

Iowa Department of Natural Resources

Draft Title V Operating Permit Fact Sheet

This document has been prepared to fulfill the public participation requirements of 40 CFR Part 70 and 567 Iowa Administrative Code (IAC) 24.107(6). 40 CFR Part 70 contains operating permit regulations pursuant to Title V of the Clean Air Act.

The Iowa Department of Natural Resources (DNR) finds that:

1. Northern Natural Gas Co – Oakland Compressor, located at 46299 Hwy 6, Oakland, IA 51560 has applied to renew their Title V Operating Permit. The designated responsible official of this facility is Brian Mundt – VP Operations.
2. Northern Natural Gas Co – Oakland Compressor is a natural gas transmission facility. This facility consists of ten emission units with potential emissions of:

Pollutant	Abbreviation	Potential Emissions (Tons per Year)
Particulate Matter ($\leq 2.5 \mu\text{m}$)	PM _{2.5}	28.41
Particulate Matter ($\leq 10 \mu\text{m}$)	PM ₁₀	28.41
Particulate Matter	PM	28.41
Sulfur Dioxide	SO ₂	2.04
Nitrogen Oxides	NO _x	1698.26
Volatile Organic Compounds	VOC	62.95
Carbon Monoxide	CO	239.42
Lead	Lead	0.00
Hazardous Air Pollutants ⁽¹⁾	HAP	41.33

⁽¹⁾ May include the following: Acetaldehyde, Acrolein, Benzene, 1,3-Butadiene, Carbon Tetrachloride, Ethyl Benzene, Ethylene Dibromide, Formaldehyde, Hexane, Methanol, Methylene Chloride, Naphthalene, Styrene, 1,1,2,2-Tetrachloroethane, Toluene, 1,1,2-Trichloroethane, 2,2,4-Trimethylpentane, Xylenes.

3. Northern Natural Gas Co – Oakland Compressor submitted a Title V Operating Permit renewal application on December 8, 2023. Based on the information provided in these documents, DNR has made an initial determination that the facility meets all the applicable criteria for the issuance of an operating permit specified in 567 IAC 24.107.
4. DNR has complied with the procedures set forth in 567 IAC 24.107, including those regarding public notice, opportunity for public hearing, and notification of EPA and surrounding state and local air pollution programs.

DNR procedures for reaching a final decision on the draft permit:

1. The public comment period for the draft permit will run from June 20, 2024 through July 20, 2024. During the public comment period, anyone may submit written comments on the permit. Mail signed comments to Emilie Peterson at the DNR address shown below. The beginning date of this public comment period also serves as the beginning of the U.S. Environmental Protection Agency's (EPA) 45-day review period, provided the EPA does not seek a separate review period.
2. Written requests for a public hearing concerning the permit may also be submitted during the comment period. Any hearing request must state the person's interest in the subject matter, and the nature of the issues proposed to be raised at the hearing. DNR will hold a public hearing upon finding, on the basis of requests, a significant degree of relevant public interest in a draft permit. Mail hearing requests to Emilie Peterson at the DNR address shown below.
3. DNR will keep a record of the issues raised during the public participation process, and will prepare written responses to all comments received. The comments and responses will be compiled into a responsiveness summary document. After the close of the public comment period, DNR will make a final decision on the renewal application. The responsiveness summary and the final permit will be available to the public upon request.

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DNR concludes that:

1. DNR has authority under 455B.133 Code of Iowa to promulgate rules contained in 567 IAC Chapters 21-33, including, but not limited to, rules containing emission limits, providing for compliance schedules, compliance determination methods and issuance of permits.
2. DNR has the authority to issue operating permits for air contaminant sources and to include conditions in such permits under 455B.134 Code of Iowa.
3. The emission limits included in this permit are authorized by 455B.133 Code of Iowa and 567 IAC Chapters 21-33.
4. DNR is required to comply with 567 IAC Chapter 24 in conjunction with issuing a Title V Operating Permit.
5. The issuance of this permit does not preclude the DNR from pursuing enforcement action for any violation.

REVIEW NOTES

Name of Permitted Facility:	Northern Natural Gas Company – Oakland Compressor Station
Facility Location:	46299 Highway 6, Oakland, Iowa
Air Quality Operating Permit Number:	98-TV-017R5
EIQ Number:	92-3874
Facility File Number:	78-04-006
SIC Code:	4922
Reviewer:	Emilie Peterson
Date:	7/1/2024

Background

Northern Natural Gas Company is a natural gas compressor station (SIC 4922). The facility has ten significant emission points and nine insignificant emission points. See the equipment lists in the permit for details.

Six of the eight significant emission units are grandfathered; therefore, there are no construction permits for those units. The construction permit for the industrial engine (EP-21) was issued in 1997, and modified in 2002. The construction permit for the gas turbine (EP-T1) was issued in 2005 and modified in 2011.

Regulatory Status

The facility is a major HAP source that is subject to NESHAP rules and NSPS standards.

Applicable Rules and Regulations

1. Facility Wide Opacity: No more than 40%. 567--IAC 23.3(2)"d"
2. Facility Wide SO₂: 500 parts per million by volume. 567--IAC 23.3(3)"e"
3. PSD: No
4. Part 61 NESHAP: No
5. NSPS: Yes – 40 CFR 60 Subpart A and Subpart GG
6. Part 63 NESHAP: Yes – 40 CFR 63 Subpart A, Subpart YYYY, Subpart DDDDD, and Subpart ZZZZ
7. Acid Rain: No
8. Stratospheric Ozone Protection: Yes
9. Prevention of Accidental Releases: No

Potential Emissions (from Form 1.5 of the Permit Application)

PM _{2.5} tons/yr	PM ₁₀ tons/yr	PM tons/yr	SO ₂ tons/yr	NO _x tons/yr	VOC tons/yr	CO tons/yr	Lead tons/yr	Total HAPs tons/yr
28.41	28.41	28.41	2.04	1698.26	62.95	239.42	0.00	41.33

Title V Major Source by Pollutant

Pollutant	Major for Title V?
PM ₁₀	<input type="checkbox"/>
SO ₂	<input type="checkbox"/>
NO _x	<input checked="" type="checkbox"/>
VOC	<input type="checkbox"/>
CO	<input checked="" type="checkbox"/>
Lead	<input type="checkbox"/>
Individual HAP	<input checked="" type="checkbox"/>
Total HAPs	<input checked="" type="checkbox"/>

HAPs include Acetaldehyde, Acrolein, Benzene, 1,3-Butadiene, Carbon Tetrachloride, Ethyl Benzene, Ethylene Dibromide, Formaldehyde, Hexane, Methanol, Methylene Chloride, Naphthalene, Styrene, 1,1,2,2-Tetrachloroethane, Toluene, 1,1,2-Trichloroethane, 2,2,4-Trimethylpentane, Xylenes

General

1. Emission points 10 through 14 are subject to the NESHAP for Stationary Reciprocating Internal Combustion Engines - 40 CFR 63 Subpart ZZZZ. These units are also subject to 40 CFR 63 Subpart A, the General Provisions. However, these units are considered Existing Spark Ignition 2-Stroke Lean Burn (2SLB) Stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and according to 40 CFR §63.6590(b)(3)(i), these units do **not** have to meet the requirements of this Subpart ZZZZ and or Subpart A of this part, including initial notification requirements.
2. Emission unit EP-T1 is subject to Subpart A (General Provisions, 40 CFR 60.1 through 60.19) and Subpart GG (Standards of Performance for Stationary Gas Turbines, 40 CFR 60.330 through 60.335, 567 IAC 24.1(2)"aa") of the NSPS, as it was not reconstructed or modified as defined by the NSPS after February 18, 2005. This emission unit is **not** subject to NSPS Subpart KKKK-Standards of Performance for Stationary Combustion Turbines. The application provided a construction date of April 2005 for this unit, which is after the NSPS Subpart KKKK applicability date February 18, 2005. However, the facility has provided documentation that confirms a contractual agreement to commence construction prior to the applicability date. Therefore, it has been decided that this unit is not subject to NSPS Subpart KKKK. This emission unit is of the source type regulated by the NESHAP for Stationary Combustion Turbines, 40 CFR 63 Subpart YYYY, and is at a major source.

3. Potential periodic monitoring requirements were evaluated based on the Department's Periodic Monitoring Guidance. There seems to be no reason to add testing to the Title V Permit. Most uncontrolled emissions are well below their limit. However, this unit is subject to the requirements of NSPS Subpart GG and NESHAP Subpart YYYYY. Also the DNR Construction Permit 05-A-221-S1 requires a sulfur content limit that shall not exceed 0.8% by weight. Therefore, no additional testing has been mentioned in the permit.
4. Updates to the facility's Insignificant List were included in the Permit Application.
5. As presented in the 97-A-487-S1 DNR Construction Permit for the auxiliary generator (EP-21), the generator shall not operate more than 2,350 hours per rolling twelve-month period.
6. During review of the draft Title V Operating Permit the facility noted the following regarding calculations: The slight discrepancies in the facility potential to emit calculations (IDNR version vs. application version) are not problematic and appear primarily attributable to the manner in which MCF was converted to MBTU. The application used a conversion value of 1050 BTU/CF (per IDNR technical guidance publications).

The comment is acknowledged. Calculations were revised and the DNR default fuel value of 1050 BTU/CF was used to determine comparative PTE values. While doing this, a numerical error was discovered under rated Capacity values, and was corrected.