AIR POLLUTION CONTROL PERMIT TO CONSTRUCT

Permittee: **Name**: Continental Resources, Inc. **Address**: P.O. Box 268870 Oklahoma City, OK 73126	**Permit Number**: ACP-18304 v1.0 **Permit Description**: PSD Synthetic Minor; Future Title V
Source Name & Location: Helen 2-4 Arley 5-7 Christiana 7-8 Kenneth 2-3 CTB GPS Coordinates: (48.167696, -103.063994) Williams County, ND	**Source Type**: Crude Petroleum and Natural Gas Production Electric Services
Date of Application: November 1, 2024, Revised September 11, 2025	

Pursuant to Chapter 23.1-06 of the North Dakota Century Code (NDCC), and the Air Pollution Control Rules of the State of North Dakota (Article 33.1-15 of the North Dakota Administrative Code or NDAC), and in reliance on statements and representations heretofore made by the permittee (i.e., owner) designated above, a Permit to Construct is hereby issued authorizing such permittee to construct and initially operate the source unit(s) at the location designated above. This Permit to Construct is subject to all applicable rules and orders now or hereafter in effect of the North Dakota Department of Environmental Quality (Department) and to any conditions specified below:

_____ Date: _____

James L. Semerad
Director
Division of Air Quality

1. Project and Facility Emissions Units:

This Permit to Construct allows the construction and initial operation of the herein-mentioned new or modified equipment at the source. The source may be operated under this Permit to Construct until a Permit to Operate is issued unless this permit is suspended or revoked. The source is subject to all applicable rules, regulations, and orders now or hereafter in effect of the North Dakota Department of Environmental Quality and to the conditions specified herein.

Table 1-1 lists the new emissions units associated with the Project.

Table 1-2 lists all emissions units associated with the facility upon Project completion.

Table 1-1: Project Emissions Units (new to facility)

Emission Unit Description [A]	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Six Waukesha VHPP9394GSI S5 natural gas-fired generator engines rated at 2,386 bhp each (NSPS JJJJ, MACT ZZZZ)	RICE1-RICE6	RICE1-RICE6	Non-selective and Reduction Catalyst (NSCR)

[A] All emission unit ratings are considered nominal ratings.

Table 1-2: Facility Emissions Units upon Project Completion

Emission Unit Description [A]	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Six Waukesha VHPP9394GSI S5 natural gas-fired generator engines rated at 2,386 bhp (NSPS JJJJ, MACT ZZZZ)	RICE1-RICE6	RICE1-RICE6	NSCR
Ten Wellheads (NSPS OOOOb)	WELL1-WELL10	N/A	None
High pressure flare (HPFL) (NSPS OOOOb)	HPFL	HPFL	--
Low pressure flare (LPFL) (NSPS OOOOb)	LPFL	LPFL	--
Vapor Recovery Unit (VRU)	VRU	N/A [B]	--
Four hydrocarbon liquid storage vessels (NSPS OOOOb)	HCTK1-HCTK4	LPFL	Submerged fill pipes (SFP) & LPFL
Four produced water storage vessels (NSPS OOOOb)	PWTK1-PWTK4		
Gas fired heater (HTR)	HTR	HTR	None
Hydrocarbon liquid loadout	HCL	HCL	Submerged loading arm
Produced water loadout	PWL	PWL	Submerged loading arm

Emission Unit Description [A]	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Four electric driven reciprocating compressors (NSPS OOOOb) [C]	CMPR1-CMPR4	CMPR1-CMPR4	None
Fugitive components (NSPS OOOOb)	FUG-LDAR	FUG-LDAR	Leak detection and repair (LDAR)
Fugitive dust	FUG-A	FUG-A	None
Maintenance - other (Misc)	FUG-Misc [D]	FUG-Misc	None

[A] All emission unit ratings are considered nominal ratings.

[B] In the event the VRU is out of service, or not operational, the gases will be routed to the LPFL for emissions control.

[C] EUs CMPR1-CMPR4 are subject to NSPS OOOOb, as applicable, due to the potential of these units being replaced with compressors having different regulatory applicability.

[D] Includes, but is not limited to: compressor blowdown venting, pig launcher/receiver blowdown, facility equipment blowdowns, well and liquid loadout activity, and well workovers.

2. Applicable Standards, Restrictions and Miscellaneous Conditions:

A. New Source Performance Standards (NSPS):

The permittee shall comply with all applicable requirements of the following NSPS subparts, in addition to Subpart A, as referenced in Chapter 33.1-15-12 of the North Dakota Air Pollution Control Rules and 40 CFR 60.

1) 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (EUs RICE1-RICE6).

2) 40 CFR 60, Subpart OOOOb – Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022 (EUs WELL1-WELL10, HPFL, LPFL, HCTK1-HCTK4, PWTK1-PWTK4, CMPR1-CMPR4 & FUG-LDAR).

B. National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Source Categories/Maximum Achievable Control Technology (MACT):

The permittee shall comply with all applicable requirements of the following MACT subparts, in addition to Subpart A, as referenced in Chapter 33.1-15-22 of the North Dakota Air Pollution Control Rules and 40 CFR 63.

1) 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (EUs RICE1-RICE6). The North Dakota Department of Environmental Quality has not adopted the area source provisions of this subpart. Please send all required reports and documentation to EPA Region 8

C. Fuel Restrictions:

1) The engines (EUs RICE1-RICE6), gas fired heater treater (EU HTR), and control device pilots (EUs HPFL & LPFL pilots) are restricted to combusting only gaseous fuel containing no more than 32 ppmv of H_2S (~2 grains per hundred standard cubic feet).

D. Flare Conditions and Restrictions (EUs HPFL & LPFL):

1) The flares shall meet the requirements specified in 40 CFR 60.18(b).

2) The flares shall be equipped and operated with an automatic ignitor or a continuous burning pilot which must be maintained and operated in good working order. This is required even if the flare is used for emergency purposes only. A continuous burning pilot is required if the Department determines that an automatic ignition system is ineffective due to production characteristics. The flare stack must be of sufficient height to allow for adequate dispersion of air contaminants as necessary to ensure that emissions comply with the ambient air quality standards of chapter 33.1-15-02 as required under NDAC 33.1-15-20-04.

3) The permittee shall operate the flares with no visible emissions, except for periods not to exceed a total of 1-minute during any 15-minute period. A visible emissions test using section 11 of EPA Method 22, 40 CFR part 60, Appendix A, must be performed at least once every calendar month, separated by at least 15 days between each test. The observation period shall be 15 minutes.

a) Devices failing the visible emissions test must follow manufacturer's repair instructions, if available, or best combustion engineering practice as outlined in the flare inspection and maintenance plan, to return the flare to compliant operation.

b) All inspection, repair, and maintenance activities for each flare must be recorded in a maintenance and repair log and must be available for inspection upon Department request.

c) Immediately following return to operation from maintenance or repair activity, each flare must pass a Method 22, 40 CFR part 60, Appendix A, visual observation as described in Condition 2.D.3). .

3. Emission Unit Limits:

Emission limits from the operation of the source unit(s) identified in Table 1-1 of this Permit to Construct (hereafter referred to as "permit") are as follows. Source units not listed are subject to the applicable emission limits specified in the North Dakota Air Pollution Control Rules.

Table 3-1: Permit Emissions Limits

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Pollutant / Parameter	Emission Limit
Six Waukesha VHPP9394GSI S5 natural gas-fired generator engines rated at 2,386 bhp each (NSPS JJJJ, MACT ZZZZ)	RICE1-RICE6	RICE1-RICE6	NO_X	0.3 g/hp-hr [A, B]
			CO	0.5 g/hp-hr [A, B]
			VOC	0.1 g/hp-hr [A, B]
			Formaldehyde	0.01 g/hp-hr [A, C]
			Opacity	20% [D]
High pressure flare (HPFL) (NSPS OOOOb)	HPFL	HPFL	Opacity	0% [E]
Low pressure flare (LPFL) (NSPS OOOOb)	LPFL	LPFL	Opacity	0% [E]
Gas fired heater (HTR)	HTR	HTR	Opacity	20% [D]
Fugitive components (NSPS OOOOb)	FUG-LDAR	FUG-LDAR	VOC	Per NSPS, Subpart OOOOb

[A] Compliance determined via emissions testing.
[B] Less restrictive 40 CFR 60 Subpart JJJJ limits also apply as follows: NOx of 1.0 g/hp-hr or 82 ppmvd @ 15% O_2; CO of 2.0 g/hp-hr or 270 ppmvd @ 15% O_2; VOC of 0.7 g/hp-hr or 60 ppmvd @ 15% O_2.
[C] Emissions of formaldehyde are not included in the VOC emissions, per §60.4241(h).
[D] 40% opacity is permissible for not more than one six-minute period per hour.
[E] Except for periods not to exceed a total of 1-minute during any 15-minute period.

4. Emission Testing Requirements:

A. Initial testing:

All initial testing will require a minimum of three runs, one hour each, unless otherwise specified in a federal subpart.

Table 4-1: Initial Emissions Testing for Project

Description (EU)	EP	Contaminant	Method [A]
Six Waukesha VHPP9394GSI S5 natural gas-fired generator engines rated at 2,386 bhp (NSPS JJJJ, MACT ZZZZ)	RICE1-RICE6	NO_X	7E
		CO	10
		VOC	25A
		Formaldehyde	320

[A] Other equivalent reference method approved by the Department may be used.

A signed copy of the test results shall be furnished to the Department within 60 days of the test date. The basis for this condition is NDAC 33.1-15-01-12 which is hereby incorporated into this permit by reference. To facilitate preparing for and conducting such tests, and to facilitate reporting the test results to the Department, the permittee shall follow the procedures and formats in the Department's Emission Testing Guideline.[1]

1) Test:

Within 180 days after initial startup, the permittee shall conduct emissions tests at the emission units listed in Table 4-1 using an independent testing firm, to determine the compliance status of the facility with respect to the emission limits specified in

Table 3-1. Emissions testing shall be conducted for the pollutant(s) listed above in accordance with EPA Reference Methods listed in 40 CFR 60, Appendix A. Test methods other than those listed above may be used upon approval by the Department.

2) Notification:

The permittee shall notify the Department using the form in the Emission Testing Guideline, or its equivalent, at least 30 calendar days in advance of any tests of emissions of air contaminants required by the Department. If the permittee is unable to conduct the performance test on the scheduled date, the permittee shall notify the Department at least five days prior to the scheduled test date and coordinate a new test date with the Department.

3) Sampling Ports/Access:

Sampling ports shall be provided downstream of all emission control devices and in a flue, conduit, duct, stack or chimney arranged to conduct emissions to the ambient air. The ports shall be located to allow for reliable sampling and shall be adequate for test methods applicable to the facility. Safe sampling platforms and safe access to the platforms shall be provided. Plans and specifications showing the size and location of the ports, platform and utilities shall be submitted to the Department for review and approval.

4) Other:

a) The Department may require the permittee to have tests conducted to determine the emission of air contaminants from any source, whenever the Department has reason to believe that an emission of a contaminant not addressed by the permit applicant is occurring, or the emission of a contaminant in excess of that allowed by this permit is occurring. The Department may specify testing methods to be used in accordance with good professional practice. The Department may observe the testing. All tests shall be conducted by

[1] See February 7, 2020, North Dakota Department of Environmental Quality Division of Air Quality Emissions Testing Guidelines. Available at: https://www.deq.nd.gov/publications/AQ/policy/PC/Emission_Testing_Guide.pdf

reputable, qualified personnel. A signed copy of the test results shall be furnished to the Department within 60 days of the test date.

All tests shall be made available, and the results calculated in accordance with test procedures approved by the Department. All tests shall be made under the direction of persons qualified by training or experience in the field of air pollution control as approved by the Department.

b) The Department may conduct tests of emissions of air contaminants from any source. Upon request of the Department, the permittee shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants.

B. Sampling and Testing:

The Department may require the permittee to conduct tests to determine the emission rate of air contaminants from the source. The Department may observe the testing and may specify testing methods to be used. A signed copy of the test results shall be furnished to the Department within 60 days of the test date. The basis for this condition is NDAC 33.1-15-01-12 which is hereby incorporated into this permit by reference. To facilitate preparing for and conducting such tests, and to facilitate reporting the test results to the Department, the permittee shall follow the procedures and formats in the Department's Emission Testing Guideline.

5. General Conditions (Equipment):

A. Best Management Practices:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

B. Operation of Air Pollution Control Equipment:

The permittee shall maintain and operate all air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

C. Stack Heights:

Emissions shall be vented through stacks that meet the following height requirements. Stack heights may be no less than those listed in the table below without prior approval from the Department.

Emission Unit (EU)	Emission Point (EP)	Minimum Stack Height (Feet)
RICE1-RICE6	RICE1-RICE6	20
HPFL	HPFL	40
LPFL	LPFL	40

D. Like-Kind Engine Replacement:

This permit allows the permittee to replace an existing engine with a like-kind unit. Replacement is subject to the following conditions:

1) The Department must be notified within 10 days after change-out of the unit.

2) The replacement unit shall operate in the same manner, provide no increase in throughput and have equal or less emissions than the unit it is replacing.

3) The date of manufacture of the replacement unit must be included in the notification. The facility must comply with any applicable federal standards (e.g. NSPS, MACT) triggered by the replacement.

4) The replacement unit is subject to the same state emission limits as the existing unit in addition to any NSPS or MACT emission limit that is applicable. Testing shall be conducted to confirm compliance with the emission limits within 180 days after start-up of the unit.

E. Organic Compound Emissions:

The permittee shall comply with all applicable requirements of NDAC 33.1-15-07 – Control of Organic Compounds Emissions.

1) Organic compound gases and vapors which are unable to be routed to sales, used as onsite fuel, used for another useful purpose, reinjected into a well, or which contains hydrogen sulfide, are required to be controlled by a flare, or an equally effective control device as approved by the department. This provision does not apply to the following:

a) Gases/vapors released from an emergency vapor blowdown system or emergency relief system.

b) Gases/vapors released for safety reasons during start-up, shut-down, and maintenance activities, provided that estimated emissions are

defined and included in the PTE submittal required by this permit, and any actual releases are included in the actual emission calculations and compliance demonstrations required by this permit.

2) The hydrocarbon liquid storage vessels (EUs HCTK1-HCTK4) and the produced water vessels (EUs PWTK1-PWTK4) shall be equipped and operated with a submerged fill pipe or meet the requirements contained in subsection 33.1-15-07-01.3. The permittee shall maintain records of material stored, period of storage, and maximum true vapor pressure of material stored for each hydrocarbon liquid storage vessel and produced water storage vessel.

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 other vapor emission control system in accordance with NDAC 33.1-15-07-01.4. Any emissions control system utilized must have a minimum control efficiency necessary to meet the requirements of chapters 33.1-15-02 and 33.1-15-16. The permittee shall maintain records of hydrocarbon liquids loadout on a daily basis to demonstrate compliance with this requirement.

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.

5) Compliance with 40 CFR 60, Subpart OOOOb shall be deemed compliance with subsection 33.1-15-07-02.1.

F. Air Pollution from Internal Combustion Engines:

The permittee shall comply with all applicable requirements of NDAC 33.1-15-08-01 – Internal Combustion Engine Emissions Restricted.

G. Fugitive Emissions:

The release of fugitive emissions shall comply with the applicable requirements in NDAC 33.1-15-17 – Restriction of Fugitive Emissions.

6. General Conditions (Procedural):

A. Construction:

Construction of the above-described facility shall be in accordance with information provided in the permit application as well as any plans, specifications and supporting data submitted to the Department. The Department shall be notified 10 days in advance of any significant deviations from the specifications furnished. The issuance of this Permit to Construct may be suspended or

revoked if the Department determines that a significant deviation from the plans and specifications furnished has been or is to be made.

Any violation of a condition issued as part of this permit to construct as well as any construction which proceeds in variance with any information submitted in the application, is regarded as a violation of construction authority and is subject to enforcement action.

B. Startup Notice:

A notification of the actual date of initial startup shall be submitted to the Department within 15 days after the date of initial startup.

C. Permit Invalidation:

This permit shall become invalid if construction is not commenced within 18 months after issuance of such permit, if construction is discontinued for a period of 18 months or more; or if construction is not completed within a reasonable time.

D. Source Operations:

Operations at the installation shall be in accordance with statements, representations, procedures and supporting data contained in the initial application, and any supplemental information or application(s) submitted thereafter. Any operations not listed in this permit are subject to all applicable North Dakota Air Pollution Control Rules.

E. Alterations, Modifications, or Changes:

Any alteration, repairing, expansion, or change in the method of operation of the source which results in the emission of an additional type or greater amount of air contaminants or which results in an increase in the ambient concentration of any air contaminant, must be reviewed and approved by the Department prior to the start of such alteration, repairing, expansion or change in the method of operation.

F. Title V Permit to Operate:

Within one year after startup of the units covered by this permit, the permittee shall submit a permit application for a Title V Permit to Operate for the facility.

G. Recordkeeping:

The permittee shall maintain any compliance monitoring records required by this permit or applicable requirements. The permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report or application. Support information may include all calibration and maintenance records and all original strip-chart recordings/computer printouts for continuous monitoring instrumentation, and copies of all reports required by the permit.

H. Annual Emission Inventory/Annual Production Reports:

The permittee shall submit an annual emission inventory report and/or an annual production report upon Department request, on forms supplied or approved by the Department.

I. Malfunction Notification:

The permittee shall notify the Department of any malfunction which can be expected to last longer than twenty-four hours and can cause the emission of air contaminants in violation of applicable rules and regulations.

J. Nuisance or Danger:

This permit shall in no way authorize the maintenance of a nuisance or a danger to public health or safety.

K. Transfer of Permit to Construct:

The holder of a permit to construct may not transfer such permit without prior approval from the Department.

L. Right of Entry:

Any duly authorized officer, employee or agent of the North Dakota Department of Environmental Quality may enter and inspect any property, premise or place at which the source listed in Condition 1 of this permit is located at any time for the purpose of ascertaining the state of compliance with the North Dakota Air Pollution Control Rules. The Department may conduct tests and take samples of air contaminants, fuel, processing material, and other materials which affect or may affect emissions of air contaminants from any source. The Department shall have the right to access and copy any records required by the Department's rules and to inspect monitoring equipment located on the premises.

M. Other Regulations:

The permittee of the source unit(s) described in Condition 1 of this permit shall comply with all State and Federal environmental laws and rules. In addition, the permittee shall comply with all local burning, fire, zoning, and other applicable ordinances, codes, rules and regulations.

N. Permit Issuance:

This permit is issued in reliance upon the accuracy and completeness of the information set forth in the application. Notwithstanding the tentative nature of this information, the conditions of this permit herein become, upon the effective date of this permit, enforceable by the Department pursuant to any remedies it now has, or may in the future have, under the North Dakota Air Pollution Control Law, NDCC Chapter 23.1-06.

7. State Enforceable Only Conditions (not Federally enforceable)

A. Odor Restrictions:

The permittee shall not discharge into the ambient air any objectionable odorous air contaminant which is in excess of the limits established in NDAC 33.1-15-16.

The permittee shall not discharge into the ambient air hydrogen sulfide (H_2S) in concentrations that would be objectionable on land owned or leased by the complainant or in areas normally accessed by the general public. For the purpose of complaint resolution, two samples with concentrations greater than 0.05 parts per million (50 parts per billion) sampled at least 15 minutes apart within a two-hour period and measured in accordance with Section 33.1-15-16-04 constitute a violation.