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U.S. Environmental Protection Agency EPA Docket Center Mailcode 2822IT Attention: Docket ID No. EPA-HQ-OAR-2010-0505 12000 Pennsylvania Avenue, NW Washington, DC 20460

Re: Comments on Oil and Gas Sector: Emission Standards for New and Modified Sources, Proposed Rule (Docket EPA-HQ-OAR-2010-0505)

Dear Docket Clerk:

The Gas Processors Association ("GPA") appreciates this opportunity to submit comments on the Environmental Protection Agency's ("EPA's") proposed rulemaking "Oil and Gas Sector: Emission Standards for New and Modified Sources," 80 Fed. Reg. 56,593 (Sept. 18, 2015) ("proposed rule" or "proposal").

GPA has served the U.S. energy industry since 1921 as an incorporated non-profit trade association. GPA is composed of 130 corporate members of all sizes that are engaged in the gathering and processing of natural gas into merchantable pipeline gas, commonly referred to in the industry as "midstream activities." Such processing includes the removal of impurities from the raw gas stream produced at the wellhead, as well as the extraction for sale of natural gas liquid products ("NGLs") such as ethane, propane, butane and natural gasoline. GPA members account for more than 90 percent of the NGLs produced in the United States from natural gas processing. Our members also operate hundreds of thousands of miles of domestic gas gathering lines and are involved with storing, transporting, and marketing natural gas and NGLs.

#### **Summary**

GPA and its members have a strong commitment to gathering and processing natural gas in a manner that minimizes environmental impacts and reduces emissions of valuable natural gas products to the fullest extent feasible. As a result, GPA's members have taken significant steps to reduce methane and VOC emissions from their operations. A number of GPA's members are voluntary participants in EPA's Natural Gas Star Program where they have reduced methane emissions in accordance with EPA's program requirements. Over the last decade, methane emissions from the natural gas sector have declined significantly:

The EPA's Greenhouse Gas Inventory acknowledged this year that methane emissions from natural gas production have fallen 35% since 2007. That's despite a 22% increase in gas production over the same period. The EPA last year found that methane emissions from hydraulically fractured gas wells had fallen 73% from 2011 to 2013. Overall methane emissions are 17% lower than in 1990.

Political Target: Natural Gas: The methane rule is part of a regulatory wave to raise drilling costs, The Wall Street Journal (Aug. 23, 2015). In addition, GPA has a long history of working collaboratively with state and federal regulators to identify commonsense solutions on a wide range of regulatory issues—including many environmental issues. GPA hopes to continue that collaborative working relationship with EPA through this rulemaking.

At the outset, GPA is not challenging EPA's authority to regulate VOC and methane emissions under Section 111 of the Clean Air Act ("CAA"), as long as proper procedures are followed and appropriate limits are put in place that reflect the way the industry actually works in the field. At the same time, however, GPA is concerned that a number of EPA's proposed requirements do not fully and accurately reflect how the midstream segment operates in practice. As a result, we are offering a series of constructive recommendations that we believe will improve the quality of EPA's regulations and will ensure that they can be implemented effectively by our member companies. A brief summary of our comments is provided below:

**EPA must make an endangerment determination for methane emissions from the oil and natural gas sector.** (Section I). Section 111 of the CAA prohibits EPA from regulating a pollutant from a specific source category unless the agency first determines that such emissions "cause[], or contribute[] significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7411(b)(1)(A). EPA has not made such an endangerment determination here. EPA's prior endangerment determination for the oil and gas sector did not address GHG emissions.

*Recommendation:* EPA must complete a separate significant contribution endangerment determination for methane emissions from the oil and natural gas sector before issuing regulations under Section 111.

**EPA must exclude midstream assets from fugitive emissions monitoring requirements for well sites.** (Section II). EPA's proposed rule creates ambiguity and uncertainty with respect to the requirements for midstream assets that are co-located at well sites. Such assets are owned and operated by midstream operators who are legally distinct from upstream producers. Midstream operators have no control over upstream operations and thus have no control over whether or not a well site is modified and becomes subject to regulation under Section 111.

Recommendation: EPA must clarify in the final rule that the fugitive emissions monitoring program for well sites applies only to assets that are owned, operated, or leased by the producer. It can do so by limiting the scope of fugitive emissions components at well sites to those owned, operated, and leased by the producer or by defining the well site boundary as the point of transfer of custody between the producer and midstream operator.

**EPA must revise several definitions in the proposed rule.** (Section III). In several cases, EPA's proposed definitions are ambiguous or are overly broad. To avoid confusion, uncertainty, and undue burden on the oil and natural gas industry, EPA must revise and clarify the definitions for "modification", "compressor", "compressor station site", and "fugitive emissions components".

Recommendation: EPA must revise the definition of modification for compressor station sites to require the addition of a new compressor and an increase in hourly emission rates. EPA must revise the definition of compressor to include only centrifugal and reciprocating compressors to be consistent with other parts of New Source Performance Standards ("NSPS") Subpart OOOO and OOOOa. EPA must revise the definition of compressor station site to exclude compressors associated with natural gas processing plants, transmission stations, and storage facilities. EPA must revise the definition of fugitive emissions components to remove naming broad equipment categories, unnamed items, and equipment that vents as part of normal, safe operation.

**EPA must simplify the fugitive emissions monitoring program for compressor station sites.** (Section IV). Compressor station sites differ significantly from other sources where EPA has already implemented fugitive emissions monitoring programs because they are typically unmanned sources that are located in remote areas. As a result, operators will face additional challenges with respect to establishing monitoring plans, conducting fugitive emissions surveys, repairing components, re-surveying repaired components, and in verifying compliance with the fugitive emissions monitoring program.

Recommendation: EPA must greatly simplify monitoring plan to avoid unduly burdening industry. EPA must extend initial monitoring deadlines and provide a fixed, annual leak monitoring schedule for compressor stations. EPA must provide additional repair time for compressor stations considering the additional strains to repair and conduct re-surveys at these types of sites. EPA must simplify the reporting and recordkeeping requirements for fugitive emissions monitoring by limiting the information that must be maintained and reported to EPA. EPA should clarify that the "once in, always in" policy does not apply to fugitive emissions monitoring so that if a new compressor that triggers compressor station fugitive emissions monitoring is subsequently removed, the station no longer is subject to the fugitive emissions monitoring program. EPA should ensure that any new technologies developed in the future can be incorporated into the fugitive emissions monitoring program without the need for complex and time-consuming regulatory action.

**EPA must simplify and add flexibility to the emission reduction requirements for pneumatic pumps.** (Section V). EPA's proposed regulations for pneumatic pumps are overly burdensome and fail to account for the unique conditions that exist at compressor station sites. EPA significantly underestimates the cost of routing emissions from pneumatic pumps to existing control devices, raising significant questions about the cost-effectiveness of the proposed regulations. EPA also fails to provide sufficient clarity regarding the types of control devices that will trigger applicability of the proposed regulationsThe proposed regulations also lack clarity regarding certain requirements for establishing initial compliance.

*Recommendation:* EPA must revise its cost-benefit analysis before regulating pneumatic pumps. EPA must clarify that only control devices installed for compliance with Subparts OOOO and

OOOOa can trigger NSPS requirements for pneumatic pumps. EPA must provide flexibility for existing control devices that lack capacity to incorporate new emissions streams or that are not designed to meet EPA's proposed emission reduction goals. EPA must exclude low-use pneumatic pumps and like-kind replacement of pneumatic pumps from the NSPS requirements. EPA must clarify that NSPS applicability ends if the underlying control device is no longer required for the primary equipment. EPA must clarify when a source can submit a certification that there are no applicable control devices on site. EPA must extend the initial compliance deadline until 30 days after startup of a control device.

**EPA must eliminate burdensome and unnecessary Next Generation compliance requirements.** (**Section VI**). EPA's proposed Next Generation compliance requirements go beyond was is necessary to ensure that companies in the oil and gas sector comply with the proposed NSPS requirements. In many cases, these compliance requirements are redundant and add little incremental value beyond EPA's traditional recordkeeping and reporting requirements.

Recommendation: EPA must eliminate the third party verification requirements for fugitive emissions monitoring. EPA must also eliminate third party verification and continuous pressure monitoring for close vent systems. For security- and competition-based reasons, EPA must avoid disclosure of sensitive information such as digital photographs. EPA must also avoid disclosure of sensitive raw data such as third party verification data that is difficult to interpret and that could lead to misconceptions about noncompliance.

**EPA's cost benefit analysis is arbitrary and capricious.** (Section VII). EPA significantly underestimates the cost of the proposed rule while overestimating the benefits.

*Recommendation:* EPA must complete a new cost benefit analysis based on accurate cost and benefit data.

**EPA must revise its capital expenditure calculation.** (Section VIII). EPA's revised capital expenditure calculation fails to account for changes in inflation levels over the past 30 years. As a result, it specifies an impermissibly small capital expenditure threshold for triggering NSPS modification requirements.

Recommendation: EPA must adopt GPA's proposed revisions so that the capital expenditure calculation is based on a ratio of consumer price index ("CPI") data.

**EPA must incorporate pressure-assisted flares as a control device for the oil and gas sector.** (Section IX). EPA specifically invites comments on the role that pressure-assisted flares play in the oil and gas sector. Several of GPA's members have used pressure assisted flares successfully at natural gas processing plants to control emissions during large discharge events such as blowdowns, emergency events, and upsets.

*Recommendation*: EPA should incorporate pressure-assisted flares as acceptable control devices for oil and natural gas facilities that are regulated under Section 111 of the CAA.

**EPA failed to conduct a meaningful Small Business Advocacy Review Panel. (Section X).** EPA failed to conduct a meaningful Small Business Advocacy Review ("SBAR") Panel because

it submitted the proposed rule to the White House Office of Management and Budget ("OMB") before the panel's comment period closed. As a result, EPA was not able to review and incorporate the perspective of small businesses—including many GPA members—in the proposal.

*Recommendation*: EPA must reconvene an SBAR Panel before submitting the final rule to OMB to ensure that small business interests are fully accounted for in the final rule.

**EPA** must revise Subpart OOOO regulations and the proposed rule to account for issues raised in GPA's petitions for reconsideration. (Section XI). In response to EPA's final rule for Subpart OOOO, GPA filed a petition for administrative reconsideration. EPA agreed to make changes with respect to several issues, but those changes were not fully implemented. Further, a number of incomplete changes were carried over into EPA's proposal for Subpart OOOOa.

Recommendation: EPA must fully exclude compressors, pneumatic pumps, and storage devices from generally applicable notification requirements. EPA must clarify that closed vent systems may be used for reciprocating rod packing emission controls. EPA must revise the definition of responsible official to remove references to permits. EPA must eliminate inconsistencies regarding regulations for reciprocating compressors. EPA must revise recordkeeping requirements for combustion control devices to ensure consistency in the NSPS regulations.

Pursuant to this theme of collaboration with EPA, GPA and its members are prepared to engage further with the Agency on this and other rulemakings impacting the oil and natural gas sector in fulfilling the shared goal of addressing emissions and environmental consequences of our industry in a way that respects and reflects the pragmatic realities and operations in the field.

GPA appreciates the extension of the comment deadline by 17 days from November 18, 2015, to December 4, 2015. However, GPA feels that significantly more time was required to gather data and develop adequate comments for such an extensive rulemaking, and had requested a 60-day extension. GPA has made its best effort with the limited amount of time available to compile these comments, but needed more time to fully consider the significance of this rule and provide additional comments. GPA will continue review of the proposed rule and requests that any supplemental comments submitted by GPA be included in the rulemaking docket and considered fully by EPA in determining the final rule. Further, GPA is also concerned that EPA's proposed timeframe to finalize the rule in the summer of 2016 does not allow EPA adequate time to consider and address all of the public comments.

### I. EPA Must Make a Separate Significant Contribution and Endangerment Determination for GHG Emissions from Each Regulated Source Category

EPA cannot proceed with this proposed regulation because it has not satisfied the requirement of first finding that GHG emissions from the oil and natural gas sector cause or contribute significantly to an endangerment of public health or welfare as is required to promulgate these rules under the CAA. Under Section 111(b) of the CAA, EPA may not regulate a pollutant unless and until the agency makes an endangerment determination that is both source- and pollutant-specific and which meets the significance threshold specified in the

CAA. Thus, EPA must separately find that methane emissions from the oil and natural gas sector "cause[], or contribute[] significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7411(b)(1)(A).

Yet, EPA has not done the analysis to assess whether methane emissions from the oil and natural gas sector create such an endangerment, and relies instead on EPA's endangerment finding for light duty vehicles under Section 202(b) of the CAA. That is insufficient to meet the requirement imposed by the Congress. First, that endangerment finding was not based specifically on the oil and natural gas sector, and thus is irrelevant to the regulated source category here. Under Section 111(b), EPA may only regulate "a category of sources ... if in his judgment it causes, or contributes significantly to, air pollution which may be reasonably anticipated to endanger public health and welfare. 42 U.S.C. § 7411(b)(1)(A) (emphasis added). In contrast, other provisions such as Section 202 allow EPA to consider all emissions sources for a given pollutant, authorizing the Administrator to regulate emissions "which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7521(a)(1); see also id. § 7408(a)(1)(A). Thus, Section 111(b) is more demanding than other provisions of the CAA because it requires EPA to make an endangerment determination that is specific to each source category. Second, Section 202(a) of the CAA lacks the more stringent "significance" requirement imposed by the NSPS program under Section 111(b). As EPA has acknowledged, Section 111(b) is different than Section 202 because it requires a source-based determination of endangerment that includes specific finding that emissions from that source category comprise a *significant* contribution to endangerment. See 74 Fed. Reg. 66,496, 66506 (Dec. 15, 2009) ("[T]he statutory language in CAA section 202(a) does not contain a modifier on its use of the term contribute. Unlike other CAA provisions, it does not require a 'significant' contribution. See, e.g., CAA section 111(b); 2013(a)(2), (4)."). Third, EPA cannot rely on prior endangerment determinations made for the oil and natural gas sector because they did not address methane or any other GHG.

Knowing that it has not made the necessary endangerment finding, the agency argues that it may apply a "rational basis" test in lieu of the statutorily required endangerment determination. *See* 80 Fed. Reg. at 56,601. This argument is wholly unsupported as a matter of law. First, Section 111(b)(1)(A) does not leave a statutory gap for EPA to fill because the statute is not ambiguous. Section 111(b)(1)(A) expressly limits EPA's authority under NSPS to the regulation and reduction of emissions of significant "air pollution" that "endanger[s] public health and welfare." In contrast, EPA's interpretation would permit the agency to subject source categories to costly regulations under the NSPS program, even if those emissions do not significantly endanger public health and welfare. Thus, the plain language of Section 111(b) of the CAA requires EPA to make a significance endangerment determination that is both pollutant- and source-specific. EPA has not done so here, particularly since GHGs were not even considered a pollutant under the CAA until 2007 at the earliest, *see Massachusetts v. EPA*, 549 U.S. 497 (2007), which is long after EPA's Section 111(b) endangerment determination for the oil and natural gas sector. *See* 80 Fed. Reg. at 56,600 (noting that EPA's endangerment determination for the source category was made in 1979).

Second, the EPA's rational basis test would not be entitled to *Chevron* deference even if the statute were ambiguous. The EPA asserts that the proposed regulations are justified because the information presented regarding GHG emissions from the oil and natural gas sector, as well as other anthropogenic sources "provides a rational basis for the methane standards [EPA] is proposing in this action." 80 Fed. Reg. at 56,601. But in doing so, EPA ignores the "significance" requirement in Section 111(b) and replaces it with a less stringent standard that is based on EPA's subjective evaluation of health and welfare impacts from global GHG emissions and an assessment of the relative contribution of the oil and gas sector to those alleged impacts. This interpretation is so far removed from the text of Section 111(b) that EPA is not entitled to *Chevron* deference. This is particularly true since EPA cannot cite a single example outside of the context of NSPS for GHG emissions<sup>2</sup> where anything less than a source- and pollutant-specific endangerment determination was required.<sup>3</sup>

Third, as an alternative, EPA appears to suggest that the information it marshals in support of its rational basis standard would suffice to qualify as a Section 111(b) significant contribution endangerment determination for the oil and natural gas sector. 80 Fed. Reg. at 56,601. Such an argument is absurd, since EPA insists that the rational basis test can be applied in the place of a formal significant contribution endangerment determination. EPA's proposed rational basis review falls far short of what Section 111(b) requires. By basing its analysis of endangerment primarily on the agency's prior Section 202(a) endangerment determination, 80 Fed. Reg. at 56,602, EPA fails to address the more stringent significance threshold and source-category determinations that Congress established for Section 111(b). EPA's interpretation is not entitled to deference when it ignores the plain meaning of the statute. See Ohio Pub. Emps. Ret. Sys. v. Betts, 492 U.S. 158, 171 (1989). Further, EPA cannot simply describe the amount of emissions from a given source category as evidence of a significant contribution to endangerment, see 80 Fed. Reg. at 56,606, without providing some quantitative standard against which those emissions can be evaluated. Simply referencing the size of the emissions and asserting that "natural gas and petroleum systems are the largest emitters of methane in the United States," id., cannot provide a reasoned basis for the EPA to determine that those emissions are "significant" within the meaning of Section 111(b). See Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto Ins., 463 U.S. 29, 43 (1983).

Lastly, since EPA has not completed an endangerment determination for methane or GHGs for the oil and natural gas sector, it is impossible to provide a concrete benefit to reducing

<sup>&</sup>lt;sup>1</sup> Under *Chevron USA Inc. v. Natural Resources Defense Council*, 467 U.S. 837 (1984), courts apply a two-step test to determine whether an agency's interpretation is entitled to deference. First, "[i]f the intent of Congress is clear, that is the end of the matter, for the court as well as the agency must give effect to the unambiguously expressed intent of Congress." *Id.* at 843-43. Second, "if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute." *Id.* at 843.

<sup>&</sup>lt;sup>2</sup> EPA's application of this rational basis test in its recently finalized regulation of CO<sub>2</sub> emissions from fossil fuelfired power plants was heavily criticized and will likely be subject to litigation.

<sup>&</sup>lt;sup>3</sup> Judicial opinions applying a rational basis standard of review to the EPA's endangerment determinations are inapposite and offer no support for EPA's assertion that it can dispense with an endangerment determination altogether. *See e.g. National Lime Ass'n v. EPA*, 627 F.2d 416 (D.C. Cir. 1980).

methane emissions from these proposed sources. The preamble states that "EPA is including requirements for methane emissions in this proposal because methane is a GHG and the oil and gas industry is one of the country's largest emitters," 80 Fed. Reg. at 56,594; however, EPA has not identified what level of methane emissions would result in a measurable reduction of risk to public health or public welfare. Therefore, EPA cannot issue regulations to control methane emissions from the oil and natural gas sector under Section 111(b) of the CAA until it completes an endangerment determination detailing the benefits of reducing methane emissions in the oil and gas industry.

# II. EPA Must Clarify That Midstream Assets Are Excluded From the Definition of Well Site for Purposes of Fugitive Emissions Monitoring

In the final rule, EPA must clearly exclude co-located midstream assets from the fugitive emissions monitoring program for well sites. GPA is concerned that, as proposed, EPA's broad definition of "well site" and "fugitive emissions component" could be interpreted to subject midstream assets to fugitive emissions monitoring requirements simply because they are located in geographic proximity to a production facility. Such an approach is inconsistent both with the way that the oil and natural gas sector operates and with the CAA. To avoid unnecessary and unreasonable burdens on midstream operators, GPA urges EPA to make appropriate clarifications and changes to the proposed rule so that co-located midstream assets are not inadvertently included in fugitive emissions monitoring requirements designed for oil and natural gas producers.

Upstream natural gas production and midstream gas gathering and processing are fully distinct and sequential portions of the natural gas sector supply chain. After natural gas is extracted from the earth by producers, the natural gas is typically transferred to separate and legally distinct midstream companies that own and operate gas gathering lines and processing plants. Because they are separate and legally distinct entities, agreements between upstream producers and midstream operators contain precise transfer of custody agreements that define when and where natural gas extracted by producers enters into the custody and control of the midstream operator. In many cases, this occurs immediately before the natural gas enters into a metering run. In a given gathering area, a midstream company could have hundreds of metering runs located on third-party producers' well pads spread across a wide geographic area.

Because the transfer of custody location serves as the dividing line between the gas production and gas gathering sectors, it is commonly found in close proximity to the well site. In fact, in many instances, the transfer of custody location may be found within the well site's footprint. As a result, there are many cases where a midstream operator may have equipment that is co-located at the well site. In some cases, this may be a matter of convenience based on the configuration of the production and midstream assets. In other cases, it may be a matter of necessity due to the amount of land available for oil and gas development (e.g., surface disturbances are minimized to reduce impact on wildlife). In either case, a midstream company

<sup>&</sup>lt;sup>4</sup> A metering run can be used to account for the amount of oil or natural gas that passes into a gathering pipeline. When used in connection with a transfer of custody agreement, the metering run serves as the basis to determine the amount of payment that the producer owes to the midstream operator.

may own, operate, or lease equipment that is located within the physical footprint of a well site. However, even when equipment is co-located at a well site, the producer has no control over the midstream assets and the midstream operator has no control over the production assets.

Despite this important distinction between production and midstream assets, the proposed definitions appear to mistakenly group production and midstream equipment together when colocated at a single well site, even though they are owned and operated by distinct entities. Thus, EPA's proposed regulations do not clearly and sufficiently address the issue of co-located midstream assets. For purposes of EPA's proposed fugitive emissions monitoring requirements, EPA broadly defines "the collection of fugitive emissions components at a well site" as "an affected facility." Proposed 40 C.F.R. § 60.5365a(i). In turn, EPA includes broad definitions for both fugitive emissions components and well site. Fugitive emissions components are defined as:

any component that has the potential to emit fugitive emissions of methane or VOC at a well site or compressor station site, including but not limited to valves, connectors, pressure relief devices, open-ended lines, access doors, flanges, closed vent systems, thief hatches or other openings on a storage vessels, agitator seals, distance pieces, crankcase vents, blowdown vents, pump seals or diaphragms, compressors, separators, pressure vessels, dehydrators, heaters, instruments, and meters. Devices that vent as part of normal operations, 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 vent, such as the seals around the bellows of a diaphragm pump, would be considered fugitive emissions.

#### Id. § 60.5430a. A well site is defined as:

one or more areas that are directly disturbed during the drilling and subsequent operation of, or affected by, production facilities directly associated with any oil well, natural gas well, or injection well and its associated well pad. For the purposes of the fugitive emissions standards at § 60.5397a, well site also includes tank batteries collecting crude oil, condensate, intermediate hydrocarbon liquids, or produced water from wells not located at the well site (e.g., centralized tank batteries).

*Id.* Neither of these definitions reflects the fact that, due to convenience or necessity, certain distinct assets that are owned or operated by midstream companies may be co-located within the physical footprint of a well site. Thus, because some of their equipment also arguably would meet this broad definition of fugitive emissions components, co-located midstream assets could be construed as subject to proposed well site LDAR requirements under these broad proposed definitions.

Including co-located midstream assets in the fugitive emissions monitoring program for well sites is inappropriate for a number of reasons. First, as described above, equipment owned, operated, or leased by midstream operators is legally distinct from equipment owned, operated, or leased by upstream producers. Given their separate and distinct legal status EPA must establish separate requirements for upstream and midstream equipment. It is arbitrary and capricious to include some midstream assets in the fugitive emissions monitoring program simply because they are co-located within the footprint of a well pad site while excluding other midstream equipment that is located on a separate parcel of land.

Second, with respect to modifications, an LDAR program that does not distinguish between production and midstream assets raises serious concerns for GPA's midstream members. Under EPA's proposal, existing midstream equipment that is co-located at a well site could become subject to Subpart OOOOa if an upstream producer constructed a new well, refractured an existing well, or undertook a number of other actions that could increase upstream emissions at the site. Under the proposal, such a modification by an upstream operator would trigger Subpart OOOOa fugitive emissions monitoring for both the upstream and midstream assets. It is patently unreasonable to subject a midstream operator to fugitive emissions monitoring requirements under Section 111(b) of the CAA when that operator did not take any action to modify its own equipment. This is particularly true because under most agreements, an upstream producer would not have any obligation to notify the midstream operator that a modification had occurred. Thus, given the short deadlines proposed by EPA for conducting initial fugitive emissions monitoring, a midstream operator could find itself in violation of the fugitive emissions monitoring requirements before receiving notice that the well site had been modified.

Furthermore, an upstream producer cannot satisfy the LDAR requirements for the entire well site because much of the co-located equipment is proprietary to the midstream operator and cannot be accessed by the producer. This is particularly true of metering runs which are used to establish the payments owed by producers to midstream operators. Allowing producers to survey and repair such equipment would create a conflict of interest that is avoided by prohibiting upstream producers from accessing such equipment. For these reasons, EPA should not include midstream assets within the scope of the upstream fugitive emissions monitoring program for well sites.

Third, EPA's proposal is inconsistent with the statutory limitations included in Section 111 of the CAA. Section 111 defines a stationary source as "any building, structure, facility, or installation which emits or may emit any air pollutant." 42 U.S.C. § 7411(a)(3). Courts have repeatedly rejected EPA's attempts to expand the scope of the term stationary source. For example, in *Asarco v. EPA*, 578 F.2d 319 (D.C. Cir. 1978), the court rejected EPA's attempt to apply a "bubble concept" that allowed it to combine emissions from several sources in the same facility. The court held that "[t]he regulations plainly indicate that EPA has attempted to change the basic unit to which NSPSs apply from a *single* building, structure, facility, or installation—the unit prescribed by statute—to a *combination* of such units. The agency has no discretion to rewrite the statue in this fashion." *Id.* at 326-27. Similarly, in *Alabama Power Co. v. Costle*, 636 F.2d 323, 397 (D.C. Cir. 1979), the court confirmed that under "the limited scope afforded the term 'source' in section 111(a)(3), however, EPA cannot treat contiguous and commonly owned units as a single source unless they fit within the four permissible statutory terms [of building, structure, facility, or installation]." There the court explained that common ownership could provide a basis for aggregating some sources under the term facility or

structure. *Id.* However, there is no basis to suggest that EPA can expand the term "facility" to include entirely separate sources that are part of different industry segments (upstream v. midstream) and owned and operated by legally distinct entities. It is fully unsettled and inappropriate to aggregate sources owned by different entities as a means of expanding the scope of the NSPS requirements. EPA offers no statutory basis for this implied expansion of its authority under Section 111.

GPA believes that EPA can resolve this problem and avoid imposing unlawful requirements on midstream operators simply due to their equipment being co-located at well sites by explicitly excluding those midstream assets from its fugitive emissions monitoring regulations for well sites. Colorado faced a similar challenge when developing its own fugitive emissions monitoring program. After consulting with industry members who raised these same concerns with the state, Colorado modified its proposed regulation and explicitly limited the scope of the fugitive emissions monitoring program at well sites to equipment that was owned, operated, or leased by the producer:

"Well production facilities" are also subject to leak detection and repair requirements and storage tank maintenance requirements. This definition is meant to include all of the emission points, as well as any other equipment and associated piping and components, owned, operated, or leased by the producer located at the same stationary source (a defined term specific to permitting).

5 Colo. Code Reg. 1001-9, Section XVII.A (2014). As a result of these changes, midstream operators in Colorado are only subject to fugitive emissions monitoring requirements if their own equipment triggers applicability requirements. They cannot become part of an affected facility based on the actions of unrelated, third-party producers.

EPA could exclude midstream assets from well site LDAR requirements by adopting the same approach as Colorado and limiting the well site LDAR program to sources that are owned, operated, or leased by producers. For example, EPA could revise Proposed 40 C.F.R. § 60.5365a(i) as follows:

Except as provided in 40 C.F.R. § 60.5365a(i)(1) through (i)(2), the collection of fugitive emissions components *owned*, *operated or leased by the producer* at a well site, as defined in 40 C.F.R. § 60.5430a, is an affected facility.

Such an approach has the advantage of well-understood property rights to determine the equipment at a well site that can be included in the LDAR program. As an alternative, EPA could adopt a process-based exclusion that focuses on the transfer of custody between the upstream producer and midstream operator. EPA already incorporates a "custody transfer" concept which is defined as:

the transfer of natural gas after processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation.

See Proposed Section 40 C.F.R. § 60.5430a; 80 Fed. Reg. at 56,694. This definition clearly distinguishes between gas processing plants and transmission lines. A similar definition could be applied to draw the line between upstream production and midstream gathering segments. To clarify that midstream equipment co-located at well sites are not subject to the well site LDAR requirements, EPA could revise Section 60.5365a(i) as follows:

Except as provided in § 60.5365a(i)(1) through (i)(2), the collection of fugitive emissions components at a well site, as defined in § 60.5430a, *to the point of custody transfer*, is an affected facility.

GPA believes that either of these approaches could effectively avoid regulating midstream assets from the upstream LDAR requirements for well sites simply because they are co-located at well sites.

Further, even if EPA wanted to regulate midstream assets located at well sites, it could not do so at this time due to a lack of costing data. EPA has an obligation under Section 111 to ensure that its regulations are cost-effective. See 42 U.S.C. § 7411(a)(1) (directing EPA to "tak[e] into account the cost of achieving such [emission] reduction" when establishing standards of performance under Section 111(b)). Here EPA has made no effort to identify the costs associated with LDAR monitoring at such midstream equipment or to determine whether such monitoring would be cost effective. Indeed, such an analysis is lacking in both EPA's proposed rule and in EPA's White Paper "Report of Oil and Natural Gas Sector Leaks" (April 2014). Without such an evaluation, EPA cannot satisfy the CAA's requirement to take into account the cost of LDAR monitoring for midstream assets located on well sites. Further, given the limited number of components associated with such equipment, it seems unlikely that EPA could demonstrate that such requirements are cost effective, since many of the costs are fixed and do not vary significantly with changes in component counts. Thus, until EPA completes the necessary cost analysis for midstream assets located as well sites and establishes that fugitive emissions monitoring surveys are cost effective, it cannot regulate such sources under Section 111(b).

#### III. EPA Must Revise and Clarify Key Definitions

#### A. Definition of "Modification" for Compressor Stations

We appreciate EPA's attempt to simplify how to define modification for fugitive emissions at compressor station sites. However, there are instances where this definition would encompass changes at compressor stations that do not result in increased emission rates. The CAA defines a modification for purposes of the NSPS program as:

Any 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 or which results in the emission of any air pollutant not previously emitted.

42 U.S.C. § 7411(a)(4). "This definition requires *both* a change—whether physical or operational—*and* a resulting increase in the emission rate of a pollutant." *New York v. EPA*, 413 F.3d 3, 11 (D.C. Cir. 2005) (emphasis in original); *see also Environmental Defense v. Duke* 

Energy Corp, 549 U.S. 561, 567 (2007) ("an NSPS modification" is "a change that "increase[s] ... the emission rate," which 'shall be expressed as kg/hr of any pollutant discharged into the atmosphere." (quoting 40 C.F.R. § 60.14(b))). Under this two-part standard for modification, it is not enough for a facility to simply make physical or operational changes. To qualify as a modification, those changes must necessarily result in an increase in emission rates.

EPA's generally applicable definition in the NSPS program is consistent with the statute and the D.C. Circuit's case law and states:

Any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

40 C.F.R. § 60.14(a). As stated in this definition, the touchstone of a modification is an *increase* in emission rate. Consistent with the statute, if there has not been an increase in emissions, then, by definition, there has not been a modification. In other words, the act of making physical changes to a source does not—by itself—constitute a modification.

In the proposed rule, EPA introduces a new definition of "modification" for compressor stations that is unduly broad and inconsistent with the generally applicable definition of modification in the NSPS program. The definition of modification is significant here, as all existing components at a compressor station site would become subject to regulation if changes at the site triggered the proposed definition of modification, *See* 42 U.S.C. § 7411(a)(2). Not just the new or modified equipment. Here, EPA proposes two conditions under which a modification could occur:

- (1) A new compressor is constructed at an existing compressor station; or
- (2) A physical change is made to an existing compressor station that increases the compression capacity of the compressor station.

Proposed 40 C.F.R. § 60.5365a(j).

EPA's part (2) of this definition includes physical changes that, by definition, would constitute a modification that triggers NSPS for existing compressor stations even in the absence of an increase in emission rate: an increase in compression capacity. This is a deviation from the foundation of the statutory text and generally applicable modification definition without cause. This condition set out in the proposed rule will not necessarily result in an emissions increase and should not be considered a modification without some evidence that an emissions increase will occur. EPA fails to provide any justification for expanding the definition of modification to include equipment changes that do not necessarily lead to an increase in emissions. Nor can it. It is a well-established principle of administrative law that "[w]here Congress has established a clear line, the agency cannot go beyond it." *City of Arlington v. FCC*, 133 S. Ct. 1863, 1874 (2013). Congress did establish a clear line by requiring an emissions

increase for modifications under the NSPS program and EPA cannot go beyond the statute by eliminating that requirement.

In addition, several terms in EPA's proposed definition of modification are ambiguous. The term "new compressor" can be construed to mean a different compressor and/or an additional compressor. Moreover, the term "compression capacity" is unclear and could potentially be based on a gas flow rate, compression power, or some other unit of measure. The maximum gas flow rate for compressor(s) at a compressor station can vary significantly depending on the inlet and outlet pressures, temperatures, and gas composition. For example, a compressor may be able to move a lot more gas starting from an inlet pressure of 200 pounds per square inch ("psi") up to 800 psi than starting from 50 psi to get to 800 psi.

Further, GPA urges EPA to clarify that a "like-kind" replacement does not constitute a "new compressor" for purposes of triggering a modification. From time to time, existing compressors at a compressor station must be replaced due to age, wear, or a number of other reasons. In such situations, a new compressor is simply exchanged for the existing compressor with no associated change in operations or throughput at the facility. In this sense, a like-kind replacement of a compressor at an existing compressor station does not add anything new to the compressor station and makes no changes to the manner in which a compressor station operates. Simply put, a like-kind replacement does not meet the definition of modification included in Section 111(a) of the CAA or in EPA's generally applicable regulations. Thus, to provide certainty to operators and avoid the risk of unnecessary enforcement actions, EPA must clarify that replacing an existing compressor with a new compressor does not constitute a modification under 40 C.F.R. §60.5365a(j) as GPA has suggested in the revised definition above.

Therefore, to ensure that the definition of modification is based on an increase in emission rates required by the CAA and to remove ambiguity, EPA must revise the definition of modification in 60.5365a(j) to read as follows:

- (1) An additional new compressor, except a like-kind replacement, is constructed at an existing compressor station and the rate of fugitive emissions increases from the compressor station, or
- (2) A new compressor, with a higher fugitive emissions rate, replaces an existing compressor.

This definition captures EPA's intent for a modification to only be triggered when an additional new compressor is constructed, and also captures the CAA requirement of an increase in emission rate. To be clear, onerous fugitive component counts should not be required to determine if an emissions increase has occurred. Operators are familiar with calculating fugitive emissions as part of air permit applications, and also have the option to use EPA's approach based on major equipment types in 40 C.F.R. 98, Subpart W. Indeed, there is already precedent in NSPS OOOO for using generally accepted emission calculations for fugitive emissions. *See* 40 C.F.R. § 60.5495 ("The uncontrolled actual VOC emissions [from a storage vessel] must be calculated using a generally accepted model or calculation methodology.").

### B. EPA Must Provide Appropriate Limits on the Definition of "Compressor"

EPA fails in the proposed rule to provide a definition for the term "compressor." Compressors play a central role in this proposed rule and, as a result, it is important that EPA clarify which types of compressors are at issue here. For example, EPA's proposed definition of modification is based on the addition or physical change in a compressor. See 40 C.F.R. § 60.5362a(j). Unless EPA defines compressor, owners and operators will face uncertainty as to the types of compressors that are covered by the proposed fugitive emissions monitoring regulations. GPA proposes that EPA define compressors for purposes of fugitive emissions monitoring as Subpart OOOOa-applicable reciprocating compressors and Subpart OOOOaapplicable centrifugal compressors. This is consistent with other provisions in Subpart OOOOa where EPA places requirements on both centrifugal and reciprocating compressors, while avoiding obligations on any other types of compressors such as vapor recovery unit compressors that are installed to recover methane and VOC emissions. This clarification will eliminate potential applicability confusion down the road for sites with other types of compressors. Also, in accordance with 40 C.F.R. § 60.14(e)(6), the relocation of an existing facility, by itself, shall not constitute a modification. Without defining "new compressor" as one subject to Subpart OOOOa, the relocation of an existing compressor from one facility to another could trigger modification of the compressor station affected facility which is in direct conflict with 40 C.F.R. § 60.14. GPA proposes to add following provision to EPA's proposed regulations:

40 C.F.R. § 60.5365a(j)(3): For purposes of defining a compressor station affected facility under this subsection, *compressor* means a centrifugal or reciprocating compressor that moves natural gas at increased pressure through gathering or transmission pipelines. A Vapor Recovery Unit (VRU) compressor used to recover vapors from a storage tank, separator, or other equipment is not a new compressor for purposes of this subpart.

## C. EPA Must Provide Appropriate Limits on the Definition of "Compressor Station Site"

EPA's proposed definition of "compressor station site" is overly broad and could result in an inadvertent overlap between sources regulated under the NSPS program as compression station sites and those regulated as gas processing plants. As proposed, "[c]ompressor station site means any permanent combination of one or more compressors that move natural gas at increased pressure through gathering or transmission pipelines, or into or out of storage. This includes, but is not limited to, gathering and boosting stations and transmission compressor stations." Proposed 40 C.F.R. § 60.5430a. GPA is concerned that this proposed definition could be interpreted to include compression at a natural gas processing plant. This would create uncertainty as to whether such compressors should be regulated as a compressor station site, as part of the gas processing plant, or both for purposes of the NSPS program.

To avoid any overlap in the way that gas processing plants are regulated under the NSPS program, GPA requests that EPA limit the definition of compressor station sites to sites located "prior to the inlet of a natural gas processing plant." This will clarify that fugitive emissions regulations imposed under Subpart OOOOa will apply only to compressor stations associated with gathering lines.

To further avoid confusion, GPA urges EPA to explicitly exclude transmission stations and storage facilities from the definition of compressor station sites. This will further avoid confusion about the downstream limits of compressor station sites and ensure that natural gas processing plants are excluded. To the extent that EPA believes it is necessary to define and regulate compressors associated with transmission lines and storage facilities, GPA urges EPA to separately define and regulate those sources. Because gathering and transmissions lines and storage facilities are fundamentally different parts of the natural gas supply chain, it is neither necessary nor advisable to regulate them together under a single definition of compressor station site. Thus, to properly reflect their different roles and operations, GPA urges EPA to adopt definitions that clearly distinguish between compressors associated with gathering, processing, transmission, and storage.

Thus, the definition of compressor station site should be "any permanent combination of one or more compressors that move natural gas at increased pressure through gathering or transmission pipelines, or into or out of storage, prior to the inlet of a natural gas processing plant." Revising this language in the definition of compressor station site will avoid uncertainty by clarifying that compressors located at gas plants are considered to be a part of the gas processing plant, and do not meet the definition of a compressor station site, removing any potential overlap in LDAR requirements.

#### D. Definition of "Fugitive Emissions Components"

In the proposal, EPA also introduces a new definition of "fugitive emissions components" for compressors stations that is unduly broad and inconsistent with EPA's prior NSPS provisions addressing fugitive emissions. Fugitive emissions components are defined in the proposal as:

any component that has the potential to emit fugitive emissions of methane or VOC at a well site or compressor station site, including but not limited to valves, connectors, pressure relief devices, open-ended lines, access doors, flanges, closed vent systems, thief hatches or other openings on a storage vessels, agitator seals, distance pieces, crankcase vents, blowdown vents, pump seals or diaphragms, compressors, separators, pressure vessels, dehydrators, heaters, instruments, and meters. Devices that vent as part of normal operations, 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 vent, such as the seals around the bellows of a diaphragm pump, would be considered fugitive emissions.

Proposed 40 C.F.R. § 60.5430a.

First, this definition marks a substantial departure from EPA's prior definitions in 40 C.F.R. Part 60 Subpart VVa, Subpart KKK, and in the original Subpart OOOO. Each of those Subparts is also intended to regulate fugitive emissions components and define the regulated components as "equipment." For example, pursuant to Subpart OOOO, the fugitive emissions components to be monitored—specifically, "equipment"—are defined as "each pump,

pressure relief device, open-ended valve or line, valve, and flange or other connector that is in VOC service or in wet gas service, and any device or system required by those same standards and requirements in this subpart." 40 C.F.R. § 60.5430. EPA offers no explanation for deviating from its past precedent and defining fugitive emissions components more broadly in the proposed rule. See Dillmon v. NTSB, 588 F.3d 1085, 1089-90 (D.C. Cir. 2009) (citing FCC v. Fox Television Stations, Inc., 129 S. Ct. 1800, 1811 (2009)) ("Reasoned decision making ... necessarily requires the agency to acknowledge and provide an adequate explanation for its departure from established precedent."); see also Motor Vehicle Mfrs. Ass'n, 463 U.S. at 42; AT&T Corp. v. FCC, 236 F.3d 729, 736-37 (D.C. Cir. 2001) (reasoned decision-making standard requires explanation for departure from prior decision).

In departing from its prior definitions of fugitive emissions components, EPA is inappropriately incorporating broad equipment categories rather than identifying actual *components* that may leak. Specifically, EPA is proposing to include entire systems such as closed vent systems, storage vessels, dehydrators, heaters, separators, instruments, meters, and pressure vessels within the definition of fugitive emissions components. But these types of equipment are not themselves sources of fugitive emissions. Instead, they contain specific components such as valves, connectors, flanges, compressor seals, and pump seals that are not intended to vent gas and, thus, may be sources of fugitive emissions. Rather than requiring monitoring surveys for broad equipment types, the definition of fugitive emissions components must be limited to the precise components that EPA believes may be a source of fugitive emissions. Unless the definition is narrowed to include only *components* rather than a collection of components and equipment types, the definition will be ambiguous and create uncertainty regarding the scope of the fugitive emissions monitoring program for both operators and regulatory agencies.

Second, EPA's proposal to leave the definition of fugitive emissions components openended will add unnecessary confusion to operators seeking to implement LDAR programs. Specifically, EPA includes in the definition of fugitive emissions components the phrase "including but not limited to." Given the open-ended nature of this proposed definition, it will be difficult for operators to determine which components meet EPA's proposed definition and obtain an accurate component count to determine a monitoring schedule. This uncertainty could also cause compliance confusion at a later date. A company's interpretation of "including but not limited to" could be entirely different than an inspector's interpretation leaving industry open to compliance actions in the future. GPA urges EPA to avoid such uncertainty and confusion by deleting this phrase from the definition of fugitive emissions components. Regulations are impermissibly vague if they fail to give "fair warning of what the regulations require." Freeman United Coal Mining Co. v. MSHA, 108 F.3d 358 (D.C. Cir. 1997); see also Utah Power & Light Co. v. Secretary of Labor, 951 F.2d 292, 295 n.11 (10th Cir. 1991). GPA's members are committed to working with EPA to reduce fugitive emissions from the gas gathering sector. However, a regulation that suggests a duty to monitor certain unnamed components does not give fair warning to operators of what is required of them as they seek to achieve those goals.

Third, EPA's proposed definition is internally inconsistent. After listing the various components that are included in the proposed definition, EPA states that "devices that vent as part of normal operations ... are not fugitive emissions components ...." 40 C.F.R. § 60.5430a.

However, this statement does not go far enough to clarify the definition and exclude devices that are designed to vent as a part of normal operation. While GPA agrees that this clarification is important, many of the specific components that are listed within the definition are designed to vent as a part of normal operation or for safety purposes. These components include thief hatches, agitator seals, distance pieces, crankcase vents, pump diaphragms, and instruments. Most of the items are designed to vent and would pose safety concerns if they did not. For example, crankcase vents are designed to vent gas in order for an engine or compressor to operate properly and safely. If the crankcase vent for an engine was not allowed to vent, blowby gas going past the piston rings into the crankcase would continually build up pressure. This would either cause a large number of oil leaks or, if there were any heat in the system, a strong possibility of a crankcase explosion. While some newer engines may route the crankcase gases back to the intake system, it is very rare that engines older than five years are set up this way. Similarly, for a compressor, if the crankcase vent is not allowed to vent, pressure would build up in the compressor and oil would leak. Likewise, a blowdown vent does not produce fugitive emissions. It is merely a piece of pipe directing emissions from blowdowns into the atmosphere. The pressure inside a natural gas compressor must be relieved before it can be restarted. A common approach is to blow down the internal gas by opening a valve to vent the natural gas to the atmosphere through a blowdown vent which is an open-ended pipe or silencer stack. To avoid confusion about the appropriate scope of LDAR programs and to avoid monitoring of normal venting activities, GPA urges EPA to remove from the definition of fugitive emissions components, the components identified above that vent during normal operations.<sup>5</sup>

Fourth, EPA's definition of fugitive emissions components overlaps with other regulatory requirements. For example, in the national emission standards for hazardous air pollutant regulations in 40 C.F.R. Part 63, Subpart HH, EPA requires that the closed vent system of a Subpart HH-applicable dehydrator be monitored annually via methods specified in 40 C.F.R. § 63.772(c). See 40 CFR § 63.773(c)(A). The inclusion of closed vent systems as a part of fugitive emissions components would make the monitoring requirement duplicative and subject certain components to multiple and potentially conflicting standards.

For the reasons described above, GPA urges EPA to revise its proposed definition of fugitive emissions components in 40 C.F.R. § 60. 5430a as follows:

Fugitive emissions component means any component that has the potential to emit fugitive emissions of methane or VOC at a well site or compressor station site, including but not limited to-valves, connectors, pressure relief devices, openended lines, access doors, flanges, closed vent systems, thief hatches or other openings on a storage vessels, agitator seals, distance pieces, crankcase vents, blowdown vents, pump seals or diaphragms, and-compressors, separators, pressure vessels, dehydrators, heaters, instruments, and meters. Devices that vent

<sup>&</sup>lt;sup>5</sup> GPA does not dispute that these components can occasionally malfunction and vent more gas than is intended. While it may be appropriate for operators to scan such equipment for malfunctions during a monitoring survey, they should be included as fugitive emissions components and subjected to the same rigorous repair requirements as true fugitive emission components. Indeed, in some cases normal venting may exceed EPA's proposed emission threshold for repairs, meaning that even a properly functioning component could subject an operator to potential enforcement action.

as part of normal operations, 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 vent, such as the seals around the bellows of a diaphragm pump, would be considered fugitive emissions.

### IV. Comments on EPA's Proposed LDAR Monitoring Standards

GPA and its members are committed to working with EPA to address fugitive emissions from the gas gathering and processing sectors. While GPA agrees that emissions reduction is an important goal, a fugitive emissions program must be cognizant of the practical realities of the gas processing sector. Thus, to be effective, a fugitive emissions program must take into account the important differences between gas wells and gathering compressor station sites and the other sectors for which EPA has already established fugitive emissions programs. GPA believes that the comments below will assist EPA in developing a fugitive emissions program that will achieve substantial emissions reductions in an efficient and cost-effective manner.

It appears that EPA is proposing regulations that are equivalent to language included in recent consent orders for operators who were found to be operating out of compliance with LDAR requirements at large industrial facilities. However, requiring these strict requirements on sites in the gathering and processing sectors that are comprised of small, remote, typically unmanned sources is not appropriate. For example, EPA's Next Gen website includes similar recordkeeping and reporting requirements for refineries as "innovative enforcement". GPA does not dispute that additional, and more onerous, LDAR requirements may be appropriate for facilities with a demonstrated record of noncompliance. However, such onerous requirements should not be applied uniformly to all facilities. EPA offers no basis for extending such noncompliance requirements to all affected facilities in the oil and natural gas production and gas gathering sector regardless of their compliance history with LDAR or any other regulatory requirement. The proposed requirements are unnecessarily burdensome without leading to significantly better environmental outcomes or performance. To require them across the board for the industry is impractical and unnecessarily punitive for an industry that focuses on environmental compliance as a preeminent priority.

As part of its comments on the proposed rule, the American Petroleum Institute ("API") compiled a cost-effectiveness evaluation regarding LDAR monitoring at compressor station sites. Multiple members of GPA are also API members and provided cost data from previously implemented LDAR programs at compressor station sites. GPA incorporates API's cost-effectiveness evaluation on compressor station LDAR by reference.

#### A. EPA Must Simplify the Monitoring Plans for the LDAR Program

EPA's proposal includes detailed and complex requirements for corporate-wide and sitespecific monitoring plans that go far beyond what is needed to ensure that operators will

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<sup>&</sup>lt;sup>6</sup> See EPA, Next Generation Enforcement Settlement Highlights (Jan. 12, 2015), available at http://www2.epa.gov/sites/production/files/2015-01/documents/nextgen-enfsettlementhighlights.pdf.

effectively monitor fugitive emissions. These requirements are extremely burdensome, yet will have very little impact on the quality of an operator's monitoring survey program. GPA is concerned that EPA failed to fully evaluate the complexity of this monitoring program or the incremental costs of many of the additional monitoring plan requirements.

To avoid unnecessary costs and burdens on operators of affected facilities, GPA urges EPA to simplify the monitoring plan requirements to focus on the intent of the proposed rule and to avoid all extraneous requirements including the site-specific plans. Specifically, to realize the goals of providing EPA with high quality information while mitigating unnecessary burdens on industry, GPA believes only the following elements should be addressed in a corporate monitoring plan:

- Whether a company survey team or contract service will conduct monitoring activities;
- The training that will be required for individuals conducting monitoring surveys;
- The individual or team that will oversee the implementation of the leak detection program and how they will ensure compliance with the program;
- How compliance records and reports will be kept and submitted; and
- How OGI camera verification records will be kept.

A monitoring plan that focuses only on these core issues will provide EPA with assurance that fugitive emissions monitoring will be conducted in accordance with the NSPS program without subjecting operators of affected facilities to additional, unnecessary administrative requirements. Further, focusing on these key elements will allow a company to develop area-specific monitoring programs, as program elements may vary between geographic and operational divisions. This allows for monitoring programs to be specific for the operational divisions which are accountable for compliance at the local level.

To implement such a monitoring program, GPA recommends the following changes to EPA's proposed regulations:

Timeframes. The proposed requirements in 40 C.F.R. §§ 60.5397a(c)(1), (c)(4), and (c)(5) require owners and operators to include in their monitoring plans detailed information for each affected facility for conducting surveys, repairing leaks, and verifying repairs. GPA does not believe it is necessary or appropriate to include additional details in a monitoring plan since the timeframes for monitoring are already incorporated directly into the proposed rule. Instead, the monitoring plan should simply communicate how a company manages the compliance program and how the compliance data will be made available in recordkeeping practices.

*Delay of repair.* The monitoring plan should communicate how the company will manage and track components on delay of repair for reasons specified in 40 C.F.R. § 60.5397a(j)(1).

*Manufacturer and model number*. Operators may change leak detection equipment periodically under an LDAR monitoring program. Operators should not be required to update their monitoring plans after such equipment changes as would be required by 40 C.F.R. § 60.5397a(c)(3). In addition, because different monitoring equipment may be used in different

geographic and operational divisions, it is illogical to require the manufacturer and model number of fugitive emissions detection equipment in a corporate-wide monitoring plan. The monitoring plan should instead communicate the company's procedures for managing and storing equipment verification data.

Survey procedures should be covered by an appropriate training requirement. To simplify the monitoring plan process and ensure that LDAR monitoring programs are implemented effectively, GPA believes that all monitoring survey operators should be trained to conduct a survey. Requiring a training program could replace a number of EPA's proposed monitoring requirements including those in 40 C.F.R. §§ 60.5397a(c)(2), 60.5397a(c)(7)(ii), 60.5397a(c)(7)(iii), 60.5397a(c)(7)(vi), 60.5397a(c)(7)(vi), and 60.5397a(c)(7)(vii). Eliminating these requirements in favor of a training program would dramatically simplify the monitoring plan. A training program should include vendor provided training programs or internal company training programs. Minimum requirements of a training program can be specified as including the elements in 40 C.F.R. §§ 60.5397a(c)(2), 60.5397a(c)(7)(ii), 60.5397a(c)(7)(iii), 60.5397a(c)(7)(vi), 60.5397a(c)(7)(vi), and 60.5397a(c)(7)(vii).

Site-specific monitoring plan requirements. The proposed site-specific requirements in 40 C.F.R. § 60.5397a(d) are overly burdensome and have very little positive impact on the quality of a company's monitoring surveys. For example, it will take a significant amount of effort and resources for companies to create walking paths and develop a map for each well site and/or compressor station. Again, by including a requirement for survey operators to be trained, EPA can ensure that the survey operators have the necessary qualifications and training to effectively monitor each fugitive emissions component without a pre-approved plan or walking map. Thus, an operator training requirement, coupled with a "certification" that each monitoring survey was performed appropriately should be enough to confirm that each component was monitored, even without an onerous site-specific map.

#### B. EPA Should Extend the Effective Date for the LDAR Monitoring Program

EPA's proposed rule does not allow enough time for operators to achieve compliance and the EPA must extend the compliance deadline to 180 days to allow adequate time for implementation. The proposed LDAR requirements are complex, and operators will need time to develop and implement a compliant program. Specifically, EPA has co-proposed several program elements for the LDAR requirements. For example, EPA co-proposes semi-annual and annual OGI monitoring frequencies and also solicits comment on quarterly monitoring. 80 Fed. Reg. at 56,595-96. As a result, operators do not know the specific LDAR requirements at this time. GPA understands EPA's approach to gathering information from interested parties and shares the goal of ensuring that EPA fully understands these issues before imposing complex regulations on operators. However, when multiple regulatory options are proposed, EPA must reconsider and lengthen the compliance deadlines so that operators have sufficient time to understand and incorporate EPA's final regulations into operating procedures.

To comply with the proposed requirements, operators must design and implement a complex LDAR tracking system and detailed survey operator training. The LDAR system must be capable of interacting directly with current internal maintenance tracking systems.

In light of EPA's many alternative proposals, GPA believes there is a high likelihood that the program elements will change between the proposed rule and final rule, which creates regulatory uncertainty and prevents its members from initiating compliance actions at this time. To avoid unnecessary and duplicative compliance efforts, operators will need to wait for the final rule to begin implementing the systems. Any changes that will affect the software must be designed, implemented, tested, and quality assured to verify the system is functioning properly. A change in the program elements that occurs between the proposed and final rule will cause the software elements to be reworked to meet the final rule requirements. Additionally, operators will need the software developers to conduct an evaluation of the software system to ensure new requirements are met. Finally, any changes to the program elements will require operators to retrain survey operators to ensure compliance with the program.

Owners and operators of affected sources will also have to acquire directly or contract with a third party to provide the equipment and staff to conduct the surveys. It will be impossible to meet a 60-day deadline to procure new devices, train operators, and implement a new program. In addition, third-party contractors will not be able to adequately staff or have enough OGI cameras to conduct the necessary surveys that could be subject to the final rule if EPA imposes an effective date that is 60 days after the final rule is issued. GPA understands that some OGI companies have commented that they will have sufficient supplies to meet the demand of the rule as proposed. However, these companies have a vested interest in supporting a rule that would vastly expand demand for their products. Moreover, it is GPA's members, and not the OGI companies, that will be subject to non-compliance penalties if those companies are unable to produce sufficient supplies. Therefore, EPA should discount the representations of these vendors of technology that will financially benefit from the rule and provide an adequate cushion in case they cannot meet demand on their promised timeframe.

For these reasons, a 60-day effective date is not an adequate time period to ensure that a program can be implemented given the several program elements that have been proposed. The LDAR management program is sensitive to changes in program elements and at least 180 days is needed after final rule to achieve compliance for sources immediately subject to the regulation.

Therefore, GPA urges EPA to extend the effective date to at least 180 days from the date that the final rule is published to allow companies to develop and implement programs to comply with the final requirements.

# C. EPA Should Simplify and Extend the Deadlines for the LDAR Monitoring Program

EPA proposes a complex and aggressive monitoring program with deadlines that are not only too strict, but that vary depending on the number of leaks detected during prior surveys. This program would add significant and unnecessary cost and complexity for operators who operate numerous compressor stations in remote locations. Thus, in order to realize the goals of the NSPS program in a way that reflects the pragmatic realities of the industry, GPA urges EPA to extend the deadline for initial surveys and to provide a uniform annual monitoring requirement for subsequent surveys.

At the outset, GPA urges EPA to extend the deadline for initial surveys to a minimum of 180 days. EPA's current proposal requires operates to "conduct an initial monitoring survey within 30 days of the startup of a new compressor station for each new collection of fugitive

emissions components at the new compressor station. For modified compressor stations, the initial monitoring survey of the collection of fugitive emissions components must be conducted within 30 days of the modification" Proposed 40 C.F.R. § 60.5397a(f)(2). The first 30 days after starting a new compressor station or adding compression to an existing compressor station is a particularly frenetic time where temporary construction staff, including their heavy equipment, are on-site. Introducing more internal or external staff during this time to count components and perform a monitoring survey would increase the risk for a safety incident. It is also common on new construction projects that not all equipment would be installed and started up when the first compressor begins operation. For example, a compressor station with multiple compressors, might initially startup with only one compressor in service. Therefore, it would be likely that not all components will be available to count or survey within the first 30 days after operations begin. Further complicating the short deadline, compressor stations are often remote, unmanned sites that will require significant coordination by contractors and operators to conduct monitoring surveys and perform necessary repairs. Access to these sites is often restricted depending on the time of the year. For example, sites located in northern and mountainous regions often experience significant snowfall and extreme temperatures that prevents access for long periods of time. Likewise, site access can be limited in coastal areas due to hurricanes and flooding. Additional access restrictions occur from lease agreements with landowners that may require coordination for gates that must be manually opened and closed or exclude access during hunting seasons. In addition, endangered species agreements may limit the time when access may be permitted for monitoring surveys. Expanding the initial survey deadline to 180 days will give operators more flexibility to coordinate with contractors and to address weather-related concerns and, most importantly, reduce the risk of a safety incident.

Also, such a deadline is consistent with existing 180-day initial compliance deadlines under NSPS Subpart OOOO, which EPA acknowledged as appropriate in this rulemaking. *See* 80 Fed. Reg. at 56647-48; *see also* 40 C.F.R. 60.482-1a(a) (allowing a 180 initial compliance period for gas processing plants). Furthermore, EPA also includes a 180-day initial startup deadline for fugitive emissions monitoring for the synthetic organic chemicals manufacturing industry ("SOCMI") under Subparts VV and VVa. 40 C.F.R. §§ 60.482-1(a), 60.852-1a(a). Both of these rules regulate industrial facilities that typically have on-site maintenance staff. EPA offers no explanation of why a shorter initial compliance deadline is appropriate for the oil and natural gas production and gas gathering sectors that are typically remote and unmanned sites. Providing these sectors with the same 180-day deadline will allow operators to develop monitoring plans, schedule contractors, and prepare for any maintenance issues.

Further, EPA must simplify the ongoing monitoring requirements proposed in 40 C.F.R. §§ 60.5397a(g)-(i). As proposed, affected facilities would be subject to different monitoring frequencies, ranging from quarterly to annually, based on the number of leaks from fugitive emissions components identified during prior monitoring surveys. Basing monitoring frequency on prior leak performance will create more recordkeeping requirements and will be burdensome for operators who will be forced to track all component counts and changes that occur at each individual station. In addition, GPA does not believe it was EPA's intent to require operators to count and tag every "fugitive emissions component" at the compressor station, which would be required to calculate leak percentages. Nor does GPA believe that such a monitoring schedule is necessary to provide an incentive for operators to reduce leaks from fugitive emissions

components. Instead, such requirements will simply add unnecessary burdens and complexity to what is already a complicated and costly monitoring program.

Thus, GPA proposes that all compressor station sites should be subject to a fixed, annual monitoring schedule with monitoring events to be separated by at least 180 days, but not be extended more than 12 months from the previous monitoring event. Past experience has shown that such a monitoring schedule will be effective in identifying and repairing leaks from compressor station sites in a timely manner. In fact, data collected by GPA members as part of Colorado's Regulation 7 fugitive monitoring program has shown that even during initial monitoring surveys, the percentage of leaking components is below the 1% threshold EPA is proposing for annual monitoring. Out of the 15 sites monitored, the highest leak percent was 0.38%. Thus, both the complexity and costs of EPA's proposed monitoring schedule as well as the history of state-based monitoring programs establishes that a requirement for annual monitoring will be sufficient to detect and repair leaks in a timely manner.

## D. EPA Must Provide Increased Flexibility for the Repair of Fugitive Emissions Leaks

GPA requests that the EPA provide increased flexibility to affected facilities that detect fugitive emissions leaks during required monitoring activities. As proposed, EPA would only provide affected facilities with 15 days to make necessary repairs, with a few limited exceptions that provide up to 60 days. *See* Proposed 40 C.F.R. § 60.5397a(j)(1). These deadlines are wholly inadequate given the unique challenges faced by owners and operators of well sites and compressors stations. Thus, GPA urges EPA to provide increased time for owners and operators to repair fugitive emissions leaks after detection.

First, GPA urges EPA to extend the primary deadline for repairs from 15 to 60 days. The 15-day deadline is used by EPA in Subparts VV, VVa, KKK, and OOOO for natural gas processing plants and other large facilities in the SOCMI sector, which are continuously manned facilities with dedicated operational and/or maintenance staff. In addition, those facilities frequently keep replacement parts on site due to high component counts. In contrast to processing plants, well sites and compressor stations are often unmanned facilities located in remote areas where on-site storage of parts is not feasible or cost effective and it would be difficult to secure and transport parts in a timely manner. In addition, for facilities with older equipment, replacement parts may not be available for purchase. In those cases, an operator would be required to obtain a custom-manufactured part to replace a leaking component, further extending the time needed for repairs. When custom-manufactured parts are required, EPA should allow a delay of repair until the new part can be made available for installation.

Access to these sites can also be limited by inclement weather, including snowfall and flooding. In addition, GPA anticipates that many operators will contract for both OGI monitoring and repair services at well sites, and compressor stations, meaning that repairs may be delayed due to contractor availability. Thus, while GPA's members are committed to repairing fugitive emissions leaks as soon as practicable, 15 days is simply too short a deadline for compressor station sites and well sites. Increasing the repair deadline in 40 C.F.R. § 60.5397a(j)(1) to 60 days will provide owners and operators with the necessary time to coordinate repair services at such remote locations. In addition, EPA should clarify that a

component should be deemed repaired if subsequent monitoring under Method 21 or OGI indicates that the component is no longer leaking.

Second, GPA urges EPA to clarify and provide flexibility regarding the requirement for remonitoring of leaks. As proposed, the resurvey requirements for OGI monitoring in 40 C.F.R. § 60.5397a(j)(2)(iii)(B) cross-reference 40 C.F.R. § 60.5397a(a), which requires monitoring of "all fugitive emissions components." GPA requests that EPA clarify that the resurvey requirements in 40 C.F.R. § 60.5397a(j)(2)(iii)(B) apply only to the repaired component(s) and do not create an obligation to resurvey the entire affected facility. Further, for the reasons discussed above, GPA requests that EPA extend the resurvey deadline to 60 days in accordance with the primary deadline for repairs.

Third, GPA urges EPA to revise the fugitive emissions threshold for remonitoring actions using Method 21. As proposed, EPA would require emissions from a repaired component to be less than 500 ppm above background when tested using Method 21. Proposed 40 C.F.R. § 60.5397a(j)(2)(ii)(A). This requirement for Method 21 is not analogous to OGI detection limits. Under field conditions, OGI can consistently detect leaks at 10,000 ppm. 80 Fed. Reg. at 56,635. This is the same as the Method 21 leak detection limit imposed by EPA for fugitive emissions in 40 CFR Part 60 subparts KKK and VV. By proposing that leaks be repaired at an effective definition of 10,000 ppm with OGI or 500 ppm with Method 21, EPA would create a strong incentive for operators to use OGI rather than Method 21 for remonitoring. It is inappropriate for EPA to promote a particular leak detection methodology over another after concluding that both are suitable for remonitoring. By using a leak definition of 10,000 ppm for both methodologies, neither Method 21 nor OGI would have an advantage over the other technology. GPA urges EPA to level the playing field for remonitoring by revising the leak detection limit in 40 C.F.R. § 60.5397a(j)(2)(ii)(A) to 10,000 ppm.

Moreover, incorporating inconsistent emission thresholds for repaired fugitive emissions components will create confusion and uncertainty if the same component is tested using different methods. For example, under EPA's proposal, a leaking component that is retested after repair using Method 21 would require additional repair work if emissions were determined to be between 500 and 1,000 ppm. However, after a second repair, the same component could be tested again using OGI. Under those circumstances, it would be impossible to determine whether the second repair was successful because the component's emissions would have been below the OGI detection limit, even before the second repair was attempted. EPA should remove such uncertainty by providing uniform fugitive emissions threshold under both methods.

Fourth, GPA urges EPA to expand and clarify the types of activities that can justify an extension beyond the otherwise applicable repair deadline. Due to the remote nature of many well sites and compressors stations, inclement weather, availability of parts, and available of repair crews can all delay equipment repairs. GPA requests that EPA specifically lists these exceptions in the text of 40 C.F.R. § 60.5397a(j)(1). Specifically, GPA requests that EPA address the availability of parts in the same manner as in NSPS Subpart VVa. *See* 40 C.F.R. § 482-9a(e) (allowing delay of repairs until a second shut-down event when parts are unavailable). In addition, affected facilities should be able to delay repair if they can demonstrate that the emissions of purged material resulting from immediate repair is greater than the fugitive emissions likely to result from delay of repair. Again, EPA has already addressed

this issue in NSPS Subpart VVa and in Proposed 40 C.F.R. § 60.5416a(b)(10) and could include the same provision in 40 C.F.R. § 60.5397a(j)(1).

Fifth, GPA urges EPA to provide additional flexibility to owners and operators of affected facilities by allowing them to respond to fugitive emissions leaks by isolating the equipment and taking it out of VOC/methane service. Such an approach will effectively stop the fugitive emissions until a repair is made. EPA has included such a provision in NSPS Subpart VVa and GPA requests that EPA include a similar provision here. *See* 40 C.F.R. § 60.482.9a(b) ("Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.").

Sixth, GPA urges EPA to eliminate the secondary six-month deadline for repairs in the event that an extension is appropriate. Such a deadline is arbitrary and is inconsistent with the way that well sites and compressor stations are operated. Instead, the time allowed for repair should be extended until the next scheduled shutdown. This proposed requirement is more stringent than the delay of repair requirements for gas processing plants in 40 C.F.R. § 60.482a-9 and is therefore not appropriate for the more remote and challenging sites in the gathering sector.

## E. EPA's Proposed Recordkeeping Requirements Are Overly Burdensome and Should Be Reduced

EPA proposes a series of recordkeeping requirements in 40 C.F.R. § 60.5397a(k) that go far beyond what is necessary to document the results of an LDAR survey and verify their accuracy. GPA is committed to accurate recordkeeping as a means of verifying compliance with the NSPS program. However, we are concerned that many of the recordkeeping requirements proposed by EPA will serve no purpose in improving the quality of the LDAR program and thus would impose unnecessary costs on operators of compressor stations. GPA urges EPA to revise the proposed recordkeeping requirements to avoid such unnecessary obligations.

First, EPA should eliminate the requirement for survey operators to include their training and experience in the monitoring survey record. *See* 40 C.F.R. § 60.5397a(k)(3). The corporate-wide monitoring plan that EPA is proposing for Subpart OOOOa already includes training requirements for conducting an LDAR monitoring survey. Therefore, it is redundant and unnecessary to require operators to include their training for each individual survey. Nor is the prior experience of the operator relevant to the success of an LDAR program. Many of these operators will be trained once this rule is final but have little experience outside of any certification. Thus, documenting operators' training and experience on each survey adds an extra recordkeeping burden. GPA requests that recordkeeping under 40 C.F.R. § 60.5397a(k)(3) be limited to the operator's name and title.

Second, EPA should clarify the process for obtaining records for ambient temperature, sky conditions, and maximum wind speed at the time of the survey pursuant to 40 C.F.R. § 60.5397a(k)(4). Bringing meteorological equipment such as a wind anemometer and thermometer to the survey, in addition to an infrared camera and other equipment, is unduly burdensome. EPA should eliminate this requirement outright since historical weather data is readily available online or, alternatively, clarify that such data can be obtained from the National

Oceanic and Atmospheric Administration ("NOAA") or a comparable source after the survey is complete.

Third, EPA should clarify the types of information that would satisfy the location requirement in 40 C.F.R. § 60.5397a(k)(6)(i). Specifically, GPA is unsure how, if at all, the location of a leaking component should be distinguished from other components at the same site. Does EPA require the precise latitude and longitude of the specific component, the process unit, the associated equipment, or the well or compressor site generally? It would be overly burdensome to keep such information for each leaking component. Documentation in a log should be sufficient to document that a site was monitored and is consistent with approaches that EPA has historically used for fugitive emissions monitoring in other NSPS Subparts.

Fourth, EPA should eliminate the requirement to document the instrument used to resurvey repaired fugitive emissions components pursuant to 40 C.F.R. § 60.5397a(k)(6)(iv) because such documentation is unnecessary. Instead, regardless of whether the resurvey was completed by OGI or Method 21, a "certification" from the company verifying that the resurvey showed the component was repaired should be allowed and sufficient. This "certification" could also verify that any OGI equipment used was verified prior to use. Such an approach would simplify the monitoring process while still ensuring the integrity of the monitoring program.

Fifth, EPA's proposal to require digital photographs pursuant to 40 C.F.R. § 60.5397a(k)(6)(ii) is both unnecessary and confusing. As an initial matter, the requirement to provide digital photographs is extremely burdensome and offers no benefits from a compliance standpoint over alternative options. Rather than requiring digital photographs in all cases, affected facilities should be provided with multiple options for recordkeeping. For example, logs are already required in the proposed rule that are similar to recordkeeping logs for other LDAR rules. These records include sufficient information to document the survey was completed. Photographs serve no additional purpose. Likewise, GPA urges EPA to allow operators to tag leaking components at each site instead of requiring digital photographs of the leaking components. Photographs do not provide any additional environmental benefit over alternative compliance options and should not be required under Subpart OOOOa for fugitive emissions monitoring.

Further, in the event that digital photographs are required, EPA must clarify in the final rule that such photographs are only required for fugitive emissions components that are found to be leaking. EPA states in the preamble that "[a] photograph of every component that is surveyed during the monitoring survey is not required." 80 Fed. Reg. at 56,615. However, in the rule, the requirement for digital photographs is a sub requirement to 40 C.F.R. § 60.5397a(k)(6), which addresses "Documentation of each source of fugitive emissions (e.g. fugitive emissions components)." EPA must clarify in 60 C.F.R. § 60.5397a(k)(6) that the sources of fugitive emissions that require such document are only leaking components and not all fugitive emissions components at the site.

In addition, to the extent that digital photographs are required for recordkeeping purposes, GPA urges EPA to protect them from public disclosure, either by excluding them from reporting requirements or by designating such photographs as confidential business information ("CBI") that need not be disclosed to the public. While created for the purpose of verifying

fugitive emissions monitoring surveys, the digital photographs will necessarily capture details about oil and gas production and gas gathering operations that are not otherwise available the public. These photographs will be of interest to individuals and organizations that have no verifying fugitive emissions monitoring activities. For example, public disclosure of photographs can create security risks and could facilitate terrorist activities. Oil and natural gas production and gas gathering facilities are typically unmanned and in many cases do not have security measures such as fences or gates. Providing digital photographs of such facilities could provide would-be terrorists with the information needed to disrupt oil and natural gas supply chains. Likewise, making digital photographs publicly available could encourage anticompetitive activities by providing competitors with visual access to proprietary operational information. If digital photographs are included in reporting requirements, state and federal agencies will inevitably begin receiving Freedom of Information Act ("FOIA") requests for these photographs for reasons unrelated to fugitive monitoring. Thus, if EPA chooses to require photographs in electronic reporting, it must first develop a process to protect those photographs from public disclosure to protect the physical and competitive interests of the owners and operators.

Sixth, EPA "solicit[s] comment on whether these records also should be sent directly to the permitting agency electronically to facilitate review remotely." Under these circumstances, it is sufficient that these records be kept at the operator's facility or field office and provided to EPA or other permitting agencies upon request. Adding additional recordkeeping burdens on these agencies would needlessly extend the amount of resources necessary to maintain and review these records. Additionally, many state agencies do not have existing systems to receive this data electronically. Keeping the records at the operator's facilities and available to agencies upon request will reduce the burden on regulatory agencies while ensuring that the records will remain available as needed.

# F. EPA Should Provide an Exclusion from LDAR Monitoring for Facilities that Are Subject to State-Based Fugitive Emissions Monitoring

GPA agrees with EPA that state-based fugitive emissions monitoring systems can serve as effective substitutes for EPA's proposed LDAR program and that it would be redundant for operators to comply with both state and federal requirements under such circumstances. In cases where states already have effective fugitive emissions monitoring programs in place, applying an additional federal program would add only significant burdens without any real benefits. Such a federal plan would likely provide insignificant incremental benefits beyond what would already be achieved by the state plan while adding all of the compliance costs of a second regulatory program. In addition, EPA did not consider facilities already subject to a state-based fugitive emissions monitoring program in their cost-effectiveness analysis. However, EPA does not exclude these facilities already subject to a state fugitive emissions program from compliance with NSPS OOOOa. Including facilities already subject to a state-based fugitive emissions monitoring program in EPA's cost-effectiveness evaluation would reduce the cost-effectiveness of the rule, because facilities would incur the same costs to comply with Subpart OOOOa as a facility with no existing LDAR program, but would produce minimal to no benefits because the existing state LDAR program already reduces fugitive emissions. Thus, to the fullest extent

possible, EPA should incorporate state fugitive emissions monitoring programs into the NSPS program whenever it is appropriate to so do.

Further, incorporating existing state fugitive emissions monitoring programs is consistent with the purpose of the CAA. Congress established the CAA to allow states to take the lead in developing programs to address air pollution. For example, 42 U.S.C. § 7401(a)(3) states "that air pollution prevention (that is, the reduction or elimination, through any measures, of the amount of pollutants produced or created at the source) and air pollution control at its source is the primary responsibility of States...." In contrast, Congress intended that EPA's primary role would be "to provide technical and financial assistance to State and local governments in connection with the development and execution of their [the states'] air pollution prevention and control programs." 42 U.S.C. § 7401(b)(3). Incorporating state fugitive emissions monitoring programs would thus be consistent with the purpose of the CAA. Moreover, such an approach can promote continued innovation in monitoring and measurement technology for fugitive monitoring equipment while also allowing states to tailor their programs to address local air quality issues.

In recognition of the potential benefits of utilizing existing state programs, EPA requests comment on:

criteria we can use to determine whether and under what conditions all new or modified well sites or compressor stations operating under corporate fugitive monitoring programs can be deemed to be meeting the equivalent of the NSPS standards for well sites or compressor stations fugitive emissions such that we can define those regimes as constituting alternative methods of compliance or otherwise provide appropriate regulatory streamlining.

80 Fed. Reg. at 56,614. GPA believes it is appropriate for EPA to rely on state-based fugitive emissions programs that are at least as stringent as EPA's proposed regulations. This is consistent with federal environmental programs that are administered by the states. *See, e.g.*, 40 C.F.R. § 123.25(a) (Clean Water Act); 40 C.F.R. § 145.11(b)(1) (Safe Drinking Water Act Underground Injection Control Program); 40 C.F.R. § 270.10(i) (Resource Conservation and Recovery Act). It is also consistent with EPA's past practice in the NSPS program. *See* 40 C.F.R. § 60.103a(g) (approving Bay Area Air Quality Management District ("BAAQMD") regulations as an alternative compliance option for work practices for flares); 40 C.F.R. § 60.107a(h) (approving BAAQMD and South Coast Air Quality Management District ("SCAQMD") regulations as an alternative compliance option for flares). It is also consistent with EPA's past actions under the NSPS program.

Thus, GPA urges EPA to include in the Code of Federal Regulations a list of state monitoring programs that qualify as alternative methods of compliance based on a comparison of the definition of fugitive components, monitoring frequency, scope, repair time and delay of repair, and enforcement and audit authority. GPA's members have significant experience operating in states with existing fugitive emissions programs and we look forward to working with EPA to develop a process and standard to recognize such program as alternative compliance options under the NSPS program.

To clarify that such programs serve as an effective substitute for EPA's proposed regulations, GPA urges EPA to modify the definition of a compressor station affected facility in 40 C.F.R. § 63.5365a(j) as follows:

The collection of fugitive emissions components at a compressor station, as defined in §60.5430a, is an affected facility. Compressor stations with a legally and practically enforceable leak detection and repair requirement established under a Federal, State, local or tribal authority are not affected by this subpart. For purposes of § 60.5397a, a "modification" to a compressor station occurs when...

This revision will ensure that sources already subject to requirement that are at least as stringent as EPA's fugitive emissions monitoring program will not be forced to comply with two redundant standards. GPA asserts that any state program should be considered equivalent if the state commits to develop an equivalent program with work practice elements, such as, a method of detection, a monitoring frequency, repair and verification, and recordkeeping and reporting.

# G. EPA Should Not Apply a "Once In, Always In" Policy to Fugitive Emissions Monitoring

GPA requests that EPA clarify in the final rule that the agency will not apply the "once in, always in" policy to affected facilities subject to fugitive emissions monitoring under Subpart OOOOa. EPA appropriately recognizes that fugitive emissions monitoring will not be cost-effective in all circumstances and, as a result, is proposing thresholds that must be exceeded before fugitive emissions monitoring is required. GPA urges EPA to clarify in the final rule that if an affected facility falls below EPA's affected source thresholds, it will no longer be considered an affected facility and, thus, will no longer have to comply with the fugitive emissions monitoring requirements. Without such a provision, GPA's members would face uncertainty regarding the regulatory status of affected facilities that fall below these thresholds and could be required to continue to conduct costly fugitive emissions surveys that will produce small emission reductions.

For example, EPA is proposing that a storage vessel will be an affected facility if its "potential for VOC emissions [is] equal to or greater than 6 tpy." Proposed 40 C.F.R. § 60.5365a(e). Due to changes in operations or changes in the types of hydrocarbons stored in a storage tank, the tank's potential to emit may change over time. Thus, after initially exceeding the 6 tpy threshold and becoming an affected facility under Subpart OOOOa, a storage tank could subsequently reduce its potential to emit below the 6 tpy threshold. Under such circumstances, GPA believes it is inappropriate to continue to regulate the storage vessel as an affected facility with compliance obligations under Subpart OOOOa. Thus, for storage vessels and other facility types with applicability thresholds, GPA urges EPA to clarify that, if the source's emissions or potential emission fall below relevant applicability thresholds, the facility will no longer be considered an affected facility under Subpart OOOOa and will not be required to comply with Subpart OOOOa requirements.

As an initial matter, the "once in, always in" policy was developed in the context of EPA's regulation of hazardous air pollutants under Section 112 of the CAA and has not

traditionally been applied in the context of Section 111 NSPS regulations. *See* EPA Memorandum, Potential to Emit for MACT Standards – Guidance on Timing Issues 9 (May 16, 1995). The policy was enacted in the context of Section 112 to prevent anti-backsliding at sources that successfully installed emissions controls that reduced hazardous air pollutants below certain thresholds. EPA's concern in adopting the policy was that sources could "backslide from MACT control levels by obtaining potential-to-emit limits, escaping applicability of the MACT standard, and [subsequently] increasing emissions to the major source threshold." *Id.*; *see also Wildearth Guardians v. Lamar Utilities Bd.*, 932 F. Supp. 2d 1237, 1245 (D. Colo. 2013).

EPA's proposed fugitive emissions monitoring program does not raise the same anti-backsliding concerns as Section 112 MACT standards. Instead, given the costs and burdens associated with conducting fugitive emissions surveys, the affected facility thresholds for well sites and compressor station sites reflect a balance between those costs and the incremental reduction in methane emissions associated with monitoring certain facilities. Simply put, for smaller facilities, the potential for fugitive emissions is also smaller and imposing onerous fugitive emissions monitoring requirements will not be cost effective.

Therefore, GPA urges EPA to clarify that well sites and compressor station sites that fall below the affected facility thresholds will no longer be considered affected facilities. Due to frequently changing conditions in oil and gas production, production volumes at individual wells can change over time. Thus, over time, an individual well's production may fall below the 15 barrels of oil equivalent per day threshold that EPA has established for fugitive emissions monitoring. EPA should clarify that, given the reduced risk of leaks associated with low-volume wells, 80 Fed. Reg. at 56,612, the well site is no longer an affected facility. Likewise, as changes take place on broader scales, gathering and boosting needs may also change. Thus, if an existing compressor station initially triggers NSPS by adding new compressors or otherwise increasing capacity in a manner that could increase fugitive emissions, it should no longer be considered an affected facility if the new compressor(s) are removed or the capacity is otherwise reduced back to prior levels. There is no concern with respect to anti-backsliding because the proposed regulations would require the sources to re-initiate fugitive emissions monitoring if they once again exceed the relevant thresholds and again become affected facilities. Alternatively, at a minimum, even if EPA determines that such sources will remain affected sources, it should clarify that those sources are not required to conduct fugitive emissions monitoring surveys if they fall below the affected facility thresholds.

# H. EPA Must Provide Operators Flexibility to Incorporate New Monitoring Technologies

In the proposed rule, EPA specifically authorizes the use of OGI for fugitive emissions monitoring, while allowing the use of Method 21 for certain other monitoring activities. Given the rapidly changing landscape for fugitive emissions monitoring, GPA urges EPA to adopt a flexible approach that allows operators to use alternative monitoring technologies, provided they are as effective as OGI in detecting fugitive emissions. As discussed above and described in

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<sup>&</sup>lt;sup>7</sup> Prior to EPA's 2013 revision to Subpart OOOO, 78 Fed. Reg. 58,416, 58,430 (Sept. 23, 2013), EPA has not applied the "once in, always in policy" to an NSPS regulation.

more detail in API's cost analysis, the costs associated with EPA's proposed fugitive emissions program—including the use of OGI technology—are significant. Moreover, the field of fugitive emissions detection is rapidly changing, with a number of new technologies for imaging and remote detection under development. Some of these technologies could dramatically reduce the costs of fugitive emissions surveys, particularly in the remote areas where many wells sites and compressors station sites are located. Rather than creating a binding obligation to use OGI (and in some circumstances Method 21) for all fugitive emissions surveys, GPA urges EPA to build into the regulations the necessary flexibility to allow for the use of other monitoring technologies, provided they are as effective as OGI. Including such a provision in the regulations will allow operators with much-needed flexibility without the regulatory burden of having to seek revision of Subpart OOOOa in the future to use other, equally effective monitoring technologies. As part of the President's Strategy to Reduce Methane Emissions—the same strategy document that requested these new methane regulations from EPA—the Department of Energy is funding research to develop "new measurement technologies, including lower-cost emissions sensing equipment." EPA should ensure that any new technologies developed through this program can be incorporated into the LDAR program without the need for complex and time-consuming regulatory action.

### V. Comments on EPA's Proposed Pneumatic Pump Standards

# A. EPA Significantly Underestimates the Cost of Emission Controls for Pneumatic Pumps

EPA's cost estimates for controlling emissions from pneumatic pumps are flawed and significantly underestimate the costs that will be required to connect pneumatic pumps to existing onsite control devices. In the proposed rule, EPA estimates that the installation costs to connect pneumatic pumps to existing control devices will be \$2,000. EPA, *Oil and Natural Gas Sector: Standards for Crude Oil and Natural Gas Facilities* 164, 166-67 (Aug. 2015). This data is derived from EPA's Natural Gas Star program. However facilities participating in EPA's Natural Gas Star program are not representative of the industry as a whole. Instead, facilities that self-select to recognize this technology under the program are likely to have done so voluntarily due to the relative ease and low cost to implement these changes. However, in most cases, existing control devices were not designed to accommodate the emissions from pneumatic pumps and are likely not conveniently located to connect piping. This means that longer piping runs will be required in most instances resulting in a substantially higher cost to implement this control requirement than EPA has estimated.

Using our expert judgment as operators of the vast majority of pneumatic pumps in the midstream sector, as well as estimates of equipment capital and installation costs, GPA estimates that implementation costs will be much greater than \$2,000. This is based on the typical location of the storage tanks and combustor being up to 200 feet away from the compressor buildings that typically house the affected pneumatic pumps. Another major cost driver would be the need to protect the pipe against condensation and freeze-up, most likely done by burying the pipe for remote stations without electrical line power. GPA's assumptions are provided below:

<sup>&</sup>lt;sup>8</sup> EPA, Gas STAR PRO No. 203. Pipe Glycol Dehydrator to Vapor Recovery Unit (2011).

### Assumptions per source<sup>9</sup> for cost estimate:

- 50 feet of 1-inch diameter pipe to tie into header.
- Materials and installation is 30/foot (50 feet x 30/foot = 1,500)
- Tie sources into 2-inch header based on 200 feet between compressor units and to the combustor header: 200 feet x \$35/foot = \$7,000.
- Install Costs 250 feet x \$200/foot to bury pipe = \$50,000

Based on GPA's estimates, the total cost to tie into existing installing controls for emissions from pneumatic pumps would be \$58,500, assuming the existing device has capacity to control these emissions.

Additionally, routing emissions to a control device poses an environmental and safety risk for devices that were not engineered and originally designed to accept the flow rate from additional sources. This is especially a concern for vapor recovery units which were designed to operate in a narrow pressure range, where additional flow might cause a bypass of the unit to atmosphere. In addition, significant technical and safety concerns can arise with routing a pneumatic pump to an existing flare or combustor. An existing device may be designed to handle only flows at a certain pressure range that is different than the pressure of a pneumatic pump discharge. Connecting lines at different pressures can create backflow risks. In addition, routing vent lines from pumps potentially several hundred feet with elevation changes and cooling creates a risk of liquid pooling in the vent line. If liquid pockets then carry over into the flare or combustor, there is risk of fire balls projecting from the device. EPA did not consider the cost in the rule to update or replace existing sources to be able to meet the additional flow from connecting multiple sources.

GPA has used its revised cost estimate for installing pneumatic pump controls to develop new cost-benefit tables for controlling emissions from pneumatic pumps. Those revised cost estimates are included as Attachment A. The per-ton emission reduction costs calculated by GPA are significantly higher than those calculated by EPA. In fact, for many pneumatic pump and industry segment combinations, the emission reduction costs become prohibitively high. In light of GPA's revised cost estimates, GPA urges EPA to eliminate the proposed requirements for pneumatic pumps. However, as described below, GPA offers a number of additional comments in the alternative, in the event that EPA finalizes a rule that includes pneumatic pumps.

B. EPA Must Clarify That Only "Control Devices" That Are Required for Another Subpart OOOO or OOOOa Affected Facility Should be Considered for Applicability

EPA's proposed rule creates uncertainty by failing to describe the type of "control devices" that can trigger NSPS applicability for pneumatic pumps. While GPA agrees with EPA

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<sup>&</sup>lt;sup>9</sup> Typically, there are multiple pneumatic pumps at a single compressor station, so this cost estimate was prepared as a per-source estimate.

that NSPS requirements should not be triggered for pneumatic pumps in the absence of an existing control device, it is unclear which types of control devices could trigger applicability. GPA urges EPA to clarify that only control devices required for another Subpart OOOO or OOOOa-affected facility should trigger applicability criteria here. Broadening the scope of a control device beyond the regulated source category it was installed to control raises both technical and legal concerns.

EPA defines a pneumatic pump affected facility at a location other than natural gas processing plant as, "a single natural gas-driven chemical/methanol pump or natural gas-driven diaphragm pump for which a control device is located on site." Proposed 40 C.F.R. § 60.5365a(h)(2). However, EPA does not define the term "control device" in 40 C.F.R. §§ 60.5420 or 60.2, so it is unclear from the proposal which type of equipment triggers pneumatic pump applicability. Because installation of a "control device" would require compliance with all the OOOOa control device requirements, the most logical reading suggests that EPA intends that the "triggering" control device is one that is required for compliance with OOOO or OOOOa for another affected facility type (e.g., a storage vessel). In other words, operators may install a piece of equipment onsite that is used to control emissions, but is *not* used to control emissions for Subpart OOOO or OOOOa, without triggering NSPS applicability for pneumatic pumps. GPA requests that EPA clarify in the final rule that pneumatic pumps will only become subject to NSPS if an existing control device was installed for the purpose of complying with Subpart OOOO or OOOOa. We propose the following language for 40 C.F.R. § 60.5420(h)(2):

For locations other than natural gas processing plants, each pneumatic pump affected facility, which is a single natural gas-driven chemical/methanol pump or natural gas-driven diaphragm pump for which a control device **that is being used to comply with Subpart OOOO or OOOOa for another affected facility** is located on site.

Alternatively, EPA could define "control device" in 40 C.F.R. § 60.5430a as follows:

## <u>Control device means a device being used to control emissions for compliance</u> with Subpart OOOO or OOOOa.

Expanding the definition of source category beyond Subpart OOOO and OOOOa control devices raises both technical and legal challenges. First, from a technical standpoint, it is not clear whether devices designed for other purposes beyond Subpart OOOO or OOOOa compliance will be able to achieve the emissions reductions required in 40 C.F.R. § 60.5393a(b)(2). Such control devices may be fully subscribed addressing emissions from other sources and may lack the excess capacity to incorporate emissions from pneumatic pumps. Further, such control devices may not be designed to meet the 95% emission reduction target that EPA has established for pneumatic pumps. As a result, even if the control device has excess capacity and can accommodate emissions from a pneumatic pump, it may not be equipped to produce a 95% reduction in methane and VOC emissions. Specifically, GPA urges EPA to clarify that other equipment that can be used to reduce emissions and/or may be considered "control devices" such as condensers, boilers, reboilers, heaters, and catalytic converters on engines be specifically exempted for the purpose of subjecting pneumatic pumps to the rule. They are not suitable control devices for pneumatic pumps and were not designed for the purpose of meeting 95% reductions of VOC or methane from vent streams from other sources.

Further, as a legal matter, EPA cannot use this rulemaking to impose new obligations on control devices installed for compliance with another regulatory program. The plain and unambiguous language of Section 111(b) requires EPA to take a source-specific approach when conducting Best System of Emissions Reduction ("BSER") analyses and establishing standards of performance. See 42 U.S.C. § 7411(b)(1)(B) (directing EPA to establish "Federal standards of performance for new sources within such source category" after making an appropriate endangerment determination). Because NSPS are source-based regulations, EPA cannot use the proposed Subpart OOOOa regulations to impose new obligations on sources or control devices from other NSPS source categories. Asarco v. EPA, 578 F.2d 319, 323 (D.C. Cir. 1978) ("Affected facilities, and thus new sources, [are] clearly not synonymous with entire plants."); Alabama Power Co v. Costle, 636 F.2d 323, 397 (D.C. Cir. 1979) ("EPA cannot treat continuous and commonly owned units as a single source unless they fit within the four permissible statutory terms."). But that is exactly what EPA would be doing if it were to impose new requirements on control devices that were installed to comply with other regulatory provisions. To avoid any confusion or potential legal issues based on the regulation of control devices subject to other regulatory provisions, EPA must clarify that 40 C.F.R. § 60.5420(h)(2) only includes control devices installed to comply with the requirements of Subpart OOOO or OOOOa.

### C. EPA Must Provide Additional Flexibility for Facilities with Existing Control Devices

EPA must also provide additional flexibility for facilities with existing control devices that may not have been installed with the expectation that they would need to receive emissions from pneumatic pumps. First, EPA must add an exclusion for existing control devices added under Subpart OOOO or OOOOa that cannot physically handle additional vented emissions from pneumatic pumps. The original installation and engineering design for these control devices may not have included the excess capacity to safely include routing additional vent streams from pneumatic pumps. The rule should only require recordkeeping of a one-time engineering demonstration that the control device cannot handle the stream to qualify for the exclusion for pneumatic pumps at a site. However, if a new control device is installed after a new pneumatic pump is installed or an existing pneumatic pump is modified, the exemption would no longer apply and the new control device would need to be designed with sufficient capacity to accommodate emissions vented from the pneumatic pump.

Second, some existing NSPS OOOO control devices may not be able to meet the 95% reduction efficiency requirement when additional sources are added in. The costs for upgrading existing devices to meet 95% are not included in the proposed rule and EPA has not provided a reasonable basis for retrofitting these control devices to achieve the 95% reduction standard. Therefore, GPA urges EPA to remove the 95% control requirement for pneumatic pumps when emissions are routed to existing NSPS OOOO control devices. The existing control devices monitoring, testing, recordkeeping, and reporting requirements imposed under Subpart OOOO should be sufficient to ensure that emission are reduced in accordance with the design requirements of the existing control device.

# D. EPA Must Remove the CPMS Requirements for Control Devices that Were Not Required to Have Them Under the Original Rule

In the proposed rule, EPA would require all pneumatic pump control devices to "install and operate the continuous parameter monitoring systems" required by 40 C.F.R. § 60.5417a(a)-(g). 40 C.F.R. § 60.5410a(b)(5). GPA urges EPA to eliminate this requirement for existing Subpart OOOO control devices. Those devices should already be subject to continuous demonstration requirements under Subpart OOOO and additional requirements should not be required. Continuous parameter monitoring was not required in the original rule for storage tank sources and is not appropriate for pneumatic pumps which are generally much smaller sources of emissions. These are the most common types of sources requiring control and most likely to also be co-located at sites with pneumatic pumps. The rule does not take into account the additional expense that will be required to meet the measurement requirements and therefore should not be required under the rule. Because the monitoring requirements imposed by Subpart OOOO have been approved by EPA as sufficient to ensure compliance, there is no need to add new burdens to those control devices.

### E. EPA Must Exclude Low-Use Pneumatic Pumps

EPA must also exclude low-use pneumatic pumps (e.g., oil pumps, sump pumps) from Subpart OOOOa. These sources are only used during startup and shutdown or for limited periods. It would be prohibitively expensive to install the equipment necessary to direct emission from these small intermittent use sources to control for a negligible reduction in emissions. To ensure that all low-use pneumatic pumps are excluded, GPA urges EPA to provide an exemption for all sources other than continuous use chemical injection pumps. Similar exemptions for limited use sources exist in other rules such as those found in NSPS VV and VVa (§60.486a(e)(6) and §60.486-1a(e)). We suggest similar recordkeeping provisions that require operators to keep a list of identification numbers for equipment that is designated as operating in VOC service less than 300 hr/yr in accordance with the exemption, along with a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr.

#### F. EPA Must Provide an Exclusion for Like-Kind Replacements

GPA also requests that EPA specifically exclude like-kind replacements of pneumatic pumps from regulation under Subpart OOOOa. From time to time, existing pneumatic pumps at a compressor station must be replaced due to age, wear, or a number of other reasons. In such situations, a new pump is simply exchanged for the existing compressor with no associated change in operations or throughput at the facility. As GPA explained in Section III.A., because like-kind replacements of equipment merely substitute for existing equipment, they do not increase a facility rate of emissions. Thus, GPA urges EPA to clarify that "like-kind"

<sup>&</sup>lt;sup>10</sup> For the same reasons, if EPA does not limit the definition of control device to Subpart OOOO and OOOOa devices, EPA must clarify that it will not impose any additional monitoring, recordkeeping, or reporting requirements under this regulation for pneumatic pumps, and instead will rely on the requirements that were prescribed for the control device when it was installed to control another emission source.

replacements do not constitute a "new pump" for purposes of triggering regulation under Subpart OOOOa.

# G. EPA Must Clarify That a Source Ceases to Be an Affected Facility If the Control Device Is No Longer Needed for Other Equipment

EPA's proposed regulation for pneumatic pumps is based on the premise that emissions controls are only required if a compatible control device is already required for other equipment at the site. Because this is essentially a derivative requirement, EPA must clarify that a pneumatic pump ceases to be an affected facility if the control device is no longer required for other equipment. This circumstance could occur, for example, when the exiting control device is installed for a Subpart OOOO or OOOOa storage vessel whose potential to emit subsequently falls below 6 tpy. If this were to occur, the storage vessel would no longer be subject to regulation and the control device would no longer be necessary. Thus, EPA must clarify that such a source can remove the control device and does not need to keep it place merely to control emissions from a pneumatic pump.

## H. EPA Must Clarify the Requirements for Initial Compliance

For pneumatic pumps that lack an available control device, EPA requires that the source include a certification in its initial annual report. However, the proposed regulations do not clearly specify which types of control devices must be available at the site to trigger regulation. Specifically, 40 C.F.R. § 60.5410a(e)(3) states:

- (e) To achieve initial compliance with emission standards for your pneumatic pump affected facility you must comply with the requirements specified in paragraphs (e)(1) through (6) of this section, as applicable.
- (1) You own or operate a pneumatic pump affected facility located at a natural gas processing plant and your pneumatic pump is driven by a gas other than natural gas and therefore emits zero natural gas.
- (2) You own or operate a pneumatic pump affected facility located other than at a natural gas processing plant and your pneumatic pump is controlled by at least 95 percent.
- (3) You own or operate a pneumatic pump affected facility located other than at a natural gas processing plant and your pneumatic pump is not controlled by at least 95 percent because a control device is not available at the site, you must submit the certification in 40 C.F.R. § 60.5420a(b)(8)(i).

Likewise, the certification requirements in 40 C.F.R. § 60.5420a(b)(8)(i) state:

- (b)(8) For each pneumatic pump affected facility, the information specified in paragraphs (b)(8)(i) through (v) of this section.
- (i) In the initial annual report, a certification that there is no control device on site, if applicable.

It appears that EPA's intent was that the annual certification provision would apply to sources where pneumatic pumps are located at a site that lacks a control device capable of

meeting the 95% control requirement in 60.5410a(e)(3). However, the 95% control requirement does not appear in 40 C.F.R. § 60.5420a(b)(8)(i), which creates uncertainty as to when a certification is required. To resolve this uncertainty, GPA urges EPA to revise 40 C.F.R. § 60.5420a(b)(8)(i) should be revised to read:

(i) In the initial annual report, a certification that there is no control device **that** meets the requirement of 60.5410a(e)(2) on site, if applicable.

# I. EPA Must Extend the Initial Compliance Deadline After a Control Device is Installed or a Pneumatic Pump is Added

In the proposed rule, EPA requires that new or modified pneumatic pump sites that currently lack an emission control device will become an affected facility if a control device is later installed. GPA does not dispute EPA's position. However, GPA is concerned that EPA does not give such sources sufficient time to come into compliance. As proposed, a source must come into compliance within 30 days after a control device is *installed*. Proposed 40 C.F.R. § 60.5393a(b)(2)(ii). GPA urges EPA to extend this compliance deadline until 30 days after *startup of the control device*. This approach will give facilities more flexibility to properly startup and commission the new control device Subpart OOOOa pneumatic pump requirements are triggered. This will ensure that the control device can be properly tested after installation without concern over triggering non-compliance for pneumatic pump controls.

In addition, EPA must provide additional time to connect a newly installed pneumatic pump to a control device. The timeframe to identify a need for a pneumatic pump, purchase, install, and began operating the pump can occur in a matter of days since pumps are purchased ready to operate. For example, a site may identify a need to install methanol injection pumps due to impending cold weather and install the pumps in a matter of days. These pumps and accompanying storage totes are portable and quickly put into service. However, analyzing an existing control device for capability to accept additional flows, designing the connections, and purchasing and constructing the connection piping is much more involved and has significantly more safety concerns that must be mitigated. This process could easily take several months. Therefore, GPA urges EPA to allow 180 days after the installation of a pneumatic pump to connect to an existing NSPS OOOO or OOOOa control device.

## VI. Comments on Next Generation Compliance

### A. Third Party Verification is Unnecessary

In the proposed rule, EPA requests comment on the inclusion of an independent third-party verification program for Subpart OOOOa. 80 Fed. Reg. at 56,648-53. As EPA explains, "[t]hird party verification is when an independent third party verifies to a regulator that a regulated entity is meeting one or more of its compliance obligations." *Id.* at 56,648. GPA recognizes the importance of verification in the NSPS program and its members are committed to documenting their work to establish compliance with fugitive emissions survey requirements. However, a third-party verification program is completely unnecessary under Subpart OOOOa. As discussed above, EPA already requires extensive and complex recordkeeping and reporting requirements under the proposed rule. These requirements include, among other things,

photographs to demonstrate completion of monitoring surveys and repairs of leaking fugitive emissions components. These proposed recordkeeping requirements will provide EPA with more than enough information to verify that owners or operators are complying with their regulatory obligations. Further, any small incremental benefits that may come from adding third-party verification to the proposed recordkeeping requirements would be dwarfed by the cost of such a program. Well sites and compressor station sites are often located in remote areas without easy access. It makes little sense to require third-party verification for such locations when it is not required of larger and more accessible facilities regulated under other NSPS subsections. In addition, requiring an independent third party to accompany a monitoring team to such locations to verify monitoring and repairs will add significant costs to the program. Without some evidence that these surveys cannot be conducted properly by regulated entities, EPA's proposal for third-party verification is simply a solution in search of a problem. Therefore, GPA urges EPA to refrain from imposing such unnecessary obligations on the oil and natural gas sector under Subpart OOOOa.

In addition, even without a third-party verification program, EPA and state agencies with delegated authority under the NSPS program would have the opportunity to conduct their own OGI surveys at any time to verify the data reported by operators. Such oversight is a central part of EPA's enforcement authority. It is inconsistent with EPA's role as the primary CAA enforcer to delegate both the authority and cost of compliance monitoring to the regulated entities themselves. In essence, EPA is imposing an unfunded enforcement mandate on the very entities it is supposed to be regulating that would require them to conduct EPA's oversight requirements for the agency. This also raises concerns under the Antideficiency Act's prohibition on accepting voluntary services. 31 U.S.C. § 1342 ("An officer or employee of the United States Government ... may not accept voluntary services for either government or employ personal services exceeding that authorized by law except for emergencies involving the safety of human life or the protection of property.").

Finally, EPA cannot justify increased monitoring, recordkeeping, and reporting obligations by referencing consent decrees in enforcement actions such as those in the *U.S. and CARB v. Hyundai Moto Company, et al.* Consent Decree. *See* 80 Fed. Reg. at 56,650. Regardless of whether EPA is considering third-party verification or enhanced self-auditing requirements, it is inappropriate for EPA to base generally applicable regulations on consent decrees that impose more stringent requirements on facilities that have violated the CAA and/or EPA's regulations. While additional verification and auditing requirements may be an appropriate safeguard at facilities with a history of non-compliance, EPA has offered no basis for imposing such restrictions on all affected facilities, regardless of their compliance history. Thus, EPA should not rely on enforcement-related requirements when designing generally applicable NSPS standards.

### B. Additional Requirements for Closed Vent Systems Are Not Needed

In the proposed rule, EPA suggest that third party verification or continuous pressure monitoring may be needed to remedy inadequate design and sizing of closed vent systems. 80 Fed. Reg. at 56,649. Such requirements would be unnecessary. In the proposed rule, EPA appears to assume that most, if not all, closed vent systems are inadequately designed and sized and, as a result, are not meeting current compliance obligations. It is wholly inappropriate for

EPA to simply assume that noncompliance is occurring and demand more oversight. Instead, EPA should rely on existing and monitoring requirements and take necessary enforcement actions for the few closed vent systems that are found to be designed inadequately. Unless these existing monitoring and enforcement mechanisms are shown to be insufficient, there is no basis to add additional compliance requirements.

In addition, the pressure settings on relief devices for closed vent systems are typically set on installation and are tailored to the specific design of each closed vent system. The regular OGI monitoring program included in EPA's proposal would cover these relief devices and alert the operator if the relief devices were not working properly or if seals were in need of replacement. As a result, GPA does not believe that any additional pressure monitoring systems are necessary for closed vent systems. *See id.* (requesting comment on cost-effective pressure monitoring systems for relief devices).

Further, even if a problem does exist, an independent third-party verification program is not a suitable solution. First, the types of individuals who have the necessary qualifications to serve as third party verifiers are employees of the companies that construct closed vent systems. Because this expertise is so narrowly held, there would be few, if any, options for truly outside verifiers. However, if third party verification were conducted by the vendors of control technology, those verifiers would not be fully independent and, as a result, would undermine the integrity of the program. Second, requiring vendors to conduct third-party verification of their own work would involve unnecessary expenses. EPA has not included these costs in its original cost analysis and it is not clear if the proposed requirements would still be cost effective if these additional verification processes were required. Thus, at a minimum, EPA must defer any imposition of third-party verification for closed vent systems until the appropriate cost analysis is conducted.

### C. Public Disclosure of Compliance Data Should Be Limited

GPA is also concerned that potential third-party verification programs and enhanced self-auditing programs could create significant problems if compliance data is made available to the public. In Section IV.E., GPA described a number of security and competitiveness concerns with making certain data available to the public and those concerns are applicable here. In addition, the types of disclosure that EPA discusses in the preamble would create both uncertainty and, in some cases, raise significant legal questions. For these reasons, GPA urges to limit, in particular, the types of raw data that would be made available to the public in any Next Generation compliance program.

As an initial matter, public disclosure of compliance data related to third-party verification should be limited to avoid confusion. The affected facilities that EPA proposes to regulate are complex and have multiple components that may be subject to regulation. Due to their complexity, some degree of variation between surveys is virtually certain to occur. As a result, publicly disclosing all compliance data from third-party audit surveys would create multiple challenges to EPA and to the owners and operators of affected facilities who must respond to public questions regarding such data. First, because there is no numerical limit on fugitive emissions data, a third-party audit will not clearly show whether a facility is in compliance with the rule or not. Thus, public disclosure may be of limited value. Further, to the

extent there are minor discrepancies between an affected facility's reported data and the audit results, the public may mistakenly believe that an affected facility has violated the CAA or EPA's regulations. In fact, some discrepancies are to be expected and may be explained by a number of factors. Thus, to the extent that third-party audit data is collected by EPA, GPA urges EPA to make it publicly available in summary form only so that the results can be accompanied by necessary explanatory information.

Further, under no circumstances should EPA require companies to report quantitative environmental results on their own corporate websites. *See* 80 Fed. Reg. at 56,652. EPA has not pointed to any provision of the CAA under which it could require each regulated entity to maintain such a website and serve as a public clearinghouse for compliance data at its own expense. While EPA may possess such authority in the enforcement context to include corporate reporting in a consent decree, it cannot do so in a generally applicable regulation. Instead, to the extent that EPA believes information should be made available to the public, EPA must bear the burden of maintaining that information on its own website. The reporting requirements for affected facilities must be limited to submitting necessary data to EPA.

## VII. EPA's Cost Benefit Analysis is Arbitrary and Capricious

EPA's proposed rule is arbitrary and capricious because EPA both understates the likely costs of the proposed rule and also overestimates the potential benefits. As discussed in Section V.A. and described in Attachment A, EPA dramatically understates the costs associated with routing emission from pneumatic pumps to existing controls devices. Further, as discussed in Section IV, GPA incorporates by reference API's critique of EPA's cost estimates for the proposed rule. That comprehensive analysis highlights a series of ways in which EPA has systematically understated the likely costs of complying with the rule, leaving the mistaken impression that the costs of the rule can be justified by its benefits.

Furthermore, the costs of implementing the proposed regulations will be unduly expensive, particularly for the gathering sector where many of GPA's members operate. According to data prepared by the Small Business Advocacy Review ("SBAR") Panel, gas processing facilities, which include gathering and boosting operations, accounted for 34,000 MT of methane emissions. SBAR Panel Report on EPA's Emissions Standards for New and Modified Sources in the Oil and Natural Gas Sector, App'x A at 8. This accounts for only 7% of the methane emissions from the oil and natural gas sector. The significance of these emissions is further diminished when viewed in the broader context of the natural gas distribution system. According to EPA's GHG Inventory, gas processing facilities account for only 0.54% of the methane emissions from natural gas systems and 0.13% of the methane emissions from the U.S. as a whole. EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2013* at ES-6 (Apr. 15, 2015). Thus, gas processing facilities produce only the smallest fraction of methane emissions from natural gas systems and from the United States as a

<sup>&</sup>lt;sup>11</sup> Available at <a href="http://www2.epa.gov/reg-flex/documents-sbar-panel-emission-standards-new-and-modified-sources-oil-and-natural-gas-sector">http://www2.epa.gov/reg-flex/documents-sbar-panel-emission-standards-new-and-modified-sources-oil-and-natural-gas-sector</a>.

 $<sup>^{12}</sup>$  According to the GHG Inventory, methane emissions from natural gas systems were 157.4 MMT of  $CO_2e$ ; total methane emissions were 636.3 MMT  $CO_2e$ .

whole. Given the extremely small incremental effect that this rule's requirements will have in reducing U.S. methane emissions from gathering and boosting facilities, GPA does not believe that the costs of this rule can be justified by its purported benefits.

### VIII. EPA Must Revise Its Capital Expenditure Calculation

EPA's proposed equation for Capital Expenditure is not representative of current economic conditions characterized by low inflation and must be revised. The original equation; A = B \* Y, where Y = 1 – 0.575\*log(1982-X) and B = 4.5; was modeled based on the inflation of the late 1970s and early 1980s. This equation was intended to reflect—or correlate with—changes in the Consumer Price Index ("CPI"). However, inflation was much higher in 1982 than it is today. Yet EPA's proposed revision to this definition simply substitutes a new starting year, 2011, into the prior equation without accounting for the different economic conditions present in 1982 and 2011. By simply inserting 2011 into this equation, EPA has generated an unrepresentatively low value for A that substantially reduces the capital expenditure threshold for NSPS modifications under Subpart OOOOa. GPA proposes that EPA use a CPI-based equation to discount B (valued at 4.5% for the oil and gas sector) as shown below:

Y = (CPI of date of construction or reconstruction/CPI of date of component price data)

When changes are made at an existing facility, the component price data must be adjusted for inflation if it is not current. Attached as Figure 1 is a comparison of the two equations showing the value of A over time. The red curve uses EPA's proposed equation Y = 1 - 0.575\*log(2011-X), and the blue curve uses GPA's proposed equation above using 2012 price data. A comparison of the two curves shows that the equation proposed by the EPA is no longer correlated with changes in the CPI and unrepresentatively overstates the effect of inflation in terms of discounting the value of B. In contrast Figure 2 is a comparison showing older data points using EPA's original equation and GPA's proposed equation. The red curve uses EPA's original equation Y = 1 - 0.575\*log(1982-X), and the blue curve uses GPA's proposed equation above using 1982 as the date of component price data. In Figure 2, GPA's proposed equation tracks EPA's model very closely. This suggests that GPA's proposed equation does in fact capture EPA's original intent in establishing capital expenditure thresholds and should be used in lieu of EPA's proposed equation using 2011 as a starting point.

Failure to revise this equation will have serious repercussions for the oil and gas industry. The effect is that gas plants that were built after 1982 that were not designed to comply with the more stringent OOOO regulations could exceed the capital expenditure threshold and trigger a modification based on extremely small changes. For example, a source could exceed the capital expenditure threshold and be forced to comply with Subpart OOOOa by simply adding a valve to an existing process unit. Under such circumstances, large replacements of "equipment" (as defined in the regulation) may then be needed to comply with this change. Given the expense associated with such replacements, premature and permanent plant shutdowns may occur if replacements are deemed uneconomic. This could result in increased flaring of wet gas and increased VOC emissions, or the shutting in of oil wells.

Figure 1:

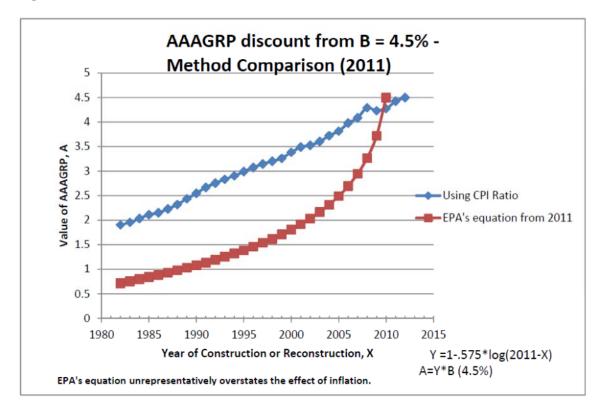
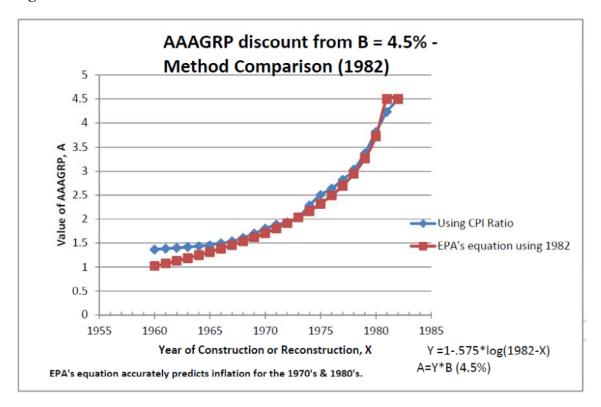


Figure 2:



## IX. Pressure-Assisted Flares Can Play a Critical Role in Controlling Emissions from Natural Gas Processing Plants

In the proposed rule, EPA solicits a series of comments on the use of pressure-assisted flares, asking, among other things:

where in the source category, under what conditions (e.g., maintenance), and how frequently pressure-assisted flares are used to control emissions from an affected facility, as defined within this subpart.

80 Fed. Reg. at 56,646. Some of GPA's members use pressure-assisted flares and GPA believes these comments will assist EPA in understanding how such flares are used in the oil and natural gas industry. GPA's member companies use pressure-assisted or sonic flares at natural gas processing plants, where they are designed specifically for large volume flows, such as a full gas plant blowdown. These flares have tulip-shaped tips that increase turbulence during high velocity flow, thus increasing the air/fuel mixture. This improvement in air/fuel mixing leads to a more complete combustion during high velocity flow.

Pressure-assisted flares are not designed for continuous use, but instead operate in emergency or upset situations where high volumes and pressures are sent to the flare. Pressure relief valves are routed to these flares for the purpose of emergencies or upsets. Maintenance events are also routed to these flares in some cases. GPA's members have tested pressure-assisted flares and have also collected manufacturer data to confirm that these flares meet the general requirements found in 40 C.F.R. § 60.18 during low flow conditions.

To work effectively, pressure-assisted flares must satisfy several operational conditions. Flame stability is of great importance for the operation of pressure-assisted flares. Each arm on the flare has a fitted sonic discharge nozzle. The nozzles provide stabilization for the flame at high and low pressures. The nozzles have a series of lugs, behind which are a number of gas bleed holes. These holes allow some of the gas to escape the nozzle and effectively multiply the pilot heating power. This greatly contributes to flame stability across all operating and atmospheric conditions. In addition, the flare head design is crucial to the operation of the pressure-assisted flare. The flare destruction efficiency of a pressure-assisted flare can be established through factory or manufacturer testing prior to installation.

The design features of pressure-assisted flares provide a number of significant benefits. First, pressure-assisted flares can operate under a wider range of heat content than other flares due to the turbulent mixing of air and gas. Second, pressure-assisted flares can operate under a wide range of gas and flare tip pressures due to the turbulent mixing of air and gas. At a low pressure, during normal operations, the blowers that provide pressure-assistance do not need to be used. However, at a high pressure, these blowers operate, increasing the combustion capability and hence the destruction efficiency of the flare.

GPA believes that pressure-assisted flares can play an important role in controlling emissions from gas gathering and processing facilities, particularly under emergency or upset conditions. Therefore, we urge EPA to consider these flares as acceptable control devices for oil and gas affected facilities requiring controls under this and other NSPS provisions. We look

forward to working with EPA to develop regulations that can incorporate pressure-assisted flares while making necessary adjustments to account for the unique conditions present during emergency and upset conditions where such flares are most valuable.

## X. EPA Failed to Conduct a Meaningful Small Business Advocacy Review Panel

EPA failed to conduct a meaningful review of the impact of the proposed rule on small businesses because it completed the notice of proposed rulemaking and submitted it to OMB prior to completing the Small Business Advocacy Review Panel. By submitting the proposed rule to OMB before even receiving comments from small businesses, EPA sent a signal that it did not intend to take their concerns into account and instead was merely working to meet the procedural requirements of the Regulatory Flexibility Act ("RFA") and Small Business Regulatory Enforcement Fairness Act ("SBREFA"). Section 609(b) of the RFA requires EPA to convene a Small Business Advocacy Review ("SBAR") Panel before proposal of any rule which would have a significant impact on a substantial number of small entities. The purpose of this requirement is to allow dialogue between EPA and small business representatives to ensure that EPA is taking the interests of small businesses into account in its rulemakings.

EPA's own guidance clearly states that EPA must conduct SBAR panels early in the rulemaking process to ensure that it has time to review the reports from such panels and, when necessary, make changes to the proposal to address impacts on small businesses. See EPA, Final Guidance for EPA Rulewriters: Regulatory Flexibility Act 53 (Nov. 2006) ("RFA Guidance") ("In light of the Panel Report, the Agency is to modify, where appropriate, the proposed rule ...."). Thus, the RFA Guidance explains that "[e]arly involvement helps ensure that small entity comments and insights inform EPA's thinking about fundamental issues of rule design and scope, as well as more specific issues posed by the particular regulatory program at issue." *Id.* To achieve these goals, "EPA expects that the Panel process will normally be concluded well in advance of Final Agency Review ... in order to be most useful in the development of the proposed rule." Id. at 57. EPA sets a specific process for ensuring that the agency takes small business interests into account and dictates that the SBAR Panel Report must be completed and incorporated into the proposed rule before the rule can be submitted to OMB for review. Id. at 67 ("The Regulatory Management Division of EPA's Office of Policy, Economics and Innovation, which is responsible for the review of regulations prior to OMB review and signature by the Administrator, will, in conjunction with OGC, ensure that your preamble language is sufficient." (emphasis added)).

Here, EPA failed to comply with its own guidelines when it submitted the proposed rule to OMB on June 23, 2015, before the July 6, 2105, deadline for accepting comments from small businesses as part of the SBAR panel process. This is contrary to the RFA and suggests that the entire SBAR Panel was merely a formality and not taken seriously by the agency. EPA cannot assert that it took the interests of small businesses into account if it had already finalized its proposal before receiving their comments. Further, by failing to address their concerns at the outset of this rulemaking, EPA has prejudiced the interests of small businesses in the oil and gas sector, many of whom will be significantly impacted by the requirements of this rule. Those harms cannot be undone. However, to alleviate those concerns to the fullest degree possible, GPA urges EPA to convene another SBAR Panel well in advance of OMB's review of the final

rule so that EPA can make necessary changes to address the impacts of the rule on small businesses.

### XI. Issues Related to GPA's Prior Petitions for Reconsideration

## A. EPA Must Clarify That Compressors, Pneumatic Pumps, and Storage Devices Are Exempt from Generally Applicable Notification Requirements

GPA appreciates EPA's efforts to address our concerns about reconstruction notifications for compressors, pneumatic pumps, and storage tanks. A continued dialogue between the agency and regulated entities is essential to ensure that regulations are effective in achieving their goals in an efficient and cost-effective manner. In response to GPA's requests, EPA attempted to clarify that notification requirements for such affected facilities would be governed by the specific requirements in Subpart OOOO instead of the generally applicable notification provisions for the NSPS program. EPA also appropriately attempted to apply the same approach in Subpart OOOOa. While GPA appreciates EPA's efforts in this regard, several further modifications are needed to fully implement these changes in both Subparts OOOO and OOOOa.

First, in Table 3, EPA states that 40 C.F.R. § 60.15(d) "does not apply to pneumatic controllers, centrifugal compressors, or storage vessels." GPA agrees that these devices should not be subject to 40 C.F.R. § 60.15(d). However, GPA is unsure why this exclusion was not also extended to reciprocating compressors, as EPA has done in the past. *See, e.g.*, 40 C.F.R. § 60.5420(a)(1) (extending exclusion to gas wells, pneumatic controllers, centrifugal compressors, reciprocating compressors, and storage vessels). GPA urges EPA to correct this apparent oversight by revising Table 3 to include reciprocating compressors.

Second, to ensure consistency between Table 3 and 40 C.F.R. § 60.5420, GPA requests that the latter provision be revised to clarify that these devices are also excluded from the requirements of 40 C.F.R. § 60.15(d). Specifically, GPA requests that 40 C.F.R. § 60.5420(a)(1) be revised as follows: "If you own or operate a gas well, pneumatic controller, centrifugal compressor, reciprocating compressor or storage vessel affected facility you are not required to submit the notifications required in §60.7(a)(1), (3), and (4) and 60.15(d)."

Third, EPA's initial revisions to remove construction, startup, and modification notification requirements for reciprocating and centrifugal compressors, created an inconsistency between 40 C.F.R. §§ 60.5420(a)(1) and 60.5410(b)(6). Specifically, 40 C.F.R. § 60.5410(b)(6) still requires sources to comply the provisions 40 C.F.R § 60.7(a)(1), (3), and (4) while 40 C.F.R. § 60.5420(a)(1) excludes them from complying with those provisions. GPA urges EPA to delete 40 C.F.R. § 60.5410(b)(6) to ensure consistency between the regulations.

Further, in the proposed rule for Subpart OOOOa, EPA has copied the same defective language used in Subpart OOOO. Therefore, GPA requests that EPA make conforming changes to Table 3 to Subpart OOOOa, Proposed 40 C.F.R. § 60.5420a(a)(1), and Proposed 40 C.F.R. § 60.5410a(b)(6) to ensure that compressors, pneumatic pumps, and storage devices are also excluded from the generally applicable notification requirements under Subpart OOOOa.

# B. EPA Did Not Fully Modify Rule Language When It Allowed Use of Closed Vent Systems for Reciprocating Rod Packing Emission Control

In the preamble to the December 31, 2014 revisions to Subpart OOOO, EPA described changes regarding the use of closed vent systems for reciprocating rod packing emission controls: "We are revising the continuous compliance demonstration provisions in § 60.5415(c)(4) to reflect that the source must comply with 60.5416(a) and (b) rather than § 60.5411(a) and (b)." 79 Fed. Reg. at 79,023. However, EPA did not fully execute changes to the December 31, 2014 version of OOOO that were described in the preamble. Likewise, those changes were not included in the proposed rule for Subpart OOOOa. As such, these changes still need to be made in OOOO and carried through to OOOOa as well. GPA proposes that EPA revise 40 C.F.R. §§ 60.5415(c)(4) and 60.5415a(c)(4) as follows:

60.5415(c)(4) You must operate the rod packing emissions collection system under negative pressure and continuously comply with the closed vent requirements in §60.5411(a) 60.5416(a).

In addition, EPA stated in the December 31, 2014 preamble that "[w]e are amending \$60.5420(c)(6) through (9) to add reciprocating compressors as sources subject to these recordkeeping requirements." 79 Fed. Reg. at 79,023. Thus, this language change is still needed in Subpart OOOO. (EPA correctly revised the analogous language in OOOOa.) Consistent with EPA's proposal for 40 C.F.R. § 60.5420a(c)(6), 40 C.F.R. § 60.5420(c)(6) should be amended as follows:

60.5420(c)(6) Records of each closed vent system inspection required under \$60.5416(a)(1) and (2) for centrifugal or reciprocating compressors or \$60.5416(c)(1) for storage vessels.

In addition, GPA is concerned that EPA's option allowing rod packing emissions to be collected under negative pressure and sent to a control device could potentially lead to significant safety issues. See 40 C.F.R. §§ 60.5385(a)(3) and 60.5385a(a)(3) ("Collect the emissions from the rod packing using a rod packing emissions collection system which operates under negative pressure and route the rod packing emissions to a process through a closed vent system...); see also 40 C.F.R. §§ 60.5415(c)(4) and 60.5415a(c)(4). Operating a crankcase collection system under negative pressure (i.e. in a vacuum) leads to significant safety issues due to the possibility of oxygen being introduced into the system. Crankcases are not designed to operate at pressures greater than 2 psi because of issues with gaskets and seals in the crankcase will occur. Therefore, in addition to the technical corrections described above, we urge EPA to eliminate the requirement to collect emissions from rod packing systems under negative pressure. Specifically, we recommend that 40 C.F.R. § 60.5385a(a)(3) be revised to state:

Collect the emissions from the rod packing using a rod packing emissions collection system which operates under negative pressure and route the rod packing emissions to a process through a closed vent system....

This issue is also appears in Subpart OOOO, therefore a revision should also be made to 40 C.F.R. § 60.5385(a)(3), as follows:

Collect the emissions from the rod packing using a rod packing emissions collection system which operates under negative pressure and route the rod packing emissions to a process through a closed vent system....

# C. EPA Did Not Fully Remove All Language Related to "Permits" in the Definition of "Responsible Official."

As EPA explained in the preamble to the proposed revisions published July 17, 2014, "the 2012 NSPS uses the term 'permitting authority' in the definition of 'responsible official.' The NSPS is not a permitting program, and the annual compliance certification that requires signature of the 'responsible official' is a requirement of the NSPS and is not associated with a permitting program. As a result, we are proposing to replace the term 'permitting authority' with 'Administrator' in the definition of 'responsible official' to be consistent with other notification and reporting requirements of the NSPS." 79 Fed. Reg. at 41,762. As GPA explained in comments to that proposal, the definition of "Responsible Official" in Subpart OOOO still contains a reference to permit applications. The same definition is proposed for Subpart OOOOa. We suggest the following changes to the definition of responsible official in Subparts OOOO and OOOOa:

Responsible official means one of the following: (1) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or with an affected facility subject to a permit this subpart and either:...

### D. Inconsistent Requirements for Reciprocating Compressors

For reciprocating compressor affected facilities regulated under Subpart OOOO, the operator must track the hours of operation or the number of months since initial startup, since October 15, 2012, or since the previous rod packing replacement, whichever is later. EPA proposes a similar requirement for reciprocating compressor affected facilities under Subpart OOOOa. The language in 40 C.F.R. §§ 60.5410(c)(1) and 60.5410a(c)(1) should be modified as suggested below in order to reflect this requirement, to avoid compliance confusion, and to be consistent with the language in 40 C.F.R. §§ 60.5420(b)(4)(i), 60.5420(c)(3)(i), and 60.5415(c)(1).

60.5410(c)(1): If complying with §60.5385(a)(1) or (2), during the initial compliance period, you must continuously monitor the number of hours of operation or track the number of months since <u>initial startup</u>, October 15, 2012, <u>or</u> the last rod packing replacement, <u>whichever is later</u>.

60.5410a(c)(1): If complying with §60.5385a(a)(1) or (2), during the initial compliance period, you must continuously monitor the number of hours of operation or track the number of months since <u>initial startup</u>, September 18, <u>2015</u>, or the last rod packing replacement, whichever is <u>later</u>.

## E. Recordkeeping Requirements for Combustion Control Devices Tested by the Manufacturer Are Not Reflected in 40 C.F.R. §§ 60.5420 or 60.5420a.

In Subpart OOOO and in the proposed rule, EPA would require that "[a]ll repairs and maintenance activities for each unit must be recorded in a maintenance and repair log and must be available for inspection." 40 C.F.R. §§ 60.5413(e)(4); 60.5413a(e)(4). However, this additional recordkeeping requirement is not reflected in 40 C.F.R. §§ 60.5420(c) or 60.5420a(c). This recordkeeping requirement should be added to the recordkeeping sections of the rule to maintain rule consistency and clarity.

### Conclusion

GPA appreciates the opportunity to submit these comments on the proposed rule. We look forward to continuing to work with EPA as it develops policies to address air emissions from the oil and natural gas sector. GPA is standing by to provide further information or answer any questions that EPA may have.

Respectfully Submitted,

Mark Sutton
President and Chief Executive Officer
Gas Processors Association

## **ATTACHMENT 1: COST EFFECTIVENESS OF PNEUMATIC PUMP CONTROLS**

The EPA's estimate of cost savings from the rule is misleading. By adjusting the value in the equation closer to actual costs for Routing Equipment, the average cost/ton is much greater than the figure EPA used. See tables below.

Original Figures, (Source: Docket EPA-HQ-OAR-2010-0505, Support Document: TSD Section 7 Pneumatic Pumps 073015):

#### Routing To Existing Flare or VRU Standard method

		Emission reductions (tpy/pump)				Na	Cost of Control (\$/ton)			
					Conital Cost Bouting Faulinment	Emission	Saved		Without Savings	
Segment	Type of Pump	Methane	voc	Annualized Cost	Capital Cost Routing Equipment to Existing Flare (2012 \$)	Factor (scf/h)	(Mcf/yr) <sup>a</sup>	Value	Methane	voc
Production	Diaphram	3.29	0.91	\$285	\$2,000	22.45	187	\$749	\$87	\$312
Transmission	Diaphram	3.29	0.09	\$285	\$2,000	22.45	187	\$749	\$87	\$3,130
Storage	Diaphram	3.29	0.09	\$285	\$2,000	22.45	187	\$749	\$87	\$3,130
Production	Piston	0.36	0.10	\$285	\$2,000	2.48	21	\$84	\$789	\$2,840
Transmission	Piston	0.36	0.01	\$285	\$2,000	2.48	21	\$84	\$789	\$28,501
Storage	Piston	0.36	0.01	\$285	\$2,000	2.48	21	\$84	\$789	\$28,501

a. Assumes 95% capture and recovery for a VRU.

#### Routing To Existing Flare or VRU prorated method

		Emission redu	ctions			Na	Cost of Control (\$/ton)			
		(tpy/pump)			Conital Cost Bouting Faciliament	Emission	Saved		Without Savings	
Segment	Type of Pump	Methane	voc	Annualized Cost	Capital Cost Routing Equipment to Existing Flare (2012 \$)	Factor (scf/h)	(Mcf/yr) <sup>a</sup>	Value	Methane	voc
Production	Diaphram	3.29	0.91	\$285	\$2,000	22.45	187	\$749	\$43	\$156
Transmission	Diaphram	3.29	0.09	\$285	\$2,000	22.45	187	\$749	\$43	\$1,564
Storage	Diaphram	3.29	0.09	\$285	\$2,000	22.45	187	\$749	\$43	\$1,564
Production	Piston	0.36	0.10	\$285	\$2,000	2.48	21	\$84	\$394	\$1,419
Transmission	Piston	0.36	0.01	\$285	\$2,000	2.48	21	\$84	\$394	\$14,238
Storage	Piston	0.36	0.01	\$285	\$2,000	2.48	21	\$84	\$394	\$14,238

a. Assumes 95% capture and recovery for a VRU.

b. Savings only applies for VRU, not gas savings for combustion

b. Savings only applies for VRU, not gas savings for combustion

#### Routing To Existing Flare or VRU Standard method

		Emission reductions		Capital Cost Routing	Natural Gas			Cost of Control (\$/ton)		Cost of Control (\$/ton)		
		(tpy/pump)			Equipment to	Emission			Without Savings		With Savings <sup>b</sup>	
Segment	Type of Pump	Methane	voc	Annualized Cost	Existing Flare (2012 \$)	Factor (scf/h)	Saved (Mcf/yr) <sup>a</sup>	Value	Methane	voc	Methane	voc
Production	Diaphram	3.29	0.91	\$8,329	\$58,500	22.45	187	\$749	\$2,534	\$9,116	\$2,306	\$8,297
Transmission	Diaphram	3.29	0.09	\$8,329	\$58,500	22.45	187	\$749	\$2,534	\$91,478	\$2,306	\$83,256
Storage	Diaphram	3.29	0.09	\$8,329	\$58,500	22.45	187	\$749	\$2,534	\$91,478	\$2,306	\$83,256
Production	Piston	0.36	0.10	\$8,329	\$58,500	2.48	21	\$84	\$23,072	\$83,003	\$22,841	\$82,170
Transmission	Piston	0.36	0.01	\$8,329	\$58,500	2.48	21	\$84	\$23,072	\$832,933	\$23,072	\$832,933
Storage	Piston	0.36	0.01	\$8,329	\$58,500	2.48	21	\$84	\$23,072	\$832,933	\$23,072	\$832,933

a. Assumes 95% capture and recovery for a VRU.

#### Routing To Existing Flare or VRU prorated method

		Emission reductions		Capital Cost Routing	Natural Gas			Cost of Control (\$/ton)		Cost of Control (\$/ton)		
		(tpy/pump)			Equipment to	Emission	6		Without Savings		With Savings <sup>b</sup>	
Segment	Type of Pump	Methane	voc	Annualized Cost	Existing Flare (2012 \$)	Factor (scf/h)	Saved (Mcf/yr) <sup>a</sup>	Value	Methane	voc	Methane	voc
Production	Diaphram	3.29	0.91	\$8,116	\$58,500	22.45	187	\$749	\$1,267	\$4,558	\$1,153	\$4,148
Transmission	Diaphram	3.29	0.09	\$8,116	\$58,500	22.45	187	\$749	\$1,267	\$45,739	\$1,153	\$41,628
Storage	Diaphram	3.29	0.09	\$8,116	\$58,500	22.45	187	\$749	\$1,267	\$45,739	\$1,153	\$41,628
Production	Piston	0.36	0.10	\$8,116	\$58,500	2.48	21	\$84	\$11,536	\$41,501	\$11,420	\$41,085
Transmission	Piston	0.36	0.01	\$8,116	\$58,500	2.48	21	\$84	\$11,536	\$416,467	\$11,536	\$416,467
Storage	Piston	0.36	0.01	\$8,116	\$58,500	2.48	21	\$84	\$11,536	\$416,467	\$11,536	\$416,467

a. Assumes 95% capture and recovery for a VRU.

b. Savings only applies for VRU, not gas savings for combustion

b. Savings only applies for VRU, not gas savings for combustion.

<sup>\*</sup>At \$416,467/ton VOC prorated cost for piston chemical injection pumps the cost becomes prohibitive.