AIR QUALITY EFFECTS ANALYSIS
FOR
AIR POLLUTION CONTROL
GENERAL PERMIT FOR OIL & GAS PRODUCTION FACILITIES
(GP-OG v1.0)

Introduction and Background:

The upstream oil and gas industry in North Dakota has experienced significant and continued growth resulting from the development of various Williston Basin formations (e.g., Bakken and Three Forks). Development of these formations is largely contributed to advanced oil and gas extraction technologies, such as horizontal drilling and hydraulic fracturing. Implementation of these new extraction techniques has led to many oil and gas production facilities increasing in size and complexity when compared to conventional oil and gas development. The increased size and complexity of operations has the potential to lead to more significant environmental impacts (e.g., air emissions). This culminated in many oil and gas operators expressing interest in obtaining an Air Pollution Control permit from the North Dakota Department of Environmental Quality – Air Quality Division (Department).

The Department collaborated with the North Dakota Petroleum Council's Air Quality Working Group, which consists of representatives from many of the oil and gas operators in North Dakota, to better understand the industry's position with regards to obtaining an Air Pollution Control permit.

Upon conclusion that an Air Pollution Control permit would benefit the Department, the oil and gas industry, and the public, the Department began developing a general permit. The Department determined that issuance of a general permit through North Dakota Administrative Code (NDAC) Subdivision 33.1-15-14-02.1.c was appropriate. Pursuant to Chapter 23.1-06 of the North Dakota Century Code (NDCC), the Air Pollution Control Rules of the State of North Dakota, Article 33.1-15 of the NDAC, and in reliance on information provided in the applicant's oil and gas registration form, the Department is authorized to grant the applicant a General Permit for the construction and operation of source unit(s) (as described in Table 1 of GP-OG v1.0) at the designated GPS Coordinates of Facility. GP-OG v1.0 not only provides oil and gas production facilities with consistent regulatory requirements, but it also allows the Department to more easily manage North Dakota's air resources and provides additional transparency to the public.

Applicants:

The owner/operator of an oil and gas production facility in non-Indian Country[1] becomes eligible for coverage under General Permit GP-OG v1.0 through submission of a satisfactory oil and gas registration form required per NDAC Subsection 33.1-15-20-02.1 to the Department using CERIS-ND[2], which includes appropriate fee(s).

For the purposes of this Air Quality Effects Analysis and GP-OG v1.0, an oil and gas production facility means all equipment, wells, flow lines, separators, treaters, tanks, flares, gathering lines, and auxiliary non transportation-related equipment used in the exploration, development, or subsequent production or handling of oil and gas from an oil or gas well or wells which are located on one or more contiguous or adjacent surface properties, and are under the control of the same person (or persons under common control).[3]

Facility Locations:

GPS Coordinates of the facility as designated on the well registration form.

[1] 40 CFR Part 49, (https://www.ecfr.gov/current/title-40/chapter-I/subchapter-B/part-49#49.2)
[2] CERIS-ND is accessible at: https://www.deq.nd.gov/ceris-ND/
[3] NDAC Subdivision 33.1-15-20-01.2.n

Rules Analysis
Potentially Applicable Rules and Expected Compliance Status

A. NDAC 33.1-15-01 – General Provisions:

Multiple topics are included in the General Provisions chapter: entry onto premises - authority, variances, circumvention, severability, land use plans and zoning regulations (only to provide air quality information), measurement of air contaminants, shutdown and malfunction of an installation - requirements for notification, time schedule for compliance, prohibition of air pollution, confidentiality of records, enforcement, and compliance certifications.

Applicability and Expected Compliance

Based on the review of the information provided, the facility will comply with all applicable sections of this rule.

B. NDAC 33.1-15-02 – Ambient Air Quality Standards:

The facility must comply with the North Dakota and Federal Ambient Air Quality Standards (AAQS). In addition to these standards, compliance with the "Criteria Pollutant Modeling Requirements for a Permit to Construct" guidelines[4] is required.

Applicability and Expected Compliance

The facility is not subject to PSD nor does the facility's PTE trigger the modeling thresholds listed in the "Criteria Pollutant Modeling Requirements for a Permit to Construct", therefore, preconstruction modeling for this facility was not required. Based on the facility PTE from normal operations, compliance with the ambient air quality standards is expected to be maintained.

C. NDAC 33.1-15-03 – Restriction of Emission of Visible Air Contaminants:

This chapter requires all non-flare sources from new facilities to comply with an opacity limit of 20% except for one six-minute period per hour when 40% opacity is permissible. This chapter also requires facility flares to comply with an opacity limit of 20% except for one six-minute period per hour when 60% opacity is permissible. Lastly, this chapter restricts the opacity of fugitive emissions transported off property to 40% except for one six-minute period per hour when 60% opacity is permissible. This chapter also contains exceptions under certain circumstances and provides the method of measurement to determine compliance with the referenced limits.

Applicability and Expected Compliance

All sources permitted under the General Permit must comply with the opacity requirements of NDAC Chapter 33.1-15-03 and 40 CFR 60 Subpart A, as applicable.

[4] See October 6, 2014, Criteria Pollutant Modeling Requirements for a Permit to Construct. Available at: https://www.deq.nd.gov/publications/AQ/policy/Modeling/Criteria_Modeling_Memo.pdf

- Non-flare sources at the facility must comply with an opacity limit of 20%, except during one six-minute period per hour when 40% opacity is permissible (NDAC 33.1-15-03-02).
- Fugitive emissions from the facility must not exceed an opacity limit of 40% for more than one six-minute period per hour (NDAC 33.1-15-03-03).

All flares and other combustion devices[5] shall meet the requirements set forth in Condition 2.D of GP-OG v1.0. Notably:

- Flares and other combustion devices subject to the general provisions of 40 CFR 60 Subpart A and 40 CFR Part 60 Subpart OOOO, OOOOa, or OOOOb must operate with no visible emissions, except for periods totaling no more than 1 minute during any 15 minute period.[6]
- Flares and other combustion devices subject to the general provisions of 40 CFR 63 Subpart A must operate with no visible emissions, except for periods totaling no more than 5 minutes within any 2 consecutive hours.[7]
- For all flares subject to 40 CFR Part 60 or Part 63, a visible emissions test using section 11 of EPA Method 22, Appendix A-7 to Part 60, Title 40, must be conducted.
- Flares and other combustion devices not subject to 40 CFR Part 60 shall be observed for proper operation[8].
- All flares and other combustion devices shall be returned to compliance operations as soon as possible and the corrective actions shall be documented.

D. NDAC 33.1-15-04 – Open Burning:

No person may dispose of refuse and other combustible material by open burning, or cause, allow, or permit open burning of refuse and other combustible material, except as provided for in Section 33.1-15-04-02 or 33.1-15-10-02, and no person may conduct, cause, or permit the conduct of a salvage operation by open burning.

Applicability and Expected Compliance

No open burning operations at the facility are permitted unless consulted and approved by the Department.

E. NDAC 33.1-15-05 – Emissions of Particulates Matter Restricted:

This chapter establishes particulate matter emission limits and restrictions for industrial process equipment and fuel burning equipment used for indirect heating.

[5] Combustion devices include units such as: high pressure flare (HPFL), low pressure flare (LPFL), enclosed combustion device (ECD), and other similar units.
[6] 40 CFR 60.5412(d)(1)(iii), 40 CFR 60.5412a(d)(1)(iii), 40 CFR 60.5412b(a)(1)(ix), and 40 CFR 60.5412b(a)(3)(vii)
[7] 40 CFR 63.11(b)(4)
[8] Such as no smoke emissions being observed. Smoke emissions means a pollutant generated by combustion in a flare and occurring immediately downstream of the flame. Smoke occurring within the flame, but not downstream of the flame, is not considered a smoke emission or improper operations.

Applicability and Expected Compliance

Since the fuel burning equipment used for indirect heating is fired on gaseous fuels, the particulate matter limits in this chapter do not apply. It should be noted that combustion of gaseous fuels in the units is expected to result in extremely low particulate matter emissions that are well below the allowable levels established by this chapter.

F. NDAC 33.1-15-06 – Emissions of Sulfur Compounds Restricted:

This chapter applies to any installation in which fuel is burned and the SO_2 emissions are substantially due to the sulfur content of the fuel; and in which the fuel is burned primarily to produce heat. This chapter is not applicable to installations which are subject to an SO_2 emission limit (3.0 lb SO_2/MMBtu) under Chapter 33.1-15-12, Standards for Performance for New Stationary Sources, or installations which burn pipeline quality natural gas.

Applicability and Expected Compliance

All combustion equipment at the facility that is not subject to a SO_2 emission limit under a new source performance standard (NSPS) will burn gaseous fuels containing no more than 500 ppm H_2S[9], thereby ensuring compliance with the sulfur restrictions in this chapter as part of its physical and operational design. In addition, the sulfur restrictions will help ensure compliance with the NAAQS and PSD increment standards (NDAC 33.1-15-06-02.2).

G. NDAC 33.1-15-07 – Control of Organic Compounds Emissions:

This chapter establishes requirements for the construction of organic compound facilities and the disposal of organic compounds gas and vapor generated as waste resulting from storage, refining, or processing operations at the facility.

Applicability and Expected Compliance

The hydrocarbon liquid storage vessels (EU HCTK) and the produced water vessels (EU PWTK) which are not pressure tanks[10] shall be equipped and operated with a submerged fill pipe or fitted with a vapor recovery system[11] in accordance with NDAC 33.1-15-07-01.3.

Hydrocarbon liquid loadout (EU HCL) stations handling over 20,000 gallons per day (476 barrels per day) shall be equipped and operated with a submerged filling arm or another vapor emission control system in accordance with NDAC 33.1-15-07-01.4.

All rotating pumps and compressors handling VOCs must be equipped and operated with properly maintained seals designed for their specific product service and operating conditions, in accordance with NDAC 33.1-15-07-01.5.

[9] 0.08 lb SO_2/MMBtu, based on a conservative higher heating value of 1,020 Btu/scf.
[10] As defined in 40 CFR Part 60, Subpart K
[11] As defined in 40 CFR Part 60, Subpart K

Facility flares and other combustion devices must comply with the requirements listed in Condition 6.D of GP-OG v1.

H. NDAC 33.1-15-08 – Control of Air Pollution from Vehicles and Other Internal Combustion Engines:

This chapter restricts the operation of internal combustion engines which emit from any source unreasonable and excessive smoke, obnoxious or noxious gas, fumes or vapor. This chapter also prohibits the removal or disabling of motor vehicle pollution control devices.

Applicability and Expected Compliance

The engines (EUs RICE) are subject to opacity requirements under NDAC 33.1-15-03-02 and may also be subject to the requirements of NSPS IIII or NSPS JJJJ. Based on the Department's experience with normal engine operations, the engines are not expected to emit any unreasonable and excessive smoke, obnoxious or noxious gases, fumes, or vapor.

I. NDAC 33.1-15-09 – [repealed]

J. NDAC 33.1-15-10 – Control of Pesticides:

This chapter provides restrictions on pesticide use and restrictions on the disposal of surplus pesticides and empty pesticide containers.

Applicability and Expected Compliance

The facility is subject to this chapter and is expected to comply with all applicable requirements should pesticides be used. Should the need for pesticide application arise, the facility will utilize contracted services for this purpose.

K. NDAC 33.1-15-11 – Prevention of Air Pollution Emergency Episodes:

When an air pollution emergency episode is declared by the Department, the facility shall comply with the requirements in Chapter 33.1-15-11 of the North Dakota Air Pollution Control (NDAPC) rules.

L. NDAC 33.1-15-12 – Standards of Performance for New Stationary Sources [40 Code of Federal Regulations Part 60 (40 CFR Part 60)]:

This chapter adopts most of the Standards of Performance for New Stationary Sources (NSPS) under 40 CFR Part 60. The facility is subject to the following subparts under 40 CFR Part 60 which have been adopted by North Dakota as of July 1, 2019:

Subpart A – General Provisions

Subpart A contains general requirements for plan reviews, notification, recordkeeping, performance tests, reporting, monitoring and general control device requirements.

Applicability and Expected Compliance

The facility will comply with the general provisions of Subpart A through submission of timely notifications, performance testing, reporting, and following the general control device and work practice requirements under Subpart A.

Subpart IIII – Standards of Performance for Stationary Compressor Ignition Internal Combustion Engines

Subpart IIII applies to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines. It covers provisions and requirements related to emission standards, certification, labeling and recordkeeping, performance tests, monitoring requirements, and compliance with standards and maintenance requirements. The subpart also includes definitions and general provisions that apply to the regulations.

Applicability and Expected Compliance

Diesel-fired engines (EU RICE) are potentially subject to NSPS IIII, based on the date of manufacture. Engines constructed after July 1, 2006, shall follow the applicable requirements under NSPS IIII.

Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Subpart JJJJ establishes emissions standards (NO_X, CO, VOC) and compliance schedules for all new, modified and reconstructed stationary spark ignition (SI) internal combustion engines (ICE) and equipment manufactured on or after July 1, 2007, regardless of size. The subpart applies to manufactures, owners, and operators of such engines and equipment. SI ICE are categorized in this subpart by usage, size and fuel type.

Applicability and Expected Compliance

Gas-fired engines (EU RICE) are potentially subject to the requirements of NSPS JJJJ, based on the date of manufacture.

NSPS JJJJ requires each engine to comply with the emissions standards set forth in Table 1[12] to Subpart JJJJ of Part 60, Title 40.

Affected facilities must demonstrate compliance with the above limits by conducting emissions testing every 8,760 hours of operations or every three years, whichever comes first.

The facility is also expected to comply with NSPS JJJJ requirements by properly maintaining and operating an air-to-fuel ratio controller and keeping a maintenance plan and records of conducted maintenance and, to the extent practicable, will maintain and

[12] Table available at: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-JJJJ#Table-1-to-Subpart-JJJJ-of-Part-60

operate the engines in a manner consistent with good air pollution control for minimizing emissions.

Subpart OOOO – Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015.

Subpart OOOO outlines the standards of performance for crude oil and natural gas facilities concerning emissions of volatile organic compounds (VOC) and sulfur dioxide (SO_2). These standards apply to facilities for which construction, modification, or reconstruction commenced after August 23, 2011, and on or before September 18, 2015. The subpart includes provisions for various affected facilities, including, but not limited to, gas wells, compressors, pneumatic controllers, storage vessels, and natural gas processing plants.

Applicability and Expected Compliance

Hydraulically fractured wells (EU WELL), pneumatic controllers (EU GDPC), and storage vessels (EUs HCTK & PWTK) are affected facilities under this subpart (40 CFR 60.5365). Sweetening units are also affected facilities under Subpart OOOO; however these units are not covered under GP-OG v1.0. The affected emission units are expected to comply with this subpart by following subsequent measures.

Hydraulically Fractured Wells (EU WELL)

- **Standards**:
  - Post December 6, 2022, a well completion operation with hydraulic fracturing or refracturing is subject to Subpart OOOOb. The requirements specified in §60.5375(a)(1) through (4) no longer apply.
  - Gas well affected facilities must meet the initial and continuous compliance standards as required by §§60.5410(a) and 60.5415(a).
- **Monitoring**:
  - No monitoring requirements apply to well affected facilities under Subpart OOOO.
- **Recordkeeping and Reporting**:
  - Maintain daily logs of completion operations, containing the records specified in §60.5420(c)(1)(iii).
  - Submit annual reports required by §60.5420(b)(1) and (2).

Note: An affected facility must continue to comply with the requirements of this subpart until it begins complying with a more stringent requirement, or modifies or reconstructs after December 6, 2022, and thus becomes subject to Subpart OOOOb.

Pneumatic Controllers (EU GDPC)

- **Standards**:
  - As required by §60.5390(c)(1), pneumatic controller affected facilities, that do not have a functional need requirement, must have a bleed rate less than or equal to 6 standard cubic feet per hour.

- As required by §60.5390(c)(2), pneumatic controller affected facilities must be tagged with the date of installation, reconstruction or modification. The tag must also include identification that allows traceability to the records for that pneumatic controller, as required in §60.5420(c)(4).
- Pneumatic controller affected facilities must meet the initial and continuous compliance standards as required by §§60.5410(d) and 60.5415(d).

- **Monitoring**:
  - No monitoring requirements apply to pneumatic controller affected facilities under Subpart OOOO.
- **Recordkeeping and Reporting**:
  - Pneumatic controller affected facilities must comply with the notification, recordkeeping, and reporting requirements specified in §60.5420.

Storage Vessels (EUs HCTK & PWTK)

- **Standards**:
  - The potential for VOC emissions must be calculated for storage vessel affected facilities using a generally accepted model or calculation method, as required by §60.5365(e).
  - Unless uncontrolled actual VOC emissions from storage vessel affected facilities are maintained at less than 4 tpy [§60.5395(d)(2)], VOC emissions must be reduced by 95.0 percent, as required by §60.5395(d)(1).
  - VOC emissions controls are not required if uncontrolled actual VOC emissions are maintained at less than 4 tpy [§60.5395(d)(2)].
  - Storage vessel affected facilities using a control device to reduce VOC emissions must be equipped with a cover, closed vent system, and control device that meet the requirements of §§60.5411(b), 60.5411(c), and 60.5412(c) and (d).
  - Storage vessel affected facilities using a floating roof to reduce VOC emissions must meet the requirements of §60.112b(a)(1) or (2).
  - Storage vessel affected facilities that are removed from service or returned to service must meet the requirements of §60.5395(f). A storage vessel is not an affected facility under this subpart for the period it is removed from service.
  - Storage vessel affected facilities must meet the initial and continuous compliance standards as required by §§60.5410(h) and (i) and 60.5415(e)(3).
  - This subpart does not apply to storage vessels subject to and controlled in accordance with the requirements for storage vessels in 40 CFR 60, Subpart Kb and 40 CFR 63, Subparts G, CC, HH, or WW.
- **Monitoring**:
  - Storage vessel affected facilities equipped with a cover, closed vent system, and control device must meet the monitoring and inspection requirements of §§60.5411 and 60.5412.

  - Storage vessel affected facilities using a floating roof to reduce VOC emissions must meet the relevant monitoring and inspection requirements of 40 CFR 60, Subpart Kb.
- **Recordkeeping and Reporting**:
  - Storage vessel affected facilities must comply with the notification, recordkeeping, and reporting requirements specified in §60.5420.
  - Storage vessel affected facilities using a floating roof to reduce VOC emissions must meet the relevant recordkeeping and reporting requirements of 40 CFR 60, Subpart Kb.

Sweetening Units

- Sweetening unit affected facilities are not included as potential onsite emission units and are not covered under GP-OG v1.0.

Subpart OOOOa – Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After September 18, 2015, and On or Before December 6, 2022

Subpart OOOOa establishes emission standards and compliance schedules for facilities in the crude oil and natural gas sector that began construction, modification, or reconstruction after September 18, 2015, and on or before December 6, 2022. This subpart includes provisions for controlling emissions of greenhouse gases (GHG), volatile organic compounds (VOC), and sulfur dioxide (SO_2) from various affected facilities such as wells, compressors, pneumatic controllers, storage vessels, and natural gas processing plants.

Applicability and Expected Compliance

Hydraulically fractured wells (EU WELL), pneumatic controllers (EU GDPC), pneumatic pumps (EU GDPP), storage vessels (EU HCTK & PWTK), and fugitive emission components (EU FUG-LDAR) located within the crude oil and natural gas source category (40 CFR 60.5430a) are affected facilities under this subpart (40 CFR 60.5365a). Sweetening units are also affected facilities under Subpart OOOOa; however these units are not covered under GP-OG v1.0. The affected emission units are expected to comply with this subpart by following subsequent measures:

Hydraulically Fractured Wells (EU WELL)

- **Standards**:
  - Post December 6, 2022, a well completion operation with hydraulic fracturing or refracturing is subject to Subpart OOOOb. The requirements specified in §60.5375a(a)(1) through (4) no longer apply.
  - Well affected facilities must meet the initial and continuous compliance standards as required by §§60.5410a(a) and 60.5415a(a).
- **Monitoring**:
  - No monitoring requirements apply to well affected facilities under Subpart OOOOa.
- **Recordkeeping and Reporting**:

- Maintain daily logs of completion operations, containing the records specified in §60.5420a(c)(1)(iii).
- Submit annual reports required by §60.5420a(b)(1) and (2).

Note: An affected facility must continue to comply with the requirements of this subpart until it begins complying with a more stringent requirement, or modifies or reconstructs after December 6, 2022, and thus becomes subject to subpart OOOOb.

Pneumatic Controllers (EU GDPC)

- **Standards**:
  - As required by §60.5390a(c)(1), pneumatic controller affected facilities, that do not have a functional need requirement, must have a bleed rate less than or equal to 6 standard cubic feet per hour.
  - As required by §60.5390a(c)(2), pneumatic controller affected facilities must be tagged with the date of installation, reconstruction or modification. The tag must also include identification that allows traceability to the records for that pneumatic controller, as required in §60.5420a(c)(4).
  - Pneumatic controller affected facilities must meet the initial and continuous compliance standards as required by §§60.5410a(d) and 60.5415a(d).
- **Monitoring**:
  - No monitoring requirements apply to pneumatic controller affected facilities under Subpart OOOOa.
- **Recordkeeping and Reporting**:
  - Pneumatic controller affected facilities must comply with the notification, recordkeeping, and reporting requirements specified in §60.5420a.

Storage Vessels (EU HCTK & PWTK)

- **Standards**:
  - The potential for VOC emissions must be calculated for storage vessel affected facilities using a generally accepted model or calculation method, as required by §60.5365a(e).
  - VOC emissions from storage vessel affected facilities must be reduced by 95.0 percent, as required by §60.5395a(a)(2).
  - VOC emissions controls may be removed after 12 consecutive months of compliance with §60.5395a(a)(2), if uncontrolled actual VOC emissions are maintained at less than 4 tpy.
  - Storage vessel affected facilities using a control device to reduce VOC emissions must be equipped with a cover, closed vent system, and control device that meet the requirements of §§60.5411a(b), 60.5411a(c) and (d), and 60.5412a(c).

  - Storage vessel affected facilities using a floating roof to reduce VOC emissions must meet the requirements of §60.112b(a)(1) or (2).
  - Storage vessel affected facilities that are removed from service or returned to service must meet the requirements of §60.5395a(c). A storage vessel is not an affected facility under this subpart for the period it is removed from service.
  - Storage vessel affected facilities must meet the initial and continuous compliance standards as required by §§60.5410a(h) and (i) and 60.5415a(e)(3).
  - This subpart does not apply to storage vessels subject to and controlled in accordance with the requirements for storage vessels in 40 CFR 60, Subpart Kb and 40 CFR 63, Subparts G, CC, HH, or WW.
- **Monitoring**:
  - Storage vessel affected facilities equipped with a cover, closed vent system, and control device must meet the monitoring and inspection requirements of §§60.5411a and 60.5412a.
  - Storage vessel affected facilities using a floating roof to reduce VOC emissions must meet the relevant monitoring and inspection requirements of 40 CFR 60, Subpart Kb.
- **Recordkeeping and Reporting**:
  - Storage vessel affected facilities must comply with the notification, recordkeeping, and reporting requirements specified in §60.5420a.
  - Storage vessel affected facilities using a floating roof to reduce VOC emissions must meet the relevant recordkeeping and reporting requirements of 40 CFR 60, Subpart Kb.

Sweetening Units

- Sweetening unit affected facilities are not included as potential onsite emission units and are not covered under GP-OG v1.0.

Pneumatic Pumps (EU GDPP)

- **Standards**:
  - Pneumatic pump affected facilities at a well site must reduce natural gas emissions by 95.0 percent [§60.5393a(b)].
  - If a control device or route to a process is used to reduce emissions, the pneumatic pump affected facility must be connected through a closed vent system that meets the requirements of §§60.5411a(d) and (e), 60.5415a(b)(3), and 60.5416a(d).
  - Pneumatic pump affected facilities must meet the initial and continuous compliance standards as required by §§60.5410a(e) and 60.5415a(b).
- **Monitoring**:
  - No monitoring requirements apply to pneumatic pump affected facilities under Subpart OOOOa.

- **Recordkeeping and Reporting**:
    - Pneumatic pump affected facilities must meet the applicable recordkeeping and reporting requirements of §§60.5420a(c) and 60.5420a(b).

Fugitive Emission Components (EU FUG-LDAR)

- **Monitoring and Repair**:
    - As required by §60.5397a(a), all fugitive emissions components, as defined in §60.5430a, must be monitored in accordance with §60.5397a(b) through (g).
    - An emissions monitoring plan, that meets the requirements of §60.5397a(c) and (d) and covers the collection of fugitive emissions components, must be developed. [§60.5397a(b)]
    - Each identified source of fugitive emissions shall be repaired in accordance with §60.5397a(h)(1) and (2).
    - Delay of repair of a fugitive emissions component is allowed if the conditions in §60.5397a(h)(3)(i) or (ii) are met.
    - To complete a repair, the identified source of fugitive emissions must be resurveyed in accordance with §60.5397a(h)(4)(i) through (iv) to ensure that there are no fugitive emissions.
- **Recordkeeping and Reporting**:
    - Records for each monitoring survey must be maintained as specified in §60.5420a(c)(15).
    - Annual reports, that include the information specified in §60.5420a(b)(7), must be submitted for each collection of fugitive emissions components. [§60.5397a(j)]

Subpart OOOOb – Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022.

Subpart OOOOb establishes emission standards and compliance schedules for the control of the pollutant greenhouse gases (GHG). The greenhouse gas standard in this subpart is in the form of a limitation on emissions of methane from affected facilities in the crude oil and natural gas source category that commence construction, modification, or reconstruction after December 6, 2022. This subpart also establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO_2) emissions from affected facilities in the crude oil and natural gas source category that commence construction, modification, or reconstruction after December 6, 2022.

Applicability and Expected Compliance

Hydraulically fractured wells (EU WELL), process controllers (EU GDPC), pumps (EU GDPP), storage vessels (EU HCTK & PWTK), fugitive emissions components (EU FUG-LDAR), compressors at centralized tanks batteries (EU CMPR), liquids unloading (EU

HCL & EU PWL), and associated gas from oil wells, located within the crude oil and natural gas source category (40 CFR 60.5430b), are affected facilities under this subpart (40 CFR 60.5365b). Sweetening units are also affected facilities under Subpart OOOOb; however these units are not covered under GP-OG v1.0. The affected emission units are expected to comply with this subpart by following subsequent measures:

Hydraulically Fractured Wells (EU WELL)

Well Completion Operations with Hydraulic Fracturing and Refracturing:

- **Standards**:
  - For each well completion operation with hydraulic fracturing or refracturing at a well affected facility, except as provided in §60.5375b(f), (g) and (h), follow requirements specified in §60.5375b(a)(1) through (3).
  - Well affected facilities must meet the initial and continuous compliance standards as required by §§60.5410b(a) and 60.5415b(a).
- **Monitoring**:
  - No monitoring requirements apply to well affected facilities under Subpart OOOOb.
- **Recordkeeping and Reporting**:
  - Maintain daily logs of completion operations, containing the records specified in §60.5420b(c)(1)(iii).
  - Perform the required notification, reporting and recordkeeping required by §60.5420b(a)(2), (b)(1) and (2), and (c)(1).

Well Completion Operations with Hydraulic Fracturing at wildcat, delineation, or low-pressure wells:

- **Standards**:
  - For each well completion operation with hydraulic fracturing at a wildcat, delineation, or low pressure well, follow requirements specified in §60.5375b(f)(3).
  - Demonstrate initial and continuous compliance with the standards as required by §§60.5410b(a) and 60.5415b(a).
- **Monitoring**:
  - No monitoring requirements apply to well affected facilities under Subpart OOOOb.
- **Recordkeeping and Reporting**:
  - Maintain daily logs for the duration of well completion operations specified in §60.5420b(c)(1)(i) through (iii) and (vii).
  - Perform the required notification, reporting and recordkeeping required by §60.5420b(a)(2), (b)(1) and (2), and (c)(1), except if each well completion affected facility has less than 300 scf of gas per stock tank barrel of oil produced, you must comply with §60.5375b(g).

Process Controllers (EU GDPC)

- **Standards**:

- Process controller affected facilities must be designed and operated with zero methane and VOC emissions to the atmosphere.
  - If process controller emissions are routed to a process or control device, they must be routed through a closed vent system that meets the requirements of §60.5411b(a) and (c).
  - If self-contained natural gas-driven process controllers are used, they must be designed with no identifiable emissions, as demonstrated by §60.5416b(b).
- Process controller affected facilities must meet the initial and continuous compliance standards as required by §§60.5410b(f) and 60.5415b(h).

- **Monitoring**:
  - The requirements of §60.5416b(b)(1), (2), (4), and (9) must be met for each self-contained process controller.
- **Recordkeeping and Reporting**:
  - Pneumatic controller affected facilities must comply with the notification, recordkeeping, and reporting requirements specified in §60.5420b.

Storage Vessels (EU HCTK & EU PWTK)

Each storage vessel affected facility, is a tank battery that has either the potential for VOC emissions equal to or greater than 6 tons per year (tpy) or the potential for methane emissions equal to or greater than 20 tpy.

- **Standards**:
  - The potential for VOC and methane emissions must be calculated for storage vessel affected facilities using a generally accepted model or calculation method, as required by §60.5365b(e)(2).
  - VOC and methane emissions from storage vessel affected facilities must be reduced by 95.0 percent, as required by §60.5395b(a)(2).
  - VOC and methane emissions controls may be removed after 12 consecutive months of compliance with §60.5395b(a)(2), if uncontrolled actual VOC and methane emissions are maintained at less than 4 tpy and 14 tpy, respectively.
  - Storage vessel affected facilities using a control device to reduce VOC and methane emissions must be equipped with a cover, closed vent system, and control device that meet the requirements of §§60.5411b(b), 60.5411b(a) and (c), and 60.5412b.
  - Under this subpart, the use of a floating roof to reduce emissions from storage vessel affected facilities does not apply to well sites or centralized production facilities. Therefore, §60.5395b(b)(2) is not applicable.
  - Storage vessel affected facilities that are removed from service or returned to service must meet the requirements of §60.5395b(c). A storage vessel is not an affected facility under this subpart for the period it is removed from service.

  - Storage vessel affected facilities must meet the initial and continuous compliance standards as required by §§60.5410b(j) and 60.5415b(i).
  - This subpart does not apply to storage vessels subject to and controlled in accordance with the requirements for storage vessels in 40 CFR 60, Subpart Kb and 40 CFR 63, Subparts G, CC, HH, or WW.
- **Monitoring**:
  - Storage vessel affected facilities equipped with a cover, closed vent system, and control device must meet the monitoring and inspection requirements of §§60.5411b and 60.5412b.
- **Recordkeeping and Reporting**:
  - Storage vessel affected facilities must comply with the notification, recordkeeping, and reporting requirements specified in §60.5420b.

Sweetening Units

- Sweetening unit affected facilities are not included as potential onsite emission units and are not covered under GP-OG v1.0.

Pneumatic pumps (EU GDPP)

- **Standards**:
  - Pump affected facilities, located at a site with access to electrical power or at a site without access to electrical power that has three or more gas-driven diaphragm pumps, must be designed and operated with zero methane and VOC emissions.
  - Pump affected facilities, located at a site without access to electrical power and that has less than three gas-driven diaphragm pumps, must route emissions through a closed vent system to a vapor recovery unit (VRU). If a VRU is not onsite, methane and VOC emissions must be reduced by 95.0 percent [§60.5393b(b)(2) and (3)].
  - If a control device or route to a process is used to reduce emissions, the pump affected facility must be connected through a closed vent system that meets the requirements of §60.5411b(a) and (c).
  - Pump affected facilities must meet the initial and continuous compliance standards as required by §§60.5410b(g) and 60.5415b(e).
- **Monitoring**:
  - Pump affected facilities are subject to the applicable monitoring and repair requirements outlined in the Fugitive Emissions Components subsection below.
- **Recordkeeping and Reporting**:
  - Pump affected facilities must meet the applicable recordkeeping and reporting requirements of §§60.5420b(c) and 60.5420b(b).

Fugitive Emissions Components (EU FUG-LDAR)

- **Monitoring and Repairs**:
  - A fugitive emissions components affected facility is the collection of fugitive emissions components, as defined in §60.5430b, located at a well site, centralized production facility, or a compressor station.
  - As required by §60.5397b(a), all fugitive emissions components affected facilities must be monitored in accordance with §60.5397b(b) through (g).
  - A fugitive emissions monitoring plan, that meets the requirements of §60.5397b(c) and (d) and covers all fugitive emissions components affected facilities within each company-defined area, must be developed. [§60.5397b(b)]
  - Each identified source of fugitive emissions shall be repaired in accordance with §60.5397b(h)(1) and (2).
  - Delay of repair of a fugitive emissions components affected facility is allowed if the conditions in §60.5397b(h)(3)(i) or (ii) are met.
  - To complete a repair, the identified source of fugitive emissions must be resurveyed in accordance with §60.5397b(h)(4)(i) through (v) to ensure that there are no fugitive emissions.
- **Recordkeeping and Reporting**:
  - Fugitive emissions components affected facilities must meet the recordkeeping and reporting requirements of §§60.5420b(c)(14) and 60.5420b(b)(1) and (9).
- **Miscellaneous**:
  - The initial and continuous compliance standards for fugitive emissions components affected facilities (§§60.5410b(k) and 60.5415b(l)) cover the same requirements as previously outlined in this section of the AQEA.
  - Fugitive emissions components affected facilities are required to complete the well closure requirements specified in §60.5397b(l)(1) through (4).

Compressors (EU CMPR)

- **Reciprocating Compressors at Well Sites**: A reciprocating compressor located at a well site is not an affected facility under this subpart.
- **Reciprocating Compressors at Centralized Production Facilities**:
  - **Volumetric Flow Rate**: The volumetric flow rate of each cylinder of a reciprocating compressor affect facility will not exceed 2 standard cubic feet per minute (scfm). If the individual cylinders are manifolded to a single open-ended vent line, the volumetric flow rate will not exceed the sum of the individual cylinders multiplied by 2 scfm.
  - **Volumetric Flow Rate Measurement Requirements**: All reciprocating compressor affected facilities will measure the volumetric flow rate of each compressor cylinder using one of the two methods described as in §60.5385b(b) or §60.5385b(c). Alternatively, the owner/operator may

choose to comply with this requirement by following the measurement method described in §60.5385b(d).

- **Additional Volumetric Flow Rate Measurement Requirements**: For reciprocating compressor affected facilities with individual cylinders manifolded to a single open-ended vent line the following additional volumetric flow rate measurements will be conducted:
  - The first volumetric flow rate measurements will be completed on or before 8,760 hours of operation after last rod packing replacement, or on or before 8,760 hours of operation after startup, whichever date is later.
  - Subsequent volumetric flow rate measurements will be conducted on or before 8,760 hours of operation after the previous measurement demonstrating compliance.
- **Rod Packing Repair / Replacement**: If the volumetric flow rate for a cylinder or manifolded cylinders exceeds 2 scfm the rod packing will be repaired or replaced within 90 calendar days of the volumetric emissions measurement. Follow up measurements will be conducted to verify the repair / replacement within 15 days of completion. Delay of repair will be allowed if the conditions in §60.5385b(a)(3)(i) or §60.5385b(a)(3)(ii) are met.
- **Compliance Standards**: Ensure compliance with initial and continuous standards under §§60.5410b(e) and 60.5415b(g).
- **Recordkeeping and Reporting**: All reciprocating compressor affected facilities will maintain records as specified in §60.5420b(c)(5) and (8) through (13), as applicable. perform the reporting specified in §60.5420b(b)(1), (6), and (11) through (13), as applicable.

- **Centrifugal Compressors at Well Sites:** A centrifugal compressor located at a well site is not an affected facility under this subpart.
- **Centrifugal Compressors at Centralized Production Facilities**:
  - **Wet Seal Compressors**
    - **Emission Reduction Methods**: All wet seal centrifugal compressor affected facilities will reduce methane and VOC emission through one of the methods described below:
      - Reduce emissions from wet seal fluid degassing systems by 95.0 percent.
      - Equip the wet seal fluid degassing system with a control device. The affected facility will have a cover that meets the requirements of §60.5411b(b) and will be connected through a closed vent system that meets the requirements of §60.5411b(a) and (c). All control devices will meet the conditions specified in §60.5412b.
      - The emissions will be routed to a process.

- **Alternative Emission Reduction**: Self-contained wet seal centrifugal compressor affected facilities that decide not to implement control devices to reduce emissions will be required to measure volumetric flow rate as described in §60.5380b(a)(4).
- **Rod Packing Repair / Replacement**: If the volumetric flow rate for a seal is exceeded, the seal will be repaired or replaced within 90 calendar days of the volumetric emissions measurement. Follow up measurements will be conducted to verify the repair / replacement within 15 days of completion. Delay of repair will be allowed if the conditions in §60.5380b(a)(8)(i) or §60.5380b(a)(8)(ii) are met.
- **Compliance Standards**: Ensure compliance with initial and continuous standards under §§60.5410b(d) and 60.5415b(d).
- **Recordkeeping and Reporting**: All wet seal centrifugal compressor affected facilities will maintain records as specified in §60.5420b(b)(1) and (5), and (b)(11) through (13), as applicable and perform the reporting specified in §60.5420b(c)(4), and (8) through (13), as applicable.

o **Dry Seal Compressors:**

- **Volumetric Flow Rate**: The volumetric flow rate at dry seal centrifugal compressor affected facilities will not exceed 10 standard cubic feet per minute (scfm) per seal. If the individual cylinders are manifolded to a single open-ended vent line, the volumetric flow rate will not exceed the sum of the individual seals multiplied by 10 scfm.
- **Volumetric Flow Rate Measurement Requirements**: Volumetric flow rates will be measured as described in §60.5380b(a)(7)(iii).
- **Additional Volumetric Flow Rate Measurement Requirements**: Initial Volumetric flow rate measurements from the centrifugal compressor affected facilities will be conducted on or before 8,760 hours of operation after startup. Subsequent volumetric flow rate measurements will be conducted on or before 8,760 hours of operation after the previous measurement.
- **Rod Packing Repair / Replacement**: If the volumetric flow rate for a seal is exceeded, the seal will be repaired or replaced within 90 calendar days of the volumetric emissions measurement. Follow up measurements will be conducted to verify the repair / replacement within 15 days of completion. Delay of repair will be allowed if the conditions in §60.5380b(a)(8)(i) or §60.5380b(a)(8)(ii) are met.
- **Alternative Emission Reduction**: Dry seal centrifugal compressor affected facilities that decide not to implement volumetric flow measurements to monitor for emissions will follow §60.5380b(a)(9) to ensure emission reduction.

- **Compliance Standards**: Ensure compliance with initial and continuous standards under §§60.5410b(d) and 60.5415b(d).
- **Recordkeeping and Reporting**: All dry seal centrifugal compressor affected facilities will maintain records as specified in §60.5420b(b)(1) and (5), and (b)(11) through (13), as applicable and perform the reporting specified in §60.5420b(c)(4), and (8) through (13), as applicable.

Liquids Unloading (EU HCL & EU PWL)

- **General Requirements**: Comply with the requirements of this section for each gas well liquids unloading operation at your gas well affected facility as specified in §60.5376b(a).
  - Resource Recovery: Safely maximize resource recovery and minimize atmospheric releases.
- **Work Practice Standards**: If a gas well liquids unloading operation employs a technology or technique that vents methane and VOC emissions to the atmosphere, you must comply with the requirements as specified in §60.5376b(b) through (f).
- **Best Management Practice Requirements**: For each gas well liquids unloading operation which vents methane and VOC emissions to the atmosphere, you must develop, maintain, and follow a best management practice plan to minimize venting of methane and VOC emissions to the maximum extent possible from each gas well liquids unloading operation as specified in §60.5376b(c).
- **Compliance Standards**: Ensure compliance with initial and continuous standards under §§60.5410b(b) and 60.5415b(b).
- **Recordkeeping and Reporting**: Perform the required notification, recordkeeping and reporting requirements as specified in §60.5420b(b)(3) and (c)(2). Submit the information specified in §60.5420b(b)(1) and (b)(3)(i) in the annual report.
- **Alternative Compliance Option**: Reduce methane and VOC emissions from well affected facility gas wells that unload liquids by 95.0 percent by complying with the requirements specified in §60.5376b(g).

Associated Gas from Oil Wells

- You must comply with either paragraph (a)(1), (2), (3), or (4) of §60.5377b for each associated gas well upon startup and at all times, except as provided in paragraphs (b) through (f) of §60.5377b.
  - **Compliance Standards**: Demonstrate initial and continuous compliance with the GHG and VOC standards for each associated gas well as required by §§60.5410b(c) and 60.5415b(c).
  - **Recordkeeping and reporting**: Perform the required notification, recordkeeping and reporting requirements as specified in § 60.5420b(a)(2). Submit the information specified in § 60.5420b(b)(1) in the initial annual report. You must maintain a log of records as specified in § 60.5420b, as applicable, for each well completion operation conducted.

M. NDAC 33.1-15-13 – Emission Standards for Hazardous Air Pollutants [40 Code of Federal Regulations Part 61 (40 CFR Part 61)]:

This chapter discusses emission standards for hazardous air pollutants. It specifically incorporates a majority of the subparts and appendices of the National Emission Standards for Hazardous Air Pollutants (NESHAP) under 40 CFR Part 61 as of July 2, 2010.

Applicability and Expected Compliance

There are no applicable 40 CFR Part 61 standards covered by this permit.

N. NDAC 33.1-15-14 – Designated Air Contaminant Sources, Permit to Construct, Minor Source Permit to Operate, Title V Permit to Operate:

This chapter designates that federally regulated sources are required to obtain a Permit to Construct and a Permit to Operate and comply with specific emission control and air quality standards.

Applicability and Expected Compliance

The facility has submitted an oil and gas well registration form under NDAC Section 33.1-15-20-02. A satisfactory oil and gas registration serves as the application for the General Permit GP-OG v1.0 under NDAC Subdivision 33.1-15-14-02.1.c. GP-OG v1.0 is classified as a synthetic minor source under the Prevention of Significant Deterioration (PSD) of air quality program, via federally enforceable restrictions of regulated new source review (NSR) pollutant[13] to below 250 tons per year (excluding fugitives). Requirements regarding a permittee approaching or triggering potential Title V Permit to Operate applicability are included in Condition 4.B. of GP-OG v1.0.

According to NDAC Subdivision 33.1-15-14-02.1.c., GP-OG v1.0 for oil and gas production facilities must undergo public comment following the procedures of NDAC Subdivision 33.1-15-14-02.6.b.

O. NDAC 33.1-15-15 – Prevention of Significant Deterioration of Air Quality [40 CFR 52.21]:

This chapter adopts the federal provisions of the Prevention of Significant Deterioration of air quality (PSD) program (40 CFR 52.21). A facility is subject to PSD review if it is classified as a "major stationary source" under NDAC Chapter 33.1-15-15.

Applicability and Expected Compliance

This facility is not classified as a "major stationary source" under 40 CFR 52.21(b)(1)(i)(a) and is therefore only subject to PSD review if emissions of a regulated NSR pollutant[14]

[13] See 40 CFR 52.21(b)(50). Available at: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-52/subpart-A/section-52.21#p-52.21(b)(50)

[14] See 40 CFR 52.21(b)(50).

exceed 250 tpy (excluding fugitive emissions). Through federally enforceable limits, actual emissions and PTE for this facility is limited to below 250 tpy (Condition 4.A.4., GP-OG v1.0) and therefore not subject to PSD review. Condition 4.C. of GP-OG v1.0 outlines the requirements if PSD major source thresholds are exceeded.

P. NDAC 33.1-15-16 – Restriction of Odorous Air Contaminants:

This chapter restricts the discharge of objectionable odorous air contaminants which measures seven odor concentration units or greater outside the property boundary. The emission of hydrogen sulfide is also addressed with strict concentration limitations. The chapter also establishes the method of measurement using certified inspectors, scentometers, and other approved instruments.

Applicability and Expected Compliance

The facility must not discharge hydrogen sulfide (H_2S) into the ambient air at concentrations that would violate NDAC Subsection 33.1-15-16-02.1. Based on the Department's experience with upstream oil and gas facilities in North Dakota, compliance with this chapter is expected. Any odor-related complaints received by the department will be investigated and resolved in accordance with the directives outlined in the chapter.

Q. NDAC 33.1-15-17 – Restriction of Fugitive Emissions:

This chapter restricts fugitive emissions from particulate matter or other visible air contaminants and gaseous emissions that would violate Chapter 2 (ambient air quality standards), Chapter 15 (PSD), Chapter 16 (odor), or Chapter 19 (visibility).

Applicability and Expected Compliance

The facility will be required to take reasonable precautions to prevent fugitive emissions in violation of the above referenced NDAC chapters.

R. NDAC 33.1-15-18 – Stack Heights:

This chapter restricts the use of stack heights above good engineering practices (GEP). The chapter primarily adopts federal regulations listed under 40 CFR 51.100(ii). This chapter also restricts the use of dispersion techniques to affect the concentration of a pollutant in the ambient air. Demonstrations of GEP stack heights must be made available for review.

Applicability and Expected Compliance

The facility's stacks shall not exceed GEP and shall not use dispersion techniques to affect the pollutant concentration in the ambient air.

S. NDAC 33.1-15-19 – Visibility Protection:

This chapter outlines regulations regarding visibility protection and applies to new major stationary sources as defined in Section 33.1-15-15-01. It contains provisions regarding visibility impact analysis, visibility models, notification requirements for permit

applications, review by federal land managers, permit issuance criteria, and visibility monitoring.

Applicability and Expected Compliance

The facility is not a new major stationary source and, therefore, is not subject to the requirements of this chapter. Individual facilities covered by this permit are not expected to contribute adversely to visibility impairment within the three units of the Theodore Roosevelt National Park (nearest federal Class I areas) or at the Lostwood National Wildlife Refuge.

T. NDAC 33.1-15-20 – Control of Emissions from Oil and Gas Well Production Facilities:

This chapter regulates emissions from oil and gas well production facilities, requiring operators to register new wells and report gas composition changes. It establishes PSD applicability for major sources and mandates compliance with air quality standards for pollutants like sulfur dioxide and hydrogen sulfide.

Applicability and Expected Compliance

The facility is classified as an oil and gas well production facility and is therefore subject to the requirements of this chapter (Condition 4.A, GP-OG v1.0). Operators must register new and recompleted wells within 90 days of achieving active production status. Applicable emission controls must be implemented across all production equipment, including flares, separators, and tanks. Flares must be equipped with automatic ignitors or continuous burning pilots, and stack heights should be designed to allow adequate pollutant dispersion while following GEP. Routine inspections of tanks, vent lines, compressors, and pressure relief devices are required to minimize emissions, ensuring that tank hatches maintain positive pressure or are repaired as needed.

Malfunctions lasting over 24 hours that may result in air quality violations must be reported. Emergency emission events should be documented and promptly addressed.

The registration required by this chapter will serve as the mechanism (or permit application) that will result in the issuance of the general permit (GP-OG v1.0).

U. NDAC 33.1-15-21 – Acid Rain Program:

This chapter adopts the acid rain provisions of the Clean Air Act specified under 40 CFR Parts 72-78. The facility is not subject to the acid rain provision as they are not an electric utility.

V. NDAC 33.1-15-22 – Emissions Standards for Hazardous Air Pollutants for Source Categories [40 Code of Federal Regulations Part 63 (40 CFR Part 63)]:

This chapter adopts most of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories under 40 CFR Part 63. These standards typically apply to major sources of air pollution that are in a regulated source category. In addition to the major source requirements, some of the regulations have "area source" standards (for non-

major sources). Some of the area source standards have not been adopted by the Department and compliance will be determined by the United States Environmental Protection Agency (USEPA) (e.g. 40 CFR 63, Subpart ZZZZ area source provisions have not been adopted by the Department).

Applicability

The facility's actual and potential HAP emissions are expected to be maintained below 10 tpy of any single HAP and below 25 tpy of any combination of HAPs, so the facility is expected to be an area (minor) source of HAPs. In the event HAP emissions exceed area source levels, Condition 4.B.2 of GP-OG v1.0 must be followed.

Subpart A – General Provisions

This subpart contains general requirements for prohibited activities and circumvention, preconstruction review and notification, standards and maintenance requirements, performance tests, monitoring, recordkeeping, reporting, and control device work practice requirements.

Applicability and Expected Compliance

The facility will comply with the general provisions of Subpart A through submission of timely notifications, performance testing, monitoring, recordkeeping, reporting, and following the control device work practice requirements under Subpart A.

Subpart HH – National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities

This subpart establishes National Emission Standards for Hazardous Air Pollutants (NESHAP) for oil and natural gas production facilities that are classified as major or area sources of HAPs. The rule applies to various emission sources within these facilities, including glycol dehydration units, storage vessels, and equipment leaks. It mandates control measures to reduce emissions of hazardous air pollutants such as benzene, toluene, ethylbenzene, and xylene (BTEX). The regulation also provides exemptions for certain small sources and prescribes alternative compliance options for meeting emission reduction goals.

Applicability and Expected Compliance

The facility is expected to be an area source of HAPs and may be subject to this subpart. When the facility is subject to NESHAP HH, it must comply with control, monitoring, recordkeeping, and reporting requirements to limit hazardous air pollutant (HAP) emissions. For triethylene glycol (TEG) dehydration units, the facility must comply with control requirements under §63.764(d)(2). Facilities emitting more than 5 tpy of a single HAP or 12.5 tpy of combined HAPs must update emissions estimates annually under §63.760(c). Compliance includes initial notification and periodic reporting as required by §63.775, recordkeeping under §63.774, and control equipment operation as specified in

§63.771. All new or reconstructed sources are expected to comply upon startup (§63.760(f)(6)).

Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

This subpart establishes emission limits and operating requirements for stationary reciprocating internal combustion engines (RICE). It covers engines located at major or area sources of hazardous air pollutants. The subpart requires performance testing to demonstrate emissions compliance and includes requirements for monitoring and reporting emissions data. The subpart also lists the provisions for petitioning the administrator for alternative standards and for exemptions from the standards.

Applicability and Expected Compliance

Facilities which operate engines (EUs RICE) are potentially subject to the requirements under this subpart. The requirements of Subpart ZZZZ for the engines are met by complying with the requirements of NDAC Chapter 33.1-15-12 [40 CFR 60], NSPS IIII and NSPS JJJJ, if applicable. For Engines not subject to NSPS IIII or JJJJ, the requirements of this subpart shall be followed.

W. NDAC 33.1-15-23 – Fees:

The applicant has paid the $150 per well nonrefundable filing fee for an oil and gas well registration. In addition, the applicant must pay a $300 annual permit fee in accordance with NDAC Subsection 33.1-15-23-03.1.

X. NDAC 33.1-15-24 – Standards for Lead-Based Paint Activities:

The facility will not perform any lead-based painting and is therefore not subject to this chapter.

Y. NDAC 33.1-15-25 – Regional Haze Requirements:

This chapter is specific to existing stationary sources or groups of sources which have the potential to "contribute to visibility impairment" as defined in NDAC Section 33.1-15-25-01.2. Existing stationary sources or groups of sources determined to contribute to visibility impairment may be required to implement emissions reduction measures to help the Department make reasonable progress toward North Dakota's reasonable progress goals established in accordance with 40 CFR 51.308.

Applicability and Expected Compliance

Based individual facility PTE of visibility impairment pollutants, it is not expected to contribute to visibility impairment. As a result, the facility (individually) is not currently subject to the requirements of this chapter.

Summary:

A complete review of the proposed project indicates that the facility is expected to comply with the applicable federal and state air pollution rules and regulations. The Department will make a final recommendation on the issuance of a general Permit to Construct for oil and gas production facilities following completion of a 30-day public comment period. The public comment period will run from March 14, 2025, through April 13, 2025.

Update post comment period:
[Reserved]

Date of Draft Analysis: March 13, 2025
Date of Final Analysis: [Reserved]

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