

Overview of Proposed Changes to Air Quality Permitting Rules

Permanent Rulemaking: Oil and Natural Gas Permit By Rule (PBR) and Updated Greenhouse Gas (GHG) Exemptions Subchapters 5,7, and 8

Air Quality Advisory Council Meeting
October 17, 2024



Tom Richardson, P.E.
Rules & Planning Section
Air Quality Division
Oklahoma Department of Environmental Quality

Introduction

Summary of topics for today's meeting:

- ❖ EPA's New Source Performance Standards (NSPS), Subpart OOOOb
- ❖ Emergency changes to the Oil and Gas Permit by Rule (PBR)
 - Approved by the AQAC and EQB. Signed by the Governor.
 - In effect through September 14, 2025.
- ❖ Permanent rule language for consideration today. (A preliminary version was presented to the Council during the July meeting.)
- ❖ Stakeholder comments and DEQ responses.

Proposed Changes to Air Quality Permitting Rules

NSPS, Subpart 0000b



16820 Federal Register / Vol. 89, No. 47 / Friday, March 8, 2024 / Rules and Regulations

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 60

[EPA-HQ-OAR-2021-0317; FRL-8510-01-OAR]

RIN 2060-AV16

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: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is finalizing multiple actions to reduce air pollution emissions from the Crude Oil and Natural Gas source category. First, the EPA is finalizing revisions to the new source performance standards (NSPS) regulating greenhouse gases (GHGs) and volatile organic compounds (VOCs) emissions for the Crude Oil and Natural Gas source category pursuant to the Clean Air Act (CAA). Second, the EPA is finalizing emission guidelines (EG) under the CAA for states to follow in developing, submitting, and implementing state plans to establish performance standards to limit GHG emissions from existing sources (designated facilities) in the Crude Oil and Natural Gas source category. Third, the EPA is finalizing several related actions stemming from the joint

the internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through <https://www.regulations.gov/>.

FOR FURTHER INFORMATION CONTACT: Ms. Amy Hambrick, 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, Research Triangle Park, North Carolina, 27711; telephone number: (919) 541-0964; email address: hambrick.amy@epa.gov.

SUPPLEMENTARY INFORMATION: *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:

AMEL alternative means of emission limitation
ANSI American National Standards Institute
API American Petroleum Institute
ARPA-E Advanced Research Projects Agency-Energy
ASME American Society of Mechanical Engineers
ASTM ASTM, International
AVO audible, visual, and olfactory
AWP alternative work practice
bbl barrels of crude oil
BLM Bureau of Land Management
boe barrels of oil equivalents
BOEM Bureau of Ocean Energy

FEAST Fugitive Emissions Abatement Simulation Toolkit
FR Federal Register
FrEDI EPA’s Framework for Evaluating Damages and Impacts model
FRFA final regulatory flexibility analysis
g/hr grams per hour
GHG greenhouse gas
GHGI Inventory of U.S. Greenhouse Gas Emissions and Sinks
GHGRP Greenhouse Gas Reporting Program
GOR gas-to-oil ratio
H₂S hydrogen sulfide
HAP hazardous air pollutant(s)
ICR information collection request
IRFA initial regulatory flexibility analysis
IWG Interagency Working Group on the Social Cost of Greenhouse Gases
kg kilograms
kg/hr kilograms per hour
kt kilotons
lb/yr pounds per year
low-E low emission
LDAR leak detection and repair
LPE legally and practicably enforceable
Mcf thousand cubic feet
MW megawatt
NAAQS national ambient air quality standards
NAICS North American Industry Classification System
NDE no detectable emissions
NIE no identifiable emissions
NESHAP national emission standards for hazardous air pollutants
NGO non-governmental organization
NHV net heating value
NO_x nitrogen oxides
NSPS new source performance standards
NTTAA National Technology Transfer and Advancement Act
O₂ oxygen
OAQPS Office of Air Quality Planning and Standards
OCI optical gas imaging



Oil and Natural Gas Sources Covered by EPA’s Final New Source Performance Standards (NSPS) and Emissions Guidelines, by Site

Location and Equipment or Process Covered	Required to or Would Be Required to Reduce Emissions under EPA Rules (if finalized as proposed)	Rules that Apply			
		2012 NSPS for VOCs (0000)	2016 NSPS for Methane & VOCs (0000a)	2023 Final NSPS for Methane & VOCs (0000b)	2023 Final Emissions Guidelines for Methane (0000c)
Oil and Natural Gas Well Sites					
Completions of hydraulically fractured wells	✓	•	•	•	•
Compressors at centralized tank batteries	✓	•	•	•	•
Fugitive emissions	✓	•	•	•	•
Liquids unloading	✓	•	•	•	•
Pneumatic controllers	✓	•	•	•	•
Pneumatic pumps	✓	•	•	•	•
Storage vessels	✓	•	• ¹	•	•
Sweetening units	✓	• ²	• ²	• ²	• ²
Associated gas from oil wells	✓	•	•	•	•
Natural Gas Gathering and Boosting Compressor Stations					
Compressors	✓	•	•	•	•
Fugitive emissions	✓	•	•	•	•
Pneumatic controllers	✓	•	•	•	•
Pneumatic pumps	✓	•	•	•	•
Storage vessels	✓	•	• ¹	•	•
Sweetening units	✓	• ²	• ²	• ²	• ²
Natural Gas Processing Segment					
Compressors	✓	•	•	•	•
Fugitive emissions	✓	•	•	•	•
Pneumatic controllers	✓	•	•	•	•
Pneumatic pumps	✓	•	•	•	•
Storage vessels	✓	•	• ¹	•	•
Sweetening units	✓	• ²	• ²	• ²	• ²
Transmission and Storage Segment					
Compressors	✓	•	•	•	•
Fugitive emissions	✓	•	•	•	•
Pneumatic controllers	✓	•	•	•	•
Pneumatic pumps	✓	•	•	•	•
Storage vessels	✓	•	• ¹	•	•

All of the sources listed above are covered by EPA’s Super Emitter Program

¹ Added in 2022 supplemental proposal

² Covered for SO₂ only

³ Covered for VOCs only

Final Rule Published: March 8, 2024

Effective Date for Final Rule: **May 7, 2024**

Summary of NSPS Subpart OOOOb Requirements

Part 60, Subpart OOOOb (new)

- Applies to **new** sources only (those constructed, reconstructed, or modified *after* Dec. 6, 2022)
- Effective 60 days after publication in the *Federal Register*: **May 7, 2024**
- Establishes GHG emission limits in the form of methane as well as VOC and SO₂ emission limits
- Affected facilities include:
 - Oil or natural gas well
 - Centrifugal compressor
 - Reciprocating compressor
 - Process controller(s) (aka pneumatic controllers)
 - Storage vessel(s) (now considered as “tank battery” rather than as single tank with emissions > 6 TPY VOC or > 20 TPY methane for the entire tank battery)
 - Process unit equipment (at natural gas plant)
 - Sweetening unit
 - Natural gas-driven pump(s)
 - Fugitive emissions components
- Compliance dates vary based on type of equipment, including 1-year for installing zero-emission process controllers and pumps and 2-years to eliminate flaring at oil wells
- Includes super-emitter events, third-party certification program, and response to EPA

Legally and Practicably Enforceable (LPE) Limits

NSPS Subpart OOOOb defines “storage vessel affected facility” differently than did previous rules (Subparts OOOO and OOOOa):

§ 60.5365b Am I subject to this subpart?

(e) **Each storage vessel affected facility**, which is a tank battery that has the potential for emissions as specified in either paragraph (e)(1)(i) or (ii) of this section. A tank battery with the potential for emissions below both of the thresholds specified in paragraphs (e)(1)(i) and (ii) of this section is not a storage vessel affected facility provided the owner/operator keeps records of the potential for emissions calculation for the life of the storage vessel or until such time the tank battery becomes a storage vessel affected facility because the potential for emissions meets or exceeds either threshold specified in either paragraph (e)(1)(i) or (ii) of this section.

Legally and Practicably Enforceable (LPE) Limits

- (2) The potential for VOC and methane emissions must be calculated as the cumulative emissions from all storage vessels within the tank battery as specified by the applicable requirements in paragraphs (e)(2)(i) through (iii) of this section. The determination may take into account requirements under a legally and practicably enforceable limit in an operating permit or other requirement established under a Federal, state, local, or Tribal authority.
- (i) For purposes of determining the applicability of a storage vessel tank battery as an affected facility, a legally and practicably enforceable limit must include the elements provided in paragraphs (e)(2)(i)(A) through (F) of this section.
- (A) A quantitative production limit and quantitative operational limit(s) for the equipment, or quantitative operational limits for the equipment;
 - (B) An averaging time period for the production limit in (e)(2)(i)(A) of this section, if a production-based limit is used, that is equal to or less than 30 days;
 - (C) Established parametric limits for the production and/or operational limit(s) in paragraph (e)(2)(i)(A) of this section, and where a control device is used to achieve an operational limit, an initial compliance demonstration (*i.e.*, performance test) for the control device that establishes the parametric limits;
 - (D) Ongoing monitoring of the parametric limits in (e)(2)(i)(C) of this section that demonstrates continuous compliance with the production and/or operational limit(s) in (e)(2)(i)(A) of this section;
 - (E) Recordkeeping by the owner or operator that demonstrates continuous compliance with the limit(s) in (e)(2)(i)(A) through (D) of this section; and
 - (F) Periodic reporting that demonstrates continuous compliance.

The criteria EPA developed for the establishment of LPE limits on emissions from storage vessels are shown in this excerpt from NSPS 0000b.

The application of these criteria and their incorporation into rule language generated a number of comments which will be discussed later in this presentation. **Ongoing monitoring of the parametric limits** is underlined for emphasis.

Goals for the Permanent Rulemaking

- Adopt the bulk of the new language from the emergency update to the Oil and Gas PBR as a permanent update to our rules.
- Address exemptions and exclusions of Greenhouse Gases (GHGs), as an aggregate and as individual pollutants, within the sections where emissions of GHGs could trigger otherwise applicable requirements:

Subchapter 5: emissions inventories and fees

Subchapter 7: minor source permitting rules

Subchapter 8: Title V operating permits and major source construction permits

Additional Rule Language Clean-Up

- Brooks Kirlin presented proposed changes to Subchapter 8 during the July AQAC meeting.
- For procedural clarity, we only present changes to a particular section of our rules once each year.
- In addition to the rule changes associated with the Oil and Natural Gas Sector PBR and the changes meant to maintain exemptions for GHGs from key programmatic requirements, I will reference changes Brooks shared in July. Those changes are summarized on the next two slides.
- These proposed changes to rule language will be highlighted along with the other changes (associated with GHG exemptions) during the discussion of Subchapter 8.

Additional Rule Language Clean-Up

Summary of changes presented by Brooks Kirlin in July:

OAC 252:100-8-4:

- Clarify that facilities with minor source permits (Subchapter 7) will need a construction permit to install emission units that would make them subject to Title V (Part 70) permitting requirements.
- Add missing language defining a “timely application.”
- Formally authorize electronic submission of applications for Subchapter 8 permits.
- Clarify that existing facilities (with minor source operating permits) which become subject to the requirement to obtain a Title V operating permit will need an NSR permit if new emission limits are requested.

Additional Rule Language Clean-Up

Additional change unrelated to the Oil and Natural Gas Sector PBR and the language included to maintain GHG exemptions:

OAC 252:100-8-31:

- Under the definition of “**Major stationary source,**”
- For (XIV) municipal incinerators, change the charging capacity from 250 tons to 50 tons of refuse per day.
- This change will bring our rules in alignment with EPA’s rules – 40 CFR §51.166(b)(1)(i)(a).

Chapter 100, Subchapter 5 Changes

**TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 100. AIR POLLUTION CONTROL
SUBCHAPTER 5. REGISTRATION, EMISSION INVENTORY AND ANNUAL
OPERATING FEES**

Please turn in your folder to the proposed amendments to rule text in Chapter 100, Subchapter 5.

An “as presented” version of these proposed amendments is available on the web: https://www.deq.ok.gov/wp-content/uploads/air-division/AQAC_2024_OCT_SC5_SC7_SC8_RUL_Presented.pdf

Policy Goals for Subchapter 5

- Owner/operators of facilities with Oklahoma DEQ air quality permits are not required to include GHGs (as an aggregate and as individual pollutants) in their annual emissions inventories.
- No fees will be charged for GHGs.
- GHGs will not be considered in the determination of the frequency with which facilities with PBRs need to submit annual emissions inventories (every three years or every six years).

Chapter 100, Subchapter 5 Changes

**TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 100. AIR POLLUTION CONTROL**

**SUBCHAPTER 5. REGISTRATION, EMISSION INVENTORY AND ANNUAL
OPERATING FEES**

252:100-5-1.1. Definitions

The following words and terms when used in this Subchapter shall have the following meaning unless the context clearly indicates otherwise:

"Regulated air pollutant (for fee calculation)", which is used only for purposes of this Subchapter, means any "regulated air pollutant" except the following:

- (A) Carbon monoxide.
- (B) Gross particulate matter (GPM).
- (C) Greenhouse gases (GHGs) either as individual pollutants or as an aggregate.

Today's presentation will be very similar to the presentation on July 24, 2024.

New or modified language will be identified.

Adding "air" to fix an omission and exempting GHGs from the list of "regulated air pollutants (for fee calculation)."

Slight **change in language** from that shown previously (in July). The location of the “(excluding GHGs as individual pollutants and as an aggregate)” text is now harmonized in (A) and (B).

252:100-5-2.1. Emission inventory

(a) **Requirement to file an emission inventory.** The owner or operator of any facility that is a source of regulated air pollutants shall submit a complete annual emission inventory through DEQ's electronic reporting system or in another manner acceptable by the Division.

(1) **General requirements.** The inventory shall cover operations during a calendar year and shall be submitted on or before April 1 of the following year. Upon receiving a written demonstration of good cause the Director may grant an extension for submittal beyond the April 1 deadline.

(2) **Permit by rule.** The owner or operator of a facility registered under a permit by rule in Subchapter 7, Part 9, shall submit, at a minimum, an annual emission inventory for the 2014 reporting year or the calendar year in which the facility is registered, if the facility is registered after December 31, 2014, and thereafter according to the following schedule:

(A) For a registered facility with actual emissions greater than 5 tons per year of any regulated air pollutant (excluding GHGs as individual pollutants and as an aggregate), an annual emission inventory for that facility shall be submitted for every National Emissions Inventory (NEI) Three-Year Cycle Inventory year, as defined in 40 CFR Section 51.30(b).

(B) For a registered facility with actual emissions of 5 tons per year or less of any regulated air pollutant (excluding GHGs as individual pollutants and as an aggregate), an annual emission inventory for that facility shall be submitted every second National Emissions Inventory (NEI) Three-Year Cycle Inventory year, as defined in 40 CFR Section 51.30(b), beginning with the 2020 NEI reporting year.

This language exempts GHGs from the determination whether a facility with a PBR is required to submit an annual emissions inventory on a three-year cycle or a six year-cycle.

Big picture:

We are not going to inventory GHGs.

We are not feeling GHGs.

(b) **Content.** All inventories submitted to the Division shall include, but shall not be limited to, the following:

~~(1) For those emissions subject to a permit, the permitted allowable emissions as set forth therein.~~

(2) The amount of ~~the~~ actual emissions of any regulated air pollutant as defined in OAC 252:100-1-3 (excluding GHGs as individual pollutants and as an aggregate), including quantifiable excess emissions, and the basis for such determination. If the total actual emissions of any regulated air pollutant from a facility vary from the allowable or from the previous year's actual by more than 30%, the Department may require the owner or operator to provide an explanation for the difference in order to determine compliance with the Oklahoma Clean Air Act or any rule promulgated thereunder, or any permit condition prescribed or order issued pursuant thereto.

(2) For those emissions subject to a permit, the permitted allowable emissions as set forth therein. Greenhouse gases (GHGs), as individual pollutants and as an aggregate, are exempt from this requirement.

(3) For those emissions not the subject of a permit and when requested by the AQD, a list of all OAC 252:100 rules setting forth emission limitations applicable to the facility in question and the maximum yearly allowable for the facility.

Rearranging (1) and (2) to emphasize our preference for actual emissions over permitted allowable emissions for our annual emissions inventory.

GHGs are exempt from the annual emissions inventory.

Chapter 100, Subchapter 7 Changes

**TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 100. AIR POLLUTION CONTROL
SUBCHAPTER 7. PERMITS FOR MINOR FACILITIES**

Please turn in your folder to the proposed amendments to rule text in Chapter 100, Subchapter 7.

An “as presented” version of these proposed amendments is available on the web: https://www.deq.ok.gov/wp-content/uploads/air-division/AQAC_2024_OCT_SC5_SC7_SC8_RUL_Presented.pdf

Policy Goals for Subchapter 7

- GHGs (as an aggregate or as individual pollutants) are not factored into the determination whether a facility meets the definition of “de minimis facility” or “permit exempt facility.”
- GHGs do not need to be included in a minor facility permit unless the facility is subject to a GHG limit under NSPS, a requirement based on Emissions Guidelines (adopted in accordance with 40 CFR Part 60), or the owner/operator requests a limit.
- GHGs will not be considered in the determination whether a facility is eligible for a minor source permit, a general permit, or a PBR.
- GHGs will not be factored into the determination whether a construction permit is required because a facility has undergone a modification that results in an emissions increase of 5 tons per year.

Policy Goals for Subchapter 7 (Cont.)

- GHGs are not factored into the determination whether a facility is a:
 - “Major source” (as defined in OAC 252:100-8-2) and is, therefore, required to obtain a Title V (Part 70) operating permit.
 - “Major stationary source” (as defined in OAC 252:100-8-31 for facilities in attainment areas) and is, therefore, subject to the Prevention of Significant Deterioration (PSD) permitting requirements.
 - “Major stationary source” (as defined in OAC 252:100-8-51 for facilities in nonattainment areas) and is, therefore, subject to Nonattainment New Source Review (NSR) permitting requirements.
- GHGs are not factored into the determination whether a facility’s project is a “major modification” as defined in OAC 252:100-8-31 for facilities in attainment areas (for PSD purposes) or in OAC 252:100-8-51 for facilities in nonattainment areas (for Nonattainment NSR purposes).

Chapter 100, Subchapter 7 Changes

SUBCHAPTER 7. PERMITS FOR MINOR FACILITIES

PART 1. GENERAL PROVISIONS

252:100-7-1.1. Definitions

The following words and terms when used in this Subchapter shall have the following meaning unless the context clearly indicates otherwise:

"De minimis facility" means a facility that meets the requirements contained in paragraphs (A) and (B) of this definition.

(A) All the air pollutant emitting activities at the facility are on the de minimis list contained in Appendix H or the facility meets all of the following de minimis criteria:

(i) The facility has actual emissions of 5 TPY or less of each regulated air pollutant, except:

(I) that fraction of particulate matter that exhibits an aerodynamic particulate diameter of more than 10 micrometers (μm) and

(II) GHGs as individual pollutants and as an aggregate.

(ii) The facility is not a "major source" as defined in OAC 252:100-8-2.

(iii) The facility is not a "major stationary source" as defined in OAC 252:100-8-31 for facilities in attainment areas.

(iv) The facility is not a "major stationary source" as defined in OAC 252:100-8-51 for facilities in nonattainment areas.

(v) The facility is not operated in conjunction with another facility or source that is subject to air quality permitting.

(vi) The facility has not opted to obtain or retain an Air Quality Division permit.

(B) The facility is not subject to the Federal NSPS (40 CFR Part 60) or the Federal NESHAP (40 CFR Parts 61 and 63).


Today's presentation will be very similar to the presentation on July 24, 2024.

New or modified language will be identified.

Exempting GHGs for the purposes of determining whether a facility meets the "de minimis facility" definition.

"Permit exempt facility" means a facility that:

- (A) has actual emissions in every calendar year that are 40 TPY or less of each regulated air pollutant (excluding GHGs as individual pollutants and as an aggregate);
- (B) is not a de minimis facility as defined in OAC 252:100-7-1.1;
- (C) is not a "major source" as defined in OAC 252:100-8-2 for Part 70 sources;
- (D) is not a "major stationary source" as defined in OAC 252:100-8-31 for PSD facilities in attainment areas;
- (E) is not a "major stationary source" as defined in OAC 252:100-8-51 for facilities in nonattainment areas;
- (F) is not operated in conjunction with another facility or source that is subject to air quality permitting;
- (G) is not subject to an emission standard, equipment standard, or work practice standard in the Federal NSPS (40 CFR Part 60) or the Federal NESHAP (40 CFR Parts 61 and 63); and
- (H) is not subject to the requirements of OAC 252:100-39-47.



Exempting GHGs from the determination whether a facility is a "permit exempt facility."

252:100-7-2.1. Minor permits for greenhouse gas (GHG) emitting facilities

~~Greenhouse gas (GHG) emissions shall not be included in a minor facility permit nor cause a facility to be subject to minor facility permitting requirements contained in OAC 252:100-7, unless the owner or operator of that facility requests that GHG emission limits and/or physical or operational limitations be included in a minor permit for the facility to set enforceable limits to keep potential GHG emission levels below the applicability threshold levels for the PSD construction permit program and/or the Part 70 operating permit program. Physical or operational limitations may include, but are not limited to, air pollution control equipment, restrictions on hours of operation, and/or restrictions on the type or amount of material combusted, stored, or processed.~~

(a) Greenhouse gas (GHG) emissions, as an aggregate, or as individual pollutants (e.g., methane), are not required to be included in a minor facility permit unless one or more of the following apply:

(1) The facility is subject to a GHG emission limit under a New Source Performance Standard (40 CFR Part 60) or National Emissions Standard for Hazardous Air Pollutants (40 CFR Parts 61 and 63); or

(2) The facility is subject to a GHG emission limit that is based on a federal Emission Guideline (EG) promulgated by EPA (in 40 CFR Part 60) pursuant to Section 111(d) of the Federal CAA; or

(3) The owner or operator requests that a minor facility's permit include GHG emission limits and/or physical or operational limitations obtained for the purposes of reducing potential GHG emissions.

(b) GHG emissions, as an aggregate, and as individual pollutants (e.g., methane), are not required to be included in a facility's annual emissions inventory (OAC 252:100-5.2.1).

(c) GHG emissions, as an aggregate, and as individual pollutants (e.g., methane), are excluded from the definition of "regulated air pollutants (for fee calculation)" in OAC 252:100-5-1.1, and are, therefore, not subject to the annual operating fees under OAC 252:100-5-2.2.

(d) Regardless of any limits on methane included in a minor source permit or inclusion of any reporting requirements or other provisions in the permit that may affect methane or GHG emissions, neither methane nor GHG (as an aggregate) will be considered to be regulated air pollutants for the purposes of the following:

(1) The determination whether the owner or operator of a facility registered under a permit by rule in Subchapter 7, Part 9, is required to submit an emissions inventory on a three-year or six-year cycle in accordance OAC 252:100-5-2.1(a)(2).

(2) The determination whether a construction permit is required for a modification of an existing facility to add or physically modify a piece of equipment or a process that results in a permitted emissions increase of any one regulated air pollutant by more than 5 TPY (OAC 252:100-7-15(a)(2)(B)(ii)).

Previously this section stated that minor source permits could not include GHG emission limits except when requested to avoid the requirement to obtain a PSD construction permit or a Title V (Part 70) operating permit.

The changes allow GHG limits where required by (1) federal NSPS or NESHAP, (2) rules promulgated as required by federal Emissions Guidelines, or (3) when requested by the owner/operator.

This section also provides a "laundry list" of GHG exemptions.

(3) The determination whether a facility has actual emissions of 5 TPY or less of each regulated air pollutant to determine whether a facility is a “de minimis facility” as defined in OAC 252:100-7-1.1.

(4) The determination whether a facility has actual emissions in every calendar year of 40 TPY or less of each regulated air pollutant to determine whether a facility is a “permit exempt facility” as defined in OAC 252:100-7-1.1.

(5) The determination whether a facility is eligible for a permit by rule, in accordance with OAC 252:100-7-15(b)(1)(A), because it has actual emissions of 40 TPY or less of any regulated air pollutant (except for HAPs).

(6) The determination whether a facility is eligible for a general permit, in accordance with OAC 252:100-7-15(b)(2)(A), because it has actual emissions of less than 100 TPY of any regulated air pollutant (except for HAPs).

(7) The determination whether a facility is eligible for a permit by rule for oil and natural gas sector facilities, in accordance with OAC 252:100-7-60.5, because it has actual emissions of 40 TPY or less of any regulated air pollutant (except for HAPs).

(8) The determination whether a facility is eligible for a permit by rule for emergency engine facilities, in accordance with OAC 252:100-7-60.6, because it has actual emissions of 40 TPY or less of any regulated air pollutant (except for HAPs).

(9) The determination whether a facility is eligible for a permit by rule for gasoline dispensing facilities and gasoline dispensing facilities with emergency engines, in accordance with OAC 252:100-7-60.7, because it has actual emissions of 40 TPY or less of any regulated air pollutant (except for HAPs).

(10) The determination whether a facility is a "major source" as defined in OAC 252:100-8-2.

(11) The determination whether a facility is a "major stationary source" as defined in OAC 252:100-8-31 for facilities in attainment areas or in OAC 252:100-8-51 for facilities in nonattainment areas.

(12) The determination whether a facility's project is a "major modification" as defined in OAC 252:100-8-31 for facilities in attainment areas or in OAC 252:100-8-51 for facilities in nonattainment areas.

(e) Any of these exceptions or requirements may be set aside at the discretion of the Director.

The “laundry list” of GHG exemptions continues.

PART 3. CONSTRUCTION PERMITS

252:100-7-15. Construction permit

(a) **Construction permit required.** Except as provided in OAC 252:100-7-2(b)(5), a construction permit is required to commence construction or installation of a new facility or the modification of an existing facility as specified in OAC 252:100-7-15(a)(1) and (2).

(1) **New Facility.** No person shall cause or allow the construction or installation of any new minor facility other than a de minimis facility or a permit exempt facility as defined in OAC 252:100-7-1.1 without first obtaining a DEQ-issued air quality construction permit.

(2) **Modification of an existing facility.**

(A) A construction permit is required for any modification that would cause an existing facility to no longer qualify for de minimis status, permit exempt facility status, or its current permit category.

(B) A construction permit is required for an existing facility covered by an individual permit:

(i) to add an "affected facility," "affected source," or "new source" as those terms are defined in 40 CFR Section 60.2, 40 CFR Section 63.2, and 40 CFR Section 61.02, respectively, that is subject to an emission standard, equipment standard, or work practice standard in a federal NSPS (40 CFR Part 60) or a federal NESHAP (40 CFR Parts 61 and 63) or

(ii) to add or physically modify a piece of equipment or a process that results in a permitted emissions increase of any one regulated air pollutant (excluding GHGs as individual pollutants and as an aggregate) by more than 5 TPY.

(C) The requirement to obtain a construction permit under OAC 252:100-7-15(a)(2)(B)(i) does not apply to replacement of a piece of equipment, provided the replacement unit does not require a change in any emission limit in the existing permit, and the owner or operator notifies the DEQ in writing within fifteen (15) days of the startup of the replacement unit, and/or as otherwise specified by the permit.

GHGs will not be included in the determination whether the addition or modification of a piece of equipment or process exceeds 5 tpy of any regulated air pollutant.

(b) **Permit categories.** Three types of construction permits are available: permit by rule, general permit, and individual permit. A permit by rule may be adopted or a general permit may be issued for an industry if there are a sufficient number of facilities that have the same or substantially similar operations, emissions, and activities that are subject to the same standards, limitations, and operating and monitoring requirements.

(1) **Permit by rule.** An owner or operator of a minor facility may apply for registration under a permit by rule if the following criteria are met:

(A) The facility has actual emissions of 40 TPY or less of each regulated air pollutant, except HAPs and GHGs (as individual pollutants and as an aggregate).

(B) The facility does not emit or have the potential to emit 10 TPY or more of any single HAP or 25 TPY or more of any combination of HAPs.

(C) The DEQ has established a permit by rule for the industry in Part 9 of this Subchapter.

(D) The owner or operator of the facility certifies that it will comply with the applicable permit by rule.

(E) The facility is not operated in conjunction with another facility or source that is subject to air quality permitting.

(2) **General permit.** Minor facilities may qualify for authorization under a general permit if the following criteria are met:

(A) The facility has actual emissions less than 100 TPY of each regulated air pollutant, except for HAPs and GHGs (as individual pollutants and as an aggregate).

(B) The facility does not emit or have the potential to emit 10 TPY or more of any single HAP or 25 TPY or more of any combination of HAPs.

(C) The DEQ has issued a general permit for the industry.

GHGs will not be included in the determination whether a facility is eligible for a PBR or a GP.

PART 9. PERMITS BY RULE

252:100-7-60.5. Oil and natural gas sector

(a) **Applicability.** This PBR is issued for minor facilities and area sources in the oil and natural gas (O&NG) sector. This includes but is not limited to facilities subject to federal standards, primarily Subparts IIII, JJJJ, OOOO, ~~and OOOOa~~, and OOOOb of the federal NSPS, 40 CFR Part 60, and Subparts HH and ZZZZ of the federal NESHAP, 40 CFR Part 63, as cited in this PBR and incorporated by reference in OAC 252:100-2 and Appendix Q to Chapter 100. Specifically, this PBR applies to the following:

(1) **Eligible minor facilities and area sources.** New and existing minor facilities and area sources in the O&NG sector are eligible for this PBR, provided they comply with the conditions in (A) through (G) of this paragraph.

(A) The facility has actual emissions of 40 TPY or less of each regulated air pollutant, except HAPs and GHGs (as individual pollutants and as an aggregate).

(B) The facility has potential emissions of each regulated air pollutant, except HAPs, that are less than the emission levels that require prevention of significant deterioration (PSD), nonattainment new source review (NNSR), and Part 70 permits.

(C) The facility does not emit or have potential emissions of 10 TPY or more of any single HAP or 25 TPY or more of any combination of HAPs.

(D) For the purpose of determining if a facility is eligible for registration under this PBR, the calculation of actual emissions may include emission reductions that will be made enforceable by registration under this PBR.

(E) Only for the purpose of determining if a facility is eligible for registration under this PBR, the calculation of potential emissions shall not include emission reductions resulting from any physical or operational limitation (including capacity limitations, use of air pollution control equipment, and/or restrictions on hours of operation or on the type or amount of material combusted, stored, or processed). ~~Affected~~ However, affected or potentially affected sources subject to a federal standard (NSPS or NESHAP) may include enforceable limitations imposed by the federal standards in the calculation of potential emissions.

(F) The facility must meet the criteria in 252:100-7-15(b)(1)(C) through (E).

(G) The facility is not otherwise a Part 70 source.

The vast majority of these changes to the Oil and Natural Gas PBR are identical to those adopted as an emergency rule in April 2024.

The original language in the O&NG PBR allows facilities to be constructed and operated even if those facilities will be subject to NSPS Subpart OOOOb. This additional language is just for clarification and completeness.

Limitations on emissions imposed by NSPS or NESHAP may be used to determine PTE.

(2) **Equipment and processes.** This PBR covers equipment and processes located at minor facilities and area sources in the O&NG sector that meet the criteria contained in 252:100-7-60.5(a)(1). Covered equipment and processes under this PBR include, but are not limited to:

(A) The affected facilities listed in 40 CFR Section 60.5365 of NSPS Subpart OOOO, ~~and~~ 40 CFR Section 60.5365a of NSPS Subpart OOOOa, and 40 CFR Section 60.5365b of NSPS Subpart OOOOb.

(B) Stationary compression ignition internal combustion engines, as specified in 40 CFR Section 60.4200 of NSPS Subpart IIII, which are located at minor facilities in the O&NG sector.

This language adds a reference to NSPS Subpart OOOOb and clarifies that all emissions units addressed by that rule may be covered by the O&NG PBR. While this clarification is not strictly necessary to ensure coverage, including this language is less likely to lead to confusion.

(d) Requested process-specific legally and practicably enforceable limitations - storage vessel affected facilities (tank batteries). An owner or operator shall designate on the PBR registration form(s) that the following legally and practicably enforceable (LPE) limits are applicable to a specified storage vessel affected facility under 40 CFR Part 60, Subpart OOOOb. The permittee shall submit a notice of enforceability on forms provided by the DEQ to add or remove the applicability of LPE limits to or from any tank battery, whether the tank battery consists of a single storage vessel or multiple storage vessels that are manifolded together for liquid transfer.

(1) The storage vessel affected facility shall be limited to less than 6 TPY of VOC emissions and less than 20 TPY of methane emissions, calculated as cumulative emissions from all storage vessels within the tank battery, with both limits based on a 12-month rolling total.

(A) Demonstration of compliance with the VOC and methane emission limits shall include the following:

(i) A monthly quantitative throughput volume.

(ii) The composition of tank contents and any process stream (actual or representative consistent with DEQ policy as established by the Director) necessary to perform the calculations below.

(iii) Emission calculation methods for working, breathing, and flashing emissions approved by the Director.

(iv) Process operating parameters, including temperatures and pressures relied on in the compliance calculations.

(v) The method, if any, used to capture emissions, and divert emissions to a process and/or route emissions to a control device.

(vi) Calculations showing that, given the tank contents, throughput, and process operating parameters (including downtime), the emissions from the tank battery will not exceed the LPE limits for VOC or methane.

The vast majority of the new rule language is in new subsection (d). This subsection provides the mechanism for facilities to accept legally and practicably enforceable (LPE) limits on tank batteries to keep those tank batteries from becoming classified as “storage vessel affected facilities” under NSPS Subpart OOOOb.

Note: This language is identical to the emergency rule language approved in April 2024.

Changes will be highlighted on later slides.

(B) Applicants that elect to comply with the LPE limits through one or more of the following options shall meet these operational and parametric limits:

(i) If using a nonassisted flare:

(I) a closed vent system that routes emissions from the storage vessel affected facility to the flare.

(II) a combustion destruction efficiency of at least 95%.

(III) the flare shall meet the following applicable requirements of 40 CFR § 60.18: visible emissions requirements in § 60.18(c)(1); the pilot flame requirements in § 60.18(c)(2); the heating value requirements in § 60.18(c)(3)(ii); exit velocity requirements in § 60.18(c)(4); and the operational requirements in § 60.18(e).

(ii) If using a nonassisted enclosed combustion device:

(I) a closed vent system that routes emissions from the storage vessel affected facility to the combustor.

(II) a combustion destruction efficiency of at least 95%.

(III) the combustor shall meet the following applicable requirements for flares in 40 CFR § 60.18: visible emissions requirements in § 60.18(c)(1); the pilot flame requirements in § 60.18(c)(2); the heating value requirements in § 60.18(c)(3)(ii); and the operational requirements in § 60.18(e).

(IV) the maximum design capacity (MMBTU/hr) of the gases combusted as established by the manufacturer or operator during a performance test.

(iii) If using a VRU:

(I) a closed vent system that captures all emissions from the storage vessel affected facility and routes all emissions to a process.

(II) the openings of the storage vessels shall be closed and sealed (e.g., covered by a gasketed lid, cap, or other appropriate methods) during normal operation.

Note: This language is identical to the emergency rule language approved in April 2024.

(C) The emission reductions associated with the option(s) selected under (B) shall only be included in emissions calculations to show compliance with limits in (1) above when the following initial and periodic and/or continuous monitoring requirements are met:

(i) If using a nonassisted flare or enclosed combustion device:

(I) perform an initial visible emission observation of the flare or enclosed combustion device using Method 22 in Appendix A of 40 CFR Part 60, with a minimum observation time of six (6) minutes, within 60 days of initial operation.

(II) continuously monitor at least once every five minutes for the presence of a pilot flame or combustion flame using a device (including, but not limited to, a thermocouple, ultraviolet beam sensor, or infrared sensor) capable of detecting that the pilot or combustion flame is present at all times. An alert must be sent whenever the pilot or combustion flame is unlit.

(III) perform an initial, and semi-annually thereafter, determination of the net heating value of the gases combusted using the equation in 40 CFR § 60.18(f)(3), GPA Method 2261, or other approved method. **If this requirement is removed, waived, or otherwise explicitly rendered unnecessary in 40 CFR Part 60, Subpart OOOOb, the requirement in this subunit shall also be waived or otherwise rendered unnecessary.**

(IV) for a flare, perform an initial, and semi-annually thereafter, determination of the exit velocity of the gases combusted, calculated by dividing the volumetric flowrate by the unobstructed (free) cross sectional area of the flare tip. Volumetric flowrate shall be determined by Method 2 in Appendix A of 40 CFR Part 60, or a generally accepted model or calculation methodology.

(V) for an enclosed combustion device, perform an initial, and semi-annually thereafter, demonstration that the actual heat content (MMBTU/hr) of the gases combusted are within the design values **that were** established by the manufacturer or **minimum net heating value determined** during **an initial** performance test. The heat content of the combusted gases shall be determined by a generally accepted model or calculation methodology.

(VI) whenever the closed vent system, flare, or enclosed combustion device experiences outages and/or downtime, maintain calculations of associated emissions for the purpose of determining compliance with the limits in paragraph (1).

Language that has been **changed** from the language in the emergency rule (approved in April 2024) and from the version presented at the July 24 Council meeting is shown in **red**.

A number of comments were submitted that requested changes to these paragraphs, including a request to eliminate these requirements altogether. Those comments and our responses will be discussed later in this presentation. However, I would like to clarify that (1) a determination of NHV will be required unless that requirement is waived by EPA. And (2) a performance test will only be required if the control device does not have a manufacturer's guarantee of performance.

(D) Reporting of any exceedances of these limits in accordance with DEQ guidance.

(E) Recordkeeping updated monthly and maintained for a period of five (5) years, including:

- (i) Records of contents stored,
- (ii) Monthly and 12-month rolling total throughputs,
- (iii) Records of parameters monitored as required in subparagraphs (A) and (B) above,
- (iv) Monthly and 12-month rolling total emissions calculations used to demonstrate compliance,
- (v) Times and emissions when the system used to comply with the LPE limits is not operating in accordance with the requirements established in this subsection, and
- (vi) Records of all periods of uncontrolled venting.
- (vii) Equipment specifications, manuals, and/or maintenance records, as appropriate.

(2) [RESERVED]

Note: This language is identical to the emergency rule language approved in April 2024.

Comments were received on (vii), the requirement to keep records including equipment specifications, manuals, and/or maintenance records as appropriate. The comments and our responses will be discussed later in this presentation.

(e) **Exceptions to Otherwise Applicable State-Only Requirements.** When an owner or operator elects to obtain coverage under the oil and natural gas PBR (OAC 252:100-7-60.5) the following exceptions to otherwise applicable state requirements shall govern the equipment and operations covered by the PBR:

(1) GHG emissions, as an aggregate, or as individual components (e.g., methane) may be included in the facility's PBR notwithstanding the provisions of OAC 252:100-7-2.1, Minor permits for greenhouse gas (GHG) emitting facilities.

(2) Regardless of any limits on methane included in the PBR or inclusion of any reporting requirements or other provisions in the permit that may affect methane or GHG emissions, neither methane nor GHG (as an aggregate) will be considered to be regulated air pollutants for the purposes of the following:

(A) The determination of "actual emissions" from a given facility as defined in 252:100-5-1.1.

(B) The emissions inventory requirements of OAC 252:100-5-2.1.

(C) "Regulated pollutant (for fee calculation)," as defined in 252:100-5-1.1, subject to annual operating fees under OAC 252:100-5-2.2.

(D) The determination whether a facility is a "major source" as defined in OAC 252:100-8-2.

(E) The determination whether a facility is a "major stationary source" as defined in OAC 252:100-8-31 for facilities in attainment areas or in OAC 252:100-8-51 for facilities in nonattainment areas.

(F) The determination whether a facility's project is a "major modification" as defined in OAC 252:100-8-31 for facilities in attainment areas or in OAC 252:100-8-51 for facilities in nonattainment areas.

(3) These exceptions may be set aside at the discretion of the Director.

The emergency rules included subsection (e) which carved out exceptions from other state-only rule language in Chapter 100.

For the emergency rulemaking, these exceptions were meant to isolate the amended O&NG PBR from restrictions included in other parts of Chapter 100 that could contradict authorities endorsed in the revised PBR.

For the permanent rule, these exemptions are addressed in the individual sections and in OAC 252:100-7-2.1, Minor permits for greenhouse gas (GHG) emitting facilities (discussed previously).

252:100-7-60.6. Emergency engine facilities

(a) **Applicability.** This PBR is issued for minor facilities and area sources whose only obligation to obtain a permit is due to the construction (installation) and/or operation of an emergency engine that is subject to an emission standard, equipment standard, or work practice standard in the federal NSPS (40 CFR Part 60) or the federal NESHAP (40 CFR Parts 61 and 63). This includes but is not limited to facilities subject to 40 CFR Part 60, primarily Subparts IIII and JJJJ, and/or 40 CFR Part 63, primarily Subpart ZZZZ, as cited in this PBR and incorporated by reference in OAC 252:100-2 and Appendix Q to Chapter 100. Specifically, this PBR applies to the following:

(1) **Eligible minor facilities and area sources.** New and existing minor facilities and area sources are eligible for this PBR, provided they comply with the conditions in (A) through (F) of this paragraph.

(A) The obligation to obtain a permit from the DEQ is solely because of the presence of one or more emergency engines.

(B) The facility has actual emissions of 40 TPY or less of each regulated air pollutant, except HAPs and GHGs (as individual pollutants and as an aggregate).

(C) The facility has potential emissions of each regulated air pollutant, except HAPs, that are less than the emission levels that require prevention of significant deterioration (PSD), nonattainment new source review (NNSR), and Part 70 permits.

(D) The facility does not emit or have potential emissions of 10 TPY or more of any single HAP and 25 TPY or more of any combination of HAPs.

(E) The facility must meet the criteria in 252:100-7-15(b)(1)(D) and (E).

(F) The facility is not otherwise a Part 70 source.

GHG exemption when determining eligibility for the Emergency Engine Facility PBR.

252:100-7-60.7. Gasoline dispensing facilities and gasoline dispensing facilities with emergency engines

(a) **Applicability.** This PBR is issued for minor facilities and area sources whose primary or only obligation to obtain a permit is due to the construction (installation) and/or operation of a gasoline dispensing facility that is subject to an emission standard, equipment standard, or work practice standard in the federal NSPS (40 CFR Part 60) or the federal NESHAP (40 CFR Parts 61 and 63). This includes facilities subject to 40 CFR Part 60, Subparts IIII and JJJJ, and/or 40 CFR Part 63, primarily Subparts ZZZZ, and CCCCCC, as cited in this PBR and incorporated by reference in OAC 252:100-2 and Appendix Q to Chapter 100. Specifically, this PBR applies to the following:

(1) **Eligible minor facilities and area sources.** New minor facilities and area sources are eligible for this PBR, provided they comply with the conditions in (A) through (F) of this paragraph.

(A) The obligation to obtain a permit from the DEQ is solely due to the presence of a gasoline dispensing facility, or the presence of a gasoline dispensing facility and an emergency engine.

(B) The facility has actual emissions of 40 TPY or less of each regulated air pollutant, except HAPs and GHGs (as individual pollutants and as aggregate).

(C) The facility has potential emissions of each regulated air pollutant, except HAPs, that are less than the emission levels that require prevention of significant deterioration (PSD), nonattainment new source review (NNSR), and Part 70 permits.

(D) The facility does not emit or have potential emissions of 10 TPY or more of any single HAP, and does not emit or have potential emissions of 25 TPY or more of any combination of HAPs.

(E) The facility must meet the criteria in 252:100-7-15(b)(1)(D) and (E).

(F) The facility is not otherwise a Part 70 source.

GHG exemption when determining eligibility for the gasoline dispensing facilities PBR.

Chapter 100, Subchapter 8 Changes

**TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 100. AIR POLLUTION CONTROL
SUBCHAPTER 8. PERMITS FOR PART 70 SOURCES AND MAJOR NEW SOURCE
REVIEW (NSR) SOURCES**

Please turn in your folder to the proposed amendments to rule text in Chapter 100, Subchapter 8.

An “as presented” version of these proposed amendments is available on the web: https://www.deq.ok.gov/wp-content/uploads/air-division/AQAC_2024_OCT_SC5_SC7_SC8_RUL_Presented.pdf

Policy Goals for Subchapter 8

- GHG emissions will not trigger the requirement for a facility to obtain a Title V (Part 70) operating permit.
- GHG emissions will not trigger a requirement for a minor new source review (NSR) permit (Subchapter 8 construction permit) for a facility with a Title V operating permit. Specifically, GHGs will not be evaluated against the 10 TPY threshold for projects considered minor modifications.
- GHGs will not be subject to state (non-Prevention of Significant Deterioration (PSD)) Best Available Control Technology (BACT) requirements.
- GHGs will not be subject to state (non-PSD) air quality modeling requirements. GHGs will also be exempt from an ambient impact analysis.

Policy Goals for Subchapter 8

- An increase in emissions of GHGs will not trigger the requirement for a PSD permit.
- GHGs will only be subject to PSD BACT requirements if a facility is required to obtain a PSD permit due to a significant emission increase (and a significant net emissions increase) of one or more non-GHG pollutants and GHG emissions will increase by 75,000 tons per year of CO₂ equivalent (CO₂e)
- GHG modeling will not be required for PSD permits. GHGs are also exempt from an ambient impact analysis.
- GHG BACT is only required only when other pollutants trigger the requirement for a Nonattainment NSR permit and if GHG emissions will increase by 75,000 tons per year CO₂e.

Chapter 100, Subchapter 8 Changes

SUBCHAPTER 8. PERMITS FOR PART 70 SOURCES AND MAJOR NEW SOURCE REVIEW (NSR) SOURCES

PART 5. PERMITS FOR PART 70 SOURCES

252:100-8-2. Definitions

The following words and terms, when used in this Part, shall have the following meaning, unless the context clearly indicates otherwise. Except as specifically provided in this Section, terms used in this Part retain the meaning accorded them under the applicable requirements of the Act.

"Major source" means any stationary source (or any group of stationary sources that are located on one or more contiguous or adjacent properties and are under common control of the same person (or persons under common control)) belonging to a single major industrial grouping and that is described in subparagraph (A), (B), or (C) of this definition. For the purposes of defining "major source," a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on

Today's presentation will be very similar to the presentation on July 24, 2024.

New or modified language will be identified. In addition, language presented by Brooks Kirlin in July will be discussed.

The definition of "major source" establishes the criteria which determine whether a facility is required to obtain a Title V (Part 70) operating permit.

contiguous or adjacent properties belong to the same Major Group (i.e., all have the same two-digit primary SIC code) as described in the Standard Industrial Classification Manual, 1987. For onshore activities belonging to Standard Industrial Classification (SIC) Major Group 13: Oil and Gas Extraction, pollutant emitting activities shall be considered adjacent if they are located on the same surface site; or if they are located on surface sites that are located within 1/4 mile of one another (measured from the center of the equipment on the surface site) and they share equipment. Shared equipment includes, but is not limited to, produced fluids storage tanks, phase separators, natural gas dehydrators, or emissions control devices. Surface site, as used in this definition, has the same meaning as in 40 CFR 63.761.

(A) A major source under section 112 of the Act, which is defined as:

(i) For pollutants other than radionuclides, any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, 10 TPY or more of any hazardous air pollutant which has been listed pursuant to section 112(b) of the Act, 25 TPY or more of any combination of such hazardous air pollutants, or such lesser quantity as the Administrator may establish by rule. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or

(ii) For radionuclides, "major source" shall have the meaning specified by the Administrator by rule.

(B) A major stationary source of air pollutants, as defined in section 302 of the Act, that directly emits or has the potential to emit, 100 TPY or more of any air pollutant (except gross particulate matter and GHGs, as individual pollutants and as an aggregate) subject to regulation (including any major source of fugitive emissions of any such pollutant, as determined by rule by the Administrator). The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of section 302(j) of the Act, unless the source belongs to one of the following categories of stationary sources:

GHG exemption when determining whether a facility exceeds the 100 tpy threshold and is, therefore, required to obtain a Title V (Part 70) operating permit.

Note: Not showing the rest of the definition of "major source."

252:100-8-4. Requirements for construction and operating permits

(a) Construction permits.

(1) Construction permit required.

(A) **Facilities without Part 70 operating permits.** Except as provided in OAC 252:100-8-4(a)(1)(D), no person shall

(i) begin actual construction or installation of any new source that will require a Part 70 operating permit without first obtaining a DEQ-issued air quality construction permit under Part 5 of OAC 252:100-8, or

(ii) make a modification to an existing minor facility such that it will require a Part 70 operating permit without first obtaining a DEQ-issued air quality construction permit under Part 5 of OAC 252:100-8.

(B) **Facilities with Part 70 operating permits.** Except as provided in OAC 252:100-8-4(a)(1)(D), a construction permit is also required prior to

(i) reconstruction of a major affected source under 40 CFR Part 63,

(ii) reconstruction of a major source if it would then become a major affected source under 40 CFR Part 63,

(iii) commencement of any physical change or change in method of operation that would be a significant modification under OAC 252:100-8-7.2(b)(2), or

(iv) commencement of any physical change or change in method of operation that, for any one regulated air pollutant (except for GHGs, as individual pollutants and as an aggregate), would increase potential to emit by more than 10 TPY, calculated using the approach in 40 C.F.R. Section 49.153(b).

(C) **Additional Requirements.** In addition to the requirements of this Part, sources subject to Part 7 or Part 9 of this Subchapter must also meet the applicable requirements contained therein.

The language in red was included in the proposed rule changes to Subchapter 8 presented by Brooks Kirlin at the July 24 Council meeting. This language clarifies that a construction permit is required to authorize a modification to an existing facility with a minor source permit if the modification would require the facility to operate under a Title V (Part 70) permit.

GHG exemption from the determination whether a project emission increase (for a project considered a minor modification) would exceed the 10 tpy threshold and, therefore, require a Tier I minor NSR (construction) permit.

(3) **Timely application.** A timely application is a complete application (including appropriate fees) that is received with a legible, dated U.S. Postal Service postmark (private metered postmarks are not acceptable), delivered by a commercial carrier with a dated delivery receipt, date-stamped by DEQ when delivered in person, or submitted electronically via email or other electronic submittal system as designated by the Division, on or before the relevant date listed below.

(A) A new source shall file an administratively complete operating permit application within 180 days of commencement of operation.

(B) An existing source that becomes subject to the Part 70 operating permit program due to modification shall file an administratively complete operating permit application within 180 days of commencement of operation of the modification.

(C) An existing source that becomes subject to the Part 70 operating permit program, without undergoing physical or operational changes ~~resulting that result~~ in an increase in the emission of any air pollutant subject to regulation, shall file an administratively complete operating permit application ~~by March 6, 1999 or~~ within 12 months after the effective date on which the source first becomes subject to the Part 70 operating permit program, ~~whichever is later.~~ Compliance with the requirement to submit an administratively complete operating permit application does not authorize a facility to operate with new emission limits. To obtain new emission limits, the owner/operator must obtain a DEQ-issued air quality construction permit under Part 5 of OAC 252:100-8.

(4) [Reserved]

(5) [Reserved]

(6) **Application acceptability.** Notwithstanding the deadlines established in paragraph (4) of this subsection, an application filed prior to the above deadlines following submission of the state program to EPA for approval shall be accepted for processing.

The language in red was included in the proposed rule changes to Subchapter 8 presented by Brooks Kirlin at the July 24 Council meeting.

This language replaces missing language (present in the version of the rules on our web site but not included in the OAR). It also formally authorizes electronic submission of applications.

This language clarifies that a facility that becomes subject to the requirement to obtain a Title V (Part 70) permit (e.g., due to a change in the county's attainment status) would need an NSR permit to establish new (different) emission limits.

252:100-8-5. Permit applications

(d) Construction permit applications.

(1) An application for a construction permit shall provide data and information required by this Chapter and/or requested on the application form available from the DEQ pursuant to the requirements of this Chapter. Such data and information shall include but not be limited to site information, process description, emission data and when required, BACT, modeling and sampling point data as follows:

(A) **BACT determination.** To be approved for a construction permit, a major source must demonstrate that the control technology to be applied is the best that is available for each pollutant that would cause the source to be defined as a major source. This determination will be made on a case-by-case basis taking into account energy, environmental, and economic impacts and other costs of alternative control systems. Unless required under Part 7 of this Subchapter, a BACT determination is not required for a modification that will result in an increase of emissions of less than 100 tons per year of any regulated air pollutant. GHGs only trigger a requirement for a BACT determination under the circumstances described in Part 7 of this Subchapter (Prevention of Significant Deterioration or PSD).

(B) **Modeling.** Any air quality modeling or ambient impact evaluation that is required shall be prepared in accordance with procedures acceptable to the DEQ and accomplished by the applicant. GHGs, either as individual pollutants or as an aggregate, are exempt from the requirements for air quality modeling and ambient impact evaluation.

(C) **Sampling points.** If required by the DEQ an application shall show how the new source will be equipped with sampling ports, instrumentation to monitor and record emission data and other sampling and/or testing equipment.

GHG exemption from state (not Prevention of Significant Deterioration or PSD) Best Available Control Technology (BACT) requirements.

GHG exemption from state (not PSD) modeling requirements.

Note: State BACT and modeling requirements are triggered by a 100 tpy increase that does not require a PSD permit.

**PART 7. PREVENTION OF SIGNIFICANT DETERIORATION (PSD)
REQUIREMENTS FOR ATTAINMENT AREAS**

252:100-8-31. Definitions

The following words and terms when used in this Part shall have the following meaning, unless the context clearly indicates otherwise. All terms used in this Part that are not defined in this Section shall have the meaning given to them in OAC 252:100-1-3, 252:100-8-1.1, or in the Oklahoma Clean Air Act.

"Major stationary source" means

(A) A major stationary source is:

(i) any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 TPY or more of a regulated NSR pollutant (except for GHGs, either as individual pollutants or as an aggregate):

(I) carbon black plants (furnace process),

(II) charcoal production plants,

(III) chemical process plants, (not including ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140),

(IV) coal cleaning plants (with thermal dryers),

(V) coke oven batteries,

(VI) fossil-fuel boilers (or combination thereof) totaling more than 250 million BTU per hour heat input,

(VII) fossil fuel-fired steam electric plants of more than 250 million BTU per hour heat input,

(VIII) fuel conversion plants,

(IX) glass fiber processing plants,

(X) hydrofluoric, sulfuric or nitric acid plants,

(XI) iron and steel mill plants,

GHG exemption from the 100 tpy threshold for classification of a facility as a "major stationary source" for PSD purposes for the 26 listed source types.

- (XII) kraft pulp mills,
- (XIII) lime plants,
- (XIV) municipal incinerators capable of charging more than ~~250~~50 tons of refuse per day,
- (XV) petroleum refineries,
- (XVI) petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels,
- (XVII) phosphate rock processing plants,
- (XVIII) portland cement plants,
- (XIX) primary aluminum ore reduction plants,
- (XX) primary copper smelters,
- (XXI) primary lead smelters,
- (XXII) primary zinc smelters,
- (XXIII) secondary metal production plants,
- (XXIV) sintering plants,
- (XXV) sulfur recovery plants, or
- (XXVI) taconite ore processing plants;

Updating the definition to bring it in line with the EPA update in 40 CFR Part 51. This change was discussed during the July 24 Council meeting.

- (ii) any other stationary source not on the list in (A)(i) of this definition which emits, or has the potential to emit, 250 TPY or more of a regulated NSR pollutant (except for GHGs, either as individual pollutants or as an aggregate);
- (iii) any physical change that would occur at a stationary source not otherwise qualifying as a major stationary source under this definition if the change would constitute a major stationary source by itself.

GHG exemption from the 250 tpy threshold for classification of a facility as a “major stationary source” for PSD purposes for the other (non-listed) source types.

- (B) A major source that is major for VOC or NO_x shall be considered major for ozone.
- (C) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this Part whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:
 - (i) the stationary sources listed in (A)(i) of this definition;
 - (ii) any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.

"Subject to regulation" means, for any air pollutant, that the pollutant is subject to either a provision in the federal Clean Air Act, or a nationally-applicable regulation codified by the EPA Administrator in subchapter C of Chapter I of 40 CFR, that requires actual control of the quantity of emissions of that pollutant, and that such a control requirement has taken effect and is operative to control, limit, or restrict the quantity of emissions of that pollutant released from the regulated activity. Except that:

(A) Greenhouse gases (GHG), either as individual pollutants or as an aggregate, shall not be subject to regulation except as provided in subparagraph (D) of this definition.

(B) For purposes of subparagraphs (C) and (D) of this definition, the term TPY CO₂e equivalent emissions (CO₂e) shall represent an amount of GHG emitted, and shall be computed as follows:

(i) Multiplying the mass amount of emissions (in TPY), for each of the six greenhouse gases in the pollutant GHG, by the gas' associated global warming potential (GWP) published in Table A-1 to subpart A of 40 CFR Part 98 - Global Warming Potentials

(ii) Summing the resultant value from (B)(i) of this definition for each gas to compute a TPY CO₂e.

(C) The term emissions increase as used in subparagraph (D) of this definition shall mean that both a significant emissions increase (as calculated using the procedures in OAC 252:100-8-30(b)(1) through (5)) and a significant net emissions increase (as defined in the definitions of "net emissions increase" and "significant" in 252:100-8-31) occur. For the pollutant GHG, an emissions increase shall be based on TPY CO₂e, and shall be calculated assuming the pollutant GHG is a regulated NSR pollutant, and "significant" is defined as 75,000 TPY CO₂e and the emissions are otherwise subject to regulation as previously described in this definition.

(D) Beginning January 2, 2011, the pollutant GHG is subject to regulation if it meets the other requirements of this definition and if:

(i) The stationary source is a new major stationary source for a regulated NSR pollutant that is not GHG, and also will emit or will have the potential to emit 75,000 TPY CO₂e or more; or

(ii) The stationary source is an existing major stationary source for a regulated NSR pollutant that is not GHG, and also will have ~~an~~ both a significant emissions increase and a significant net emission increase of a regulated NSR pollutant (that is not GHG), and an emissions increase of 75,000 TPY CO₂e or more.

Clarification that GHGs are only subject to regulation (subject to PSD BACT) under the following scenarios:

(i) A new facility that will be a major stationary source of a non-GHG pollutant and which also has GHG emissions of 75,000 tpy CO₂e.

Or

(ii) An existing facility that is a major stationary source of a non-GHG pollutant, which will have a significant emissions increase and a significant net emissions increase of a non-GHG pollutant, and which also will experience a GHG emissions of increase of 75,000 tpy CO₂e.

252:100-8-33. Exemptions

(b) Exemption from air quality impact analyses in OAC 252:100-8-35(a) and (c) and 252:100-8-35.2.

(1) The requirements of OAC 252:100-8-35(a) and (c) and 252:100-8-35.2 are not applicable with respect to a particular pollutant, if the allowable emissions of that pollutant from a new source, or the net emissions increase of that pollutant from a modification, would be temporary and impact no Class I area and no area where an applicable increment is known to be violated.

(2) The requirements of OAC 252:100-8-35(a) and (c) and 252:100-8-35.2 as they relate to any PSD increment for a Class II area do not apply to a modification of a major stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each regulated NSR pollutant from the modification after the application of BACT, would be less than 50 TPY.

(3) The requirements of OAC 252:100-8-35(a) and (c) and 252:100-8-35.2 are not applicable with respect to GHGs, as individual pollutants or as an aggregate.

Clarification that GHGs are exempt from the air quality modeling requirements of OAC 252:100-8-35(a) and (c) as well as the additional impact analysis requirements (growth analysis and visibility monitoring) of OAC 252:100-8-35.2.

PART 9. MAJOR SOURCES AFFECTING NONATTAINMENT AREAS

252:100-8-50. Applicability

(a) General applicability.

(1) The requirements of this Part shall apply to the construction of any new major stationary source or major modification which would locate in or affect a nonattainment area located in Oklahoma, designated under section 107(d)(1)(A)(i) of the Act, if the stationary source or modification is major for the pollutant for which the area is designated nonattainment.

(2) The requirements of OAC 252:100-8, Parts 1, 3, and 5 also apply to the construction of any new major stationary source or major modification.


(3) In addition, the requirements of a PSD review (OAC 252:100-8, Part 7) would be applicable if any regulated NSR pollutant other than the nonattainment pollutant is emitted in significant amounts by that source or modification.

(b) Major modification.

(1) Major modification applicability determination.

(A) Except as otherwise provided in OAC 252:100-8-50(c), and consistent with the definition of "major modification" contained in OAC 252:100-8-51, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases:

- (i) a significant emissions increase, and
- (ii) a significant net emissions increase.



No need to amend the language in Part 9 covering Nonattainment New Source Review (NSR). If a facility is located in a nonattainment area and a project is determined to require a Nonattainment NSR permit, then all other pollutants would undergo a PSD assessment. The amendments to the PSD language (already discussed) would address requirements associated with GHGs, including exemptions.

Summary of Comments and DEQ Responses

The DEQ received written comments from three stakeholders:

1. **aohboard@outlook.com** – Emailed comment (Subject: Subchapter 8. Permits for Part 70 Sources and Major New Source Review (NSR) Sources) received on September 27, 2024.
2. **Energy Transfer** (lance.lodes@energytransfer.com)– Submitted as an email with an attachment received on October 7, 2024, from Mr. Lance Lodes, Director - Environmental.
3. **Continental Resources** (Brett.Eaton@clr.com) – Submitted comments included in the body of an email received on October 14, 2024, from Mr. Brett Eaton, Senior Environmental Specialist.

A Response to Comments document has been posted on the web (https://www.deq.ok.gov/wp-content/uploads/air-division/AQAC_2024_OCT_SC5_SC7_SC8_COMM_RESP.pdf) and a copy has been placed in the folder of each Council Member.

Here I will provide a summary of each comment and the DEQ's response.

Summary of Comments and DEQ Responses

1. **COMMENT:** The commenter expressed concerns regarding the sources (both natural and manmade) and risks associated with greenhouse gases (GHGs) in the environment, as well the difficulties of their regulation and further complexities of carbon sequestration.

RESPONSE: The Department recognizes commenter's concerns. However, DEQ staff notes that the comments did not object to or suggest any specific changes to the proposed rule language. Therefore, DEQ staff recommends no revisions to the proposal based on these comments.

Summary of Comments and DEQ Responses

2. **COMMENT** (from the body of the email message from Lance Lodes): In our opinion, EPA has been clear that LPE for NSPS OOOOb storage vessels should not be the same as complying with NSPS OOOOb itself. This is based on our interpretation of what EPA says about LPE within their Response to Comments document.

RESPONSE: Thank you for sharing your comments and the link to the EPA Response to Comments document. The most important source for information regarding the minimum requirements that we would need to incorporate into our Permit by Rule (PBR) is the *Federal Register* (FR) notice for the Final Rule.¹ EPA explained why they were increasing the rigor of the criteria that would be required in state permits (and notably in PBRs) in the Preamble to the Final Rule (89 FR 16974) as shown in this excerpt:

As explained in the preamble to the November 2021 Proposal (86 FR 63201), from its years of experience of reviewing permits of legally and practicably enforceable limits, the EPA has long been aware that many owners and operators claim that storage vessels are not affected facilities under 40 CFR 60.5365(e) and 40 CFR 60.5365a(e) by alleging that the VOC emissions are less than 6 tpy. Since promulgation of NSPS OOOO in 2012, the EPA has expended extensive resources in enforcement actions nationwide to review permits, general permits, and permits-

¹ U.S Environmental Protection Agency (EPA), “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, March 8, 2024.

by-rule for storage vessels and found that, in nearly in all cases, across nearly 400 storage vessels, these permits or other requirements are not legally and practicably enforceable. In nationwide ongoing enforcement actions, the EPA continues to find permits or permits-by-rule that are not legally and practicably enforceable. The EPA has repeatedly expressed this concern in prior rulemaking actions. See, *e.g.*, 83 FR 52085 and 85 FR 57425. The EPA believes that the new criteria being finalized in this action will help to ensure that storage tank batteries that rely on legally and practicably enforceable limits to claim nonapplicability of NSPS OOOOb or EG OOOOc indeed have potential emissions below the relevant applicability threshold(s).

In the Final Rule for the Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022 (NSPS OOOOb), EPA established several criteria that must be included for limits taken to avoid having storage tanks classified as a “storage vessel affected facility” under NSPS OOOOb. This description from the Preamble to the Final Rule identifies those criteria:

In this action, the EPA is finalizing the proposed criteria that must be met for a permit limit or other requirement to qualify as a legally and practicably enforceable limit for purposes of determining whether a tank battery is an affected facility or designated facility under NSPS OOOOb. A legally and practicably enforceable limit must include a quantitative production limit and quantitative operational limit(s) for the equipment, or quantitative operational limits for the equipment; an averaging time period for the production limit, if a production-based limit is used, that is equal to or less than 30 days; established parametric limits for the production and/or operational limit(s), and where a control device is used to achieve an operational limit, an initial compliance demonstration (i.e., performance test) for the control device that establishes the parametric limits; ongoing monitoring of the parametric limits that demonstrates continuous compliance with the production and/or operational limit(s); recordkeeping by the owner or operator that demonstrates continuous compliance with the limit(s) in; and periodic reporting that demonstrates continuous compliance.²

Summary of Comments and DEQ Responses

DEQ Response to Comment 2
(continued from the previous slide):

These criteria are codified in § 60.5365b(e)(2)(i) of NSPS OOOOb as follows:

(i) For purposes of determining the applicability of a storage vessel tank battery as an affected facility, a legally and practicably enforceable limit must include the elements provided in paragraphs (e)(2)(i)(A) through (F) of this section.

(A) A quantitative production limit and quantitative operational limit(s) for the equipment, or quantitative operational limits for the equipment;

(B) An averaging time period for the production limit in (e)(2)(i)(A) of this section, if a production-based limit is used, that is equal to or less than 30 days;

(C) Established parametric limits for the production and/or operational limit(s) in paragraph (e)(2)(i)(A) of this section, and where a control device is used to achieve an operational limit, an initial compliance demonstration (i.e., performance test) for the control device that establishes the parametric limits;

(D) Ongoing monitoring of the parametric limits in (e)(2)(i)(C) of this section that demonstrates continuous compliance with the production and/or operational limit(s) in (e)(2)(i)(A) of this section;

(E) Recordkeeping by the owner or operator that demonstrates continuous compliance with the limit(s) in (e)(2)(i)(A) through (D) of this section; and

(F) Periodic reporting that demonstrates continuous compliance.

Proposed Changes to Air Quality Permitting Rules

Summary of Comments and DEQ Responses

DEQ Response to Comment 2
(continued from the previous slide):

Summary of Comments and DEQ Responses

DEQ Response to Comment 2
(continued from the previous slide):

In developing the PBR requirements for establishing LPE limits, the Department used the criteria referenced above as a roadmap for developing rule language. Where necessary, the Department referenced industry-standard and EPA-accepted approaches for fleshing out the methods for demonstrating compliance with these criteria. Commenters have implied that the actions that need to be taken to meet these criteria are so challenging that there is little benefit when compared to complying with applicable requirements for NSPS OOOOB for storage vessel affected facilities. The Department understands the predicament here, however, failing to meet these criteria would nullify the legal and practicable enforceability of the limits based on EPA's clearly articulated requirements.

The email from the commenter included a link to EPA's Response to Comment (RTC) document for the Final Rule.³ Below is language from that document in support of our interpretation of EPA's position.

Response i-9-8: The proposed criteria, which EPA is finalizing, are for evaluating whether a facility is subject to legally and practicably enforceable emission limits for new and modified facilities under new and modified sources under OOOOB and existing sources under OOOOc e.g. See 86 FR 63201 (the EPA is clarifying the term "legally and practicably enforceable limits" as it related to storage vessel affected facilities in the proposed NSPS OOOOB and EG OOOOc). These criteria will apply going forward, and will not be used to assess whether owners and operators correctly determined that their storage vessels are not subject to OOOO or OOOOa. As the EPA stated in our proposal and supplemental proposal, the

³ EPA, Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review, Response to Public Comments on the November 2021 Proposed Rule and the December 2022 Supplemental Proposed Rule, November 2023, available online: <https://www.regulations.gov/document/EPA-HQ-OAR-2021-0317-4009>.

Summary of Comments and DEQ Responses

DEQ Response to Comment 2 (continued from the previous slide):

enforcement record shows²² that the EPA must further specify what legally and practicably enforceable emissions limitation means in the oil and gas sector because we have found through enforcement actions that sources have relied on inadequate limitations to support their status as exempt from the storage vessel provisions of the NSPS. However, the EPA disagrees with the comment that our action results in the need for all storage tank owners and operators to obtain site-specific permits. A permit-by-rule or general permit system that creates legally and practicably enforceable limits that meet the criteria would not require a site-specific permit. Further, no owner or operator is required under this provision to obtain any minor source permit. The owner or operator could instead comply with storage vessel requirements under OOOOB.

Summary of Comments and DEQ Responses

3.a COMMENT: [Referencing proposed revision in OAC 252:100-7-60.5(d)(1)(B).] Need to account for and address EPA certified control devices. OOOOOb has different requirements (less stringent) if install/operate EPA certified control device.

RESPONSE: It is our understanding that EPA does not certify any control devices of the sort that would be used to control emissions from storage vessels. We understand that a number of manufacturers provide guarantees that their equipment (if operated in accordance with manufacturer's instructions) will provide a level of control that meets or exceeds EPA's requirements. In our rule language establishing methods of demonstrating compliance with the LPEs, we have allowed (where appropriate) an owner or operator to reference these manufacturer's guarantees as a method to demonstrate compliance with a particular requirement. One example is the requirement to demonstrate 95% combustion destruction efficiency. Compliance with this requirement may be demonstrated with a manufacturer's guarantee. Appropriate records must be retained to document that guarantee as well as any maintenance records or other information as required by the manufacturer to ensure that the control device is operated as specified by the manufacturer.

In addition, please see our response to Comment 2 (above) for a discussion of the approach we used to develop our Legally and Practicably Enforceable (LPE) limits on emissions from storage vessels based on the requirements EPA identified in the *Federal Register* notice.

3.b COMMENT: [Referencing proposed revision in OAC 252:100-7-60.5(d)(1)(B).] Also, nothing included in this PBR for air-assisted flares which are allowed under OOOOB.

RESPONSE: With regard to air-assisted and steam-assisted flares, the Department evaluated options for establishing requirements for those types of control devices in the PBR, but ultimately determined that air-assisted and steam-assisted flares have more complicated operational requirements which would be better governed through LPE limits (where requested) in a general permit or individual facility permit. Regarding the PBR's utility as a permitting vehicle, the Department believes that the PBR should focus on less complicated control devices that are used more widely in the industry for which the PBR was developed. The Department believes that air-assisted and steam-assisted flares are better addressed through more complicated permitting vehicles than a PBR therefore, no changes to the PBR rule language were made.

The Department notes that similar questions were raised during the development of the emergency rulemaking for additions to the Oil and Natural Gas Sector PBR in April of this year. In our response to Comment 9 (from the April 2024 RTC document), we noted that

Air-assisted flares, as a control option to demonstrate compliance with LPE limits, are not allowed under the new PBR. However, an air-assisted flare may be used under the PBR to control emissions from "storage vessel affected facilities" subject to the requirements of §60.5395b or to control emissions from other units subject to NSPS, Subpart OOOOB, as long as the operation of the air-assisted flare complies with the requirements of that subpart.⁴

Summary of Comments and DEQ Responses

Summary of Comments and DEQ Responses

4. **COMMENT:** [Referencing proposed revision in OAC 252:100-7-60.5(d)(1)(B)(ii)(III).] Enclosed combustion devices are not subject to 60.18 in OOOOB; therefore, this PBR should not include compliance requirements of 60.18 for enclosed combustion devices.

RESPONSE: The Department recognizes that enclosed combustion devices are widely used to control emissions from storage vessels and that the option to include enclosed combustion devices to demonstrate compliance with LPE limits is an important option for the Oil and Natural Gas Sector PBR. Due to the more rigorous requirements established by EPA, demonstrating compliance with LPE limits using 40 CFR § 60.18 appears preferable to establishing specific stack testing requirements (or other, state-specific requirements) for these devices. No changes were made to the rule language.

Summary of Comments and DEQ Responses

5. **COMMENT:** [Referencing proposed revision in OAC 252:100-7-60.5(d)(1)(C)(i)(III).] This [the requirement to perform an initial, and semiannually thereafter, determination of the net heating value (NHV) of gases combusted] is included in EPA's Response to Petitioners as granting reconsideration and will potentially be removed for certain storage tanks and control devices. If DEQ were to codify this requirement in OAC it will remain applicable even if EPA removes requirement in future rule making.

Additionally, if you install/operate EPA certified control devices, only initial NHV sampling is required for now (not semi-annual). As currently written and notwithstanding [Petition] for Reconsideration, this exceeds even OOOOb applicability requirements.

RESPONSE: Additional language has been added to OAC 252:100-7-60.5(d)(1)(C)(i)(III) that would remove this requirement if EPA removes, waives, or otherwise explicitly renders this requirement unnecessary.

Summary of Comments and DEQ Responses

6. **COMMENT:** [Referencing proposed revision in OAC 252:100-7-60.5(d)(1)(C)(i)(V).] This [the requirement for the owner or operator of a facility that uses an enclosed combustion device to perform an initial, and semi-annually thereafter, demonstration that the actual heat content of the gases combusted are within the design value established by the manufacturer or within the range tested during a performance test] is duplicative of NHV above (III) and not even required by OOOOB. OOOOB does have requirements to maintain NHV of gas sent to control devices above a certain Btu/scf value depending on type of control device, but even applicable OOOOB control devices do not have to perform what is stated in this condition.

Additionally, first part says perform initial and semi-annually...performance tests, but last sentence says shall be determined by a generally accepted model or calculation methodology. This is confusing? Perform tests annually and semi-annually or use model? Recommendation would be to delete as it's not even required in OOOOB.

RESPONSE: For an enclosed combustion device, the determination of the net heating value of the gases (required in OAC 252:100-7-60.5(d)(1)(C)(i)(III)) would be compared with the design values established by the manufacturer (this comparison is required in OAC 252:100-7-60.5(d)(1)(C)(i)(V), the proposed revision in question). If the manufacturer does not guarantee a combustion destruction efficiency (and, as a result, there are no design values established for operating the enclosed combustion device in the manner specified by the manufacturer), the operator would be required to perform a stack test to verify that

Summary of Comments and DEQ Responses

DEQ Response to Comment 6 (continued from the previous slide):

the control device is able to meet the required control efficiency. A semi-annual demonstration that the NHV falls within the range established during the performance test would satisfy the requirements of OAC 252:100-7-60.5(d)(1)(C)(i)(V).

Additional language has been added to OAC 252:100-7-60.5(d)(1)(C)(i)(V) to clarify that this requirement applies to the determination of the net heating value (NHV) to show that the NHV falls within the range specified by the manufacturer (or within the range established during a performance test) that is required initially and semi-annually thereafter. There is no requirement to conduct a performance test if the manufacturer guarantees the combustion destruction efficiency. If the manufacturer does *not* guarantee the combustion destruction efficiency, an initial performance test is required, but there is no requirement to conduct additional performance tests on a semi-annual schedule. Only the determination of NHV is required semi-annually.

Summary of Comments and DEQ Responses

7. **COMMENT:** [Referencing proposed revision in OAC 252:100-7-60.5(d)(1)(D).] Is this guidance [the requirement to report exceedances of the LPE limits in accordance with DEQ guidance] the same as Subchapter 9 EE [excess emissions] reporting procedures? I've never seen "guidance" codified in OAC as that brings up a lot of issues. What guidance and when was referenced guidance issued? Guidance document as it was written when this condition was codified? What if this referenced guidance document changes in future? Is it still applicable then? How do we demonstrate compliance with "DEQ guidance"? Regardless, need specific citation for clarity and in order to demonstrate compliance.

RESPONSE: Yes, OAC 252:100-9 establishes requirements for reporting excess emissions. Additional guidance may be issued as needed to ensure the enforceability of the LPE limits. This guidance is not "codified" but would be used to clarify existing requirements in the rules. This is not unique to this rule proposal. See for example the AQD guidance on flash emissions calculations referenced in the existing Oil and Natural Gas Sector PBR rules (at OAC 252:100-7-60.5(c)(1)) and the reference to EPA guidance on "Control of Volatile Organic Emissions from Solvent Metal Cleaning" in OAC 252:100-39-42.

8. **COMMENT:** [Referencing proposed revision in OAC 252:100-7-60.5(d)(1)(E)(iv).] Can we avoid having to do a monthly EI calculation by just maintaining compliance with the 12-month rolling throughput similarly to GP-OGF?

RESPONSE: No, this will not be acceptable as a method of demonstrating compliance with the LPE limits on storage vessels under the Oil and Natural Gas Sector PBR. In addition, the Department is in the process of removing this as a compliance option for the Oil and Gas General Permit. EPA has been explicit in stating that emissions calculations are required to demonstrate compliance with LPE limits. The Department believes that there are number of methods for simplifying this demonstration in a manner that would be acceptable, but exclusive reliance on a throughput limit will not work in this context. No changes have been made to the proposed rule language.

The Department notes that similar questions were raised during the development of the emergency rulemaking for additions to the Oil and Natural Gas Sector PBR in April of this year. In our response to Comment 12 (from the April 2024 RTC document), we noted that

The EPA rule establishes certain minimum requirements to demonstrate continuous compliance with the LPE limits. Due to the generic nature of the PBR, establishing a quantitative production limit as the *exclusive* method of demonstrating continuous compliance and creating such a limit in advance of construction would be problematic. Therefore, DEQ believes that an individual facility permit is a more appropriate vehicle for establishing such a limit, due to the complicated, facility-specific conditions that allow a throughput limit (on its own) to demonstrate compliance with an emission limit. Due to the more generic nature of a PBR, a cap on emissions (with compliance demonstrated through monthly and 12-month total calculations of emissions to show compliance with the cap) is required when demonstrating compliance with a tons per year emission limit, per long-standing EPA guidance. To demonstrate continuous compliance with the cap, monthly throughput quantities need to be recorded *and* emissions (both monthly and 12-month rolling totals) need to be calculated. This is the same policy currently used for the Oil & Gas General Permit. If necessary, DEQ will issue guidance to update, clarify, or modify the policies described in this Response to Comments document. No revision to the rule proposal has been made based on the requested change.

Summary of Comments and DEQ Responses

Summary of Comments and DEQ Responses

9. **COMMENT:** [Referencing proposed revision in OAC 252:100-7-60.5(d)(1)(E)(vii).] This [the requirement to maintain records including equipment specifications, manuals, and/or maintenance records, as appropriate] needs to be removed. What does this have to do with LPE? Also, not required by OOOOB.

RESPONSE: Where an owner or operator relies on manufacturer's guarantees in lieu of a stack test (performance test) or other procedure, equipment specifications, manuals, and/or maintenance records (as appropriate) will be required. The records required would be established by the manufacturer to ensure compliance with the manufacturer's performance warranty. If the owner or operator performs a stack test to demonstrate the control efficiency of an enclosed combustion device, retention of those records would be sufficient. These records can be maintained in an electronic format. No changes have been made to the proposed rule language.

Summary of Comments and DEQ Responses

10. **COMMENT:** [Referencing language in OAC 252:100-7-60.5(d)(1)(C)] [C]can we change this paragraph to read "The emissions reduction associated with the options(s) selected under (B) shall only be included in emissions calculations to shown in (1) above when meeting the requirements listed in 60.5417b for control devices."

RESPONSE: The Department thanks the commenter for providing feedback on the proposed rule language. In response to the concerns raised, the Department notes that the requirements in 40 CFR 60.5417b are the continuous monitoring requirements for control devices established in NSPS OOOOb. The requirements in OAC 252:100-7-60.5(d)(1)(C) represent both initial and periodic and/or continuous monitoring requirements used to demonstrate compliance with the Legally and Practicably Enforceable (LPE) limits on storage vessel emissions requested under the PBR to *exempt* the storage vessels from being classified as "storage vessel affected facilities" under NSPS OOOOb. As was discussed in our response to Comment 2 above. EPA established more rigorous requirements for LPEs than were previously required to exempt storage vessels from the applicable requirements of NSPS OOOO and OOOOa. In § 60.5365b(e)(2)(i)(D) of NSPS OOOOb, EPA established requirements that LPE limits include "[o]ngoing monitoring of the parametric limits in (e)(2)(i)(C) of this section that demonstrates continuous compliance with the production and/or operational limit(s) in (e)(2)(i)(A) of this section." In effect, whether the owner or operator accepts LPE limits on storage vessels or whether the units are subject to control requirements under NSPS OOOOb, there is a requirement for a demonstration of initial and continuous compliance with the parameters used to ensure that emissions are either below the limits of the LPEs or to ensure compliance with NSPS OOOOb.

Summary of Comments and DEQ Responses

11. COMMENT: [Referencing language in OAC 252:100-7-60.5(d)(1)(C)] Remove the paragraphs for (c)(i) and (ii) with the associated change to (c).

RESPONSE: The requirements in OAC 252:100-7-60.5(d)(1)(C)(i) are used to ensure that flares and enclosed combustors demonstrate initial and periodic and/or continuous compliance with the LPE limits. The requirements in (C)(ii) are used to ensure that vapor recovery units (VRUs) demonstrate initial and periodic and/or continuous compliance with the LPE limits. Without these requirements the limits on emissions from storage vessels would not be considered by EPA to be legally and practicably enforceable.

Summary of Comments and DEQ Responses

12. COMMENT: I am concerned that if there are changes to this section in OOOOB that we would end up having different requirements and would like to keep our requirements as synergized with the NSPS as much as possible.

RESPONSE: The Department agrees that it is possible that EPA may make changes to OOOOB that would justify changes to the rules we have proposed to establish LPE limits under the Oil and Natural Gas Sector PBR. Depending on the specific changes made by EPA, the Department may suggest future changes to the rules which could be brought before the Air Quality Advisory Council in the future. In the interim, depending on the specific changes made, the Department has the authority to use enforcement discretion to wave some requirements and to issue guidance regarding changes in policies.

Summary of Comments and DEQ Responses

13. COMMENT: The requirement for a 6 min minimum doesn't meet the requirement for M22 inspections. There is no mention of the use of certified flares as not requiring initial testing. Testing of control devices twice a year is extremely unnecessary if following the monitoring requirements for the control device in 60.5417b and will add a heavy cost burden that would be unnecessary and in addition to what is required in OOOOB. Calculations during short downtimes for maintenance will create an excessive amount of time and resources and will provide the same information that the state would receive in an annual emissions inventory, therefore would also be duplicative. As you can see this whole section is problematic and would best be removed with the change to (c) indicating that you must follow the control device requirements under OOOOB.

RESPONSE: With regard to EPA Reference Method 22, the Department notes that Method 22 provides for the establishment of an observation period of sufficient length to meet the requirement for determining compliance with the emission standard in question. It is the Department's position that, for the purposes of establishing initial compliance with the LPE limits on storage vessels, a six-minute minimum is sufficient. With regard to the use of certified flares, the Department acknowledges that the language in OAC 252:100-7-60.5(d)(1)(C)(i)(III) and (V) appears confusing regarding the requirement to demonstrate initially and semi-annually thereafter that the net heating value (NHV) of the gases combusted is within the manufacturer's specifications or within the range demonstrated during a performance test if the control device was not tested and certified by the manufacturer to provide the combustion destruction efficiency required. The rule language has been amended to provide additional clarity.

Summary of Comments and DEQ Responses

DEQ Response to Comment 13 (continued from the previous slide):

With regard to equipment certified by the manufacturer to achieve the required combustion destruction efficiency, the Department does not require a performance test of that equipment, but only records required to demonstrate that the unit has received the manufacturer's guarantee and that the unit has been maintained and operated as required by the manufacturer.

If the owner or operator elects to use an enclosed combustion device that has not been guaranteed by the manufacturer to provide a sufficient combustion destruction efficiency, the owner or operator would be required to conduct an initial performance test. The semi-annual demonstration (thereafter) that the NHV of the gases combusted falls within the range established during the performance test would be sufficient. Additional performance tests (stack tests) would not be required.

With regard to recording downtime for maintenance (or other reasons), the Department notes that this is a requirement for demonstrating compliance with the LPE limits.

Please see additional discussion in the responses to Comments 2, 3a, 5, 6, and 10 (above) for additional discussion related to issues raised in this Comment.

Chapter 100, Subchapters 5, 7, and 8

That concludes my presentation on our proposed changes to Chapter 100, Subchapters 5, 7, and 8.

Staff requests that the AQAC recommend the proposed rule revisions to Subchapters 5, 7, and 8 as presented today to the EQB for adoption.

Thank you!

Chapter 100, Subchapters 5, 7, and 8

Questions and Discussion

Additional slides added for possible discussion.

Permit-Limited Cap on Emissions

An important issue: **Demonstration of Initial Compliance**

Question: Does the acceptance of a cap short-circuit the requirement to demonstrate initial compliance during the first 30 days that the tank battery receives liquids?

DEQ's Answer: Yes. It is the DEQ's interpretation that a cap on emissions (accepted in advance of operation) that is established in a federally enforceable New Source Review (NSR) permit (a DEQ-issued construction permit) is sufficient to limit potential to emit (PTE) so that a tank battery will not meet the definition of "storage vessel affected facility" under NSPS Subpart OOOOb.

EPA's Informal Verbal Feedback

An important issue: **Demonstration of Initial Compliance**

EPA's Answer: The EPA rule writers intended that the owner/operator demonstrate initial compliance using the “maximum average daily throughput” during the first 30 days of production.

After the initial compliance demonstration, it is acceptable to demonstrate continuous compliance with the LPE limits each calendar month, recording actual monthly throughput and calculating monthly and 12-month rolling total emissions of VOCs and methane.