# 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 July 24, 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 0000b
- Emergency changes to the Oil and Gas Permit by Rule (PBR)
  - Approved by the AQAC and EQB
  - Awaiting the Governor's signature (deadline July 31)
- ❖ Introduction to permanent rule language (to be formally presented to the Council during the October meeting)
- Next steps

### NSPS, Subpart OOOOb



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 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

H<sub>2</sub>S 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<sub>X</sub> nitrogen oxides

NSPS new source performance standards NTTAA National Technology Transfer and

Advancement Act O<sub>2</sub> oxygen

OAQPS Office of Air Quality Planning and Standards OCI ontical ass imagina

**\$EPA** 

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

to or Would Be Reduce Emissions FEPA Rules ed as proposed)	2012 NSPS for VOCs (0000)	2016 NSPS for Methane & VOCs (OOOOa)	2023 Final NSPS for Methane & VOCs (OOOOb)	2023 Final Emissions Guidelines for Methane (0000c)
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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 SO<sub>2</sub> emission limits
- Affected facilities include:
  - o 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.

# **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:

<u>Subchapter 5</u>: emissions inventories and fees

<u>Subchapter 7</u>: minor source permitting rules

Subchapter 8: Title V operating permits and major source construction

permits

July 24, 2024

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### **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: <a href="https://www.deq.ok.gov/wp-content/uploads/air-division/AQAC\_2024\_JUL\_SC\_5\_7\_8\_RUL\_PRESENTED.pdf">https://www.deq.ok.gov/wp-content/uploads/air-division/AQAC\_2024\_JUL\_SC\_5\_7\_8\_RUL\_PRESENTED.pdf</a>

# **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 <u>air pollutant</u> (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.

For today's presentation, I will be giving a high-level overview of the proposed amendments to our rules. A more detailed presentation should be provided at the October AQAC meeting.

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

#### 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 (excluding GHGs as individual pollutants and as an aggregate) greater than 5 tons per year of any regulated air pollutant, 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 of a three-year cycle or a six year-cycle.

#### Big picture:

We are not going to inventory GHGs.

We are not feeing 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: <a href="https://www.deq.ok.gov/wp-content/uploads/air-division/AQAC\_2024\_JUL\_SC\_5\_7\_8\_RUL\_PRESENTED.pdf">https://www.deq.ok.gov/wp-content/uploads/air-division/AQAC\_2024\_JUL\_SC\_5\_7\_8\_RUL\_PRESENTED.pdf</a>

# **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 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).

Again, please note that I will be giving a high-level overview of the proposed amendments to our rules. A more detailed presentation should be provided at the October AQAC meeting.

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 sources 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 rulemaking 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.

- (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 gasses combusted using the equation in 40 CFR § 60.18(f)(3), GPA Method 2261, or other approved method.
    - (IV) for a flare, perform an initial, and semi-annually thereafter, determination of the exit velocity of the gasses 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 established by the manufacturer or operator during a 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).
  - (ii) If using a VRU, whenever the closed vent system and/or VRU experiences outages and/or downtime, maintain calculations of associated emissions for the purpose of determining compliance with the limits in paragraph (1).

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

- (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.

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

(2) [RESERVED]

- (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 252:100-7-66.5) the following exceptions to otherwise applicable state requirements shall govern the equipment and operations covered by the P2R:
  - (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 elegistions" from a given facility as defined in 252:100-5-1.1.
    - (B) The emissions inventory regairements 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.
    - (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 252:100-8-21 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: <a href="https://www.deq.ok.gov/wp-content/uploads/air-division/AQAC\_2024\_JUL\_SC\_5\_7\_8\_RUL\_PRESENTED.pdf">https://www.deq.ok.gov/wp-content/uploads/air-division/AQAC\_2024\_JUL\_SC\_5\_7\_8\_RUL\_PRESENTED.pdf</a>

# **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 CO<sub>2</sub> equivalent (CO<sub>2</sub>e)
- 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 CO<sub>2</sub>e.

# **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

Once again, please note that I will be giving a high-level overview of the proposed amendments to our rules. A more detailed presentation should be provided at the October AQAC meeting.

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 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.
    - (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.

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.

**Note**: When I present the proposed amendments to this section in October, I expect to include Brooks Kirlin's proposed changes to this section as well.

#### 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 25050 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;

- (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.
- (B) A major source that is major for VOC or NO<sub>X</sub> 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.

Updating the definition to bring it in line with the EPA update in 40 CFR Part 51.

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. "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 CO<sub>2</sub> equivalent emissions (CO<sub>2</sub>e) 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 CO<sub>2</sub>e.
- (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 CO<sub>2</sub>e, and shall be calculated assuming the pollutant GHG is a regulated NSR pollutant, and "significant" is defined as 75,000 TPY CO<sub>2</sub>e 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 CO<sub>2</sub>e 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 CO<sub>2</sub>e 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 CO<sub>2</sub>e.

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 CO<sub>2</sub>e.

#### 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 no written comments on the proposed amendments.

We intend to publish a Notice of Proposed Permanent Rulemaking with an updated set of proposed amendments to Subchapters 5, 7, and 8 in advance of the October AQAC meeting.

We look forward to reviewing comments on the more complete set of proposed amendments.

### 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 defer action on the proposed rule revisions to Subchapters 5, 7, and 8.

Thank you!

# Chapter 100, Subchapters 5, 7, and 8

**Questions and Discussion** 

Additional slides added for possible discussion.

# Legally and Practicably Enforceable (LPE) Limits

### Steps in the process:

- Submit an application for an authorization to construct under the O&NG PBR which establishes LPE limits (in advance) based on an estimate of throughput, stream composition, operating parameters, and the control scenario.
- 2. Demonstrate initial compliance.
- 3. Demonstrate continuous compliance.
- 4. Recordkeeping.
- 5. Reassess on modification or reconstruction.

# **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.