

The EPA Administrator, Michael S. Regan, signed the following notice on December 20, 2024, 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 govinfo website (<https://www.govinfo.gov/app/collection/fr>) and on Regulations.gov (<https://www.regulations.gov>) in Docket No. EPA-HQ-OAR-2024-0358. 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-2024-0358; FRL-12031-01-OAR]

RIN 2060-AW35

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

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing amendments to the New Source Performance Standards and Emission Guidelines for Existing Sources for the Crude Oil and Natural Gas Source Category in response to petitions for reconsideration. Specifically, this action proposes discrete technical changes to two different aspects of the rules. First, this action proposes discrete technical changes to the temporary flaring provisions for associated gas in certain situations. Second, this action proposes discrete technical changes to the vent gas net heating value (NHV) continuous monitoring requirements and alternative performance test (sampling demonstration) option for flares and enclosed combustion devices. In a letter dated May 6, 2024, the EPA notified petitioners and the public that the Agency granted reconsideration on these two aspects of the March 8, 2024 (89 FR 16820) final rule. These amendments neither propose changes to any other aspect of the final rule, nor propose to alter the substance of any

emission standards within the final rule. Also, in this action, the EPA proposes to make formatting changes to the regulatory text to meet the required formatting standards of the Office of the Federal Register.

DATES: Comments. Comments must be received on or before **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

Public Hearing. If anyone contacts us requesting a public hearing on or before **[INSERT DATE 5 CALENDAR DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, we will hold a virtual public hearing. Please refer to the **SUPPLEMENTARY INFORMATION** for information on requesting and registering for a public hearing.

ADDRESSES: You may send comments, identified by Docket ID No. EPA-HQ-OAR-2024-0358, by any of the following methods:

- Federal eRulemaking Portal: <https://www.regulations.gov> (our preferred method). Follow the online instructions for submitting comments.
- Email: a-and-r-docket@epa.gov. Include Docket ID No. EPA-HQ-OAR-2024-0358 in the subject line of the message.
- Mail: U.S. Environmental Protection Agency, EPA Docket Center, Docket ID No. EPA-HQ-OAR-2024-0358, Mail Code 28221T, 1200 Pennsylvania Avenue, NW, Washington, DC 20460.
- Hand/Courier Delivery: EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue, NW, Washington, DC 20004. The Docket Center's hours of operation are 8:30 a.m.–4:30 p.m., Monday–Friday (except Federal Holidays).

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Instructions: All submissions received must include the Docket ID No. for this rulemaking. Comments received may be posted without change to <https://www.regulations.gov>, including any personal information provided. For detailed instructions on sending comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: Frank Benjamin-Eze, Sector Policies and Programs Division (E143-05), Office of Air Quality Planning and Standards, U.S.

Environmental Protection Agency, 109 T.W. Alexander Drive P.O. Box 12055 RTP, North Carolina 27711; telephone number: (919) 541-3753; and email address:

benjamineze.frank@epa.gov. Additional questions may be directed to the following email address: *O&GMethaneRule@epa.gov*.

SUPPLEMENTARY INFORMATION:

Participation in virtual public hearing. To request a virtual public hearing, contact the public hearing team at (888) 372-8699 or by email at *SPPDpublichearing@epa.gov*. If requested, the virtual public hearing will be held via virtual platform. The EPA will announce the date of the hearing and further details on the virtual public hearing at <https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-operations>. The hearing will convene at 11:00 a.m. Eastern Time (ET) and will conclude at 4:00 p.m. ET. The EPA may close a session 15 minutes after the last pre-registered speaker has testified if there are not additional speakers.

The EPA will begin pre-registering speakers for the hearing no later than 1 business day after a request has been received. To register to speak at the virtual hearing, please use the online

registration form available at <https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-operations> or contact the public hearing team at (888) 372-8699 or by email at SPPDpublichearing@epa.gov. The last day to pre-register to speak at the hearing will be **[INSERT DATE 12 CALENDAR DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Prior to the hearing, the EPA will post a general agenda that will list pre-registered speakers at: <https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-operations>.

The EPA will make every effort to follow the schedule as closely as possible on the day of the hearing; however, please plan for the hearings to run either ahead of schedule or behind schedule. Each commenter will have 4 minutes to provide oral testimony. The EPA encourages commenters to submit a copy of their oral testimony as written comments to the rulemaking docket. The EPA may ask clarifying questions during the oral presentations but will not respond to the presentations at that time. Written statements and supporting information submitted during the comment period will be considered with the same weight as oral testimony and supporting information presented at the public hearing.

Please note that any updates made to any aspect of the hearing will be posted online at <https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-operations>. While the EPA expects the hearing to go forward as set forth above, please monitor these websites or contact the public hearing team at (888) 372-8699 or by email at SPPDpublichearing@epa.gov to determine if there are any updates. The EPA does not intend to publish a document in the *Federal Register* announcing updates.

If you require the services of a translator or a special accommodation such as audio description, please pre-register for the hearing with the public hearing team and describe your needs by **[INSERT DATE 7 CALENDAR DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. The EPA may not be able to arrange accommodations without advance notice.

Docket. The EPA has established a docket for this rulemaking under Docket ID No. EPA-HQ-OAR-2024-0358. All documents in the docket are listed in the Regulations.gov index. Although listed in the index, some information is not publicly available, *e.g.*, Confidential Business Information (CBI) 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 as pdf versions that can only be accessed on the EPA computers in the docket office reading room. Certain data bases and physical items cannot be downloaded from the docket but may be requested by contacting the docket office at (202) 566-1744. The docket office has up to 10 business days to respond to these requests. With the exception of such material, publicly available docket materials are available electronically in Regulations.gov.

Written Comments. Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2024-0358, at <https://www.regulations.gov> (our preferred method), or the other methods identified in the ADDRESSES section. Once submitted, comments cannot be edited or removed from the docket. The EPA may publish any comment received to its public docket. Do not submit to the EPA's docket at <https://www.regulations.gov> any information you consider to be CBI or other information whose disclosure is restricted by statute. This type of information should be submitted as discussed in the *Submitting CBI* section of this document.

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Multimedia submissions (audio, video, *etc.*) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the Web, cloud, or other file sharing system). Please visit <https://www.epa.gov/dockets/commenting-epa-dockets> for additional submission methods; the full EPA public comment policy; information about CBI or multimedia submissions; and general guidance on making effective comments.

The <https://www.regulations.gov> website allows you to submit your comment anonymously, which means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to the EPA without going through <https://www.regulations.gov>, your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, the EPA recommends that you include your name and other contact information in the body of your comment and with any digital storage media you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. Electronic files should not include special characters or any form of encryption and be free of any defects or viruses.

Submitting CBI. Do not submit information containing CBI to the EPA through <https://www.regulations.gov>. Clearly mark the part or all of the information that you claim to be CBI. For CBI information on any digital storage media that you mail to the EPA, note the docket ID, mark the outside of the digital storage media as CBI, and identify electronically within the

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digital storage media the specific information that is claimed as CBI. In addition to one complete version of the comments that includes information claimed as CBI, you must submit a copy of the comments that does not contain the information claimed as CBI directly to the public docket through the procedures outlined in the *Written Comments* section of this document. If you submit any digital storage media that does not contain CBI, mark the outside of the digital storage media clearly that it does not contain CBI and note the docket ID. Information not marked as CBI will be included in the public docket and the EPA's electronic public docket without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 Code of Federal Regulations (CFR) part 2.

Our preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol (FTP), or other online file sharing services (*e.g.*, Dropbox, OneDrive, Google Drive). Electronic submissions must be transmitted directly to the Office of Air Quality Planning and Standards (OAQPS) CBI Office at the email address oaqps_cbi@epa.gov, and as described above, should include clear CBI markings and note the docket ID. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email oaqps_cbi@epa.gov to request a file transfer link. If sending CBI information through the postal service, please send it to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, 109 T.W. Alexander Drive P.O. Box 12055 RTP, North Carolina 27711, Attention Docket ID No. EPA-HQ-OAR-2024-0358. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.

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Preamble acronyms and abbreviations. Throughout this document the use of “we,” “us,” or “our” is intended to refer to the EPA. We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

AGR	Acid gas removal
AMP	Alternative Monitoring Plan
API	American Petroleum Institute
ASTM	American Society for Testing and Materials
BPV	back pressure valve
BSER	best system of emission reduction
Btu/lb	British thermal units per pound
Btu/scf	British thermal units per standard cubic feet
°C	degrees Celsius
CAA	Clean Air Act
CBI	Confidential Business Information
CFR	Code of Federal Regulations
CO ₂	carbon dioxide
CRA	Congressional Review Act
CVS	closed vent systems
EG	emission guidelines
EJ	environmental justice
EOR	enhanced oil recovery
EPA	Environmental Protection Agency
FR	<i>Federal Register</i>
ft ³	cubic feet
GC	gas chromatograph
GHG	greenhouse gas
GHGRP	Greenhouse Gas Reporting Program
ICR	information collection request
MACT	maximum achievable control technology
MS	mass spectrometer
NAICS	North American Industry Classification System
NHV	net heating value
NHV _{cz}	combustion zone NHV
NHV _{dil}	NHV dilution parameter
NHVs	net heating values
NSPS	new source performance standards
NTTAA	National Technology Transfer and Advancement Act
O ₂	oxygen
OAQPS	Office of Air Quality Planning and Standards

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OMB	Office of Management and Budget
PRA	Paperwork Reduction Act
RFA	Regulatory Flexibility Act
RIA	regulatory impact analysis
RLSO	redline strike out
scf	standard cubic feet
TAR	Tribal Authority Rule
UMRA	Unfunded Mandates Reform Act
U.S.	United States
VISR	Video Imaging Spectro-Radiometry
VOC	volatile organic compound(s)

Organization of this document. The information in this preamble is organized as follows:

I. General Information

- A. Does this action apply to me?
- B. Where can I get a copy of this document and other related information?

II. Statutory Background and Regulatory History

- A. Statutory background of CAA sections 111(b), 111(d), and General Implementing Regulations
- B. What is the regulatory history and background of NSPS and EG for the Crude Oil and Natural Gas Source Category?

III. Summary and Rationale of Proposed Amendments to NSPS OOOOb and EG OOOOc

- A. Temporary flaring provisions for associated gas in certain situations
- B. Vent gas net heating value (NHV) continuous monitoring requirements and alternative performance test (sampling demonstration) option for flares and enclosed combustion devices

IV. How do these proposed amendments impact the implementation of EG OOOOc?

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- A. Executive Order 12866: Regulatory Planning and Review and Executive Order 14094: Modernizing Regulatory Review
- B. Paperwork Reduction Act (PRA)
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- D. Unfunded Mandates Reform Act (UMRA)
- E. Executive Order 13132: Federalism
- F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
- G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
- H. Executive Order 13211: Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use
- I. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR part 51

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J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations and Executive Order 14096: Revitalizing Our Nation’s Commitment to Environmental Justice for All

I. General Information

A. Does this action apply to me?

The source category that is the subject of this proposal is the Crude Oil and Natural Gas Source Category regulated under Clean Air Act (CAA) section 111, New Source Performance Standards (NSPS) and Emission Guidelines (EG). The 2022 North American Industry Classification System (NAICS) code for the source category is summarized in table 1. The NAICS codes serve as a guide for readers outlining the entities that this proposed action is likely to affect. The NSPS codified in 40 CFR part 60, subpart OOOOb, are directly applicable to affected facilities that begin construction, reconstruction, or modification after December 6, 2022. As shown in table 1, Federal, State, and local government entities would not be affected by the NSPS action.

Table 1—Industrial Source Categories Affected by NSPS Action

Category	NAICS Code	Examples of Regulated Entities
Industry	211120	Crude Petroleum Extraction
	211130	Natural Gas Extraction
	221210	Natural Gas Distribution
	486110	Pipeline Distribution of Crude Oil
	486210	Pipeline Transportation of Natural Gas
Federal Government	Not affected
State and Local Government	Not affected
Tribal Government	921150	American Indian and Alaska Native Tribal Governments

This table is not intended to be exhaustive but rather provides a guide for readers regarding

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entities likely to be affected by the NSPS action. Other types of entities not listed in the table could also be affected by these NSPS action. To determine whether your entity is affected by any of the NSPS action, you should carefully examine the applicability criteria found in the final NSPS rule. If you have questions regarding the applicability of the NSPS rule to a particular entity, consult the person listed in the **FOR FURTHER INFORMATION CONTACT** section, your State air pollution control agency with delegated authority for NSPS, or your EPA Regional Office.

The issuance of the CAA section 111(d) EG in March of 2024 did not impose binding requirements directly on existing sources. The EG codified in 40 CFR part 60, subpart OOOOc, applies to States in the development, submittal, and implementation of State plans to establish performance standards to reduce emissions of GHGs from designated facilities that are existing sources on or before December 6, 2022. Under the Tribal Authority Rule (TAR), eligible Tribes may seek approval to implement a plan under CAA section 111(d) in a manner similar to a State. See 40 CFR part 49, subpart A. Tribes may, but are not required to, seek approval for treatment in a manner similar to a State for purposes of developing a Tribal implementation plan (TIP) implementing the EG codified in 40 CFR part 60, subpart OOOOc. The TAR authorizes Tribes to develop and implement their own air quality programs, or portions thereof, under the CAA. However, it does not require Tribes to develop a CAA program. Tribes may implement programs that are most relevant to their air quality needs. If a Tribe does not seek and obtain the authority from the EPA to establish a TIP, the EPA has the authority to establish a Federal CAA section

111(d) plan for designated facilities that are located in areas of Indian country.¹ A Federal plan would apply to all designated facilities located in the areas of Indian country covered by the Federal plan unless and until the EPA approves a TIP applicable to those facilities.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, at Docket ID No. EPA-HQ-OAR-2024-0358 located at <https://www.regulations.gov/>, an electronic copy of this action is available on the Internet at <https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-operations>. In accordance with 5 U.S.C. 553(b)(4), a brief summary of this proposed rule may be found at www.regulations.gov, Docket ID No. EPA-HQ-OAR-2024-0358. Following publication in the *Federal Register*, the EPA will post the *Federal Register* version of the proposal and key technical documents at this same website.

A memorandum showing the edits that would be necessary to incorporate the changes to 40 CFR part 60 subpart OOOOb and 40 CFR part 60 subpart OOOOc proposed in this action is available in the docket (Docket ID No. EPA-HQ-OAR-2024-0358). Following signature by the EPA Administrator, the EPA also will post a copy of this document to <https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-operations>.

II. Statutory Background and Regulatory History

A. Statutory background of CAA sections 111(b), 111(d), and General Implementing Regulations

The EPA's authority for this rulemaking is CAA section 111, 42 USC § 7411, which governs the establishment of standards of performance for stationary sources. This CAA section

¹ See the EPA's website, <https://www.epa.gov/tribal/tribes-approved-treatment-state-tas>, for information on those Tribes that have treatment as a state for specific environmental regulatory programs, administrative functions, and grant programs.

requires the EPA to list source categories to be regulated, establish standards of performance for air pollutants emitted by new sources in that source category, and establish EG for States to establish standards of performance for certain pollutants emitted by existing sources in that source category. For a comprehensive discussion of the statutory background of CAA sections 111(b), 111(d), and general implementing regulations, refer to the discussion provided in section IV.A (Statutory Background of the CAA sections 111(b), 111(d), and General Implementing Regulations) of the March 2024 final rule preamble. (89 FR 16846-16848; March 8, 2024).

B. What is the regulatory history and background of NSPS and EG for the Crude Oil and Natural Gas Source Category?

On November 15, 2021, the EPA published a proposed rule (November 2021 Proposal) to mitigate climate-destabilizing pollution and protect human health by reducing greenhouse gas (GHG) and volatile organic compound (VOC) emissions from the oil and natural gas industry,² specifically the Crude Oil and Natural Gas source category.^{3, 4} In the November 2021 Proposal, the EPA proposed new and updated standards of performance under section 111(b) of the CAA for GHGs (in the form of methane limitations) and VOC emissions from new, modified, and

² The EPA characterizes the oil and natural gas industry operations as being generally composed of 4 segments: (1) Extraction and production of crude oil and natural gas (“oil and natural gas production”), (2) natural gas processing, (3) natural gas transmission and storage, and (4) natural gas distribution.

³ “*Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review.*” Proposed rule (86 FR 63110; November 15, 2021).

⁴ The EPA defines the Crude Oil and Natural Gas source category to mean: (1) Crude oil production, which includes the well and extends to the point of custody transfer to the crude oil transmission pipeline or any other forms of transportation; and (2) natural gas production, processing, transmission, and storage, which include the well and extend to, but do not include, the local distribution company custody transfer station, commonly referred to as the “city-gate.”

reconstructed sources in this source category, as well as revisions to standards of performance already codified at 40 CFR part 60, subparts OOOO and OOOOa. The EPA also proposed EG under section 111(d) of the CAA for GHGs emissions (in the form of methane limitations) from existing sources (designated facilities).⁵ The EPA also proposed several related actions stemming from the joint resolution of Congress, adopted on June 30, 2021, under the Congressional Review Act (CRA), disapproving the EPA’s final rule titled, “Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review,” September 14, 2020 (2020 Policy Rule). Lastly, in the November 2021 Proposal the EPA proposed a protocol for optical gas imaging (OGI) under the part 60 general provisions. The only portions of the November 2021 Proposal that are relevant to this rulemaking are specific limited provisions of the NSPS (OOOOb) and EG (OOOOc) identified in this proposal.

On December 6, 2022, the EPA published a supplemental proposed rule (“December 2022 Supplemental Proposal”) that was composed of two main additions.⁶ First, the EPA proposed updated, strengthened, and expanded NSPS OOOOb standards compared to those proposed in November 2021 under CAA section 111(b) for GHGs (in the form of methane limitations) and VOC emissions from new, modified, and reconstructed facilities. Second, the EPA proposed updated, strengthened, and expanded presumptive standards compared to those proposed for EG OOOOc in the November 2021 Proposal as part of the CAA section 111(d) EG

⁵ The term “designated facility” means “any existing facility which emits a designated pollutant and which would be subject to a standard of performance for that pollutant if the existing facility were an affected facility.” See 40 CFR 60.21a(b).

⁶ “*Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review.*” Supplemental notice of proposed rulemaking (87 FR 74702; December 6, 2022).

for GHGs emissions (in the form of methane limitations) from designated facilities. For purposes of EG OOOOc, the EPA also proposed the implementation requirements for State plans developed to limit GHGs pollution (in the form of methane limitations) from designated facilities in the Crude Oil and Natural Gas source category under CAA section 111(d).

On March 8, 2024, at 89 FR 16820 (hereafter, referred to as the March 2024 final rule), the EPA published the final rule with multiple separate actions to reduce air pollution emissions from the Crude Oil and Natural Gas source category. First, the EPA finalized NSPS OOOOb regulating GHG (in the form of a limitation on emissions of methane) and VOCs emissions for the Crude Oil and Natural Gas source category pursuant to CAA section 111(b)(1)(B). Second, the EPA finalized the EG in OOOOc to limit GHGs. Third, the EPA finalized several related actions (including final amendments to NSPS OOOOa) stemming from the joint resolution of Congress, adopted on June 30, 2021, under the CRA, disapproving the 2020 Policy Rule. Fourth, the EPA finalized a protocol under the General Provisions for optical gas imaging (OGI). The final rule became effective 60 days after publication, which was May 7, 2024.

After the publication of the March 2024 final rule, the EPA identified, through its own internal reassessment of the regulatory text, as well as through communications with stakeholders and the Office of the Federal Register, erroneous cross-references and typographical errors within the regulatory text. Through those same processes, the EPA also identified the need for some minor wording changes to clarify erroneous language (or, in some cases, erroneous omissions) in the regulatory text, and to ensure that the regulatory text aligns with the descriptions of the relevant provisions in the final rule preamble and other parts of the

regulation(s). The EPA published an interim final rule (89 FR 62872; August 1, 2024)⁷ which made minor and non-substantive corrections to the March 2024 final rule in order to correct the identified inadvertent errors.

Further, after the publication of the March 2024 final rule, the EPA received multiple petitions⁸ for reconsideration. On May 6, 2024,⁹ we notified certain petitioners and the public that we granted reconsideration on two narrow and discrete aspects of the March 2024 final rule: (1) The temporary flaring provisions for associated gas in certain situations; and (2) the vent gas NHV continuous monitoring requirements and alternative performance test (sampling demonstration) option for flares and enclosed combustion devices. These issues were raised in petitions for reconsideration from: (1) The American Petroleum Institute (API) and the American Exploration and Production Council (AXPC)¹⁰; (2) Second petition from API/AXPC¹¹; (3) The Texas Oil & Gas Association (TXOGA)¹²; (4) GPA Midstream Association (GPA Midstream);

⁷ Docket ID No. EPA-HQ-OAR-2021-0317-4057.

⁸ See Docket No. EPA-HQ-OAR-2024-0358 for petitions for reconsideration received.

⁹ See Docket No. EPA-HQ-OAR-2024-0358 for May 6, 2024, letter granting reconsideration.

¹⁰ Letter to Michael S. Regan, EPA Administrator, from API and AXPC. Re: Provisions in the EPA's Final Rule "New Source Performance Standards and Emission Guidelines for Crude Oil and Natural Gas Facilities: Climate Review." Reconsideration of the Final Rule. May 6, 2024. Hereinafter referred to as the "May 2024 API and AXPC petition."

¹¹ Letter to Michael S. Regan, EPA Administrator, from TXOGA. Request for Reconsideration of the EPA's Final Rule "New Source Performance Standards and Emission Guidelines for Crude Oil and Natural Gas Facilities: Climate Review." May 7, 2024. Hereinafter referred to as the "May 2024 TXOGA petition."

¹² Letter to Michael S. Regan, EPA Administrator; Gautam Srinivasan, Associate General Counsel, EPA; and Amy Hambrick, SPPD, EPA; from GPA Midstream Association. GPA Midstream Association Petition for Reconsideration and Request for Stay of Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review. May 2, 2024. Hereinafter referred to as the "May 2024 GPA Midstream petition."

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and (4) Environmental Integrity Project et. al.¹³ This action proposes amendments to the March 2024 final rule as a result of our reconsideration of these two narrow issues.¹⁴

III. Summary and Rationale of Proposed Amendments to NSPS OOOOb and EG OOOOc

The amendments proposed in this action only relate to two narrow aspects of the March 2024 final rule: (1) The temporary flaring provisions for associated gas in certain situations; and (2) the vent gas NHV continuous monitoring requirements and alternative performance test (sampling demonstration) option for flares and enclosed combustion devices. This proposal does not address, and therefore the EPA is not reopening, any other aspects of the March 2024 final rule aside from these two specific aspects. Further, the two issues addressed in this proposal are separate and distinct from each other. Each of these two issues concern different portions of the March 2024 final rule that do not rely on the other. Also, in this action, the EPA proposes to make formatting changes to the regulatory text to meet the required formatting standards of the Office of the Federal Register.¹⁵

A. Temporary flaring provisions for associated gas in certain situations

The final NSPS OOOOb requirements, and EG OOOOc presumptive standards (model rules), allow oil wells that are not routinely flaring associated gas (*i.e.*, oil wells that route

¹³ Letter to Michael S. Regan, EPA Administrator, from Air Alliance Houston; Clean Air Council; and Environmental Integrity Project. Re: Petition for Reconsideration of the Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review; Final Rule, 89 Fed. Reg. 16,820 (March 8, 2024), Docket No. EPA-HQ-OAR-2021-0317. May 7, 2024. Hereinafter referred to as the “May 2024 EIP, *et al.* petition.”

¹⁴ In the May 6, 2024, letter to petitioners, the EPA also took the opportunity to clarify the applicable timeframe for performance testing with respect to NHV sampling.

¹⁵ To view the proposed formatting changes, see the full redline strike out (RLSO) of the regulatory text located in the public docket at EPA-HQ-OAR-2024-0358.

associated gas to sales line or equivalent alternative), to route associated gas to a flare or control device temporarily in certain situations. During situations where a malfunction or incident endangers the safety of operator personnel or the public, and during repair, maintenance including blow downs, a production test, or commissioning, owners and operators are allowed to route to a flare or control device for 24 hours or less per incident. Petitions for reconsideration include information that suggest that 24 hours for temporary flaring may not be sufficient time in these situations to troubleshoot and repair equipment. A summary of the relevant promulgated provisions being reconsidered is presented in section III.A.1, and specific concerns and supporting information provided by petitioners and other industry representatives are presented in section III.A.2 of this preamble. After consideration of the petitioners' concerns and supporting information, the EPA is proposing certain discrete changes to these particular requirements finalized in the March 2024 final rule. The proposed changes are presented in section III.A.3 of this preamble and the EPA's rationale for those proposed changes is presented in section III.A.4 of this preamble .

1. Summary of Promulgated Provisions Being Reconsidered

When developing the March 2024 final rule requirements for associated gas, the EPA recognized that temporary situations may occur beyond the reasonable control of an owner or operator that could make it technically infeasible or unsafe to comply with the standard that requires the associated gas be recovered and either routed into a gas gathering flow line or collection system to a sales line, used as an onsite fuel source, used for another useful purpose that a purchased fuel or raw material would serve, or reinjected into the well or inject the recovered gas into another well. Therefore, for all associated gas wells subject to NSPS OOOOb

and complying with one of these four options, the final rule allows owners and operators to route the associated gas to a flare or control device temporarily. 40 CFR 60.5377b(d). The EG also includes similar provisions as part of the model rule at 40 CFR 60.5391c(c). The NSPS OOOOb final rule allow temporary flaring for the following situations:

(1) During a malfunction or incident that endangers the safety of operator personnel or the public, an owner or operator is allowed to route to a flare or control device for 24 hours or less per incident.

(2) During repair, maintenance including blow downs, a production test, or commissioning, an owner or operator is allowed to route to a flare or control device for 24 hours or less per incident.

(3) During a temporary interruption in service from the gathering or pipeline system, an owner or operator is allowed to route to a flare or route to a control device for the duration of the temporary interruption not to exceed 30 days per incident.

(4) During periods when the composition of the associated gas does not meet pipeline specifications for sources, or when the composition of the associated gas does not meet the quality requirements for use as a fuel for sources, or when the composition of the associated gas does not meet the quality requirements for another useful purpose, an owner or operator is allowed to route to a flare or control device until the associated gas meets the required specifications or for 72 hours per incident, whichever is less.

This proposed rule only concerns the first two situations listed above: (1) Malfunction/safety, and (2) repair/maintenance. The EPA is not reopening the other two situations listed. Specifically, the EPA is proposing changes to the following regulatory text only:

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40 CFR 60.5377b(d)(1) and (2), and 60.5391c(c)(1) and (2). To view the proposed changes, see the full redline strike out (RLSO) of the regulatory text located in the public docket at EPA-HQ-OAR-2024-0358.

2. Petitioner’s Concerns and Supporting Information

The EPA received a petition for reconsideration of the March 2024 final rule from API-AXPC¹⁶ that included support for the EPA’s general approach finalized at 40 CFR 60.5377b(d) that allows temporary flaring of associated gas for unique situations. However, petitioners highlighted that there are certain oil and natural gas production operations that are remote and spread out over many miles that are prone to severe winter weather events that could prevent operators from accessing these remote sites for longer than 24 hours. They provided, for example, that seasonal weather in North Dakota may cause local agencies to close roads whereby people and equipment would be prevented from arriving at a location within 24 hours. They requested that the EPA extend the temporary flaring provisions for malfunction and repair or maintenance activity to 72 hours from 24 hours as finalized. They added that the March 2024 final rule’s specific timing restrictions for flaring were not in the proposals and therefore they did not have the opportunity to comment on the timelines finalized.

The petitioners added that the March 2024 final rule preamble includes language that they believe indicates that the EPA intended to allow up to 72 hours for temporary flaring, “...during repair, maintenance including blowdowns, a packer leakage test, a production test, or commissioning.”¹⁷ Petitioners asking the EPA to reconsider this issue interpreted that it was the

¹⁶ April 2024 API and AXPC petition.

¹⁷ 89 FR 16820, at 16949.

EPA’s intention that 72 hours be allowed for temporary flaring, “...during repair, maintenance including blowdowns, a packer leakage test, a production test, or commissioning,” based on language in the final rule preamble.

However, the EPA is now clarifying that the language cited by Petitioners was an inadvertent error. Elsewhere in the final rule preamble (*e.g.*, Table 17 - Situations and Durations where Associated Gas May Temporarily be Routed to a Flare or Control Device) and the final rule regulatory text correctly specify 24 hours as the allowance for temporary routing to a flare or control device during repair and maintenance. The final rule does allow for up to 72 hours in a different scenario, if associated gas does not meet pipeline specifications. In the March 2024 final rule, the EPA did not intend, and the existing regulatory text does not permit, to allow up to 72 hours for repair and maintenance.

As a follow-up to their petition, API conducted a survey¹⁸ from June through July 2024 with its members to understand the distribution of temporary associated gas flaring duration due to malfunction or maintenance and repair and submitted to the EPA for consideration. The API survey-provided responses include information on duration, data (month and year), and cause of temporary flaring events due to malfunction or maintenance or repair based on readily available data collected over 6 years (with 70 percent of the data collected within the last 3 years). The API survey data set represents over 2,800 total data points from six operators across three basins. The majority of the information (92 percent of the data points) was from the Permian Basin, with 6 percent and 2 percent from the Williston and San Joaquin Basins, respectively. Overall,

¹⁸ API (Prepared for API by John Beath Environmental, LLC). *Operator Survey: Temporary Flaring*. Slide Presentation and Excel Workbook. July 2024.

according to API, the results indicate that over 17 percent of events across the three basins required temporary flaring greater than 24 hours per event and over 15 percent of events required temporary flaring greater than 72 hours per event. Broken down by basin, 12 percent of the events in the Permian Basin required temporary flaring greater than 24 hours, and 11 percent required flaring durations greater than 72 hours. For the Williston Basin, 92 percent of events required flaring for greater than 24 hours and 78 percent required flaring for greater than 72 hours. For the San Joaquin Basin, 7 percent of events required flaring greater than 24 hours and 0 percent required flaring greater than 72 hours. The average duration of a temporary flaring event for all basins was reported to be 46 hours. The average flaring event durations by basin were 26 hours for the Permian Basin, 378 hours for the Williston Basin, and 8 hours for the San Joaquin Basin. API reported that inclement weather is one of many factors that contributes to the need for longer temporary flaring durations, which is reflected in the longer durations in the Williston Basin.¹⁹ They concluded that the data set supports their position that a 24-hour limit is a potential issue across various causes of temporary flaring including planned events, with geographically dispersed sites presenting additional challenges to rapid response.

Additional takeaways from the survey data, according to API, are that: (1) Operators are already making efforts to reduce the duration of temporary flaring, with approximately 83 percent of flaring events represented in the data set being less than 24 hours; and (2) API believes that a 72-hour flaring limit would be more realistic, force operational innovation, minimize emissions, and would reduce the duration of roughly 15 percent of events. API

¹⁹ The Williston Basin spans western North Dakota, northwestern South Dakota, eastern Montana and into a southern section of Canada.

acknowledged that although the results of the survey may not be statistically representative of the entire population (the entire industry in terms of all wells with associated gas), they believe that the collected data indicates that 72 hours is more appropriate than 24 hours as a national standard for temporary flaring due to malfunction or planned repair and maintenance.

The EPA had also received a briefing by Hess Corporation prior to receiving the April 2024 API and AXPC petition on temporary flaring concerns.²⁰ Their briefing stressed that well sites are unmanned facilities that are spread over hundreds of miles throughout North Dakota. They stressed that seasonal conditions such as road restrictions in spring and fall and extreme winter conditions can prevent personnel and equipment from getting to site, and that it may take days and up to over a week until access roads to a well site are cleared of snow. They added that, if a maintenance crew is required for repair, it can take multiple days even with equipment available. They suggested that it would be more appropriate and achievable for the EPA to allow 72 hours for temporary flaring due to safety and repair conditions.

Hess Corporation provided two specific scenarios in their briefing that they believe would require the need for flaring greater than 24 hours: (1) Back pressure valve (BPV) failure; and (2) frozen sales gas piping on well site. Under the first scenario, they reported that it can take over a week to fix a BPV where an operator cannot fix it without involving others to perform corrective work and to obtain the necessary parts. Under the second scenario, once a freeze is identified, mitigation needs to be scheduled with a 3rd party and work can entail over a day to remove snow to provide access to thaw piping.

²⁰ Hess Briefing for the EPA: *Oil and Natural Gas Final Methane Rule NSPS OOOOb and EG OOOOc*. February 29, 2024, Slide Presentation. See slides 19-23.

In June of 2024, Hess Corporation presented an updated briefing²¹ to the EPA on their concerns related to the temporary flaring provisions which included additional supporting information for the above-mentioned scenarios. For example, for the first scenario above, Hess provided BPV failure notification to resolution timeline data indicating that it takes anywhere from a half day to 8 days (with an average resolution time of 3.2 days). Hess emphasized that weather-related closures/restrictions that prevent personnel and repair equipment from getting to a site, and well sites in North Dakota that are unmanned facilities spread over hundreds of miles are both instances that would prevent maintenance and repair within 24 hours as required by the March 2024 final rule. Hess represented that their operations in North Dakota span an area of roughly 7,200 square miles. Thus, the company stated that even under normal business processes – that incorporate efficiencies – maintenance and repair within 24 hours is unlikely and infeasible in many instances, even without a reason beyond an operator’s control.

3. Summary of Proposed Changes

After consideration of the petitioners’ concerns and supporting information, the EPA is proposing to revise the temporary flaring provisions for associated gas in certain situations finalized in the March 2024 final rule. Specifically, these proposed revisions only apply to situations during: (1) Malfunction/safety, and (2) repair/maintenance. The EPA is proposing to extend the allowable time for temporary flaring from 24 to 48 hours for malfunction, including for reasons of safety, and during all repairs and maintenance.

Further, the EPA recognizes Petitioners’ claim that there may be some instances in which an owner or operator encounters a malfunction, safety, repair, or maintenance event that requires

²¹ Hess Briefing for the EPA: *NSPS OOOOb Safety, Malfunction & Repair Temporary Flaring Allowance*. June 3, 2024. Slide Presentation.

routing to a flare or control device beyond 48 hours. To address such instances, the EPA is soliciting comment on allowing owners or operators of associated gas affected facilities to route to a flare or control device for up to 72 hours if “exigent circumstances” exist. Such “exigent circumstances” would include situations where an owner or operator cannot physically access a site due to weather or other conditions (*e.g.*, road closures). In addition to extreme weather events/road closures, the EPA is also soliciting comment on whether there are other specific “exigent circumstances” where the EPA should consider allowing an owner or operator to include as a basis of a “exigent circumstance” claim requiring the need to route to a flare or control device beyond the proposed 48-hour allowance for repairs and malfunctions. The EPA also solicits comment on the records and reports that should be required if the EPA were to include an allowance for owners or operators of associated gas affected facilities to route to a flare or control device for up to 72 hours for “exigent circumstances.” Specifically, the EPA solicits comment on requiring an owner or operator who must make use of the extended timeframe to maintain records that include: (1) A written description of the “exigent circumstance”; (2) the rationale for the need to route to a flare or control device beyond 48 hours; (3) a description of the measures taken to minimize temporary flaring/routing to a control device; and (4) the duration of temporary flaring/routing to a control device due to the identified “exigent circumstance.” Lastly, the EPA solicits comment on requiring an owner or operator to include a summary of their annual “exigent circumstance” recorded events in their annual report.

The basis for the EPA’s proposed changes and solicitations is discussed in III.A.4 of this preamble.

4. Basis for Proposed Changes

The March 2024 final rule allows temporarily routing associated gas to a flare or control

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device for 24 hours during situations where a malfunction or incident endangers the safety of operator personnel or the public, and during repair, maintenance including blow downs, a production test, or commissioning. These provisions were based on requirements of existing State rules, information from the World Bank Global Flaring and Methane Reduction Partnership, and specific recommendations provided by comments received on the proposal and supplemental proposal.²²

As discussed in section III.A.2 of this preamble, industry petitioners indicated that the 24-hour limitation for temporary routing to a flare or control device in the final rule during situations where a malfunction or incident endangers the safety of operator personnel or the public, and during repair, maintenance including blow downs, a production test, or commissioning, is not sufficient. They claim that a 72-hour timeframe for all these situations is more appropriate for temporary routing to a flare or control device due to the unique characteristics of some well sites, weather conditions, or a combination of both.

The EPA considered this information, and examined the scenarios provided by the petitioners where they claimed there was a need for temporary routing to a flare or control device beyond 24 hours. First, the information provided by petitioners is persuasive in demonstrating that a blanket 24-hour limit on temporary flaring can pose compliance challenges for certain owners and operators. While we still expect that owners and operators can feasibly limit temporary flaring to less than 24 hours in a large majority of situations (and this is supported by the API survey data cited above), we acknowledge that in certain instances, fundamental aspects of well site operational schedules can make this requirement challenging, particularly for remote

²² 89 FR 16943 to 16944 and 89 FR 16948 to 16950.

unmanned sites. The EPA understands that owners' and operators' operational schedules outline the staffing and work shifts of oil and gas operations, ensuring that personnel are available to monitor and respond to issues within a designated timeframe while maintaining safe and efficient operations. We recognize that challenges arise when problems occur outside of an operator's working hours, such as during night shifts, shift changes or when fewer staffs are present leading to delays in identifying and addressing repairs and malfunctions. Hess has shared information with the EPA highlighting how the 24 hour operational schedule may not be sufficient for quick response in such cases, particularly with the remote nature of these sites.²³ We also recognize that the gathering of available parts and prioritization of corrective work to correct a situation, such as the BPV failure example cited by Hess, could require the need for routing to a flare or control device for a period greater than 24 hours. Further, we also recognize that circumstances outside of the control of the owner/operator, such as weather events, can also impact the ability to address the situation within 24 hours.

However, the EPA believes at this time that proposing to change the requirement to allow temporary routing to a flare or control device for up to 48 hours is likely to address most of the issues raised by the petitioners. We maintain that equipment needs for failures should be planned for in advance to minimize routing to a flare or control device (*i.e.*, owners and operators should plan to have equipment on hand for failures on site), and that additional time beyond 48 hours should not be necessary to address issues at remote sites since these sites are typically accessible within a 24 hour period (except during certain conditions *e.g.*, seasonal weather, road closures

²³ An example of the timeline challenges with well site operational schedules is presented in slide 5 of Hess Briefing for the EPA: *NSPS OOOOb Safety, Malfunction & Repair Temporary Flaring Allowance*. June 3, 2024. Slide Presentation.

that may prevent operators from accessing the site). Therefore, we are proposing to double the time frame for which temporary routing to a flare or control device is allowed during situations where a malfunction or incident endangers the safety of operator personnel or the public, and during repair, maintenance including blow downs, a production test, or commissioning, from 24 hours per event to 48 hours per event. This timeframe is supported by API's survey, which found the average duration of temporary flaring was 46 hours per event.

While the EPA is proposing to change the allowed duration for temporarily routing associated gas to a flare or control device from 24 to 48 hours, we recognize that there is some information that could support retaining the 24-hour time frame. As noted above, the API survey indicated that 83 percent of the circumstances encountered that required temporary flaring were resolved in 24 hours or less. Further, Colorado 2 Colo. Code. Regs. § 4041:903 allow gas to be flared (or vented during an upset condition), but for a period not to exceed 24 cumulative hours per event. In addition, information from New Mexico²⁴ indicates that only 11 percent of the total volume of gas flared (from all sources, not only associated gas) results from flaring activities with durations greater than 8 hours. We request information and data on whether the proposed temporary flaring duration of 48 hours has the potential to increase the amount of primary or secondary emissions. The duration of flaring will vary by basin and by the reason for flaring. We request that any data on changes in emissions due to flaring specifically identify the basin, reasons for flaring, and duration of the temporary flaring. We request that commenters consider this information in submitting comments related to the proposed change to 48 hours. We also

²⁴<https://www.wapps.emnrd.nm.gov/OCD/OCDPermitting/Reporting/NaturalGasWaste/UpstreamNaturalGasWasteSummaryReportExpanded.aspx>.

request additional information to support the proposal, or to support retaining the 24-hour period in the final rule.

While the EPA expects that the vast majority of temporary flaring situations can be addressed within the 48-hour timeframe proposed in these amendments, we recognize that incidents might not be resolved within 48 hours due to circumstances beyond an owner or operator's control. Examples of such "exigent circumstances" mentioned by the petitioners include road closures and seasonal weather that could prevent operators from accessing the site to conduct a necessary repair. As discussed above, EPA is not proposing to allow temporary flaring beyond 48 hours during such circumstances; however, we are soliciting comment on the need to allow routing to a flare or control device for up to 72 hours where a legitimate and supported "exigent circumstance" claim is made. We solicit comment on what would constitute an exigent circumstance and defining these incidences. Relatedly, we are soliciting comment on the potential "exigent circumstances" recordkeeping criteria explained above, and on when an "exigent circumstance" claim should be sent to the Agency (in the annual report or otherwise). This longer time frame of up to 72 hours for special situations is consistent with the duration recommended by reconsideration petitioners. We acknowledge that such circumstances represent real-life scenarios that are beyond an owner or operator's control but seek more information on this as an option. See section III.A.3 of this preamble for more explanation on our solicitation for information.

B. Vent gas net heating value (NHV) continuous monitoring requirements and alternative performance test (sampling demonstration) option for flares and enclosed combustion devices

A summary of the relevant promulgated provisions being reconsidered related to the vent gas NHV continuous monitoring requirements and alternative performance test (sampling demonstration) option for flares and enclosed combustion devices is presented in section III.B.1, and specific concerns and supporting information provided by petitioners and other industry representatives are presented in section III.B.2 of this preamble. After consideration of the petitioners' concerns and supporting information, the EPA is proposing certain discrete changes to these particular requirements finalized in the March 2024 final rule. The proposed changes are presented in section III.B.3 of this preamble and the EPA's rationale for those proposed changes is presented in III.B.4 of this preamble.

1. Summary of Promulgated Provisions Being Reconsidered

The EPA finalized compliance requirements for continuous monitoring and initial and periodic performance testing for flares and enclosed combustion devices in the March 2024 final rule. Of relevance to this proposal are the final requirements for those two control devices regarding the NHV monitoring requirements and alternative performance test (sampling demonstration) option. In the March 2024 final rule, with exceptions for catalytic vapor incinerators, boilers and process heaters, and enclosed combustors where temperature is an indicator of destruction efficiency, all flares and enclosed combustors must maintain the NHV of the gas sent to the device above a minimum NHV value if the combustion device is pressure-assisted or uses no assist gas. If an owner or operator uses a steam- or air-assisted enclosed

combustion device or flare, the owner or operator must maintain the combustion zone NHV (NHV_{cz}) above a minimum level. If the owner or operator uses an air-assisted enclosed combustion device or flare, the owner or operator must maintain the NHV dilution parameter (NHV_{dil}) above a minimum level. The NHV_{cz} and NHV_{dil} parameter terms account for the reduction in heating value caused by the introduction of air or steam. These terms ensure that the assist gas does not overwhelm the heating value provided by the vent gas to the point where proper combustion is no longer occurring. Owners or operators also have the option to apply to use an alternative test method that either demonstrates continuous compliance with the combustion efficiency limit or directly demonstrates continuous compliance with the NHV_{cz} operating limit and, if applicable, the NHV_{dil} operating limit.

Associated gas from a well site affected facility was exempt from NHV monitoring (*i.e.*, assumed to always have high NHV) under the March 2024 final rule. For each enclosed combustor and flare used to control gases other than associated gas from a well site affected facility, the owner or operator must conduct continuous monitoring using a calorimeter, gas chromatograph (GC), or mass spectrometer (MS) in order to determine the NHV of the vent stream. As an alternative to continuous monitoring of NHV, the owner or operator may conduct a performance test to demonstrate the NHV of the vent stream consistently exceeds the applicable NHV operating limit in one of two ways: (1) Continuous sampling for 14 consecutive days plus ongoing (3 samples every 5 years) sampling, or (2) manual sampling (twice daily for 14 consecutive days) plus ongoing (3 samples every 5 years) sampling. The minimum collection time for each individual manually- collected sample must be at least one hour. If inlet gas flow is intermittent such that collecting 28 samples in 14 days is infeasible, an owner or operator must

continue to collect samples beyond 14 days in order to collect a minimum of 28 samples. Owners or operators also have the option to use an alternative test method^{25,26} that demonstrates continuous compliance with the combustion efficiency limit; if there are no values of the combustion efficiency measured by the alternative test method over the 14-day period that are less than 95 percent, the gas stream is considered to consistently exceed the applicable NHV operating limit and the owner or operator is not required to continuously monitor or conduct sampling of the NHV of the inlet gas to the enclosed combustion device or flare. Owners or operators of steam-assisted and air-assisted enclosed combustors and flares also must monitor the vent gas and assist gas flow rates and calculate NHV_{cz} and NHV_{dil} in accordance with the provisions in 40 CFR 63.670 (*i.e.*, the refinery maximum achievable control technology rule, or Refinery MACT). Alternatively, owners or operators of air-assisted flares may provide a one-time demonstration based on maximum air assist rates, minimum waste gas flow rates (based on

²⁵ Under the provisions outlined in 40 CFR 60.5412b(d) and 60.5415b(f)(1)(xi), sources can request to use an “equivalent method” pursuant to 40 CFR 60.8(b)(2), or “an alternative method the results of which [the Administrator] has determined to be adequate for indicating whether a specific source is in compliance” pursuant to 40 CFR 60.8(b)(3). The EPA is currently accepting and reviewing applications for alternative (ALT) test methods for NHV monitoring in the oil and natural gas sector. See <https://www.epa.gov/emc/oil-and-gas-alternative-test-methods#:~:text=The%20application%20portal%20can%20be,Air%20Emission%20Measurement%20Center%20webpage>. Since the rule’s publication date of March 8, 2024, two alternative test method requests have been approved by the EPA for use under NSPS subpart OOOOb: (1) ALT-156 Alternative Test Method to monitor the NHV of the flare combustion zone at facilities Subject to NSPS OOOOb and (2) ALT-157 Alternative Test Method for determining NHV from gas sent to an ECD or Flare subject to NSPS OOOOb. A list of the EPA’s approved alternative test methods can be found at <https://www.epa.gov/emc/broadly-applicable-approved-alternative-test-methods>.

²⁶ Per 40 CFR 60.8(b)(5), the EPA has more general authority to approve alternative test methods involving “shorter sampling times and smaller sample volumes when necessitated by process variables or other factors.”

back pressure regulator setting), and minimum NHV from the most recent sampling rather than continuously monitor vent gas and assist gas flow rates.

Finally, as discussed in section II.B of this preamble, the EPA issued a letter on May 6, 2024, whereby the EPA clarified performance testing deadlines with respect to the alternative NHV sampling demonstration that owners or operators must meet in order to demonstrate compliance with the applicable NSPS subpart OOOOb emission standard. The EPA stated that as applied to the March 2024 final rule, affected sources that were new, modified, or reconstructed after the supplemental proposal (December 6, 2022), but before the rule's effective date of May 7, 2024, have 180 calendar days after the effective date of the rule to conduct performance (*i.e.*, compliance) testing. For NSPS subpart OOOOb sources that are new, modified or reconstructed after the final rule's effective date of May 7, 2024, the applicable monitoring requirements (including the 14-day NHV performance test) must be completed within 180 calendar days after initial startup of the source.

2. Petitioners' Concerns and Supporting Information

API and AXPC^{27,28}, TXOGA²⁹, GPA Midstream³⁰, and EIP³¹ raised issues in their petitions relating to the March 2024 final rule requirements for the NHV compliance demonstration, which consists of either monitoring the NHV content of the vent gas on a continuous basis, or utilizing the alternative performance test option. The April and May 2024 API and AXPC petitions, May 2024 TXOGA petition, and May 2024 GPA Midstream

²⁷ April 2024 API and AXPC petition.

²⁸ May 2024 API and AXPC petition.

²⁹ May 2024 TXOGA petition.

³⁰ May 2024 GPA Midstream petition.

³¹ May 2024 EIP, *et al.* petition.

Association petitions raised issues regarding the need for the NHV compliance demonstration, technical infeasibility of the demonstration, and compliance timing (including supply chain issues). The May 2024 EIP, et. al. petition contended that the EPA did not support its conclusion in the March 2024 final rule that initial assessments of flares and other control devices, in lieu of continuous monitoring, can capture the variability of NHV in the oil and gas sector, and that no sampling or monitoring of NHV is needed when only associated gas from wells is sent to control devices.

a. Need for NHV Compliance Demonstration

The April and May 2024 API and APXC and May 2024 GPA Midstream petitions state that vent gases in this industry are not expected to fall below the minimum NHV unless diluted by inert gases,³² and therefore the NHV requirements in the March 2024 final rule are unnecessary. The May 2024 GPA Midstream petition raised concerns with operations in the midstream and stated that waste gas streams routed to combustion devices have very high British thermal unit (Btu) values, when compared to the minimum NHV values finalized in the March 2024 final rule, because these midstream gas streams consist of natural gas and field gas with NHVs typically in excess of 1,000 Btu/standard cubic feet (scf). Further, this petitioner stated that inert gases, such as nitrogen, are rarely used at midstream sources and any water in the gas is eliminated well before the control device. This petitioner also cited to prior responses to public comments from the EPA which acknowledged the NHV of the vent gas to a flare in this sector is

³² For the purposes of the NHV compliance provisions, inert gases (or inerts) are gases that do not readily undergo combustion. Inert gases consist of or contain high concentrations of nitrogen, carbon dioxide (CO₂), water, or other compounds that have a net heating value of zero.

likely to be well above the minimum required NHV³³ and questioned what it perceived as a change in the EPA’s position³⁴ in the March 2024 final rule. In a letter³⁵ to the EPA dated July 31, 2024, GPA Midstream provided additional information, not previously provided during the course of the prior rulemaking, regarding operating scenarios in midstream operations where vent gases may have a lower NHV than typical gathering, boosting, and processing operations. In this same letter, GPA Midstream also provided new NHV data from gathering, boosting, and processing vent gas streams routed to controls, along with four new operating scenarios for the EPA’s consideration, where the NHV content in vent gas streams may be lower than normal:

1. Combining acid gas removal (AGR) system amine regenerator still column vent gas with affected facility vent gas streams – GPA Midstream explained that AGR amine regenerator still column vent gases typically are routed to an individual control device due to the low flow rate, low pressure, and corrosive nature of the vent stream, and that the low NHV of the stream typically requires supplemental gas for proper control device operation. However, GPA Midstream explained it is possible to combine the still column vent gas with other vent gas streams, which would lower the NHV of the combined stream, primarily due to the high CO₂ content of the still column vent gas.
2. Combining glycol dehydration unit reboiler vent gas with affected facility vent gas streams without water removal – GPA Midstream explained that typically glycol

³³ See RTC, Response II-17-46 and II-17-47.

³⁴ See 89 FR 16966.

³⁵ GPA Midstream–EPA 06/24/24 Meeting Follow-Up. Re: Response to EPA Request for Additional Information regarding OOOOb GPA Midstream Net Heating Value Case Scenarios and Data. (Attachment Summarizing NHV Data Included as an Attachment). Hereinafter referred to as the “July 2024 GPA Midstream Letter.”

dehydration unit reboiler vent gas is routed through a condenser to remove liquids (including VOC and water vapor) and then routed to a process or control device.

However, it is possible to combine the glycol dehydration unit reboiler gas, without routing through a condenser, with other vent gases routed to common control. The high water content of the reboiler vent gas stream could lower the NHV of the combined vent gas streams.

3. Use of inert gases and entrainment in affected facility vent gas stream – GPA

Midstream explained that midstream operations usually do not employ the use of inert gases such as nitrogen because if a blanket gas is needed, its midstream operations use natural gas as it is readily available and compatible with control devices due to the high NHV. In instances where an inert gas such as nitrogen is used as a blanket gas, this could cause lower NHV of the vent gas stream.

4. High water content in vent gas streams from storage vessels – Finally, GPA

Midstream explained that midstream operations employ the use of storage vessels for storing hydrocarbons and produced water, which typically have NHVs well above the thresholds required by the March 2024 final rule. However, it is possible that some production areas could have higher water content in the vent stream coming from the storage vessels, which would lower the NHV. GPA Midstream notes that in these cases, the high water content would increase the probability that the storage vessel emissions thresholds for applicability would not be exceeded. In any event, GPA Midstream explained that in such scenarios, the NHVs are still above the lower NHV thresholds of the rule.

GPA Midstream summarized that midstream operators would be aware of the operating scenarios provided and should be allowed to use process knowledge to assess whether the NHV could not meet the requirements of the March 2024 final rule, and thus would require the use of supplemental gas.

GPA Midstream also provided a new data set³⁶ of sampled data and modeled data from midstream operations, stating that the data indicate that the vent gas streams are well above the NHV requirements of the rule and hence should not require continuous NHV monitoring. GPA Midstream further explained technical difficulties in collecting the data, which are described in section III.B.b of this preamble.

The April 2024 API and AXPC petition referred to an NHV data set³⁷ that they provided to the EPA after publication of the March 2024 final rule which included over 22,000 data points from 18 operators across approximately 4,200 sites. The petitioners stated that this data set showed that more than 99.5 percent of the time NHV values were at least 800 Btu/scf and more than 99.9 percent of the time the NHV value was at least 300 Btu/scf. API and AXPC further stated that the results appeared consistent across five basins, representing 99 percent of the data. While some sources with multiple data points showed variability, the NHV was still well above 800 Btu/scf for those sources. API and AXPC stated that all NHV data \leq 900 Btu/scf in the survey were from known scenarios where large amounts of inert gas(es) are expected. The petitioners stated that operators know which scenarios or sites have the potential for large

³⁶ July 2024 GPA Midstream Letter.

³⁷ API/AXPC-EPA 03/18/24 Meeting Follow-Up. *Operator Survey: Net Heating Value*. API-AXPC Meeting Slide Presentation to the EPA. (Attachment Summarizing NHV Data Included as an Attachment. Excel Sheet Provided of *Analysis of NHV Data Provided by Operators: Supporting Data* (Prepared by John Beath Environmental, LLC for API/AXPC).)

amounts of inert gases to reduce the NHV of vent streams below the required minimum; these known scenarios include: (1) Sites in fields using water or CO₂ flood Enhanced Oil Recovery (EOR), and (2) produced water tanks not co-located with oil tanks in certain dry gas plays.

The April 2024 API and AXPC petition also included a letter from SPL, which stated it is the largest laboratory in the United States (U.S.) specializing in the analysis of hydrocarbon products, processing more than 225,000 natural gas samples each year. SPL stated that based on its direct experience analyzing thousands of vent gas samples from every major oil and gas producing region of the U.S. annually, it would be exceptionally uncommon for the NHV content of vent gas to fall below the threshold levels established by the March 2024 final rule. SPL explained that vent gases are exceptionally heavy gases (relative to air) that are typically depleted with respect to lighter hydrocarbon molecules such as methane and ethane, and enriched in molecules like propane, butane and pentane. As a result, SPL explained that these heavy gases have a lower vapor pressure (relative to a methane-enriched sales gas, for example) and therefore do not “flash” from the liquid hydrocarbon stream until the final stage of separation. The vendor provided NHV data for methane (909.4 Btu/ft³), propane, n-butane and n-pentane (2,315 Btu/ft³, 3,000 Btu/ft³ and 3,707 Btu/ft³ respectively).³⁸ Therefore, SPL explained that, unless there is a source of inert gas diluting the vent gas stream (sources of inert gas could be added by design, or, due to leaking equipment), there should be no compositional reason the NHV of that gas would be under the threshold set by the EPA.

b. Technical Infeasibility

³⁸ See: GPA 2145 – “Table of Physical Properties for Hydrocarbons and Other Compounds of Interest to the Natural Gas Industry.”

The April and May 2024 API and AXPC petitions, May 2024 TXOGA petition, and May 2024 GPA Midstream petitions raised new issues regarding the feasibility of conducting the sampling for the alternative NHV performance test (sampling demonstration), given the intermittent flow to control devices. The petitioners explained that in some cases, flow to the control device may occur for as little as a few minutes, making continuous monitoring or collection of single (or 28) one-hour samples impossible. The May 2024 TXOGA petition also explained that sampling equipment is not designed to operate in low temperatures or with all types of gases.

The April 2024 API and AXPC petition pointed out that while the March 2024 final rule reduced the number of required samples from 240 (as proposed in the December 6, 2022 supplemental rule) to 28, it did not address the feasibility of collecting the samples. API and AXPC also contended that extending the sampling duration from 10 to 14 days added time and costs to an already technically infeasible option. As noted above, these petitioners submitted information from SPL, a laboratory that stated that the minimum one-hour sampling requirement in the alternative performance test (sampling demonstration) option goes against traditional norms for the collection of natural gas grab samples and requires all sampling entities to deploy alternative strategies which are not currently available. SPL explained that typical methods for the collection of natural gas samples call for spot sampling techniques that procure gas on very short (seconds to minutes) timescales, but the one-hour requirement requires composite sampling techniques typically used in custody-transfer applications (and elsewhere) to be adapted to a more rugged and transportable setup. SPL suggested that the EPA allow sample collection methods such as those referenced in GPA 2166-22 instead. SPL also pointed out what it

considered to be several issues with the use of Summa canisters for vent gas collection. SPL explained that Summa cannisters were designed primarily for atmospheric gas sampling and that in order to collect 1-hour samples by Summa cannister, restrictive flow metering devices will be required, which rely on a restrictive orifice to meter the gas into the Summa cannister. SPL explained that the potentially wet and dirty nature of flare gas will rapidly foul these devices, resulting in errors in collection and potential contamination bias. Instead, SPL recommended that, for operators and laboratories to meet sample demand in a reasonable manner, single cavity stainless steel constant volume cylinders should be allowed for sample collection so long as they are maintained according to the requirements set forth in 43 CFR 3175 (Onshore Oil and Gas Operations; Federal and Indian Oil and Gas Leases; Measurement of Gas).

The May 2024 GPA Midstream petition explained that vent gas flow from midstream sources to control devices tended to be sporadic and at low pressure. They stated that intermittent flow was particularly an issue for storage vessels that either have low flows generally or have pressure control valves that only release short bursts of gas to control devices. GPA Midstream stated it is not possible to achieve the necessary flow rate for establishing a temperature limit, continuous monitoring, or one-hour sampling without adding gas pressure. It further explained that storage vessels will frequently be unable to add sweep gas because the necessary headspace is limited; in situations where facilities add gas, those situations will not be representative of normal operating conditions. In the July 2024 GPA Midstream letter, GPA Midstream provided further examples of sample collection issues. In addition to the availability of sampling ports, discussed below, GPA Midstream noted that closed vent systems (CVS) operate under a slight vacuum or close to atmospheric pressure and temperature, which can draw oxygen (O₂) in with

the vent stream sample. Also, because vent gas samples are obtained at atmospheric pressures, explained GPA Midstream, running the vent gas samples through the GC upon capture causes issues due to liquids (*e.g.*, water) condensing during analysis, which often requires repairs to the GC.

The April 2024 API and AXPC petition contended that NHV monitoring is not required in existing State regulations governing upstream flares and combustion emissions control devices and that upstream operators are not currently conducting NHV monitoring for operational or other non-regulatory reasons.³⁹ Thus, the petitioners argued that the NHV monitoring at upstream flares and combustion emissions control devices has not been demonstrated to be feasible or cost-effective.

The April 2024 API and AXPC petition also expressed concerns that the Refinery MACT-based NHV_{oz} and NHV_{dil} requirements for devices which use steam- and air-assist and perimeter-assist air, respectively, are overly burdensome because well sites, central production facilities, and compressor stations are fundamentally different than petroleum refineries. The petitioners explained that the oil and natural gas production sector does not operate at steady State conditions and equipment design must be tailored to the conditions and fluid compositions supplied by the reservoir. They added that hydrocarbon fluids (including oil, condensate, and produced water) and natural gas are located thousands of feet below the surface and must flow to the surface for separation. API and AXPC explained that separation occurs in either a two- or three- phase separator with intermittent pulses of produced water sent from the bottom of the separator to its storage vessel, hydrocarbon liquids from the middle to its storage vessel, and

³⁹ API and AXPC specifically point to Colorado and New Mexico as examples.

natural gas off the top of the separator to the gathering system. These petitioners further explained that as production declines, management of liquids can mean that flow to the storage vessel can vary from essentially zero to high flow rates and quickly back to zero rapidly and often. According to the petitioners, the same is true for how vapors from the storage vessel will be expected to flow to a control device since emissions occur from flashing and working losses as liquid periodically flows into the storage vessel from the separator. The petitioners explained that this highly variable, non-steady state flow requires equipment to be sized much larger than ideal steady state conditions would dictate and makes flow measurement infeasible. The petitioners also provided that the cost for Refinery MACT controls and monitoring equipment at refineries are \$1 million or more, with major ongoing costs. The petitioners explained that these costs will be much greater at upstream facilities without the necessary utilities and instrumentation resources available for a large complex facility such as a refinery and it is unclear whether instrumentation that is available that would work reliably under these varying operating conditions.

The April and May API and AXP and May 2024 GPA Midstream petitions also raised issues with the alternative test method approval process, stating that alternative test methods are costly to implement (and unlikely to be used by small operators) and take time for agency approval (and which is related to issues regarding compliance timing discussed in section IV.B.2.c of this preamble). The May 2024 GPA Midstream petition requested that the EPA revise the March 2024 final rule to allow alternative test methods for air and steam-assisted combustion devices, such as Video Imaging Spectro-Radiometry (VISR), as the March 2024 final rule preamble and regulatory text conflict with respect to what is allowable. Specifically,

the petitioner cited to 89 FR 16968, which indicates that “an owner or operator could request an alternative test method to use a technology such as VISR that continuously monitors combustion efficiency or a technology such as Simplified VISR that continuously monitors NHV_{cz} and NHV_{dil} ,” but noted that the associated monitoring requirements at 40 CFR 60.5417b(d)(8)(iii)(H) appear to not allow alternative test methods to continuously monitor NHV_{cz} and NHV_{dil} .

The May 2024 GPA Midstream petition also stated that the EPA should allow for compliance demonstration alternatives. This petitioner explained that design evaluations using process simulation software will be more than sufficient for midstream sources to document that waste streams consistently exceed the EPA’s minimum NHV values. The petitioner repeated prior comments to the EPA⁴⁰, that owners and operators can perform and document source-specific design evaluations to demonstrate that waste gas streams will consistently exceed the required minimum NHV thresholds in a manner similar to the evaluations used for condensers and carbon absorption units under 40 CFR 60.5413b(c). If the EPA does not allow for compliance demonstration alternatives, the petitioner requested that the EPA allow for alternative sampling locations. In the July 2024 GPA Midstream letter, GPA Midstream explained that prior to NSPS OOOOb, operators were not required to collect NHV data because process knowledge would support the vent stream as having a high NHV. Because of this, CVS were not designed to include sampling ports. In addition to the compliance timing reasons discussed in section IV.B.2.c of this preamble relating to “hot taps,” the petitioner requested that the EPA allow sampling from existing access points, such as thief hatches, which would avoid the

⁴⁰ See GPA Midstream Comments on the Supplemental Proposed Rule (February 13, 2023) at 42-43. See Docket ID No. EPA-HQ-OAR-2021-0317.

compliance timing issues, unnecessary costs, and creation of a new opening that would be another potential source of fugitive emissions. The petitioner also requested that owners or operators be able to draw samples from storage vessel headspace, as there are always vapors present in the vessel headspace and it will be representative of the vent gas routed to the control devices.

The May 2024 API and AXPC petition also requested that the EPA require a re-evaluation of the of the vent gas stream NHV only when there are process or equipment changes that could result in a lowering of the NHV and requested that the EPA provide guidance regarding the analytical methods required for NHV sampling. The petitioners noted that the March 2024 final rule requires the use of American Society for Testing and Materials (ASTM) Method D1945-14 for NHV analysis but stated that this method is not widely available for well sites, centralized production facilities, compressor stations, and gas plants since it evaluates components not typically found in vent gas from these operations (*e.g.*, helium). The petitioners requested that the EPA revise the March 2024 final rule, or at a minimum provide guidance, to allow the use of GPA 2261 and other appropriate alternative methods to measure NHV. In support of this, the petitioner provided information from SPL, which stated that ASTM D1945-14 is not widely available and will require additional time for method development, as well as purchase or modification of equipment.

c. Compliance Timing

In addition to the compliance timing issues discussed above relating to alternative test method approval and test method capability development, the May 2024 GPA Midstream petition raised the issue that the March 2024 final rule does not provide adequate time to conduct

the testing after such an approval is granted. The petitioner explained that while 40 CFR 60.5412b(d)(1)-(5) provides requirements for how the alternative test is performed, it provides no period of time by which it should be performed, unlike 40 CFR 60.5413b(b)(5)(i) which specifies that performance testing is required within 180 days after initial startup. The petitioner further notes that unlike continuous monitoring, which can be installed prior to startup of a new source, the alternative testing protocol requires the combustion device to already be operating in order to determine the destruction efficiency and inspect of visible emissions. The petitioner is concerned that the March 2024 final rule can be read so that any period of operation before or during the alternative testing (dating back to December 2022 for modified sources) may be a deviation. The petitioner requests that the EPA allow 30 days after startup to perform alternative testing.

The May 2024 TXOGA and April 2024 API and AXPC petitions expressed concerns about the availability of sampling vendors that can perform the sampling. The May 2024 TXOGA petitioner also pointed out that finding viable sampling periods cannot be predicted due to the intermittent flow to the devices. The April 2024 API and AXPC petition estimated that a single sampling crew can typically visit no more than two or three sites in a day due to the geographically dispersed nature of upstream operations. This same petitioner provided statements from SPL stating that the number of samples required would be greater than the capacity of labs to collect and process in the 60-day window and that there are not enough gas chromatographs, sample cylinders, and human resources to make compliance within 60 days a possibility.

The May 2024 GPA Midstream petition raised concerns with the feasibility of meeting compliance timelines for installation of sampling ports. The petitioner stated that the EPA has underestimated the number of sources that would be considered “modified” under the Final Rule, resulting in the need to install monitors and sampling ports on thousands of sources in an impracticably short time.⁴¹ The petitioner stated that it will take owners and operators several months to procure continuous monitoring equipment and installation will take additional time. The petitioner provided purchase quotations from vendors which indicated that calorimeters would take eight to 12 weeks for delivery and continuous monitoring devices would take up to 26 weeks; installation would require an additional 2 to 3 weeks. Additional concerns expressed by the May 2024 GPA Midstream petition were that installation of monitoring equipment or sampling ports on existing control devices requires specialized “hot tap” work, which they stated cannot be accomplished across the industry prior to the deadline for compliance demonstrations, due to a limited number of qualified contractors and the need to properly time unit shutdowns for the hot tap work.

d. Other

The May 2024 EIP, et. al. petition contended that the EPA did not support the March 2024 final rule conclusion that initial assessments of flares and other control devices, in lieu of continuous monitoring, can capture the variability of NHVs in the oil and gas sector and asserted that no sampling or monitoring at all is needed when only associated gas from wells is sent to control devices.

⁴¹ See GPA Midstream Comments on Supplemental Proposed Rule at 37-38 (need for additional compliance time for storage vessels); 42 (discussing supply chain shortages contributing to long lead times). See Docket ID No. EPA-HQ-OAR-2021-0317.

3. Summary of Proposed Changes

The EPA is proposing to revise numerous aspects of the NHV monitoring and testing provisions in the March 2024 final rule. The EPA is proposing to expand the streams that are exempt from monitoring due to high NHV content to include unassisted flares or enclosed combustion devices at new sources and to include unassisted, air-assisted, and steam-assisted flares or enclosed combustion devices at existing sources. We are proposing that the NHV monitoring that is currently required should continue to be required for all pressure-assisted, air-assisted, and steam assisted flares or enclosed combustion devices at new sources and for pressure-assisted flares or enclosed combustion devices at existing sources. We are proposing to remove the general exemption from NHV monitoring for associated gas from well site affected facilities for any control device. For flares or enclosed combustion devices that are subject only to a minimum NHV content in the vent gas of 200 Btu/scf or 300 Btu/scf, we are proposing to require NHV monitoring only in cases where inert gases are added, or for other miscellaneous scenarios which decreases the NHV content of the inlet stream gas to the enclosed combustion device or flare. These known operational scenarios include combining AGR system amine regenerator still column vent gas with affected facility vent gas, combining glycol dehydration unit reboiler vent gas with affected facility vent gas streams without water removal, high water content in vent streams from certain storage vessels, and EOR sites in fields using water or CO₂ flooding. The EPA is proposing recordkeeping and reporting to indicate whether the flare or enclosed combustion device receives inert gases or other streams which may lower the NHV of the combined stream, and if so, a description of the operating scenario(s) which may lower the NHV of the combined stream through the introduction of those inert gases or other streams.

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In addition, when an owner or operator opts to meet the NHV compliance demonstration by conducting the alternative performance test via the NHV grab sampling option, the EPA is proposing revisions to clarify that sampling may be conducted on “the inlet gas *which is routed* to the enclosed combustion device or flare” [emphasis denotes proposed revision]. The EPA intends that this revised phrasing will clarify that sampling upstream of the inlet to the control device is allowed, provided that the sample is representative of the gas inlet to the control device. For example, sampling may be conducted from a location on the control device piping header, provided the sampling location is downstream of all waste gas inlets into the header. The EPA is proposing to clarify that the NHV of the vent stream shall be determined in Btu/scf, where standard conditions are 20 degrees Celsius (°C), not Btu per pound (Btu/lb). If the composition is determined in weight percent, those concentrations can be used, but they will need to be converted to volume percent (equivalent to mole percent) based on the molecular weight of the constituents. Other changes in this proposal include specifying that the 14-day period for the performance test (sampling demonstration) option shall be consecutive operating days and that for the purposes of determining the hourly average for continuous samples, the average shall be a block hourly average. The EPA is not proposing to amend the sampling frequency (*i.e.*, 2 samples per day for 14 days with an ongoing demonstration of 3 samples every 5 years) for the performance test (sampling demonstration) option for neither NSPS OOOOb nor EG OOOOc. However, the EPA is proposing to allow for breaks for weekends and holidays which may occur during the 14-day sampling period, such that the 14 days do not have to be consecutive. The EPA is also proposing to retain the one-hour minimum sampling time for the twice daily samples, except in cases where low or intermittent flow makes one-hour sampling infeasible. In

such a case, the EPA is proposing to allow less than one-hour sampling times and proposing that the sampling time used and the reason for the reduced sampling time must be documented and reported. The EPA is proposing to more clearly allow the use of the sampling methodology alternative to continuous monitoring in 40 CFR 60.5417b(d)(8)(iii) for all types of air and steam assisted flares or enclosed combustion devices. The EPA is proposing these same changes in both NSPS OOOOb and EG OOOOc.

In addition, for NSPS OOOOb, the EPA is proposing to retain the NHV_{cz} and NHV_{dil} monitoring requirements, but more clearly including the provisions at 40 CFR 60.5417b(d)(8)(vi) to allow the use of approved alternative test methods as provided in 40 CFR 60.5412b(d)(1)(i) and (ii) for continuous monitoring of NHV_{cz} and, if applicable, NHV_{dil} . We are also proposing to more fully delineate in 40 CFR 60.5417b(d)(8)(iv) when flare flow or assist rates are not required to be monitored. On the other hand, for EG OOOOc, the EPA is proposing to remove the requirement to comply with and conduct monitoring for NHV_{cz} and NHV_{dil} for air- and steam-assisted enclosed combustion devices and flares used for existing sources. This series of proposed revisions in EG OOOOc include changes in the initial compliance requirements for air- or steam-assisted enclosed combustion devices or flares in 40 CFR 60.5412c, the continuous compliance requirements for these control devices in 40 CFR 60.5415c, and the continuous monitoring requirements for these control devices in 40 CFR 60.5417c. We are proposing under EG OOOOc that air- or steam-assisted enclosed combustion devices or flares must meet a minimum NHV in the vent gas of 300 Btu/scf.

4. Basis for Proposed Changes

a. Proposed Revisions to Inlet Gas Streams Exempt from Monitoring

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As discussed in section III.B of this preamble, based on new information provided by petitioners regarding NHV characteristics of sample streams, the EPA is proposing changes to the requirements in the March 2024 final rule that would, if finalized, expand the scope of the exclusion for the NHV continuous monitoring requirements and alternative performance test (sampling demonstration) option so that the following control devices would not be required to make any such demonstration: unassisted flares or enclosed combustion devices at a new source and for unassisted, air-assisted, or steam-assisted flares or enclosed combustion devices at existing sources. New data submitted in the April 2024 API and AXPC petition demonstrated that, for over 22,000 NHV data points, 99.5 percent of those data points showed that the NHV was at least 800 Btu/scf and more than 99.9 percent of those data points showed that NHV was at least 300 Btu/scf. Notably, these data were consistent across different basins.⁴² Data supplied in the July 2024 GPA Midstream letter supported their prior petition submittals that gas streams in the midstream consist of natural gas and field gas with NHV values greater than 1,000 Btu/scf, with the exception of certain streams in which inert gases or other known low-NHV streams were added. Because these new data appear to demonstrate that the NHV of the vent gas is consistently well above the 200 or 300 Btu/scf vent gas requirements for these control devices when inerts are not present, and because there are no combustion zone or dilution parameters for these control devices, the EPA is proposing to determine that an expanded exclusion from the monitoring requirements is appropriate.

⁴² 99 percent of the data were from five basins: Permian, Anadarko, Gulf Coast (Eagleford), Williston (Bakken), and Powder River. See March 18, 2024, API/AXPC Slides in Docket ID No. EPA-HQ-OAR-2024-0358.

While we previously excluded monitoring for associated gas from the NHV compliance demonstration requirements, some petitioners have now identified instances where the NHV for associated gas streams could be compromised. Specifically, the use of water or CO₂ flooding EOR could introduce significant inerts as part of the associated gas produced and thereby lower NHV of the associated gas. We find the information presented by the petitioners compelling and therefore propose to conclude that the March 2024 final rule's exclusion of associated gas from the NHV compliance demonstration requirements is overly broad. Because the definition of associated gas in the March 2024 final rule does specifically exclude these inert gases that may be released with the natural gas during the initial stage of separation after the wellhead, there are cases where associated gas can have high levels of inerts and low NHV. Therefore, we are proposing to remove this exclusion for associated gas in its entirety. The proposed removal of this exclusion would impact pressure-assisted flares and enclosed combustion devices at both new and existing sources and air- and steam-assisted flares and enclosed combustion devices at new sources.

The EPA is not proposing to exclude pressure-assisted flares or enclosed combustion devices from the NHV compliance demonstration requirements. For pressure-assisted flares or enclosed combustion devices, the required minimum NHV of 800 Btu/scf is not significantly higher than the NHV of methane, which is 896 Btu/scf (using standard conditions of 68 °F (20 °C); this value is lower than the value provided by SPL because they used 60 °F as standard conditions). Therefore, sources that contain primarily methane would not require much dilution from inert components (*e.g.*, nitrogen, CO₂, or air) to be below the 800 Btu/scf NHV threshold for pressure-assisted flares or enclosed combustion devices. While the data provided by

petitioners indicated that the majority of samples had NHVs above 800 Btu/scf, we find that it is much easier for the NHV in the vent gas samples from these control devices to decrease and approach the 800 Btu/scf NHV threshold and that, therefore, continuous NHV monitoring or an alternative performance test (sampling demonstration) is still warranted for pressure-assisted flares or enclosed combustion devices. Accordingly, we are proposing to retain the requirement that, as currently required in the March 2024 final rule, pressure-assisted flares must either continuously monitor NHV or conduct the 14-day performance test sampling demonstration in order to ensure that the gases sent to those control devices have NHVs well above the regulatory threshold.

For reasons described in section III.B.4.d of this preamble, the EPA is proposing to retain the NHV_{cz} and NHV_{dil} requirements for air- and steam assisted flares for sources subject to NSPS subpart OOOOb. Because these parameters are not only dependent on the NHV of the vent gas but also on the flow rate of the vent gas and the assist gas, we propose that the NHV demonstration is necessary (when continuous monitoring is not used) to determine a minimum NHV to use in the assessments under 40 CFR 60.5417b(d)(8)(iv) and in the calculation of the NHV_{cz} and NHV_{dil} parameters in 40 CFR 60.5417b(d)(8)(vi).

As demonstrated by the July 2024 GPA Midstream data set, the addition of inert gases or streams from amine units or produced water tanks can decrease the NHV content of the gas stream to the point that the minimum NHV thresholds for non-pressure-assisted flares or enclosed combustion devices may not be achieved. In addition to sources of inert streams previously identified in the March 2024 final rule (*i.e.*, streams from compressors in acid gas service and streams from EOR facilities), the July 2024 GPA Midstream letter explained that

other operating scenarios can result in the addition of low-Btu value streams into the vent gas stream, which lowers the overall NHV for the vent stream. Therefore, we are proposing to require NHV monitoring for unassisted flares and enclosed combustion devices at new sources and for unassisted, air-assisted, and steam-assisted flares and enclosed combustion devices at existing sources in cases where there are contributions from inerts. In the example cases provided in section III.B. of this preamble, the EPA expects that these operational scenarios can be easily validated through the physical presence (or absence) of process equipment, process piping, engineering analysis, or process flow diagrams in order to determine when the owner or operator should monitor the NHV of the stream. For example, in the case of the AGR system amine regenerator still column vent gas, it would be easy to trace process piping to determine if the vent stream was routed to a dedicated control device or was combined with affected facility vent gas streams. Similarly, for the glycol dehydration unit reboiler vent gas, the lack of a process condenser would indicate that higher water content (and lower Btu) reboiler vent gas streams was combined with affected facility vent gas streams. The use of nitrogen as a blanket gas can be readily determined through the presence of nitrogen storage, supply systems, and process piping. Finally, regarding vent streams from storage tanks with higher water content, the EPA expects that tanks with water content high enough to depress overall NHV values typically would not meet the applicability thresholds of the rule and would not be combined with other vent streams routed to an enclosed combustion device or flare. However, when gas streams from produced water tanks are vented to control, vent lines from these tanks can be traced to identify sources that require monitoring or sampling.

Regarding the concerns raised in the May 2024 EIP, et. al. petition, since we are proposing to remove the general monitoring exemption for when the only inlet gas stream to the enclosed combustion device or flare is associated gas from a well affected facility, we directly resolve one of the issues raised in that petition. We consider the data submitted by the industry petitioners to support the proposed exemption from monitoring for flares and enclosed combustion devices subject to a vent gas NHV requirement of 200 or 300 Btu/scf (and not subject to NHV_{cz} and NHV_{dil} requirement) when no inerts are present because the results were consistently much higher than these levels. The May 2024 EIP, et. al. petition also contended that the EPA did not support its conclusion in the March 2024 final rule that initial assessments of flares and other control devices, in lieu of continuous monitoring, can capture the variability of NHV in the oil and gas sector. We consider the data submitted by the industry petitioners also supports that the NHV demonstrations required for pressure-, air-, and steam-assisted control devices would be adequate data to show that the NHV from those demonstrations is well above the limits required by the rule and that continuous monitoring is not needed. When inerts are added intermittently or process operations change that may lower the NHV, the proposed standards require re-demonstration with a new 14-day sampling effort. The new demonstration would consider the variability associated with these operations and determine a reasonable lower-range value to use in the compliance assessments. As such, we propose to find that the sampling requirements, with the revisions proposed, are robust and sufficient for the demonstration and that continuous monitoring is not needed when the demonstration shows the NHV value of the gas stream being controlled is sufficiently high, when considering the range of vent gas and assist gas flow rates, to meet the required standards.

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The EPA is also requesting comment on the proposed removal of the associated gas monitoring exemption and the proposed requirement for continuous measurement or sampling requirements for pressure-assisted flares and enclosed combustion devices at new and existing sources and for air- and steam-assisted flares or enclosed combustion devices at new sources. The EPA is requesting comment on whether there are other known process or upset condition scenarios which may introduce inert gases or other low-Btu streams into affected facility vent gas streams, resulting in NHV values which could be below the thresholds in the March 2024 final rule for flares and enclosed combustion devices subject to the vent gas NHV requirements of 200 or 300 Btu/scf and necessitating a determination of the NHV of the combined stream(s). The EPA also is requesting comment on how the EPA can determine (*e.g.*, the presence or absence of certain process equipment or piping configurations) that these scenarios are present at an affected facility and, therefore, require NHV continuous monitoring or the use of the sampling option to demonstrate that the mixed gas stream has sufficient NHV content to afford proper combustion efficiencies.

b. Sampling Location and Duration for the Alternative Performance Test

The EPA is reconsidering the requirements in the March 2024 final rule regarding the sampling duration for the alternative performance test (sampling demonstration) option for the NHV compliance demonstration, and is proposing to allow for shorter sampling times when it is technically infeasible to collect a grab sample for a minimum of one hour. While the March 2024 final rule included provisions for sampling periods of longer than 14 days (where needed) to collect a total of 28 samples, and the general provisions in 40 CFR 60.8(b)(5) also allow for “shorter sampling times and smaller sample volumes when necessitated by process variables or

other factors,” the EPA finds compelling the petitioners’ arguments and newly presented supporting information regarding the potential instances of intermittent flow of gas streams, which makes sampling for one hour technically infeasible in those cases (*e.g.*, intermittent flow from sources with low pressure). As such, the EPA finds it appropriate to propose additional flexibility in the final rule to fully address these intermittent flow situations. Therefore, the EPA is proposing that sampling must be conducted for a minimum of one hour, when technically feasible. When it is not technically feasible to collect the sample for a minimum of one hour, the owner or operator should collect the sample for as long as possible, up to one hour. For samples taken during low or intermittent flow events, the collection time and the reason for not obtaining a full one-hour sample must be documented and reported with the NHV sampling results. We request comment on the actual duration of flow that is achievable in practice for those cases where sampling for one hour is technically infeasible on low pressure and intermittent gas streams, and why a one hour sample would be technically infeasible for those cases.

Regarding the location for sampling, the EPA notes that, according to the March 2024 final rule, the sample must be taken of the inlet gas to the control device, but the gas need not be taken directly at the inlet of the control device. We consider a sample within the control device header system in a location after all vent streams sources have been added to the control device header as an inlet gas sample. While the EPA recognizes petitioners’ concerns with installing sampling ports or “taps” on these source types, the March 2024 final rule does not specify a physical location where the sampling must occur. The EPA therefore does not believe it is necessary to specify that sampling may occur at another “representative” location or specify such “representative” locations. The EPA also notes that the General Provisions in 40 CFR part 60

include procedures for alternatives to monitoring, including alternative locations for monitoring, “when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements”⁴³ – these provisions already address site-specific issues with conducting the alternative performance test (sampling demonstration) option. Accordingly, the EPA is proposing not to change the current provisions in the March 2024 final rule regarding sampling location for the NHV grab sample option.

c. Methodologies for compositional analysis of the gas stream

The EPA is reconsidering the requirements in the March 2024 final rule which limited the test method available for determining the compositional analysis of the gas stream to ASTM-D1945-14 (R2019). The EPA recognizes that other rules in which vent gases are analyzed, such as 40 CFR part 63 subpart CC (Refinery MACT) and the Greenhouse Gas Reporting Program (GHGRP) rule allow the use of other test methods. The EPA is soliciting comment to expand the use of similar consensus-based standards (*e.g.*, GPA 2166 and GPA 2261) to consider if these additional available methods would alleviate petitioners’ concerns that ASTM-D1945 is not widely available and that testing laboratories do not have the capacity currently to enable its use.

Regarding the units in which NHV is determined as prescribed in the March 2024 final rule, the EPA does not disallow the use of measurement methods that determine concentrations in terms of weight fractions, but the weight fractions must be converted to volume fractions because the calculations referenced therein from part 63 use Btu/scf (not Btu/lb). Therefore, the EPA is not proposing to change the units in the March 2024 final rule, but rather proposing to

⁴³ Per 40 CFR 60.5417b(d), requests for approval to monitor different monitoring parameters can be made under the Alternative Monitoring Plan (AMP) provisions in 40 CFR 60.13(i).

clarify that NHV for individual components must be determined in units of Btu/scf consistent with the existing specification using published values of the component NHV per mole at 25°C and 1 atmosphere and using 20°C as the standard temperature for determining the volume corresponding to one mole of vent gas. We noted that SPL reported the NHV of common constituents in vent gas streams at the incorrect temperature. Therefore, we are proposing to clarify that the standard temperature for 40 CFR part 60 (at 40 CFR 60.18(f)(3)) is 20 °C and that the NHV values must be determined at this standard temperature. These clarifications are proposed to ensure the NHV determinations are conducted consistently and accurately. The EPA is requesting comment on the proposed clarifications of the NHV units of measure and calculation procedures.

We are also proposing to clarify that Tedlar bags may be used to satisfy the grab sampling requirements, provided that the Tedlar bag qualifies as an “evacuated container” as prescribed by section 8.2.1.1 of EPA Method 18. We request comment on the need to clarify that Tedlar bags can be used and the limitation proposed on when Tedlar bags can be used.

d. NHV_{cz} and NHV_{dil} for air- and steam-assisted flares and enclosed combustion devices at existing and new sources

The EPA is proposing to retain the NHV_{cz} and NHV_{dil} requirements for air- and steam assisted flares for sources subject to NSPS subpart OOOOb because, as noted in the November 2021 Proposal (86 FR 63246; November 15, 2021), the EPA had received some data indicating air-assisted and steam-assisted flares have been found operating outside of the conditions necessary to achieve at least 98 percent control efficiency on a continuous basis. We disagree with petitioners that these NHV-related parameters are not appropriate for assisted flares in the

oil and gas industry because we had evidence of poor-performing assisted flares in the oil and gas industry. The EPA therefore proposes to conclude (as in the March 2024 final rule) that sufficient evidence exists demonstrating poor destruction efficiencies due to over-assisting a flare or enclosed combustion device, such that NHV compliance demonstrations are necessary to show that these particular control devices are meeting the requisite efficiency. The EPA requests comment on the proposed retention of the NHV_{cz} and NHV_{dil} provisions for new sources. The EPA is also requesting comment on whether the NHV_{dil} parameter is appropriate for enclosed combustion devices with perimeter assist air and the appropriate effective diameter to use in the calculation of NHV_{dil} , if it is retained, particularly for devices with multiple burner tips within the enclosed combustion device.

Regarding petitioner GPA's statement that 40 CFR 60.5417b(d)(8)(iii)(H) appears to not allow alternative test methods to continuously monitor NHV_{cz} and NHV_{dil} , we note that the provisions at 40 CFR 60.5417b(d)(8)(iii) are specific to the 14-day alternative performance test (sampling demonstration) option and do not apply to continuous monitoring. We did not include provisions for a 14-day demonstration using continuous monitoring of NHV_{cz} and NHV_{dil} because assist rates could be changed and alter the control device's performance. Continuous monitoring using alternative test methods is expressly provided for in 40 CFR 60.5412b(d) and 60.5415b(f)(1)(xi). Additionally, we propose to clarify in 40 CFR 60.5417b(d)(8)(vi) that continuous monitoring of NHV_{cz} and, if applicable, NHV_{dil} using an approved alternative method as provided under 40 CFR 60.5412b(d)(1)(i) and (ii) is allowed and that, when using this alternative test method, you are not required to monitor NHV of the vent gas as specified in paragraph (d)(8)(ii) of this section or monitor flow rates as specified in paragraph (d)(8)(vi) of

this section provided you can demonstrate that the maximum flow rate to the flare cannot cause the flare tip velocity to exceed 18.3 meter/second (60 feet/second). The EPA requests comment on the proposed clarifications when using the alternative test method to demonstrate continuous compliance and requests comment on whether and how such monitoring could be used as part of the 14-day sampling demonstration.

With respect to the monitoring requirements for NHV_{cz} and NHV_{dil} for air- and steam-assisted flares at new sources, the EPA acknowledges the petitioners' concerns but is not proposing significant changes to this requirement for new sources subject to NSPS subpart OOOOb. However, in reviewing these requirements we note that the requirements in 40 CFR 60.1547b(d)(8)(vi) reference NHV determinations using the lowest NHV result of the sampling demonstration in 40 CFR 60.1547b(d)(8)(iii), but 40 CFR 60.1547b(d)(8)(iii) did not have provisions for steam-assisted nor for certain air-assisted flares or enclosed combustion devices. Therefore, we are proposing to clarify that 40 CFR 60.1547b(d)(8)(iii) can be used for any steam- or air-assisted flare or enclosed combustion device, and that the effective vent gas NHV to allow the use of the demonstration is 300 Btu/scf when using continuous 14-day sampling or 360 Btu/scf when using the 14-day grab sampling approach. This revision in 40 CFR 60.1547b(d)(8)(iii) is necessary considering the calculation provision in 40 CFR 60.1547b(d)(8)(vi) and corrects an unintended error in the March 2024 final rule. The EPA requests comment on the use of the proposed use of the 14-day sampling demonstration in 40 CFR 60.1547b(d)(8)(iii) for air- and steam-assisted flares, particularly those at new sources subject to NHV_{cz} and NHV_{dil} requirements.

With the alternative sampling provisions being proposed in 40 CFR 60.5417b(d)(8)(iii) and the assessments outlined in 40 CFR 60.5417b(d)(8)(iv), we expect few facilities will have to install continuous monitoring systems. Since monitoring is necessary to ensure proper operation of these flares at new sources, and considering the monitoring options provided by the proposed revisions will afford sources additional flexibility when compared to the March 2024 final rule, we are retaining the NHV_{cz} and NHV_{dil} requirements in NSPS subpart OOOOb.

A provision to conduct monitoring for NHV_{cz} and NHV_{dil} at existing sources was included in the March 2024 final rule subpart OOOOc model rule in error. The EPA did not conduct Refinery MACT cost level monitoring for existing sources, and stated in the preamble to the March 2024 final rule that monitoring of NHV_{cz} and NHV_{dil} was not recommended as part of the Emission Guidelines for existing sources due to concerns about retrofitting existing flares to meet the requirements⁴⁴. The EPA is proposing to correct this inadvertent error by removing the language in the model rule to conduct monitoring of NHV_{cz} and NHV_{dil} at existing sources and specifying the model rule for these control systems is an NHV of 300 Btu/scf in the vent gas. The EPA is requesting comment on the appropriateness of using an NHV of 300 Btu/scf in the vent gas for air- and steam-assisted flares or enclosed combustion devices at existing sources for demonstrating compliance with the combustion efficiency requirements for these control devices.

e. Miscellaneous other changes

In addition to the proposed changes described above, the EPA is proposing to clarify that for the purposes of determining the hourly average of the NHV for continuously sampled (*i.e.*,

⁴⁴ See 89 FR 16895 and 16967.

sampled continuously for 14 consecutive days) inlet streams, the hourly average shall be determined on a block (and not a rolling) average. The EPA is proposing this clarifying edit to ensure that all owners and operators are using the same averaging timeframe and it is not left up to interpretation as to whether the average should be a block average or a rolling average. Block averages are required for other averaging time periods in the March 2024 final rule and we consider this change to be warranted for consistency and clarity. The EPA also is proposing to clarify that the 14-day period for the continuous monitoring option shall be consecutive operating days. However, for manual grab sampling, the EPA is proposing to allow for breaks for weekends and holidays which may occur during the 14-day representative grab sampling period, such that these do not have to be consecutive. Consecutive operating days are reasonable for continuous monitoring because these systems are present continuously. However, manual grab sample collection requires someone to be present at the site to collect samples each day, which, if required to be done on consecutive days, would require collection on weekends and potentially on holidays. The final requirements of the March 2024 final rule already allows for sampling beyond the 14 days if 28 samples cannot be collected during that time frame. Allowing additional flexibility for non-consecutive operating day sampling can lengthen the time needed to collect samples and delay the conclusion of the NHV determination, but it does not reduce the number of samples required nor the representativeness of those samples. As such, we consider it reasonable to provide some flexibility in the grab sampling approach to allow twice daily sampling to determine the average NHV of the gas stream for 14 operating days, with no sampling day to be spaced more than 3 operating days apart from the previous sampling day. Finally, the EPA is proposing to allow 60 days for conducting the continuous NHV monitoring

required by one of the options in 40 CFR 60.5417b(d)(8)(ii)(A) through (D) if the results of the periodic (3 samples every 5 years) sampling indicate that the NHV is less than 1.2 times the applicable threshold NHV level in the rule. The EPA considers it necessary to specify a timeframe to install and operate the required continuous monitors to provide owners and operators with regulatory certainty for when this must occur. We consider 60 days to be an expedited time schedule for the installation of continuous monitoring systems, but we consider it a reasonable timeframe for installing necessary grab sampling systems to automatically collect samples at least once every 8 hours as provided in 40 CFR 60.5417b(d)(8)(ii)(D). Facilities would be required to collect grab samples every 8 hours until such time a continuous monitor can be installed, and installation of such a system requires more than 60 days. We request comment on the proposed 60-day compliance provision when a 5-year sampling event indicates the vent stream is not sufficiently above the required NHV.

The EPA also is proposing a similar change to address compliance timing pending the re-evaluation that must occur after a process change that potentially reduces the NHV of the gas sent to an enclosed combustion device or flare. For the same reasons as stated above (*i.e.*, for continuous monitoring which must occur after the results of periodic monitoring indicate the vent stream is not sufficiently above the required NHV), the EPA is proposing that continuous monitoring should commence within 60 days after the re-evaluation indicates that the inlet gas stream does not meet the limits. The EPA also is proposing to clarify, for both periodic testing and re-evaluations which occur after a process change, that if the results of the grab sampling indicate that the vent stream is not sufficiently above the required NHV, continuous monitoring

using a calorimeter, GC, MS, or continuous grab sampling (*i.e.*, once every 8 hours) sampling must commence within the specified timeframe.

Finally, the EPA is proposing revisions to the provisions in 40 CFR 60.1547b(d)(8)(v), which include one-time assessments to be used in lieu of installing vent gas flow monitors and, in the case of assisted flares, assist gas flow monitors if certain provisions are met. While we finalized provisions to unassisted flares to conduct an initial determination to ensure the flare tip velocity is not exceeded under worst-case flow provisions, this requirement was not included in the March 2024 final rule for air-assisted flares, even though the velocity limits apply. Therefore, we are proposing to add this maximum velocity assessment to the existing provisions in 40 CFR 60.1547b(d)(8)(v)(D) and (E) for air-assisted flares. This provision is not applicable to enclosed combustion devices. In reviewing these provisions, we also noted that there was no corresponding provision for steam-assisted flares or enclosed combustion devices. This was an oversight in the March 2024 final rule and we are proposing new provisions at 40 CFR 60.1547b(d)(8)(v)(F) similar to those for air-assisted devices that are specific to steam-assisted flares or enclosed combustion devices. These revisions are not needed in NSPS subpart OOOOc because these provisions are specific to evaluations for flares complying with an NHV_{cz} or NHV_{dil} parameter. The EPA requests comment on these proposed provisions to ensure compliance with the velocity operating limit and whether, for those devices that have conducted NHV demonstrations, the velocity limit used in the assessment should be based on the allowable velocity at the lowest NHV result from the demonstration rather than being based on the default of 18.3 meters/second (60 feet/second).

IV. How do these proposed amendments impact the implementation of EG OOOOc?

The EPA's proposed amendments discussed in section III (Summary and Rationale of Proposed Amendments to NSPS OOOOb and EG OOOOc) of this preamble in response to several petitions for reconsideration of aspects of the 2024 NSPS and EG final rule would not significantly impact the implementation of EG OOOOc or the State planning process. Based on the EPA's reconsideration, the EPA is proposing amendments that revise two narrow aspects of the EG's model rule: (1) The associated gas temporary flaring provisions for certain situations and (2) the NHV value continuous monitoring and alternative performance test (sampling demonstration) provisions for certain combustion control devices. The proposed amendments do not alter in any way the EPA's identified best system of emission reduction (BSER) in the EG, the EPA's identified degree of emissions limitation achievable via application of that BSER, the timeline for State plan submittal, or compliance timelines finalized under EG OOOOc. Any changes that a State or Tribe may make to their plan as a result of this proposed action will be minor such that the State or Tribe should be able to make such changes before their plans are required to be submitted for approval.

As indicated in section I.A (Does this action apply to me?) of this preamble, the issuance of the CAA section 111(d) final EG does not impose binding requirements directly on existing sources. The EG (codified in 40 CFR part 60, subpart OOOOc) applies to States in the development, submittal, and implementation of State plans to establish performance standards to reduce emissions of GHGs from designated facilities that are existing sources on or before December 6, 2022. Further, under the TAR, eligible Tribes may seek approval to implement a plan under CAA section 111(d) in a manner similar to a State, and Tribes are authorized under

the TAR to develop and implement their own air quality programs, or portions thereof, under the CAA.

V. Summary of Cost, Environmental, and Economic Impacts

The proposed NSPS OOOOb and EG OOOOc discrete compliance requirement revisions included in this action and discussed in section III (Summary and Rationale of Proposed Amendments to NSPS OOOOb and EG OOOOc) of this preamble do not alter the substantive requirements of the final rule. The economic impacts and a qualitative discussion of the environmental impacts are presented in the memorandum titled *Economic Impact Analysis for 2024 NSPS & EG Reconsideration*. There are no other quantifiable environmental (e.g., air quality, water, waste), energy, or benefits beyond those already presented in accompanying Regulatory Impact Analysis (RIA) for the March 8, 2024, *Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review* final rule (89 FR 16820). As such, a new environmental justice (EJ) analysis was not conducted for this action.

VI. Statutory and Executive Order Reviews

Additional information about these statutes and Executive orders can be found at <https://www.epa.gov/laws-regulations/laws-and-executive-orders>.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 14094: Modernizing Regulatory Review

This action is a “significant regulatory action” as defined in Executive Order 12866, as amended by Executive Order 14094. Accordingly, the EPA submitted this action to the Office of Management and Budget (OMB) for Executive Order 12866 review. Documentation of any

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changes made in response to the Executive Order 12866 review is available in the docket for this action (see memorandum titled *Economic Impact Analysis for 2024 NSPS & EG Reconsideration*).

B. Paperwork Reduction Act (PRA)

The information collection activities for NSPS OOOOb and EG OOOOc were previously approved by OMB under the PRA as of June 28, 2024.

The EPA has revised the approved information collection request (ICR) to include small changes to incorporate EPA's proposed recordkeeping and reporting to indicate whether the flare or enclosed combustion device receives inert gases or other streams which may lower the NHV of the combined stream as proposed in section III.B of this preamble. The EPA estimates an average of 48 respondents will be affected by this proposed requirement over the three-year period (2023–2025). The average annual burden for the recordkeeping and reporting requirements for these owners and operators is estimated at 83 person-hours, with an average annual cost of \$4,374 over the three-year period.

The EPA also revised the approved ICR to include burden estimates for the maintenance of records that EPA is soliciting comment on. Specifically, the EPA includes burden estimates in the revised ICR for the records and annual reporting that would be required if EPA were to allow for the use of the associated gas extended flaring allowance under “exigent circumstances” as specified in section III.A of this preamble. The incremental increase in burden that would be associated with these recordkeeping and reporting requirements relative to the baseline is estimated at 2 hours per event annually over the three-year period (2024–2026) at an average annual cost of \$120 per flaring event over the three-year

period. The occurrence of flaring that could potentially be claimed due to "exigent circumstances" is unknown. However, we expect that a maximum of 16 percent of flaring events could potentially require an owner or operator to need to extend flaring beyond 48 hours due to "exigent circumstances". The burden associated with the two proposed reconsideration items under this action minimally affect the ICR burden estimated for compliance with EG OOOOc. The annual burden for this proposed additional collection of information for the states would be less than 1 percent.

The approved ICR document that the EPA prepared was assigned OMB Control No. 2060–0721 and EPA ICR number 2523.07. You can find a copy of the previously submitted ICR in Docket EPA-HQ-OAR-2021-0317. The revised ICR document that the EPA prepared for this reconsideration proposal has been assigned OMB Control No. 2060–0721 and EPA ICR number 2523.08. You can find a copy of the revised ICR in Docket EPA-HQ-OAR-2024-0358.

C. 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 EPA concludes that the impact of concern for this rule is any significant adverse economic impact on small entities and that the Agency is certifying that this rule will not have a significant economic impact on a substantial number of small entities because the rule has reduced net regulatory burden on the small entities subject to the rule. This action addresses two discrete compliance requirement aspects of NSPS OOOOb and the model rules within EG OOOOc based on petitions for reconsideration received on the March 2024 final rule requirements, providing additional

flexibilities to entities subject to the NSPS requirements and to the model rules within EG OOOOc. We have therefore concluded that this action will have reduced net regulatory burden for all directly regulated small entities. For further details, see the document, *Economic Impact Analysis for 2024 NSPS & EG Reconsideration*, in the docket.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of \$100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. This action imposes no enforceable duty on any State, local or Tribal governments or the private sector. This action addresses two discrete compliance requirement aspects of NSPS OOOOb and the model rules within EG OOOOc based on petitions for reconsideration received on the March 2024 final rule requirements.

E. 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. However, the EPA recognizes that States will have a substantial interest in this action and any future revisions to associated requirements. This action addresses two discrete compliance requirement aspects of NSPS OOOOb and the model rules within EG OOOOc based on petitions for reconsideration received on the March 2024 final rule requirements.

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

This action does not have Tribal implications as specified in Executive Order 13175. This action addresses two discrete compliance requirement aspects of NSPS OOOOb and the

model rules within EG OOOOc based on petitions for reconsideration received on the March 2024 final rule requirements. Thus, Executive Order 13175 does not apply to this action.

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

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of “covered regulatory action” in section 2-202 of the Executive Order. The EPA believes that it is not practicable to assess whether an environmental health risk or safety risk affecting children may exist prior to this action. This action addresses two discrete compliance requirement aspects of NSPS OOOOb and the model rules within EG OOOOc based on petitions for reconsideration received on the March 2024 final rule requirements and does not result in any changes to the BSER of NSPS OOOOb or EG OOOOc. The EPA believes that the EPA’s Policy on Children’s Health also does not apply.

H. 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. Further, we have concluded that this action is not likely to have any adverse energy effects because this action addresses two discrete compliance requirement aspects of NSPS OOOOb and the model rules within EG OOOOc based on petitions for reconsideration received on the March 2024 final rule requirements and does not result in any changes to the BSER of NSPS OOOOb or EG OOOOc.

I. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR part 51

This action does not involve any new technical standards. Therefore, the NTTAA does not apply.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority

Populations and Low-Income Populations and Executive Order 14096: Revitalizing Our Nation's Commitment to Environmental Justice for All

The EPA believes that it is not practicable to assess whether the human health or environmental conditions that exist prior to this action result in disproportionate and adverse effects on communities with EJ concerns. This action addresses two discrete compliance requirement aspects of NSPS OOOOb and the model rules within EG OOOOc based on petitions for reconsideration received on the March 2024 final rule requirements and does not result in any changes to the BSER of NSPS OOOOb or EG OOOOc. The EPA lacks specific and representative data on the frequency of temporary or emergency flaring, the number of sources flaring, or the length of time temporary flaring occurs. This data limitation prevents the EPA from estimating the impacts of an extension of allowed flaring. The March 2024 final rule describes how the rule will result in reductions in VOCs, which are an important precursor contributing to ground-level ozone formation in many regions of the country and reduce methane pollution that contributes to climate change, which itself has substantial and adverse impacts on EJ communities.⁴⁵ The information supporting this Executive Order review is contained in the docket for this action (see memorandum titled *Economic Impact Analysis for 2024 NSPS & EG Reconsideration*).

⁴⁵ 89 FR 17031.

Michael S. Regan,

Administrator.

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