The EPA Administrator, E. Scott Pruitt, signed the following notice on 2/23/2018, and EPA is submitting it for publication in the *Federal Register* (FR). While we have taken steps to ensure the accuracy of this Internet version of the rule, it is not the official version of the rule for purposes of compliance. Please refer to the official version in a forthcoming FR publication, which will appear on the Government Printing Office's FDSys website (<u>http://gpo.gov/fdsys/search/home.action</u>) and on Regulations.gov (http://www.regulations.gov) in Docket No. EPA-HQ-OAR-2010-0505. Once the official version of this document is published in the FR, this version will be removed from the Internet and replaced with a link to the official version.

6560-50-P

# ENVIRONMENTAL PROTECTION AGENCY

#### 40 CFR Part 60

#### [EPA-HQ-OAR-2010-0505; FRL-xxxx-xx-xxx]

#### **RIN 2060-AT59**

# Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources; Amendments

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action finalizes amendments of certain requirements that are contained

within the final rule titled "Oil and Natural Gas Sector: Emission Standards for New,

Reconstructed, and Modified Sources," published in the Federal Register on June 3, 2016 (2016

Rule). The Environmental Protection Agency (EPA) is finalizing amendments of two narrow

provisions of the requirements for the collection of fugitive emission components at well sites

and compressor stations: (1) removes the requirement for completion of delayed repair during

unscheduled or emergency vent blowdowns, and (2) provides separate monitoring requirements

for well sites located on the Alaskan North Slope.

DATES: This final rule is effective on [INSERT DATE OF PUBLICATION IN THE

#### FEDERAL REGISTER].

**ADDRESSES:** The EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2010-0505. All documents in the docket are listed on the *http://www.regulations.gov* Web

site. Although listed in the index, some information is not publically available, *e.g.*, confidential

business information or other information whose disclosure is restricted by statute. Certain other

material, such as copyrighted material, is not placed on the Internet and will be publicly available

only in hard copy form. Publicly available docket materials are available electronically through

http://www.regulations.gov.

# FOR FURTHER INFORMATION CONTACT: Mrs. Karen Marsh, Sector Policies and

Programs Division (E143-05), Office of Air Quality Planning and Standards, Environmental

Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919)

541-1065; email address: marsh.karen@epa.gov.

# SUPPLEMENTARY INFORMATION:

*Outline*. The information presented in this preamble is presented as follows:

- I. General Information
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  - B. Where can I get a copy of this document and other related information?
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VII. Statutory and Executive Order Reviews

- A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review
- B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs
- C. Paperwork Reduction Act (PRA)
- D. Regulatory Flexibility Act (RFA)
- E. Unfunded Mandates Reform Act (UMRA)
- F. Executive Order 13132: Federalism
- G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

- H. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
- I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use
- J. National Technology Transfer and Advancement Act (NTTAA)
- K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- L. Congressional Review Act (CRA)

# **I.** General Information

A. Does this action apply to me?

Categories and entities potentially affected by this action include:

Category	NAICS Code <sup>1</sup>	Examples of Regulated Entities			
Industry	211111	Crude Petroleum and Natural Gas Extraction.			
	211112	Natural Gas Liquid Extraction.			
	221210	Natural Gas Distribution.			
	486110	Pipeline Distribution of Crude Oil.			
	486210	Pipeline Transportation of Natural Gas.			
Federal government		Not affected.			
State/local/tribal		Not affected.			
government					

<sup>1</sup> North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that the EPA is now aware could potentially be affected by this action. Other types of entities not listed in the table could also be regulated. To determine whether your entity is regulated by this action, you should carefully examine the applicability criteria found in the final rule. If you have This document is a prepublication version, signed by EPA Administrator, E. Scott Pruitt on 2.23.2018. We have taken steps to ensure the accuracy of this version, but it is not the official version.

questions regarding the applicability of this action to a particular entity, consult the person listed in the **FOR FURTHER INFORMATION CONTACT** section of this preamble, your delegated authority, or your EPA Regional representative listed in 40 CFR 60.4 (General Provisions). *B. Where can I get a copy of this document and other related information?* 

In addition to being available in the docket, an electronic copy of the final action is available on the Internet. Following signature by the Administrator, the EPA will post a copy of this final action at *https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry*. Additional information is also available at the same Web site.

#### C. Judicial Review

Under section 307(b)(1) of the Clean Air Act (CAA), judicial review of this final rule is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by **[INSERT DATE 60 DAYS AFTER DATE OF** 

**PUBLICATION IN THE FEDERAL REGISTER**]. Moreover, under section 307(b)(2) of the CAA, the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce these requirements. Section 307(d)(7)(B) of the CAA further provides that "[o]nly an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review." This section also provides a mechanism for the EPA to convene a proceeding for reconsideration, "[i]f the person raising an objection can demonstrate to the EPA that it was impracticable to raise such objection within [the period for public comment] or if the grounds for such objection arose after the period for public comment, (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule." Any person seeking to make such a demonstration to us should submit

a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, EPA WJC West Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave., NW, Washington, DC 20460.

#### II. Background

On June 3, 2016, the EPA published a final rule titled "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources; Final Rule," at 81 FR 35824 ("2016 Rule"). The 2016 Rule established new source performance standards (NSPS) for greenhouse gas and volatile organic compound (VOC) emissions from the oil and natural gas sector. This rule addressed, among other things, fugitive emissions at well sites and compressor stations ("fugitive emissions requirements") and emissions from pneumatic pumps. In addition, for a number of affected facilities (*i.e.*, centrifugal compressors, reciprocating compressors, pneumatic pumps, and storage vessels), the rule required certification by a professional engineer of the closed vent system design and capacity, as well as any technical infeasibility determination relative to controlling pneumatic pumps at well sites. For further information on the 2016 Rule, see 81 FR 35824 (June 3, 2016) and associated Docket ID No. EPA-HQ-OAR-2010-0505. A number of states and industry associations sought judicial review of the rule, and the litigation is currently being held in abeyance. In addition, the EPA received a number of petitions for administrative reconsideration of the rule and on April 18, 2017, convened a proceeding to reconsider certain aspects of the rule, including those related to the above three requirements.

On June 16, 2017, the EPA proposed to stay the fugitive emissions requirements, the well site pneumatic pump requirements, and the requirements for certification of closed vent systems by a professional engineer for 2 years. The EPA proposed the stay of these requirements in order to provide the EPA with sufficient time to propose, take public comment on, and issue a final action on the issues under reconsideration. See 82 FR 27645 (June 16, 2017). On November 8, 2017, the EPA issued a notice of data availability (NODA), in which the EPA offered additional information in further support of the proposed stay and solicited comments on a suggestion from stakeholders to allow additional time to phase in these requirements as opposed to a stay. See 82 FR 51788 (November 8, 2017). Additionally, the NODA solicited comment and information on several implementation challenges raised by stakeholders. In particular, the EPA broadly solicited comments on issues associated with the requirement to complete repairs on components on a delay of repair (hereinafter referred to as "delayed repair" for short in this notice)<sup>1</sup> during emergency or unscheduled shutdowns or vent blowdowns and suggestions for addressing the issues. See 82 FR 51793.

EPA received a broad range of comments and information in response to the proposed stay and the NODA. Relevant to this action is information regarding two specific provisions of the fugitive emissions requirements that we have concluded present immediate compliance concerns: (1) the requirement that delayed repairs must be completed during unscheduled or emergency vent blowdowns that occur within the 2-year repair timeframe and prior to other scheduled events, and (2) the monitoring survey requirements for well sites located on the

<sup>&</sup>lt;sup>1</sup> See 40 CFR 60.5397a(h)(2) for delay of repair requirements. "If the repair or replacement is technically infeasible, would require a vent blowdown, a compressor station shutdown, a well shutdown or well shut-in, or would be unsafe to repair during operation of the unit, the repair or replacement must be completed during the next compressor station shutdown, well shut-in, after an unscheduled, planned or emergency vent blowdown or within 2 years, whichever is earlier."

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Alaskan North Slope. See section IV of this preamble for a discussion of these concerns and these final amendments. The Agency is still examining comments related to all other issues raised in the proposal and NODA, including other issues related to delayed repair and the Alaskan North Slope, and is not taking final action with respect to these other matters in this final action.

#### **III. Legal Authority**

The legal authority for this final action, which amends two narrow provisions of the fugitive emissions requirements in the 2016 Rule, is the same as that for the promulgation of the 2016 Rule. The EPA promulgated the 2016 Rule pursuant to section 111(b)(1)(B) of the CAA, which requires the EPA to issue "standards of performance" for new sources in the list of categories of stationary sources that cause or contribute significantly to air pollution which may reasonably be anticipated to endanger public health or welfare. See 81 FR 35828. CAA section 111(a)(1) defines "a standard of performance" as "a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirement) the Administrator determines has been adequately demonstrated." This definition makes clear that the standard of performance must be based on controls that constitute "the best system of emission reduction... adequately demonstrated." The standard that the EPA develops, based on the best system of emission reduction (BSER), is commonly a numerical emissions limit, expressed as a performance level (e.g., a rate-based standard). However, CAA section 111(h)(1) authorizes the Administrator to promulgate a work practice standard or other requirements, which reflects the best technological system of continuous emission reduction, if it is not feasible to prescribe or

enforce an emissions standard. The work practice standards for fugitive emissions from well sites and compressor stations were promulgated pursuant to CAA section 111(h)(1)(A). See 81 FR 35829.

Agencies have inherent authority to reconsider past decisions and to revise, replace, or repeal a decision to the extent permitted by law and supported by a reasoned explanation. *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009); *Motor Vehicle Mfrs. Ass 'n v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29, 42 (1983) (*"State Farm"*). *"The power to decide in the first instance carries with it the power to reconsider." Trujillo v. Gen. Elec. Co.*, 621 F.2d 1084, 1086 (10th Cir. 1980); see also, *United Gas Improvement Co. v. Callery Properties, Inc.*, 382 U.S. 223, 229 (1965); *Mazaleski v. Treusdell*, 562 F.2d 701, 720 (D.C. Cir. 1977). Accordingly, in this final rule, the EPA is using the same statutory authority in promulgating the 2016 Rule to amend two provisions of the fugitive emissions requirements in the 2016 Rule. As explained below in section IV, with these two narrowly tailored amendments, the fugitive emissions requirements better reflect BSER for reducing fugitive emissions at well sites and compressor stations.

#### **IV. Summary of Final Action**

The EPA is finalizing amendments to two fugitive emissions requirements: (1) the requirements for delayed repairs, and (2) the monitoring survey requirements for well sites located on the Alaskan North Slope.

#### A. Delayed Repairs

In this action, the EPA is finalizing amendments to the requirements related to delayed repairs. Specifically, the final rule removes the requirement for completion of delayed repairs during unscheduled or emergency vent blowdowns. Owners and operators are still required to

complete repairs during the next compressor station shutdown, well shutdown, well shut-in, after a planned vent blowdown, or within 2 years, whichever is earlier.

The 2016 Rule requires replacement or repair of a component within 30 days of detection of fugitive emissions, but allows delaying the replacement/repair under certain situations specified in the rule. Specifically, the rule requires that the delayed repair "must be completed during the next compressor station shutdown, well shutdown, well shut-in, after an unscheduled, planned or emergency vent blowdown or within 2 years, whichever is earlier." See 40 CFR 60.5397a(h)(2). While the only unscheduled and emergency event specified in this regulation is with regard to vent blowdown, the EPA stated in the preamble to the 2016 Rule that "if an unscheduled or emergency vent blowdown, compressor station shutdown, well shutdown, or well shut-in occurs during the delay of repair period, the fugitive emissions components would need to be fixed at that time." See 81 FR 35858. This preamble language implied that delayed repairs were required if any of these events occurred, regardless of whether it was planned. As mentioned above, the EPA discussed in the NODA stakeholder feedback that requiring repair or replacement of fugitive emissions components during unscheduled or emergency vent blowdowns could result in natural gas supply disruptions, safety concerns, and increased emissions. In response, the EPA solicited comments on shutdown, shut-in, and blowdown scenarios that could result in technical, safety, and/or environmental issues, as well as suggestions for addressing them. See 82 FR 51793. The EPA learned from the comments, through additional specific examples, that the requirement to complete delayed repairs during an unscheduled or emergency vent blowdown could lead to a number of unintended negative consequences. In particular, emissions from requiring delayed repairs during an unscheduled or emergency shutdown, shut-in, or vent blowdown could result in greater emissions than the leaks

that are to be repaired; as such, it could not possibly reflect BSER for addressing fugitive emissions at well sites and compressor stations.

One commenter described configurations at well sites that can lead to an automatic emergency well shut-in and where the rule, if applied as suggested in the preamble, could have unintended consequences.<sup>2</sup> Where well sites have a compressor that collects flash gas from a low pressure separator or a vapor recovery unit that collects flash gas from storage vessels, there are certain safety measures put in place in the event these compressors unexpectedly go offline. Depending on the remoteness of the well site, one safety measure available is to automatically shut in the well to prevent the release of gas from pressure relief valves. In these, and other similar emergency shut-in situations, the equipment is not depressurized so the well can be brought back into production as soon as possible. However, by requiring completion of the delayed repair during such shut-in events, equipment at this well site that have components placed on delayed repair would have to be depressurized and blown down, resulting in emissions that would not have occurred except for the delayed repair requirement and could be higher than the emissions from continuing to delay repair.

Similar scenarios were provided by the commenters for compressor stations, where changes in horsepower demand, upsets of the compressor unit or the station, lightning strikes, power loss, floods, unplanned maintenance or repairs of a pipeline, fire, third-party damage, or instrumentation outages can result in unplanned or emergency blowdowns of certain equipment at a compressor station.<sup>3</sup> When the compressor station is not operating, gas will continue to enter gathering lines until upstream wells are routed to other compressor stations. This gas must be vented or flared to prevent overpressurization of the gathering lines. Repairs can require skilled

<sup>&</sup>lt;sup>2</sup> See Docket ID No. EPA-HQ-OAR-2010-0505-12446.

<sup>&</sup>lt;sup>3</sup> See Docket ID No. EPA-HQ-OAR-2010-0505-12447.

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labor crews and custom fabricated parts, both of which must be scheduled and ordered in advance.<sup>4</sup> Given the unpredictability of these unplanned or emergency events, gas may need to be vented or flared for an extended period of time while the owner or operator organized completion of delayed repairs and before the compressor station is brought back online, thereby creating emissions that would not have occurred except for the delayed repair requirement and could be higher than the emissions from continuing to delay repair. For these reasons, not requiring repair during unplanned or emergency vent blowdowns would limit excess emissions from avoidable blowdowns.

In addition to emissions from avoidable blowdowns described above, several commenters raised concerns about extended gas service disruption.<sup>5</sup> For example, many natural gas transmission pipelines are operating year-round at or near capacity, with little redundancy in the supply chain. Further, some regions do not have access to alternate gas supplies. As we have learned, the requirement for delayed repairs during unplanned or emergency blowdowns can result in the unintended consequence of forcing owners or operators to choose between meeting contractual commitments governed by the Federal Energy Regulatory Commission or complying with leak repair requirements.<sup>6</sup> The disruption to service can also result in loss of home heating during the winter and the loss of natural gas supply to power plants during periods when electricity demands are higher. This is clearly an unintended and undesirable result and should, therefore, be avoided, as demonstrated by the leak repair requirement by the California Air

<sup>&</sup>lt;sup>4</sup> See Docket ID Nos. EPA-HQ-OAR-2010-0505-12421, EPA-HQ-OAR-2010-0505-12424, EPA-HQ-OAR-2010-0505-12430, EPA-HQ-OAR-2010-0505-12436, EPA-HQ-OAR-2010-0505-12446, EPA-HQ-OAR-2010-0505-12447, and EPA-HQ-OAR-2010-0505-12454.

<sup>&</sup>lt;sup>5</sup> See Docket ID Nos. EPA-HQ-OAR-2010-0505-12430, EPA-HQ-OAR-2010-0505-12436, EPA-HQ-OAR-2010-0505-12446, EPA-HQ-OAR-2010-0505-12447, and EPA-HQ-OAR-2010-0505-12454.

<sup>&</sup>lt;sup>6</sup> See Docket ID No. EPA-HQ-OAR-2010-0505-12447.

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Resource Board (CARB).<sup>7</sup> We note that CARB's leak repair requirement, which CARB commented as being more stringent than the EPA's leak repair requirement in the 2016 Rule, does not require repair, if it would disrupt service.

After examining the comments and supporting data on this issue, the EPA agrees with the commenters that delayed repairs should not be required during an unscheduled or emergency shutdown, shut-in, or vent blowdown due to the potential unintended consequences of further increasing the emissions, in addition to disruption of services. The EPA further concludes that this issue must be addressed immediately to avoid these unintended consequences. Because the proposed 2-year stay or proposed phase-in would offer only a temporary relief from this requirement, which the EPA has already concluded to be unacceptable, the EPA is not finalizing a stay or phase-in of this requirement. Instead, the EPA is taking final action to amend the delayed repair requirement to remove the terms "unplanned" and "emergency" from the list of events that would require completion of delayed repairs.

#### B. Alaskan North Slope

We are finalizing amendments to the fugitive emission monitoring requirements for well sites located on the Alaskan North Slope.<sup>8</sup> New well sites that startup production between September and March must conduct initial monitoring within 6 months of the startup of production<sup>9</sup> or by June 30, whichever is later. Well sites that startup production between April

<sup>&</sup>lt;sup>7</sup> Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities, section 95669, California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10 Climate Change, Article 4, Subarticle 13. Effective date October 1, 2017. This regulation has a phase-in period from January 1, 2018, to December 31, 2019, where fugitive emissions are defined as a leak of 10,000 parts per million (ppm) or greater using EPA Method 21 on a quarterly monitoring frequency. After January 1, 2020, that leak definition decreases to 1,000 ppm on the same monitoring frequency.

<sup>&</sup>lt;sup>8</sup> Alaskan North Slope is defined in 40 CFR 60.5430a as "the approximately 69,000 square-mile area extending from the Brooks Range to the Arctic Ocean."

<sup>&</sup>lt;sup>9</sup> Startup of production is defined in 40 CFR 60.5430a as "the beginning of initial flow following the end of flowback when there is continuous recovery of salable quality gas and separation and recovery of any crude oil, condensate or produced water."

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and August must continue to meet the 60-day initial monitoring requirement in the 2016 Rule. Similarly, well sites that are modified between September and March must conduct initial monitoring within 6 months of the first day of production for each collection of fugitive emissions components or by June 30, whichever is later. Further, all well sites located on the Alaskan North Slope that are subject to the fugitive emissions requirements must conduct annual monitoring, instead of the semiannual monitoring required for other well sites. Subsequent annual monitoring must be conducted at least 9 months apart, but no more than 12 months apart. The specific repair, recordkeeping, and reporting requirements remain unchanged from the 2016 Rule, except as discussed in section IV.A of this preamble.

Under the 2016 Rule, the initial monitoring survey of fugitive emissions components at a new well site must be conducted within 60 days of startup of production at the new well site. For a collection of modified fugitive emissions components, the initial monitoring survey must be conducted within 60 days of production after the modification. The rule requires semiannual monitoring thereafter. In response to our NODA soliciting additional comments and information on implementation challenges, the EPA received comments expressing immediate concerns with the timing for conducting fugitive emissions monitoring at well sites on the Alaskan North Slope. The commenters noted that these concerns were raised in comments on the proposed rule in 2015, in addition to petitions for reconsideration following promulgation of the 2016 Rule. The commenters cautioned that the monitoring technology specified in the 2016 Rule (*i.e.*, optical gas imaging (OGI) and the instruments for EPA Method 21) cannot reliably detect methane emissions at well sites on the Alaskan North Slope for a significant portion of the year due to the lengthy period of extreme cold temperatures.<sup>10</sup> According to manufacturer

<sup>&</sup>lt;sup>10</sup> See Docket ID No. EPA-HQ-OAR-2010-0505-12434.

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specifications, OGI cameras, which the EPA identified in the 2016 Rule as the BSER for monitoring fugitive emissions at well sites, are not designed to operate at temperatures below  $^{-4}$ °F, $^{11}$  and the monitoring instruments for EPA Method 21, which the 2016 Rule provides as an alternative to OGI, are not designed to operate below  $^{+1}$ 4°F. $^{12}$  One commenter provided data, and the EPA confirmed with its own analysis, that temperatures below 0°F are a common occurrence, on the Alaskan North Slope between November and April. $^{13}$  In light of the above, there is no assurance that the initial and semiannual monitoring that must occur during that period of time are technically feasible.

During the rulemaking for the 2016 Rule, in response to comments expressing concerns with cold temperatures in several regions, the EPA had attempted to address the issue by providing additional flexibility in the form of allowing consecutive semiannual events to take place every 4 to 6 months. However, as commenters on the NODA correctly observed, the EPA did not address the issue as it relates to initial monitoring at well sites on the Alaskan North Slope; further, even with the additional flexibility, semiannual monitoring at well sites located on the Alaskan North Slope could still be required at a time when the temperature is below the operating temperature of the monitoring instruments.

In light of the technical feasibility issue discussed above, the EPA concludes that the current fugitive emissions monitoring frequencies for well sites do not reflect the BSER for monitoring fugitive emissions components at well sites on the Alaskan North Slope, and that a

<sup>&</sup>lt;sup>11</sup> See FLIR Systems, Inc. product specifications for GF300/320 model OGI cameras at *http://www.flir.com/ogi/display/?id=55671*.

<sup>&</sup>lt;sup>12</sup> See Thermo Fisher Scientific product specification for TVA-2020 at *https://assets.thermofisher.com/TFS-Assets/LSG/Specification-Sheets/EPM-TVA2020.pdf*.

<sup>&</sup>lt;sup>13</sup> See information on average hourly temperatures from January 2010 to January 2018 at the weather station located at Deadhorse Alpine Airstrip, Alaska. Obtained from the National Oceanic and Atmospheric Administration (NOAA)'s National Centers for Environmental Information and summarized in Docket ID No. EPA-HQ-OAR-2010-0505.

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different fugitive emissions monitoring schedule is warranted for well sites located on the Alaskan North Slope. Specifically, the EPA has amended the 2016 Rule to require that new or modified well sites that startup production between September and March conduct initial monitoring within 6 months of the startup of production or by June 30, whichever is later. We believe that the amendment would assure that initial monitoring take place when both OGI and EPA Method 21 are operable.

In addition, the EPA is amending the 2016 Rule to require annual (instead of semiannual) monitoring of fugitive emissions at well sites on the Alaskan North Slope. During the rulemaking for the 2016 Rule, the EPA had evaluated annual monitoring at well sites and concluded that semiannual monitoring reflected the BSER for detecting fugitive emissions at well sites. During the rulemaking for the 2016 Rule, we stated in response to a comment that there would be months during the semiannual monitoring periods when the OGI camera could work effectively.<sup>14</sup> However, after reconsidering the information provided by commenters and confirmed by the EPA, we now conclude that monitoring may not be technically feasible on the Alaskan North Slope for close to 6 consecutive months (November through April) due to the extreme cold temperatures that could render the monitoring instruments inoperable. Therefore, the EPA now concludes that annual monitoring more accurately reflects the BSER for monitoring fugitive emissions at well sites on the Alaskan North Slope because of the infeasibility of semiannual monitoring. The impracticability is demonstrated by the following example. If initial monitoring were conducted in August, the first semiannual monitoring would be required between December and February. Based on average temperatures during those months, it is unlikely that semiannual monitoring would be possible in this window. Further, in

<sup>&</sup>lt;sup>14</sup> See Chapter 4 of the *EPA*'s *Responses to Public Comments*, page 4-273 located at Docket ID No. EPA-HQ-OAR-2010-0505-7632.

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order for well sites on the Alaskan North Slope to conduct semiannual monitoring, the monitoring events would be limited to April/May and October/November, which creates additional difficulties with scheduling monitoring, repairs, and resurveys within the required periods.

The EPA concludes that the Alaskan North Slope issue must be addressed immediately given that we are currently well into the cold weather months. Because both the proposed 2-year stay and the suggestion that we extend the phase-in period for the fugitive emissions requirements would offer only temporary relief from the initial and subsequent monitoring requirements at well sites, which the EPA has already concluded to be inappropriate for the reasons stated above, the EPA is not finalizing a stay or a longer phase-in of these requirements. Rather, the EPA is taking final action to amend the 2016 Rule to provide a separate fugitive emissions monitoring schedule for well sites located on the Alaskan North Slope to accommodate its arctic climate.

#### V. Summary of Significant Comments and Responses

The EPA received a large number of comments covering a wide range of topics in response to our June 16, 2017, proposal and November 8, 2017, NODA. As discussed in sections II and IV of this preamble, the EPA is still in the process of reviewing many of these comments. As noted above, however, in the course of this review, the EPA has identified two specific provisions of the fugitive emissions requirements in the 2016 Rule that pose significant and immediate compliance concerns, and EPA is taking final action here to make targeted amendments to the 2016 Rule to address these two concerns. The Agency is still evaluating comments related to other issues raised in the proposal and the NODA and is not taking final action with respect to those issues at this time. Accordingly, we are not responding to those

comments at this time. This section summarizes the significant comments relevant to the amendments in this final action, and our response to those comments.

#### A. The EPA's Legal Authority

The EPA received numerous comments on the legal authorities for its proposal to stay certain requirements of the 2016 Rule for 2 years and for the alternative suggestion of providing longer phase-in periods for those requirements. Because this final rule does not involve staying or phasing in any requirement in the 2016 Rule, comments specific to the proposed stay and phase-in are deemed outside of the scope of this final action. The EPA is, therefore, not responding to these comments and is not addressing whether such authority exists.

This final rule amends two aspects of the fugitive emissions requirements in the 2016 Rule, which was promulgated pursuant to the EPA's authority to set NSPS standards pursuant to CAA section 111(b) according to the procedures under CAA section 307(d). Summarized below are significant comments on the EPA's authority under CAA sections 111(b) and 307(d) to amend a previously promulgated NSPS.

*Comment:* The EPA received general comments on the EPA's legal authority to amend the 2016 Rule under CAA section 111. One commenter stated that any revisions to the 2016 Rule must follow the substantive and procedural requirements found in CAA section 111 and 307(d).<sup>15</sup> In order the meet these requirements and amend the NSPS, the commenter stated that the EPA must justify any revisions as being consistent with the statutory mandate, explain the basis for the revision (including supporting record), and follow the procedures established in CAA section 111(b)(1)(B), 42 U.S.C. §7411(b)(1)(B).

<sup>&</sup>lt;sup>15</sup> See Docket ID No. EPA-HQ-OAR-2010-0505-12451.

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The commenters further described the statute's procedural requirements, such as a thorough review of specific factors, such as whether the standard reflects BSER, "the cost of those standards, any resulting nonair quality health and environmental impacts, energy requirements, the amount of air pollution reduced by the standards, and how the standards may drive technological innovation."<sup>16</sup> The commenter stated that a revision to the compliance date (as proposed) would require a factual analysis that demonstrated the new compliance date reflected in the emission reductions achievable through the BSER. Further, the commenter stated that standards must be promulgated that reflect "improved design and operational advance" that may not yet be realized by industry, "so long as there is substantial evidence that such improvements are feasible and will produce the improved performance necessary to meet the standard."<sup>17</sup>

The commenters further discussed the holding in the *National Association of Home Builders* case in 2012. "The fact that the original [rule] was consistent with congressional intent is irrelevant as long as the amended rule is also 'permissible under the statute."<sup>18</sup> In that case, the petitioners acknowledged that, although they believed the original rule was better, the amended rule was permissible. Oral Arg. Recording at 17:40-:43. As *Fox* made clear, that "suffices" as far as the court is concerned. *Fox*, 556 U.S. at 515. Further, as *Fox* noted, the Supreme Court has "neither held nor implied that every agency action representing a policy change must be justified by reasons more substantial than those required to adopt a policy in first instance." *Fox*, 556 U.S. at 514 (citing *Motor Vehicle Manufacturers Ass'n of the United States, Inc., et al., v. State Farm Mutual Automobile Insurance Co., et al.*, 463 U.S. 29, 42 (1983)). To

<sup>&</sup>lt;sup>16</sup> See 80 FR 64510, 64538 (October 23, 2015) (quoting *Sierra Club v. Costle*, 657 F.2d 298, 326, 347 (D.C. Cir. 1981)). See also 42 U.S.C. §7411(a)(1), (b)(1)(B), (h)(1).

<sup>&</sup>lt;sup>17</sup> See *Sierra Club v. Costle* 657 F.2d at 364 and *Portland Cement Ass 'n v. EPA*, 665 F.3d 177, 190 (D.C. Cir. 2011). <sup>18</sup> *Nat'l Ass 'n of Home Builders, et al., v. EPA*, 682 F.3d 1032, 1037 (citing *Fox*, 556 U.S. at 515).

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the contrary, according to the commenters, the *State Farm* case affirmed that "[a]n agency's view of what is in the public interest may change, either with or without a change in circumstances." *State Farm*, 463 U.S. at 57 (quoting *Greater Boston Television Corp. v. FCC*, 444 F.2d 841, 852 (D.C.Cir.1970)); see *Am. Trucking Ass'ns v. Atchison, Topeka & Santa Fe Ry. Co., et al.*, 387 U.S. 397, 416 (1967) (declaring that an agency, "in light of reconsideration of the relevant facts and its mandate, may alter its past interpretation and overturn past administrative rulings"). *Nat'l Ass'n of Home Builders*, 682 F.3d at 1037.

*Response:* The EPA agrees with the comment that it has authority to amend an NSPS when it demonstrates that such revision is consistent with the mandate of section 111(b) of the CAA and reasonably explain the basis for the revision based on the record before the Agency, as required by section 307(d) of the CAA. The EPA has done so in this final action and need not address at this time if this is the sole source of authority that the EPA may have to amend or stay an NSPS.

A standard of performance promulgated under section 111(b) of the CAA must reflect the BSER for that emission source. In the 2016 Rule, the EPA conducted BSER analyses for reducing fugitive emissions at well sites and compressor stations, which resulted in the work practice standards promulgated in that rule. As explained below in this section and elsewhere in this notice, in the process of the current rulemaking, the EPA has identified two narrow provisions of the fugitive emissions requirements that pose immediate compliance concerns. The first issue concerns the potential that the current requirements for delayed repairs could result in an increase (instead of a reduction) of emissions and service disruption. The other issue concerns the technical feasibility of complying with the timeframe specified in the 2016 Rule for monitoring fugitive emissions at well sites in the Alaskan North Slope due to its extreme cold

temperature for a lengthy period of time, which could render the monitoring instrument inoperable. After examining the comments and information on these two specific concerns, we conclude that the BSER and the resulting fugitive emissions requirements in the 2016 Rule did not adequately address these two compliance concerns and that revision is warranted. The revision is based on comments, data, and other information submitted during the rulemaking process, as well as our own analyses, all of which can be found in Docket ID No. EPA-HQ-OAR-2010-0505. A more detailed discussion of our revised analyses and amendment can be found below in this section as well as in section IV of this preamble.

#### B. Delayed Repairs

*Comment:* Twelve commenters provided information related to the requirements for delayed repairs in 40 CFR part 60, subpart OOOOa. Ten commenters<sup>19</sup> supported a stay and/or suggested specific changes to the regulation to address repairs during unplanned and emergency vent blowdowns, while two commenters<sup>20</sup> opposed any changes to the requirement for delayed repairs.

The commenters that supported changes reiterated comments contained in their petitions for reconsideration following the promulgation of the 2016 Rule. The commenters stated that by requiring repairs during unplanned or emergency events, the actual emissions could be higher than the emissions of the delayed repair for that component. For instance, requiring repairs during unplanned or emergency events may require venting of equipment that is not being repaired and that would not otherwise be vented during that shutdown, potentially resulting in

<sup>&</sup>lt;sup>19</sup> See Docket ID No. EPA-HQ-OAR-2010-0505-12417, Docket ID No. EPA-HQ-OAR-2010-0505-12421, Docket ID No. EPA-HQ-OAR-2010-0505-12422, Docket ID No. EPA-HQ-OAR-2010-0505-12424, Docket ID No. EPA-HQ-OAR-2010-0505-12430, Docket ID No. EPA-HQ-OAR-2010-0505-12436, Docket ID No. EPA-HQ-OAR-2010-0505-12446, Docket ID No. EPA-HQ-OAR-2010-0505-12447, Docket ID No. EPA-HQ-OAR-2010-0505-12454, and Docket ID No. EPA-HQ-OAR-2010-0505-12456.

<sup>&</sup>lt;sup>20</sup> See Docket ID No. EPA-HQ-OAR-2010-0505-12444, Docket ID No. EPA-HQ-OAR-2010-0505-12451 (part 1 of comments), and Docket ID No. EPA-HQ-OAR-2010-0505-12452 (part 2 of comments).

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emissions much larger than those of the leak itself. Further, the commenters asserted that prolonged shutdowns may be encountered while repairs are made, which would affect both upstream and downstream users. Specifically, these repairs could result in the need to vent or flare gas upstream at a production facility if the midstream compressor station has to remain offline. Further, gas supply could be limited for downstream users, causing critical issues with the provision of power or heat to end users reliance on natural gas.

One commenter<sup>21</sup> provided specific data regarding components monitored under the fugitive program in 40 CFR part 60, subpart OOOOa. The commenter references an evaluation performed on 22 of their compressor stations. This evaluation showed that 95-percent of all leaks (345 of 362 leaks) occurring at these stations between 2015 and 2017 were repaired within 30 days, leaving only 5-percent to be placed on a delayed repair. When repair was delayed, most repairs were completed within 90 days of leak detection. Two commenters<sup>22</sup> suggested specific edits to the regulation. Specifically, these edits remove reference to the requirement for repairs to be completed during unscheduled, planned, or emergency vent blowdowns and limits repairs at compressor stations to scheduled shutdowns for maintenance. Further, these commenters suggested additional language to require additional justification for delaying repairs beyond a shutdown, requiring Administrator approval on a case-by-case basis. Additional comments and information are discussed in section IV of this preamble.

In contrast, the two commenters that opposed changes to the delayed repair requirements cited a lack of information to support either a stay or compliance deadline extension. One commenter<sup>23</sup> suggests that since the leaks for which repairs are delayed were found prior to any

<sup>&</sup>lt;sup>21</sup> See Docket ID No. EPA-HQ-OAR-2010-0505-12430.

<sup>&</sup>lt;sup>22</sup> See Docket ID No. EPA-HQ-OAR-2010-0505-12421 and Docket ID No. EPA-HQ-OAR-2010-0505-12447.

<sup>&</sup>lt;sup>23</sup> See Docket ID No. EPA-HQ-OAR-2010-0505-12451 (part 1 of comments) and Docket ID No. EPA-HQ-OAR-2010-0505-12452 (part 2 of comments).

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shutdown (whether planned or not), the company had time to make arrangements to obtain replacement parts; thus, allowing repair during that next shutdown event. Further, the commenter asserted that the EPA has provided no data to demonstrate why a stay is necessary for the entire fugitive program to accommodate such a small set of leaks given that the data the EPA does have suggests the majority of leaks are repaired at the time of the monitoring survey. Another commenter<sup>24</sup> asserted that the requirement for delayed repairs is more accommodating than it needs to be when compared to the requirements found in California's rule. The commenter explained, "California's regulation requires leaks to be repaired within 14 calendar days, except for leaks involving critical components, which must be repaired by the end of the next process shutdown or within 12 months, whichever is sooner."

*Response:* The EPA is amending the requirements for delayed repair in this final action. Specifically, the EPA is removing the terms "unplanned" and "emergency," used in reference to vent blowdowns and added the term "scheduled" before the list of scenarios when delayed repair must be completed. As several commenters noted and as discussed in section IV.A of this preamble, completion of repair during an unscheduled or emergency event could require a blowdown of equipment that was not otherwise necessary in order to repair components on delayed repair. Due to the potential for increasing emissions, the current requirements for delayed repair do not reflect the BSER for addressing fugitive emissions at well sites and compressor stations. In addition, as discussed in section IV.A of this preamble, not requiring delayed repair during unscheduled vent blowdowns would avoid the potential of service disruption. As mentioned in section IV.A of this preamble, we note that under CARB's leak

<sup>&</sup>lt;sup>24</sup> See Docket ID No. EPA-HQ-OAR-2010-0505-12444.

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repair requirements,<sup>25</sup> delayed repair is permitted if gas service is critical to public gas system operation; thereby, highlighting the importance of not disrupting gas service. According to the data received, only around 5-percent of leaks are placed on delay for repair. Further, unscheduled or emergency vent blowdowns are but one of many scenarios where delayed repair must be completed. Owners or operators are still required to complete repairs on components during the next scheduled compressor station shutdown, well shutdown, well shut-in, after a planned vent blowdown, or within 2 years, whichever is earlier. Accordingly, the requirement for delayed repair, as amended, still requires that repairs occur as soon as possible while reducing the potential for unintended emissions releases and service disruptions.

As discussed earlier, this issue must be addressed immediately to avoid potentially increasing emissions and/or disrupting gas supply. The EPA acknowledges that there are other comments concerning other aspects of the requirements for delayed repair in the fugitive emissions requirements, and that the EPA continues to evaluate these comments. Should any of these comments warrant additional changes to the fugitive requirements, the EPA intends to address them separately.

#### C. Alaskan North Slope

*Comment:* Three commenters<sup>26</sup> provided comments related to compliance with the fugitive emissions monitoring requirements in extreme cold weather conditions. These comments related to the limitations of the monitoring technologies and worker safety concerns. The commenters stated that the EPA should exempt well sites and compressor stations located on

<sup>&</sup>lt;sup>25</sup> Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities, section 95669, California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10 Climate Change, Article 4, Subarticle 13. Effective date October 1, 2017.

<sup>&</sup>lt;sup>26</sup> See Docket ID No. EPA-HQ-OAR-2010-0505-12434, Docket ID No. EPA-HQ-OAR-2010-0505-12436, and Docket ID No. EPA-HQ-OAR-2010-0505-12446.

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the Alaskan North Slope from the fugitive emissions monitoring requirements. At a minimum, two commenters stated that the EPA should stay or extend the compliance deadline for initial monitoring at these well sites. Additionally, two commenters stated that extreme cold weather conditions can occur outside of the Alaskan North Slope and these commenters requested similar stays or extensions of the compliance deadlines for any location experiencing these conditions. The commenters reiterated comments submitted in the 2015 proposal and subsequent petitions for reconsideration. Specifically, the commenters stated the technological limitations and worker safety considerations in the Arctic environment warrant an exemption from monitoring.

One commenter provided manufacturer specifications for three of the commonly used monitoring instruments (OGI camera, toxic vapor analyzer (TVA), and multi gas monitors).<sup>27</sup> The commenter noted that the specifications indicate the lowest operating temperature for any of the instruments is <sup>-4°</sup>F.<sup>28</sup> This commenter further provided average hourly temperature by month for the years 2012 through 2014. This data indicated that average hourly temperatures on the Alaskan North Slope were below <sup>-4°</sup>F for approximately 5 months (December through April). Three commenters stated that while there is a waiver from quarterly monitoring at compressor stations when average temperatures are below 0°F for 2 consecutive months, there is no similar waiver for semiannual monitoring well sites, nor a waiver from initial monitoring at either well sites or compressor stations. The commenters, therefore, stated the combination of average hourly temperatures on the Alaskan North Slope and the operating limitations of the monitoring instruments pose immediate compliance implications.

<sup>&</sup>lt;sup>27</sup> See Docket ID No. EPA-HQ-OAR-2010-0505-12434.

<sup>&</sup>lt;sup>28</sup> See FLIR Systems, Inc. Product specifications for GF300/320 model OGI cameras at *http://www.flir.com/ogi/display/?id=55671*.

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Finally, two of the commenters stated that the EPA should exempt well sites and compressor stations located on the Alaskan North Slope from fugitive emissions monitoring similar to the exemptions from leak detection and repair at natural gas processing plants provided in NSPS OOOO and OOOOa.<sup>29</sup> These commenters stated the reasons for applying an exemption to the natural gas processing plants are also valid for well sites and compressor stations.

*Response:* The EPA agrees with the commenters that available monitoring technologies (OGI and, for EPA Method 21, TVA and multi gas meters) are not designed to operate below <sup>-</sup>4°F or <sup>+</sup>14°F, respectively.<sup>30</sup> In addition to the information provided by the commenters, information from the NOAA demonstrate average temperatures on the Alaskan North Slope make it technically infeasible to perform monitoring during a nearly 6-month period.<sup>31</sup> As we are already well within this period, the EPA must act immediately to avoid requiring fugitive emissions monitoring at well sites located on the Alaskan North Slope when the average temperature there is below the operating temperature of any of the available monitoring instruments. Therefore, the EPA is amending 40 CFR part 60, subpart OOOOa, to extend the initial monitoring deadline and allow annual fugitive emissions monitoring at well sites located on the Alaskan North Slope. The EPA is not amending 40 CFR part 60, subpart OOOOa, for the Alaskan North Slope. The EPA is not amending 40 CFR part 60, subpart OOOOa, for the Alaskan North Slope. The EPA is not amending 40 CFR part 60, subpart OOOOa, for the Alaskan North Slope. The EPA is not amending 40 CFR part 60, subpart OOOOa, for the Alaskan North Slope. The EPA is not amending 40 CFR part 60, subpart OOOOa, for the Alaskan North Slope. The EPA is not amending 40 CFR part 60, subpart OOOOa, fugitive emissions monitoring requirements for compressor stations located on the Alaskan North Slope because the commenters have stated there are no compressor stations currently

 <sup>&</sup>lt;sup>29</sup> See Docket ID No. EPA-HQ-OAR-2010-0505-12434 and Docket ID No. EPA-HQ-OAR-2010-0505-12446.
 <sup>30</sup> See FLIR Systems, Inc. product specifications for GF300/320 model OGI cameras at

*http://www.flir.com/ogi/display/?id=55671* and Thermo Fisher Scientific product specification for TVA-2020 at *https://assets.thermofisher.com/TFS-Assets/LSG/Specification-Sheets/EPM-TVA2020.pdf*.

<sup>&</sup>lt;sup>31</sup> See information on average hourly temperatures from January 2010 to January 2018 at the weather station located at Deadhorse Alpine Airstrip, Alaska. Obtained from NOAA's National Centers for Environmental Information and summarized in Docket ID No. EPA-HQ-OAR-2010-0505.

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subject to 40 CFR part 60, subpart OOOOa; therefore, there is no immediate compliance concern to address for these requirements at this time.<sup>32</sup>

As the commenters noted, the issues with conducting fugitive emissions monitoring at well sites located on the Alaskan North Slope were raised in the comments on the proposed 40 CFR part 60, subpart OOOOa. In the EPA's responses to public comments on this issue, the EPA stated that specific flexibilities were added to the fugitive emissions monitoring program to avoid potential compliance concerns on the Alaskan North Slope. Specifically, the repair deadline was extended from 15 to 30 days, with an additional 30 days to complete the resurvey after repair; semiannual monitoring at well sites is allowed every 4 to 6 months; when average temperatures are below 0°F for 2 consecutive months, quarterly monitoring is waived at compressor stations, and Method 21 was added as an alternative method for leak detection and resurvey.<sup>33</sup> As one commenter noted, the EPA recognized the challenges with monitoring instrument operation at low temperatures for compressor stations, but did not extend a similar waiver from monitoring for well sites.<sup>34</sup> Further, it is not clear that the flexibilities identified above assure that monitoring would not be required when the temperature on the Alaskan North Slope is below the operating temperature of the monitoring instrument. The commenters reiterated this concern in the comments on the proposed stay and NODA.

We revisited the issue and reviewed both the relevant record for the 2016 Rule as well as additional information received subsequent to the rulemaking. Based on this evaluation, we recognized that a separate initial monitoring requirement was necessary for well sites that startup

<sup>&</sup>lt;sup>32</sup> See "Discussion of Comment Submitted on the NODA with ConocoPhillips Alaska, Inc." located at Docket ID No. EPA-HQ-OAR-2010-0505.

<sup>&</sup>lt;sup>33</sup> See "EPA's Responses to Public Comments," Chapter 4, pages 4-267, 4-268, 4-273, and 4-276. https://www.regulations.gov/document?D=EPA-HQ-OAR-2010-0505-7632.

<sup>&</sup>lt;sup>34</sup> See Docket ID No. EPA-HQ-OAR-2010-0505-12446.

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production during the months when it may be technically infeasible to meet the 60-day initial monitoring requirement.

For instance, we examined the scenario of a new well starting production in September. Under the current requirements, the initial monitoring survey would be required within 60 days of the startup of production. This would put the deadline in October or November, depending on when the well started producing in September.<sup>35</sup> The EPA recognized from the data provided that these 2 months may have issues with the feasibility of completing monitoring due to changing weather conditions moving into winter. If we set a deadline for initial monitoring 6 months from startup of production, then monitoring would be required by March, when temperatures are still not warm enough for instrument operation. While the average temperatures may be sufficiently warm starting in the middle of spring, information discussed in the Response to Comments document raised concerns with melting snow, flooding, and transportation issues during this time.<sup>36</sup> Additionally, we are concerned with potentially constraining affected sources' ability to schedule and acquire requisite personnel and equipment if we were to require all well sites that start production between September and March to conduct initial monitoring in April or May. These well sites would forever be locked into performing both initial and all subsequent monitoring at the same time each year. We do not believe that it is appropriate to place such constraint on the well site's ability to schedule monitoring events. Based on average temperatures, we are confident that monitoring can occur during the summer months. Therefore, we have amended the 2016 Rule to require that, for each new or modified well site located on the Alaskan North Slope that starts production between September and March, the owner or operator

 <sup>&</sup>lt;sup>35</sup> Similar issues are realized by well sites starting up between October and March, such as extreme low temperatures, concerns with snow melt and flooding, and logistical issues associated with schedule flexibility.
 <sup>36</sup> See "EPA's Responses to Public Comments," Chapter 4, page 4-268. https://www.regulations.gov/document?D=EPA-HO-OAR-2010-0505-7632.

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has 6 months, or until June 30, whichever is later, to complete initial monitoring of the fugitive emissions components. The amendments, which provide both a time frame and specific date, would require monitoring as soon as feasible while avoiding the concerns described above. For each new or modified well site located on the Alaskan North Slope that starts production between September and March, the owner or operator has 6 months, or until June 30, whichever is later to complete initial monitoring of the fugitive emissions components.

The EPA agrees with the commenters that there are immediate compliance concerns due to the operating limitations of monitoring instruments. Therefore, we are finalizing an amendment to the timeframe for the fugitive emission monitoring program for well sites located on the Alaskan North Slope. Specifically, owners or operators must meet the initial compliance deadline of 60 days from the startup of production, unless the well site starts production between September and March. Those well sites that startup production between September and March must complete initial monitoring within 6 months of startup of production or by June 30, whichever is later. Additionally, owners or operators must perform annual monitoring for fugitive emissions, following the initial monitoring survey at all affected well sites located on the Alaskan North Slope, regardless of the startup date. Subsequent monitoring surveys must occur at least every 12 months, with consecutive monitoring surveys conducted at least 9 months apart. The requirements for repair, recordkeeping, and reporting remain the same as those in the 2016 Rule. Recognizing there are several months in which temperatures are within the operating temperature range for the monitoring instruments, the EPA concludes owners or operators have enough flexibility to complete monitoring surveys in this timeframe. Any further amendments for the Alaskan North Slope will be addressed separately. This amendment only applies at well

sites located on the Alaskan North Slope. All other well sites must continue to comply with the initial, semiannual, or quarterly monitoring requirements, as appropriate.

With respect to comments on exempting facilities located on the Alaskan North Slope from fugitive monitoring requirements, changes to low temperature waivers, or any other concerns raised by the commenters related to cold weather, addressing them will likely require additional information and analysis. The EPA will continue evaluating these comments.

#### **VI.** Impacts of the Final Amendments

Although there will be cost savings related to not requiring delayed repairs during unscheduled or emergency events, as well as forgone benefits related to the reductions of fugitive emissions that might have occurred following these repairs, the EPA does not have cost or economic data related to this provision because of the unplanned nature of these events. Therefore, we are unable to determine the cost savings or forgone benefits of amending the requirements for delayed repair requirement related to unscheduled or emergency events.

In order to determine the impacts of the amendments to the fugitive emissions requirements for well sites located on the Alaskan North Slope, we used the same assumptions and methods used to estimate impacts of the 2016 Rule. Specifically, we used the number of affected sources located on the Alaskan North Slope, and the cost and emission reductions estimated for well sites at semiannual and annual fugitive monitoring frequencies that were assumed in the 2016 Rule. The cost savings and emission reductions estimated as a result of these amendments are presented in Tables 2 and 3, respectively. For more information on the assumptions used in this analysis, as well as the costs and emission reductions for fugitive emissions requirements at well sites, see the *Background Technical Support Document for the Final New Source Performance Standards 40 CFR Part 60, subpart OOOOa* (TSD) located at

Docket ID No. EPA-HQ-OAR-2010-0505-7631. Note that the costs in the TSD are in 2012

dollar years, and the cost savings presented here are in 2016 dollar years. The amended fugitive

monitoring requirements for well sites located on the Alaskan North Slope will save

approximately \$24,000 per year in compliance costs, after accounting for forgone natural gas

recovery. This amendment will also result in approximately 34 short tons of forgone methane

emission reductions, or 772 tons of carbon dioxide equivalent (CO<sub>2</sub>E).

# Table 2. Estimated Cost Savings of the Amended Fugitive Monitoring Requirements on the

## **Alaskan North Slope**

	Compliance Cost Savings			Total Annualized Cost Savings (3%)		Total Annualized Cost Savings (7%)	
	Capital Cost Savings	Annual Operating Cost Savings	Forgone Product Recovery	w/o Product Recovery	w/ Product Recovery	w/o Product Recovery	w/ Product Recovery
NG Well Pads	\$1,300	\$29,000	\$6,700	\$29,000	\$22,000	\$29,000	\$22,000
Oil Well Pads	\$110	\$2,400	\$210	\$2,400	\$2,200	\$2,400	\$2,200
Total	\$1,400	\$31,000	\$6,900	\$31,000	\$24,000	\$31,000	\$24,000

Table 3. Estimated Forgone Emission Reductions of the Amended Fugitive Monitoring

**Requirements on the Alaskan North Slope** 

		Fo	Forgone			
	Affected Source Count	Methane (short tpy <sup>1</sup> )	VOC (tpy)	HAP (tpy)	CO <sub>2</sub> E (tpy)	Natural Gas Savings (Mcf <sup>2</sup> )
NG Well Pads	30	33	9	0	748	1,911
Oil Well Pads	3	1	0	0	24	61
Total	33	34	9	0	772	1,972

<sup>1</sup> tons per year.

<sup>2</sup> thousand cubic feet.

# VII. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *http://www2.epa.gov/laws-regulations/laws-and-executive-orders*.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is considered an Executive Order 13771 deregulatory action. This final rule provides meaningful burden reduction by amending the requirement that components on a delayed repair must conduct repairs during unscheduled or emergency vent blowdowns, and adding flexibilities for the monitoring survey requirements for well sites located on the Alaskan North Slope.

#### C. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. The information collection requirements in the final 40 CFR part 60, subpart OOOOa have been submitted for approval to the OMB under the PRA. The Information Collection Request (ICR) document prepared by the EPA has been assigned EPA ICR 2523.01. This action does not result in changes to the submitted ICR for 40 CFR part 60, subpart OOOOa, so the information collection estimates of project cost and hour burdens have not been revised.

#### D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An Agency may certify that a rule

will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden, or otherwise has a positive economic effect on the small entities subject to the rule. This action finalizes amendments for two specific requirements in the 2016 Rule. This action will not increase the burden on small entities subject to this rule. The EPA prepared a final RFA analysis for the 2016 Rule, which is available as part of the Regulatory Impact Analysis in the docket at Docket ID No. EPA-HQ-OAR-2010-0505-7630. We have, therefore, concluded that this action will have no net regulatory burden for all directly regulated small entities.

#### E. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

#### F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments, on the relationship between the federal government and Indian tribes, or on the distribution of power and responsibilities between the federal government and Indian tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action finalizes amendments for two specific requirements in the 2016 Rule. Any impacts on children's health caused by the amendments in the rule will be limited, because the scope of the amendments is limited. The Agency, therefore, concludes it is more appropriate to determine the impact on children's health in the context of any substantive changes potentially proposed in the future as part of the reconsideration of the 2016 Rule (as granted on April 18, 2017).

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not a "significant energy action" because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The basis for this determination can be found in the 2016 Rule (81 FR 35894).

J. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards.

K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

This action finalizes amendments for two specific requirements in the 2016 Rule. Any impacts on minority populations and low-income populations caused by the amendments in the rule will be limited, because the scope of the amendments is limited. The Agency, therefore,

concludes it is more appropriate to determine the impact on minority populations and lowincome populations in the context of any substantive changes potentially proposed in the future as part of the reconsideration of the 2016 Rule (as granted on April 18, 2017).

## L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

# Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources; Amendments

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# List of Subjects in 40 CFR Part 60

Environmental protection, Administrative practice and procedure, Air pollution control,

Reporting and recordkeeping.

Dated:

E. Scott Pruitt, Administrator. For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

#### PART 60--STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

1. The authority citation for part 60 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

#### Subpart OOOOa--[AMENDED]

- 2. Section 60.5397a is amended by:
- a. Revising paragraph (f)(1);
- b. Revising paragraph (g)(1) and (2); and
- c. Revising paragraph (h)(2) to read as follows:

§ 60.5397a What fugitive emissions GHG and VOC standards apply to the affected facility which is the collection of fugitive emissions components at a well site and the affected facility which is the collection of fugitive emissions components at a compressor station? \* \* \* \* \*

(1) You must conduct an initial monitoring survey within 60 days of the startup of production, as defined in §60.5430a, for each collection of fugitive emissions components at a new well site or by June 3, 2017, whichever is later. For a modified collection of fugitive emissions components at a well site, the initial monitoring survey must be conducted within 60 days of the first day of production for each collection of fugitive emission components after the modification or by June 3, 2017, whichever is later. Notwithstanding the preceding deadlines, for each collection of fugitive emissions components at a well site located on the Alaskan North Slope, as defined in §60.5430a, that starts up production between September and March, you must conduct an initial

<sup>(</sup>f) \* \* \*

monitoring survey within 6 months of the startup of production for a new well site, within 6 months of the first day of production after a modification of the collection of fugitive emission components, or by the following June 30, whichever is later.

\* \* \* \* \*

(g) \* \* \*

(1) Except as provided herein, a monitoring survey of each collection of fugitive emissions components at a well site within a company-defined area must be conducted at least semiannually after the initial survey. Consecutive semiannual monitoring surveys must be conducted at least 4 months apart. A monitoring survey of each collection of fugitive emissions components at a well site located on the Alaskan North Slope must be conducted at least annually. Consecutive annual monitoring surveys must be conducted at least 9 months apart.
(2) A monitoring survey of the collection of fugitive emissions components at a compressor station within a company-defined area must be conducted at least quarterly after the initial survey. Consecutive quarterly monitoring surveys must be conducted at least 60 days apart.

(h) \* \* \*

(2) If the repair or replacement is technically infeasible, would require a vent blowdown, a compressor station shutdown, a well shutdown or well shut-in, or would be unsafe to repair during operation of the unit, the repair or replacement must be completed during the next scheduled compressor station shutdown, well shutdown, well shut-in, after a planned vent blowdown or within 2 years, whichever is earlier.

\* \* \* \* \*