Under the IRA, EPA is directed to collect a Waste Emissions Charge on methane emissions that exceed a threshold from the owner/operator of an "applicable facility" that reports more than 25,000 tons of CO2 equivalent of GHGs under subpart W of EPA's GHG reporting rules. CAA § 136(c). An "applicable facility" is "a facility" within listed industry segments. CAA § 136(d). The charge is established by an equation derived by determining the excess of reported emissions above a defined threshold and multiplying that excess by a set dollar amount specified in the statute. CAA § 136(e)-(f). The charge does not apply to emissions that result from unreasonable delay in permitting or other necessary infrastructure development. CAA § 136(f)(5).

The IRA also included an "exemption for regulatory compliance," under which charges would also not be applied to a facility that is subject to and in compliance with methane emissions under CAA §§111(b) and (d). This exemption is conditioned upon a determination by EPA that (i) methane emissions standards under CAA § 111(b) (for new sources) and plans under CAA § 111(d) (for existing sources) have been approved and are in effect with respect to the facility and that (ii) compliance with the standards and plans would mean equivalent or greater emissions reductions that would have been achieved had EPA's November 2021 proposal been converted to regulatory text and finalized.

In fashioning a proposal on this topic, among other issues, EPA should i) view a "facility" using the common sense notion of an operating site, ii) provide common sense guidance regarding the meaning of "in compliance" to qualify for the exemption , and iii) adopt a "notice and cure" process that would allow a reasonable time to cure any material non-compliance before EPA or the relevant state assesses a waste emission charge.

A. EPA Should Apply A Common Sense Definition of "Applicable Facility"

As a fundamental matter, EPA should apply a common sense definition of "applicable facility" to harmonize the different requirements in the waste emissions charge. *See* Comments of GPA Midstream, Response to Request for Information, "Methane Emissions Reduction Program," Docket ID Nos. EPA-HQ-OAR-2022-0875, EPA-HQ-OAR-2022-0875-0002 (submitted January 18, 2023) ("GPA Midstream Comments to MERP Docket"). *See* Exhibit F.

Accordingly, in fashioning a proposal, EPA should view a "facility" using the common sense notion of an operating site – not the equipment-level "affected facility" used in OOOOb/c, nor the basin-level "facility" used in Subpart W. Throughput should similarly be based on discrete sites (i.e., each gathering and boosting compressor station). Any other interpretation would result in arbitrary treatment among industry segments and would lead to significant uncertainty as operators attempt to parse out what exactly is and is not a "facility" and how to correctly assess facility throughput. To address this potential confusion, EPA should revise Subpart W throughput reporting elements for gathering and boosting to allow reporters to reflect true facility throughput.

If EPA utilizes existing regulatory definitions to define a "facility," implementation of the IRA's language will be particularly challenging in that the terms "facility" and "facilities" have

vastly different meanings in Subpart W and OOOOb/c, and those meanings themselves do not necessarily align with the public's understanding of what these words mean. In OOOOb/c, the "affected facility" is an individual piece of equipment (or group of equipment, like all the natural gas-driven pneumatic controllers at a gas plant). On the opposite side of the spectrum, under Subpart W, a gathering and boosting "facility" includes all gathering and boosting emission sources within a basin, which is usually a large geographic area spanning many counties and sometimes many states. Neither the OOOOb/c nor the Subpart W gathering and boosting facilities definitions are consistent with a general understanding of the word "facility." Accordingly, GPA suggests that EPA use the simplest interpretation of the term, which is that "a facility" is a single site, and not specific pieces of equipment within that site, nor the aggregation of hundreds of sites within a geographic area. We think this is straightforward and "bridges the gap" between OOOOb/c and Subpart W.

B. EPA Should Apply a Reasonable Substantial Compliance Standard for Determining Whether a Facility Is Sufficiently "In Compliance" to Meet the Exemption

In addition to evaluating compliance at "a facility" using a common sense interpretation, EPA should reasonably interpret the phrase "in compliance." GPA Midstream provided suggestions on how we believe EPA should apply the exemption for regulatory compliance in its MERP comments, which it incorporate here. GPA Midstream Comments to MERP Docket at 7-8.

Among other considerations, GPA Midstream urges EPA to recognize the challenges with real world compliance with complex and detailed regulatory requirements and interpret the exemption reasonably to allow some measure of flexibility in determining whether a facility is "in compliance." In the real world, it is unreasonable to expect, if not impossible, for an individual affected facility to establish strict 100% "compliance" with all aspects of complex rules. Non-compliance can arise from minor technical or paperwork deviations or other process-related issues leading to brief emissions exceedances. It would be unreasonable for EPA to determine that a facility loses its regulatory compliance exemption for an entire year where it submits a late report or barely exceeds a threshold for a few minutes on one day, while reporting compliance the rest of the year. Such a narrow and strict approach would be unduly punitive and contrary to the basic notions of due process. Therefore, EPA should adopt a reasonable standard for determining compliance and ensure such standard sufficiently and equitably accounts for EPA's chosen interpretation of "applicable facility." To that end, GPA Midstream urges EPA to consider a reasonable "substantial compliance" standard, allowing an appropriately flexible approach to avoid the harshness of what could otherwise be a significant financial burden. EPA and states could provide further guidance on reasonable limits for this approach.

In addition, "in compliance" should allow for a broad safe harbor for a facility to promptly correct instances of non-compliance, consistent with routine monitoring, a compliance assessment or other auditing function. There is a well-worn path for regulated parties to follow, such as that laid out in EPA and state audit disclosure policies, that would provide an established mechanism for prompt correction of any non-compliance. Again, allowing this as a way to qualify for the

exemption would incentivize sources to conduct additional compliance assessments and to timely correct any issues identified.

C. EPA Should Include a Mechanism for the Agency to Provide Advance Notice to A Facility to Allow the Opportunity to Address and Cure Any Non-Compliance

In addition to EPA adopting a reasonable interpretation of what it means to be "in compliance," given the significant financial implications for non-compliance, it is also important for EPA and state permitting agencies to apply this standard fairly and in a manner consistent with due process standards.

To that end, we suggest that EPA incorporate a "notice and cure" process into its implementation of the waste emission exemption process. First, EPA is authorized to revise its reporting regulations to ensure the emissions data reporting is accurate. CAA § 136(h). As part of those regulations, EPA should provide that applicable facilities would not be subject to a charge that may otherwise be owed unless and until EPA, or the relevant state permitting agency, issue a notification that the facility is not in substantial compliance with applicable Section 111(b) or (d) emission standards or requirements and that, if not promptly cured, a waste emissions charge will be assessed. This would provide a financial incentive for the facility so notified to correct any issues to be in compliance.

A notice and cure process would also ensure the waste emission charge is applied only where a facility has in fact failed to qualify for the regulatory exemption. A facility should not lose its regulatory compliance exemption for an entire year for non-material compliance concerns, such as a late report or minor exceedance of a threshold for a few minutes on one day. Similarly, a facility should not lose its regulatory compliance exemption where there is disagreement between a facility and EPA, or the governing state, regarding the application of a standard or the relevant state plan. Determining whether a facility is "in compliance" is highly fact-specific and could be highly subjective without adequate safeguards. Here, a notice and cure process will better serve both EPA and regulated entities in fairly applying the charge to the correct facilities. To accomplish that, the notice and cure process should provide a facility the option to confer promptly with EPA or the relevant state regarding the notice in the event the facility disputes the regulator's findings. That will allow a reasonable opportunity to resolve potential disagreements prior to a final waste emission charge assessment. There should also be an opportunity for the facility to exercise its rights to question the charge through a form of administrative or judicial review under the CAA. Applying the waste emission charge without notice and cure opportunities would be unduly punitive and contrary to the basic notions of due process.

Moreover, this type of procedure would be consistent with the framework EPA has created. In CAA § 136(f)(6)(B), Congress provided EPA with authority to resume charging a facility after first applying the compliance exemption where EPA later determines that either of the two conditions at CAA § 136(f)(6)(A)(i)–(ii) were no longer met (e.g., methane emission standards not approved or not in effect in an applicable state). It stands to reason, therefore that prior to determining whether these two conditions have been met to have applied the exemption, EPA should first determine whether the facility is "in compliance" with applicable methane emission

requirements, consistent with CAA § 136(f)(6)(A). Having EPA provide the requisite notice fits seamlessly with this framework.

D. EPA Should Evaluate A Facility's Compliance as of the Supplemental Proposed Rule's Effective Date

As noted, in addition to being "in compliance" with applicable Section 111 standards, Congress placed two additional conditions on the waste emission charge exemption. Specifically, the EPA Administrator has to make a "determination … that (i) methane emissions standards and plans pursuant to subsections (b) and (d) of section 7411 of this title have been approved and are in effect in all States with respect to the applicable facilities" and "(ii) compliance with the requirements described in clause (i) will result in equivalent or greater emissions reductions" than EPA's November 2021 proposal. 42 U.S.C. § 7436(f)(6)(A).

With regard to the timeline for making these determinations, GPA Midstream urges EPA to interpret Section 136(f)(6)(A) to be reasonably consistent with the overall intent to incentivize sources to comply with Section 111. Hence, with regard to new sources, EPA should confirm that, for purposes of determining that the waste emission charge exemption applies, it will use the Subpart OOOOb effective compliance date and make the necessary evaluation of equivalency at the time it issues a final rule. This will ensure a reasonable application of the regulatory compliance exemption from the waste charge. There is no reason for a new source subject to Section 111(b) to wait for any state to choose to incorporate new source emission standards. As states are not obligated to adopt such standards for the standards to be "in effect" in a state, *see* 42 U.S.C. § 7411(c), such an interpretation could render the exemption a nullity, even if only temporarily, for those sources within states that delay or choose not to adopt their own new source standards. Likewise, it would be illogical to wait for a state to propose and implement a plan for existing sources that would not apply to the new source subject to Section 111(b) standards. Such an interpretation would accomplish the opposite of Congress's intent in creating the exemption, by punishing complying facilities rather than incentivize continued compliance.

EPA should likewise adopt a reasonable interpretation of the direction for standards and plans to be in effect "with respect to" the applicable facilities. Accordingly, EPA should allow sources that comply with the Subpart OOOOc emission guidelines, establishing the minimum "standards and plans" for the facility, to be able to show compliance and thereby establish coverage for the exemption. That would incentivize sources to comply early—even before a state goes through what can be an often long planning and adoption process. At a minimum, EPA should confirm that the reference to "all states" does not mean a facility must await for other states to act. Waiting for each and every state to adopt an EPA-approved plan would otherwise unfairly restrict a facility's ability to utilize the exemption, contrary to Congress' intent.

XIV. The Proposed Requirements for States to Show Their State Plan is Equivalent to EPA's OOOOc Emissions Guidelines Are Contrary to the Clean Air Act

The Supplemental Proposed Rule's various proposed changes to how States will establish emission limitations for existing sources raises numerous legal and factual concerns. We urge EPA to rethink this approach.

To begin, EPA is proposing through the Supplemental Proposed Rule to finalize significant changes to Subpart Ba, governing how States establish existing source performance standards, while simultaneously proposing similar changes through a separate rulemaking. *See* 87 Fed. Reg. 79,176 (Dec. 23, 2022) ("Proposed Subpart Ba Rule"). There are not only differences between the two proposals, but the Supplemental Proposed Rule suggests EPA has already determined what revisions it will make to Subpart Ba regardless of the public notice and comment process required under the Administrative Procedure Act. EPA should await its Ba rulemaking and follow those procedures, rather than create separate procedures in this rule.

More fundamentally, we urge EPA to rethink its approach, because its proposal is contrary to Congress' clear direction in the plain language of Section 111(d) to grant the States substantial discretion to develop their governing plans for existing sources. Yet, the substance of the EPA's proposal would impose an unprecedented level of federal micro-management over how States would establish emission limitations for existing sources and strip away the discretion that Congress gave to the States under Section 111(d). In support of its proposal, EPA has selected out phrases from the statute to create its "satisfactory plan" and "standards of performance" theories for interpreting the Act. But, EPA's reading is contradicted by Section 111's plain language and structure, as well as case law interpreting that statute.

Even if these proposed revisions were lawful – and GPA Midstream believes that they clearly are not – the rationale for imposing them lacks a record basis, includes impermissibly vague requirements, and will have the effect of making States' consideration of facilities' remaining useful life and other factors so onerous as to be practically impossible, despite Congress expressly authorizing States to consider those matters.

A. The Supplemental Proposed Rule is Neither the Vehicle for Proposing Revisions to Subpart Ba Nor Should it Assume that Such Proposed Revisions are Already Effective

First, EPA should address any potential changes to the process for states to develop state plans under EPA's separate, pending rulemaking to revise subpart Ba, not this rulemaking.

The Supplemental Proposed Rule's preamble explains EPA would conduct "a source-by-source evaluation" to determine whether a State's submitted program may be deemed equivalent to the proposed presumptive standards. *See* 87 Fed. Reg. at 74,814 (proposing "five basic criteria" for equivalency analysis). However, those criteria are not found in 40 C.F.R., Part 60, Subpart Ba, which governs EPA's review of state plans submitted under Section 111(d). EPA notes that it is proposing to revise Subpart Ba through a separate rulemaking, but the Proposed Subpart Ba Rule also does not contain or reference the proposed "five basic criteria" described in the Supplemental Proposed Rule. It is illogical for EPA to be using preamble language to attempt to fashion separate criteria for just this proposal.

EPA also proposes major revisions to when States may consider facilities' remaining useful life or other factors ("RULOF") to establish less stringent emission limits for a facility or class of facilities. 87 Fed. Reg. at 74,817. Here, the Supplemental Proposed Rule is clearly mandating that

States use the new criteria for RULOF that are not found in existing regulations. Instead, the Supplemental Proposed Rule incorporates new standards from the *Proposed* Subpart Ba Rule.

We urge EPA to reconsider this approach as well. By proposing the same or similar revisions in two separate rules, EPA gives the appearance that the Proposed Subpart Ba Rule is a *fait accompli*, already determined by EPA to be effective in practice before it was even proposed, much less before EPA considered public comments on the Subpart Ba Rule and finalized it. This is impermissible under the Administrative Procedure Act. *See*, *e.g.*, *Nat'l Tour Brokers Ass'n v. United States*, 591, F.2d 896, 902-03 (D.C. Cir. 1978) (the purpose of the Administrative Procedure Act's public comment provision is so that the agency may "benefit from the expertise and input of the parties who file comments" and "maintain[ ] a flexible and open-minded attitude towards its own rules"); *U.S. Steel Corp. v. EPA*, 595 F.2d 207, 214-15 (5th Cir. 1979) (agency must "ensure that affected parties have an opportunity to participate in and influence agency decision making at an early stage, when the agency is more likely to give real consideration to alternative ideas").

Instead, EPA should withdraw the portion of the Supplemental Proposed Rule that purports to implement revisions to Subpart Ba so that the Proposed Subpart Ba Rule may proceed separately and under the normal rulemaking process.[35] This does not need to delay this rulemaking. In the meantime, EPA may simply proceed under existing regulations for state plans while the agency finalizes revisions to subpart Ba.

B. EPA Lacks Authority to Impose Substantive Conditions on the States' Use of RULOF

GPA Midstream also urges EPA to drop its attempt to revise its rules to limit the discretion given states to implement its authority governing existing sources. Nothing in Section 111 of the Act provides EPA with the authority to impose what the Supplemental Proposed Rule calls "threshold requirements for considering Remaining Useful Life and Other Factors." 87 Fed. Reg. at 74,819-25. These "threshold requirements" are impermissible substantive conditions on when or how States may exercise the discretion Congress granted the States in considering RULOF to establish existing source emission standards under Section 111(d).

Moreover, EPA should likewise not finalize these regulatory changes, which are directly contrary to the text of the statute and the cooperative-federalism structure of Section 111(d), which relegates the Agency to a limited role. EPA cannot unilaterally re-define the roles that Congress assigned to each of EPA and the States through counter-textual interpretations of the terms "satisfactory plan" and "standards of performance." Further, the proposed multitude of conditions and requirements that States would have to satisfy ill-conceived, lack a record basis, and are collectively so onerous that EPA would deprive States of an option that Congress clearly provided under the statute.

[35] GPA Midstream plans on submitting comments on the Proposed Subpart BA Rule and incorporates those comments here by reference.

For all of these reasons, EPA should withdraw its various unlawful conditions on the States' use of RULOF.

1. EPA's Role Under Section 111(d) is Limited to Establishing Procedural Regulations While States Establish Standards of Performance

EPA has erred in the Supplemental Proposed Rule by improperly seeking to alter the respective responsibilities of EPA and the States under Section 111(d)(1). In short, while EPA establishes emission limitations for new sources under Section 111(b), the States establish emission limitations for existing sources under Section 111(d) with EPA playing a very limited procedural role. Section 111(d)(1) only permits the Administrator to "prescribe regulations which shall establish a procedure similar to that provided by section 7410 of this title under which each State shall submit to the administrator a plan" for existing sources. 42 U.S.C. § 7411(d)(1). Those procedural regulations will differ from Section 7410 only in that they "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." *Id.* Section 111(d)(1) does not authorize the Administrator to impose conditions on the approval of a State plan. Therefore, if such authority exists, it must come from Section 110. Yet, the Supplemental Proposed Rule never examines EPA's authority under Section 110. However, nothing in Section 110 provides EPA with any substantive powers in establishing Section 111(d)(1) emission limitations.

Section 110(k) governs EPA's review of State plans and actions on them. Of relevance, EPA must make a completeness find within 60 days indicating whether or not the state plan meets minimum statutory criteria, 42 U.S.C. § 7410(k)(1)(B), and either approve, partially approve, conditionally approve, or disapprove a state plan depending upon whether "it meets all of the applicable requirements of this chapter." *Id.* § 7410(k)(3). Thus, Section 7410, as incorporated by 7411(d), only authorizes EPA to create a procedural framework for the submission, review, and approval (or disapproval) of a state plan. Approval or disapproval is based on statutory criteria only (*i.e.*, "applicable requirements of this chapter"). Nothing in either Section 7410 or 7411(d) authorizes EPA to impose additional substantive requirements on when States may use RULOF and EPA has not identified any statutory ambiguity that it is interpreting.[36]

Further, the D.C. Circuit very recently held that EPA's interpretation of Section 111(d) responsibilities is impermissible. EPA cites to *American Lung Association v. EPA*, 985 F.3d 914 (D.C. Cir. 2021) to summarize the 2019 Affordable Clean Energy Rule litigation, 87 Fed. Reg. at 74,812, 74,817, but it ignored the D.C. Circuit's explanation of the different roles that EPA and the States serve under Section 111(d). As the court stated: "Once the EPA identifies a best system that meets" the requirements of Section 111(a) "and calculates the degree of emission limitation it allows, the Clean Air Act leaves it to the States to set their own standards of performance for their existing pollution sources." 985 F.3d at 962 (emphasis added). "The cooperative-federalism design of Section 7411(d) gives the States broad discretion in achieving those limitations." *Id.* In fact,

[36] *See*, *e.g.*, *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427 (2014) (agencies cannot re-write unambiguous statutory terms as they only have discretion to interpret ambiguous language); *Michigan v. EPA*, 268 F.3d 1075, 1082 (D.C. Cir. 2001) ("Mere ambiguity in a statute is not evidence of congressional delegation of authority.").

"under Section 7411(d), the EPA does not impose the 'best system of emission reduction' on anyone. Instead, each State decides for itself what measures to employ to meet the emission limits, and in so doing may elect to consider the 'remaining useful life' of its plants and 'other factors.'" *Id.* Notably, this was not merely a concurrence with an agency interpretation that EPA would be free to change in the future; this was the court's explanation of Section 111's unambiguous "statutory design." *Id.* Thus, both the text of Section 111, and a recent D.C. Circuit interpretation of that text, make it clear that Congress did not provide EPA with any authority to regulate how States establish existing source emission limits under Section 111(d) or to cabin the "broad discretion" provided to States under that statute.

2. The Supplemental Proposed Rule's "Satisfactory Plan" Interpretation is Contradicted by the Statute and is Unreasonable

In support of its proposal, EPA relies on an erroneous interpretation of Section 111(d), as EPA would substantially alter the roles of EPA and the States established by statute's text and structure and recognized by the D.C. Circuit, based on a strained and implausible reading of Section 111(d)(2)(A). That sub-section governs federal implementation plans promulgated where a "State fails to submit a satisfactory plan" as the Administrator "would have under section 7410(c) of this title in the case of failure to submit an implementation plan." Instead of naturally interpreting this sub-section as providing EPA with the authority to issue federal emission standards for existing sources whenever a State either fails to submit a plan or the plan is disapproved (a reading that tracks the referenced Section 7410(c)), EPA proposes to read the term as giving it a super power to limit the States' authority in the first place. According to EPA, the phrase "satisfactory plan" grants EPA vast and unprecedented powers to impose extensive conditions that restrict how States establish existing source emission limitations. According to the Supplemental Proposed Rule, "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." 87 Fed. Reg. at 74,818. This interpretation violates several basic rules of statutory construction and is, therefore, not a reasonable (or even permissible) reading of Section 111.

To begin, EPA's interpretation merely begs the question. It declares that EPA has the authority to regulate a State's use of RULOF because a "satisfactory plan" must comply with EPA regulations governing a States' use of RULOF. Thus, the Supplemental Proposed Rule presupposes an authority to regulate the States without actually trying to find such an authority in Section 111(d)(1) – an impossible task, given the subsection's text and structure, as well as the D.C. Circuit's ruling.

Further, EPA's "satisfactory plan" interpretation violates basic principles of statutory construction. Thus, it is not a reasonable construction of Section 111(d)(1) and will warrant no deference in court. *See Chevron USA Inc. v. NRDC, Inc.*, 467 U.S. 837, 844 (1984) (courts will only defer to "a reasonable interpretation made by the administrator of an agency"). For instance, the interpretation reads the following statutory terms out of the text:

- Under Section 111(d)(1), the Administrator is limited to "prescrib[ing] regulations which shall establish a procedure similar to that provided by Section 7410 of this title." Under the "satisfactory plan" interpretation, the Administrator would have virtually unlimited substantive powers to establish existing source standards of performance by prohibiting States from exercising their own discretion, not the mere power to "establish a procedure."

- Under Section 111(d)(1), "each State," not EPA, "establishes standards of performance for any existing source for any air pollutant." Under the "satisfactory plan" interpretation, EPA would dictate how standards of performance for existing sources would be established, not States.

- Under Section 111(d)(1),"the State," not EPA, "take[s] into consideration, among other factors, the remaining useful life of the existing source to which such standard applies." Under the "satisfactory plan" interpretation, the States' "consideration" of RULOF would be so circumscribed by EPA as to become a mere mechanical exercise of endorsing EPA's emission guidelines.

- Under Section 111(d)(2), EPA only has the authority described in Section 7410(c). That section allows for a Federal Implementation Plan when a State Implementation Plan is disapproved for a failure to comply with the statutory requirements of Section 7410(k)(1)(A). Nothing in Section 7410(c) provides EPA with authority to create new standards with which a State plan must comply. Under the "satisfactory plan" interpretation, Congress' cross-reference to Section 7410(c) would be meaningless and the sub-section's language would effectively terminate after the phrase "fails to submit a satisfactory plan."

In fact, EPA's "satisfactory plan" interpretation improperly re-writes Section 111(d) as to render the majority of Section 111(d)(1)'s text, and half of Section 111(d)(2)(A)'s text, superfluous. *See*, *e.g.*, *Hibbs v. Winn*, 542 U.S. 88, 101 (2004) (a "statute should be construed so that effect is given to all its provisions, so that no part will be inoperative or superfluous, void or insignificant") (internal quotations omitted). The Supplemental Proposed Rule's "satisfactory plan" approach is not a permissible interpretation of the statute, much less a reasonable one.

Nor does the "satisfactory plan" interpretation consider the overall context and structure of Section 111. A "reasonable statutory interpretation must account for both 'the specific context in which … language is used' and 'the broader context of the statute as a whole.'" *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427, 2442 (2014) (quoting *Robinson v. Shell Oil Co.*, 519 U.S. 337, 341 (1997)) (alterations in original); *see also Univ. of Texas Southwestern Med. Ctr. v. Nassar*, 570 U.S. 338, 353 (2013) (interpretations cannot be "inconsisten[t] with the design and structure of the statute as a whole"). The "satisfactory plan" interpretation would make Congress' clear decision to split the responsibility for establishing standards of performance between EPA (new sources) and the States (existing sources) completely illusory as, despite the text and structure, EPA would dictate standards of performance under both subsections.

And, finally, the "satisfactory plan" interpretation is of a type that courts have strongly and repeatedly disfavored. "Congress, we have held, does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions – it does not, one might say, hide elephants in mouseholes." *Whitman v. Amer. Trucking Assns., Inc.*, 531 U.S. 457, 468 (2001). Courts are especially skeptical of such interpretations where, as here, an agency appeals to "vague terms or ancillary provisions" to overcome specific statutory delegations of authority. *Cf. Banks v. Booth*, 3 F.4th 445, 449 (D.C. Cir. 2021) ("Appellees would have us hold that after having gone to this trouble with specificity to state exactly what it meant, Congress *sub silentio* created a further exception to its clear meaning … we are not going to hold that Congress enumerated the mice and then unleashed an invisible elephant to trample the field."). Here, the Supplemental Proposed Rule uses the vague and ancillary term "satisfactory plan" – residing in Section 111(d)(2)(A) – to wrench away the clear authority that Congress provided to States in Section 111(d)(1). Nothing in the term "satisfactory plan," or its surrounding context, indicates that Congress intended to modify Section 111(d)(1), much less provide EPA with the power to almost entirely constrain the States' "broad discretion" under that subsection. *Amer. Lung Ass'n*, 985 F.3d at 962.

3. The Supplemental Proposed Rule's "Standards of Performance" Interpretation is Unreasonable and Impermissible

The Supplemental Proposed Rule separately argues that "there is a fundamental obligation under CAA section 111(d)" that existing source emission limits "reflect the degree of emission limitation achievable through the application of the BSER, as determined by the EPA." 87 Fed. Reg. 74,816 (emphasis added). This argument claims that, because Section 111(d) uses the term "standard of performance," then Congress silently intended for EPA to establish existing source emission limits under Section 111(d)(1), not the States. *Id.* For the same reasons as the "satisfactory plan" interpretation, the "standard of performance" interpretation is an impermissible and unreasonable one that lacks a statutory basis, contradicts Section 111(d)'s text and structure, and violates basic principles of statutory construction.

C. The Supplemental Proposed Rule Provides no Reason Why the RULOF Revisions are Needed

Even if EPA had the authority to impose new conditions on States' use of RULOF, the Supplemental Proposed Rule fails to provide a rational, record-based reasoning for those conditions. Instead, the Supplemental Proposed Rule bases its proposed revisions on a series of hypothetical scenarios that do not withstand serious scrutiny. Again, we urge EPA to reconsider its approach.

As we understand it, the premise in EPA's proposal is that its regulations regarding RULOF, 40 C.F.R. § 60.24a(e), which were revised only four years ago, now lack "clear parameters for states on how and when to apply a standard less stringent than the presumptive level of stringency." 87 Fed. Reg. at 74,817.[37] Nothing about § 60.24a(e) is problematic. States

[37] GPA Midstream agrees with the Supplemental Proposed Rule's statement that, while the 2019 revisions to Subpart Ba were challenged, that challenge did not encompass 40 C.F.R. § 60.24a(e) and the court in *American Lung Association v. EPA* did not vacate that regulation. 87 Fed. Reg. at 74,817.

may demonstrate that applying the presumptive standard of performance (1) involves unreasonable costs due to a plant's age, location, or process design, (2) physically impossible, or (3) involves other factors "that make application of a less stringent standard or final compliance time significantly more reasonable." 40 C.F.R. § 60.24a(e). The existing regulation employs a rule of reason – a very commonly used standard under the Administrative Procedure Act – and factor (3) is open-ended, as it must be given Congress' decision to allow States to consider unenumerated "other factors" instead of creating a definitive list of considerations.

According to the Supplemental Proposed Rule, however, Section 60.24a(e) "does not provide clear parameters for states on how and when to apply" RULOF. 87 Fed. Reg. at 74,818. More specifically, EPA worries that "the reference to reasonableness in this provision are potentially subject to widely differing interpretations and inconsistent application among states developing plans, and by the EPA in reviewing them" that "could effectively undermine the overall presumptive level of stringency envisioned by the EPA's BSER determination and render it meaningless." *Id.* There are multiple problems with this rationale.

First, it is entirely speculative. The Supplemental Proposed Rule has not identified any questions that have arisen from the actual application of Section 60.24a(e). In fact, the Supplemental Proposed Rule "did not identify any provision in any of the state oil and natural gas regulations that included a less stringent standard for equipment or operations with a shortened lifespan." 87 Fed. Reg. at 74,818. In other words, EPA has no information showing that the proposed revisions are necessary or helpful, as no State has yet used the RULOF provisions for crude oil or natural gas sources.

Second, the concern that States "could" apply RULOF in a way that "effectively undermine[s] the overall presumptive level of stringency envisioned by the EPA's BSER determination and render it meaningless," *id.*, is not only speculative, but it misunderstands Section 111(d)'s purpose. EPA's BSER determination in its emission guidelines is always a starting point for States under Section 111(d), and therefore, it could never be "meaningless" EPA's proposal asserts. But most importantly, and contrary to the EPA's concern, the Congress intended that States, under certain circumstances, be free to implement standards less stringent than EPA's BSER determination. As one court explained, "[a]s with most legislation, the Clean Air Act amendments reflected a congressional compromise … As one legislative compromise, the Clean Air Act has less stringent regulations regarding existing power plants as compared to newly constructed sources of electricity. In other words, existing plants were 'grandfathered' in recognition of the expense of retrofitting pollution-control equipment." *United States v. EME Homer City Generation LP*, 823 F. Supp. 2d 274, 279 (W.D. Pa. 2011) (citing Section 111(d)); *see also WEPCO v. Reilly*, 893 F.2d 901, 909 (7th Cir. 1990) (citing legislative history justifying more lenient emission standards for existing sources).

Thus, the entire purpose of Section 111(d)'s RULOF provision is to allow States to implement emission limitations less stringent than BSER where the States believe that the remaining useful life – and unenumerated "other factors" – warrant it. Revising the implementing regulations to prohibit, or severely restrict, a State's ability to implement less stringent emission standards when considering "among other factors, the remaining useful life of the existing source," 42 U.S.C. § 7411(d), is contrary to the statutory purpose, the legislative compromise and the

principles of federalism embodied in Section 111. As discussed above, the notion that existing source emission limits must hew to "the overall presumptive level of stringency envisioned by the EPA's BSER determination," is contrary to the statute's text and structure, which provide the States' with "broad discretion" in establishing existing source limits. *Amer. Lung Ass'n*, 985 F.3d at 962. Thus, ensuring consistency between 111(b) new source standards and 111(d) existing source standards is not a legitimate rationale.

Third, Section 111(d) does not indicate that Congress believed that consistency between or among State existing source standards was either necessary or desirable. As the D.C. Circuit explained, "each State decides for itself what measures to employ to meet the emission limits, and in so doing may elected to consider the 'remaining useful life' of tis plants and 'other factors.'" *Amer. Lung Ass'n*, 985 F.3d at 962. The Supplemental Proposed Rule does not identify anything in Section 111(d) that justifies a contrary interpretation. This means that its concern that "the references to reasonableness in" 40 C.F.R. § 60.24a(e) "are potentially subject to widely differing interpretations and inconsistent application among the states," 87 Fed. Reg. at 74,818, is directly contrary to the statutory framework in Section 111 and the broad discretion afforded to individual States to decide "for itself."[38]

Fourth, EPA and States have been implementing air emission standards that incorporate the "remaining useful life" of regulated facilities under the Regional Haze program for decades without any concern for "widely differing interpretations and inconsistent application among states developing plans." 87 Fed. Reg. at 74,818. As with Section 111(d), the Regional Haze program gives States primary authority to establish air pollutant emission limitations that consider "the remaining useful life of the source" and other factors. 42 U.S.C. § 7491(g)(2); *see also* 40 C.F.R. §§ 51.301 ("remaining useful life" included in the definition of Best Available Retrofit Technology); 51.308(d)(1)(i)(A) (States consider "remaining useful life" in establishing Reasonable Progress Goals); 51.308(e)(1)(ii)(A) (determining Best Available Retrofit Technology); 308(f)(2)(i) (emission reduction measures that consider the "remaining useful life"). EPA and the States have collectively handled several dozen Regional Haze plans since 1999 without any indication that the methodology for State consideration of "remaining useful life" was confusing, inappropriately inconsistent, or frustrating the underlying goals of the Regional Haze program. Thus, the Supplemental Proposed Rule's claim that Section 111(d)'s implementing regulations require significant changes to resolve confusion or improper inconsistency surrounding RULOF is contradicted by the absence of such problems under the Regional Haze program.

D. The Proposed RULOF Criteria are Fundamentally Flawed

Even assuming EPA could create these RULOF criteria, the proposed requirements are, individually, arbitrary and capricious. Collectively, they would make State consideration of RULOF in establishing existing source emission standards so onerous and burdensome that EPA

[38] In addition, the Supplemental Proposed Rule's claim that the Section 60.24a(e)(1) reasonableness standard ("Unreasonable cost of control") is so vague that it necessitates clarification, 87 Fed. Reg. at 74,819, is contradicted by its simultaneous proposal to retain the "unreasonable cost of control" standard. *Id.* at 74,820. GPA Midstream supports retaining the "unreasonable cost of control" standard but the Supplemental Proposed Rule's argument that a standard it proposes to retain justifies revisions to other aspects of the regulations is arbitrary and capricious.

would effectively foreclose an option that Congress specifically provided to States. The result is that States would be forced to implement EPA's presumptive standards, surrendering to EPA the "broad discretion" that Congress intended them to exercise.

1. The Proposed "Fundamentally Different" Criterion is Fundamentally Flawed

To satisfy RULOF, EPA has created criteria based on cost, physical impossibility or technical impracticability, and "other factors specific to the facility (or class of facilities) that are fundamentally different from the factors considered in the determination of the best system of emission reduction" in EPA's emission guidelines. Proposed § §60.5365c(a)(1)-(3).

We urge EPA to reconsider the "fundamentally different" criteria, as it is flawed in at least two ways. First, "fundamentally different" is just as vague and ambiguous as "reasonable," the word that EPA claims requires additional definition. 87 Fed. Reg. at 74,819. Second, it practically requires that a State demonstrate that EPA's presumptive standards are arbitrary and capricious in a specific application. Nothing in Section 111(d) indicates that Congress intended for States to consider RULOF only in extreme, outlier scenarios that are "fundamentally different."

In fact, the Supplemental Proposed Rule illustrates how impractical RULOF would become under this "fundamentally different" criterion by claiming that States must demonstrate that BSER costs "would be exorbitant, greater than the industry could bear and survive, excessive, or 'unreasonable." 87 Fed. Reg. at 74,818 (internal quotations omitted); *see also id.* at 74,819 ("RULOF will be applicable only for a subset of sources for which implementing the BSER would impose unreasonable costs or not be feasible due to unusual circumstances that are not applicable to the broader source category that the EPA considered when determining the BSER."). In a more specific example, the Supplemental Proposed Rule asserts that, where EPA estimated that the cost-effectiveness of the wet seal centrifugal compressor emission standard to be $711 per ton of methane removed, to demonstrate unreasonable cost, a State would have to determine that for an "affective facility in their state, the cost effectiveness was <u>$71,000 per ton</u> of methane removed." 87 Fed. Reg. at 74,820 (emphasis added). The notion that States can only justify unreasonable costs by demonstrating, to EPA's satisfaction, that cost-effectiveness will be <u>two orders of magnitude higher</u> than the BSER estimate has no basis in the statute, is patently arbitrary and capricious, and would effectively preclude any State from ever establishing emission limitations based on methods that Congress authorized under Section 111(d). The Supplemental Proposed Rule protests that it only provided the example "for illustrative purposes" and that States do not necessarily need to demonstrate that costs will "be two orders of magnitude higher than the presumptive standard to be considered unreasonable." 87 Fed. Reg. at 74,820. However, this is the only example that the Supplemental Proposed Rule provided using a cost-effectiveness comparison. Both EPA and courts could refer back to this example as indicating that EPA's interpretation of "unreasonable costs" should require a cost difference so extreme that even four or five times the BSER cost-effectiveness (*i.e.*, approximately $2,850 to $3,550 per ton of methane removed) would not be enough to be "unreasonable."

2. The Proposed Standard for How States Account for Remaining Useful Life Misunderstands Section 111(d) and Lacks a Record Basis

Further, the very premise underlying EPA's claimed need for standards dictating how States account for a facility's remaining useful life is incorrect. Nothing in Section 111(d) indicates that Congress intended for individual State considerations to avoid "inconsistent application … across states." 87 Fed. Reg. at 74,821. Yet, EPA bases its proposal on the unsupported notion that States must mimic the process EPA uses in establishing emission guidelines. Hence, EPA proposes to compel each State to include "a source-specific BSER for the designated facility" that considers the same five factors used by EPA, and "must identify all control technologies available for the source and evaluate the BSER factors for each technology, using the same metrics and evaluating them in the same manner as the EPA did in developing the" emission guidelines and the resulting "standard must be in the same form (*e.g.*, numerical rate-based emission standard) as required by the EG OOOOc presumptive standard." *Id.* States must also provide analyses of why less stringent emission limitations do not "undermine the control objectives of the EG and CAA section 111(d) itself" and document "the time needed to purchase and install equipment required to comply, the time needed to develop a compliance plan and secure the services of specialized contractors to perform services required for compliance, the expected window of time needed to obtain approvals of outside agencies, the time needed to conduct any required community outreach or public hearings, as well as other potential factors." *Id.* at 74,822.

Yet, the Supplemental Proposed Rule provides no legal or record basis for any of these demands. Rather, EPA simply assumes that consistency in both process and results is demanded by Section 111(d). That is directly contrary to the "cooperative-federalism design of Section 7411(d)" that "gives the States broad discretion," *American Lung Association*, 985 F.3d at 962, and would reduce States to clerks performing paperwork exercises dictated by EPA. Further, EPA's statement that its proposed process would "generally address all relevant information that states would reasonably consider in evaluating the emission reductions reasonably achievable for a designated facility," 87 Fed. Reg. at 74,821, is not supported by any record evidence. In fact, there is no discussion of the processes that States actually have used in setting existing source standards for any source categories. Thus, the Supplemental Proposed Rule declares that greater regulation of State analytical processes is required without any evidence of what States have done in the past, whether States have actually arrived at inconsistent results, and if so, that the inconsistencies are undesirable in some way. Instead, the Supplemental Proposed Rule seeks to establish standards based upon hypothetical scenarios and unsupported presumptions. Such an approach is clearly arbitrary and capricious.

3. Section 111(d)(1) Prohibits the Proposed "Capital Investment" Limitations to the Remaining Useful Life Analysis

EPA's restriction on consideration of cost is likewise unsupported and contrary to the CAA. The Supplemental Proposal "proposes that the only cost factor that" States should be permitted to "consider in a remaining useful life determination of cost unreasonableness is whether there is a significant capital investment required to design, purchase, and install equipment." 87 Fed. Reg. at 74,823. Under this standard, "EPA does not believe that all types of designated facilities should be eligible for a determination of unreasonable costs associated remaining useful

life." *Id.* Therefore, according to the Supplemental Proposed Rule, only "oil wells with associated gas, storage vessels, pneumatic controllers, and pneumatic pumps" would be eligible for a State's consideration of remaining useful life and a "cost unreasonableness determination would not be allowed for any other designated facility types." *Id.*

Yet, EPA does not identify any legal authority for such a requirement. Indeed, Section 111(d)(1) expressly prohibits the proposed requirement: "Regulations of the Administrator under this paragraph shall permit the State in applying a standard of performance to any particular source … to take into consideration, among other factors, the remaining useful life of the existing source to which the standard applies." 42 U.S.C. § 7411(d)(1) (emphases added). With respect to the State's consideration of remaining useful life, this language is unconditional and unlimited. The State may consider the remaining useful life of "any particular source" or any "existing source." The only limitation is placed on the Administrator, not the States. The Administrator "shall permit" the consideration of any source's remaining useful life without any suggestion that Congress granted the Administrator the discretion to constrain the States.

4. The Proposed "Contingency Requirements" Lack a Legal or Record Basis

The Supplemental Proposed Rule also proposes "contingency requirements" that would effectively convert a State's determination that applying emission guidelines to a facility is not reasonably cost-effective into a binding permit term. Two such examples provided in the Supplemental Proposed Rule would be that, (1) if low oil prices would make application of the emission guidelines to a facility unreasonably expensive then a federally enforceable permit conditions would require the facility to shut down if oil prices increased (making the emission guidelines more cost effective), 87 Fed. Reg. at 74,821-22, and (2) if a short remaining useful life makes application of the emission guidelines unreasonably cost-effective, then the facility's retirement date must become a federally enforceable permit condition requiring it to shut down on that date. *Id.* at 74,822.

We again urge EPA to reconsider this approach. Nothing in the statute authorize these restrictions on defining the implementation of RULOF – and none is cited in the proposal. Nor does the record for the proposal indicate that such conditions have been used or would be needed. These "contingency requirements" address purely hypothetical scenarios without any consideration of what States actually have done in setting emission limits under Section 111(d). In addition, EPA previously rejected the requirement to make a facility's retirement date a federally enforceable permit condition, 87 Fed. Reg. at 74,823, in a similar circumstance. Under the 2005 Regional Haze Rule, EPA rejected a commenter's request that, "to the extent that assertions regarding a plant's remaining useful life influences the BART decision, there must be an enforceable requirement for the plant to shut down by that date." 70 Fed. Reg. 39,104, 39,127 (July 6, 2005). EPA rejected the request, explaining that the Clean Air Act would require such a plant to either shut down at the retirement date, face an enforcement action, or install BART controls. In other words, the facility would be able to adapt to any changes in condition. The Supplemental Proposed Rule not only changes EPA's position on this issue, but does so without explanation or even a recognition that it is changing its position.

5. The Proposed Health and Welfare Components of State Emission Limitations Have no Legal or Record Basis and are Impermissibly Vague

The Supplemental Proposed Rule imposes several additional demands on States related to impacted communities. 87 Fed. Reg. at 74,824. These include requiring States "to consider the potential health and environmental impacts on communities most affected by and vulnerable to the impacts from the designated facility considered in a state plan for RULOF provisions," implement "meaningful engagement requirements," and "describe the health and environmental impacts anticipated … along with any feedback the state received during meaning engagement." *Id.*

The protection of communities EPA and States find are impacted is an important policy goal, but not one that EPA is authorized to require States to address as part of a State's consideration of RULOF. The text of Section 111(d)(1) speaks only of a State's "consideration" of "the existing source to which such standard applies." Congress did not require or authorize any other considerations, such as impacts to health or welfare – impacts that Congress frequently included in various Clean Air Act analyses when it chose to do so. *See*, *e.g.*, 42 U.S.C. §§ 7408(a)(1)(A) (identifying air pollutants "anticipated to endanger public health and welfare"); 7409(b)(1) (establishing air quality standards "requisite to protect the public health"); 7411(b)(1)(A) (Administrator will publish list of air pollutant emission sources "which may reasonably be anticipated to endanger public health or welfare"). Section 111(d) is specific as to what States may consider ("among other factors, the remaining useful life of the existing source") and never compels States – through words like "shall" or "must" – to consider anything at all. Had Congress intended to direct States to consider generalized "overall health and welfare objectives" in Section 111(d) it would have done so. *Morales v. Trans World Airlines, Inc.*, 504 U.S. 374, 384 (1992) (""commonplace of statutory construction that the specific governs the general.")

In addition, the record EPA has proffered here does not support the specific mandate that EPA would impose on States through this regulation.

First, the Supplemental Proposed Rule declares that these new requirements are necessary "[i]n order to address the potential exacerbation of health and environmental impacts to vulnerable communities as a result of applying a less stringent standard." 87 Fed. Reg. at 74,824; *id.* ("such standards have the potential to result in disparate health and environmental impacts"); *id.* ("communities could be put in the position of bearing the brunt of the greater health and environmental impacts"). EPA has not, however, offered data or analysis regarding the likelihood of any designated facility, or group of designated facilities, of impacting the health of any vulnerable community or the extent of any such potential impacts. Therefore, there is no record basis supporting the proposal.

Second, the proposed regulatory text is significantly different in several important respects from the preamble explanation providing the supporting rationale. The proposed regulatory text requires a State to demonstrate that the "increased emissions for the duration of the remaining useful life will not result in negative impacts to the surrounding communities, including those most affected by and vulnerable to the health and environmental impacts of the plan." Proposed Section 60.5365c(e)(1)(vii). Again, EPA and States may choose to conduct this type of analysis that may

offer significant data for the government to consider in fashioning policy, but this language is significantly problematic here in the following respects:

- The State must make some demonstration that the facility's remaining life emissions "will not result in negative impacts to surrounding communities." The preamble at 87 Fed. Reg. at 74,824 supports this requirement by claiming it only requires States to "consider the potential health and environmental impacts on communities most affected by and vulnerable to the impacts from the designated facility." The proposed language does not define a "negative impact" or explain what a State must demonstrate. Neither the preamble nor the proposed regulatory language describe how a State may satisfy EPA that these emissions are acceptable.

- The preamble claims that States must analyze emissions for vulnerable communities, which are not defined. *Id.* The proposed regulatory language requires a much broader analysis; one that includes all "surrounding communities." Neither the preamble nor the proposed regulatory language define "surrounding communities," so as proposed, States will have no way of knowing how far their analysis must go.

- The need to provide some analysis of emissions, presumably including their concentration and dispersion, over the facility's remaining life implies that some form of air modeling will be required. For many sources this will be a significant burden layered onto the additional burdens of these regulations imposed on sources and State regulators. However, for other designated facilities, which may include individual pieces of equipment, such as a pneumatic controller, neither the preamble nor the proposed regulatory language provides any indication of what kind of demonstration EPA is expecting.

Therefore, the Supplemental Proposed Rule provides a defective rationale for one set of health and welfare requirements while actually proposing regulatory language that would impose very different requirements. The requirements in the proposed regulatory language are never explained and, therefore, lack the necessary "reasoned explanation." *See*, *e.g.*, *Amer. Wild Horse Preservation v. Perdue*, 873 F.3d 914, 920 (D.C. Cir. 2017) (the APA "mandates that" agencies "give reasoned explanation for the actions that they do take"). And, finally, "[e]lementary administrative law norms of fair notice and reasoned decisionmaking demand that" an agency define what it requires of regulated parties. *Checkosky v. SEC*, 139 F.3d 221, 224 (D.C. Cir. 1998). Here, the proposal (whether that be the Supplemental Proposed Rule's preamble or the proposed regulatory language) does not define key terms ("vulnerable communities," "surrounding communities," "those most affected by and vulnerable to the health and environmental impacts of the plan," "negative impacts"), the type of analysis required, such as air modeling or some unspecified qualitative analysis, or what a State must demonstrate to EPA in order to obtain approval. Therefore, even if EPA had the legal authority to impose these requirements, they lack record support, are unexplained, impermissibly vague, and otherwise arbitrary and capricious.

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GPA Midstream appreciates the opportunity to submit these comments and is standing by to answer any questions you may have.

Respectfully submitted,

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