AIR POLLUTION CONTROL
PERMIT TO CONSTRUCT

Permittee: **Name**: ONEOK Rockies Midstream, L.L.C. **Address**: 100 W Fifth Street Tulsa, OK 74103-4298	**Permit Number**: ACP-18264 v 1.0 **Permit Description**: Synthetic Minor Permit to Construct Current True Minor Source
Source Name & Location: Alexander Compressor Station NE¼, Sec. 1, T151N, R102W Lat 47.934, Long -103.671 McKenzie County, North Dakota	**Source Type**: Compressor Station (Gathering)
Date of Application: N/A	

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 does not affect the operation of the facility emissions units, does not allow for the construction of any new emissions units at the facility, and does not allow for the modification or reconstruction of any existing emissions units.

Table 1-1 lists all the permitted emission units associated with Alexander Compressor Station.

Table 1-1: Facility Emission Units

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Caterpillar G3516B natural gas-fired compressor engine rated at 1,380 bhp manufactured after January 1, 2011 (NSPS JJJJ, OOOO; MACT ZZZZ)	C1.3	C1.3	Catalytic converter
Caterpillar G3516B natural gas-fired compressor engine rated at 1,380 bhp manufactured after January 1, 2011 (NSPS JJJJ, OOOO; MACT ZZZZ)	C3.2	C3.2	Catalytic converter
Caterpillar G3516B natural gas-fired compressor engine rated at 1,380 bhp manufactured after July 1, 2010 (NSPS JJJJ; MACT ZZZZ)	C4	C4	Catalytic oxidizer
Three 400 bbl condensate storage tanks	T1.2, T2.2 & T3.2	5	Submerged fill pipe & enclosed combustor
Enclosed combustor (NSPS OOOO)	5	5	None
Emergency flare	F1.2	F1.2	None
300 bbl methanol storage tank	T4 [A]	T4	None
Condensate truck loading	L1	L1	None
Fugitive emissions	FUG [A]	FUG	None

[A] Insignificant or fugitive emission sources with no specific emission limit.

2. Applicable Standards, Restrictions and Miscellaneous Conditions:

This Permit to Construct does not affect any existing applicable standards and does not impose any new permit restrictions or miscellaneous conditions. Standards, restrictions and miscellaneous conditions listed below are for clarification.

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 C1.3, C3.2, & C4). (Applicability to this subpart is not affected with this permit action.)

2) 40 CFR 60, 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. The compressors driven by EUs C1.3 and C3.2, and the enclosed combustor (EU 5) are subject to this subpart. (Applicability to this subpart is not affected with this permit action.)

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 C1.3, C3.2, & C4). 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 at the address listed below.

U.S. EPA Region 8
1595 Wynkoop Street
Mail Code 8ENF-AT
Denver, CO 80202-1129

C. Emergency Flare Restrictions (EU F1.2)

1) When it is necessary to operate the flare during emergency, malfunction or maintenance, all precautions shall be taken to minimize emissions and maintain compliance with the applicable ambient air quality standards as outlined in NDAC 33.1-15-02 and the opacity standard of 20% not to exceed 60% for more than one six-minute period per hour.

2) The flare must be equipped and operated with an automatic ignitor or a continuous burning pilot which must be maintained in good working order as outlined in NDAC 33.1-15-07-02.

3) The presence of a flame shall be monitored using a thermocouple or any other equivalent device approved by the Department.

4) Upon issuance of this permit, the stack height for the flare of 55 feet above ground level set in ACP-17642 v1.0 (PTC14052) is rescinded.

D. Enclosed Combustor Restriction for Control of Storage Vessels (EU 5)

Emissions from the storage tanks (EUs T1.2, T2.2, & T3.2; collectively the "Tank Battery") shall be controlled by the enclosed combustor (EU 5) and will be designed and operated in accordance with one of the performance requirements specified in condition below through below:

1) The permittee must reduce the mass content of VOC in the gases vented to the device by 95.0 percent by weight or greater as determined in accordance with the requirements of § 60.5413(b).

2) The permittee must reduce the concentration of TOC in the exhaust gases at the outlet to the device to a level equal to or less than 275 parts per million by volume as propane on a wet basis corrected to 3 percent oxygen in accordance with the applicable requirements of § 60.5413(b).

3) The permittee must operate at a minimum temperature of 760°C, provided the control device has demonstrated, during the performance test that combustion zone temperature is an indicator of destruction efficiency in accordance with the applicable requirements of § 60.5413(b).

E. Enclosed Combustor Requirements for Control of Storage Vessels (EU 5)

1) The permittee must ensure the enclosed combustion device is maintained in a leak free condition.

2) The permittee must install and operate a continuous burning pilot flame.

3) The permittee must operate the combustion control device 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 of appendix A-7 of this part 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. Devices failing the visible emissions test must follow manufacturer's repair instructions, if available, or best combustion engineering practice as outlined in the unit inspection and maintenance plan, to return the unit to compliant operation. All inspection, repair and maintenance activities for each unit must be recorded in a maintenance and repair log and must be available for inspection. Following return to operation from maintenance or repair activity, each device must pass a Method 22 of appendix A-7 of this part visual observation as described in this paragraph.

F. Recordkeeping and Reporting for Control of Storage Vessels

The permittee shall maintain the following records for a period of at least five years and make them available to NDDEQ upon request:

1) Records of visible emission observation, inspection, repair, and maintenance activities required by Condition 2.E.3.

2) Records of initial and subsequent periodic performance tests for the enclosed combustor (EU 5).

The permittee shall maintain one for the following sets of records:

3) Records of monthly throughput to the tank battery (average daily throughput barrels per day). The permittee shall maintain these records for the life of the tank battery or until such time the permittee or NDDEQ determines that the tank battery is a "storage vessel affected facility" under NSPS OOOO.

4) Records of flow data from continuous flow meter that measures flow from manifolded piping from storage tanks and collects data values at least once every hour. The permittee shall also maintain records of annual gas compositional data for the gas stream at the outlet of the storage tank manifolded piping before the stream is combined with other emission streams.

The permittee shall provide an annual report to the Department as an attachment to the annual emission inventory report required under Condition 6.D. The report shall include the following:

5) Records of enclosed combustor (EU 5) performance testing, if conducted during the preceding year.

6) Records of VOC emissions that demonstrate that VOC emissions remain below 6 tpy. The VOC emissions must be determined using a generally accepted model or calculation methodology that accounts for flashing, working, and breathing losses.

G. Fuel Restrictions:

Natural gas-fired engines (EUs C1.3, C3.2 & C4) are restricted to combusting only natural gas containing no more than 2 grains of sulfur per 100 standard cubic feet.

3. Emission Unit Limits:

Emission limits from the operation of the source unit(s) identified in Table 3-1 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.

Upon issuance of this permit, the emission limits set forth in all previous Air Permit to Construct Nos., including but not limited to: ACP-17317 v1.0 (PTC11020) and ACP-17642 v1.0 (PTC14052) are rescinded. The emission limits are replaced with the following:

Table 3-1: Permit Emissions Limits

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Pollutant / Parameter	Emission Limit [A]
Natural gas-fired engines	C1.3, C3.2, & C4	C1.3, C3.2, & C4	NO_X	1.0 g/hp-hr or 82 ppmvd @ 15% O_2 [B]
			CO	1.75 g/hp-hr [B, C]
			VOC	0.7 g/hp-hr or 60 ppmvd @ 15% O_2 [B]
			Opacity	20% [D]
Enclosed combustor	5	5	Opacity	0% [E]
Emergency flare	F1.2	F1.2	Opacity	20% [F]
Condensate storage tanks	T1.2, T2.2 & T3.2	5	VOC	5.99 tons/12-month period (rolling total) [G]
Condensate truck loading	L1	L1	VOC	20 tons/12-month period (rolling total) [H]

[A] The emission limit applies to each emission point (EP).
[B] Compliance determined via emissions testing.
[C] Less restrictive 40 CFR 60 Subpart JJJJ limits also apply as follows: CO of 2.0 g/hp-hr or 270 ppmvd @ 15% O_2.
[D] 40% opacity is permissible for not more than one six-minute period per hour.
[E] Flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 1-minute during any 15-minute period.
[F] 60% opacity is permissible for not more than one six-minute period per hour.
[G] Emissions from each storage vessel shall be limited to less than 6 tons per year, per tank, on a 12-month rolling total basis, and are thus not subject sources under 40 CFR 60, Subpart OOOO per §60.5365(e).
[H] On February 25, 2020, the Department approved the use of 0.16 lb VOC/bbl of condensate as an emission factor for company-wide condensate truck loadout operations in North Dakota. As part of the approval, emissions of VOCs cannot exceed 20 tons in any 12-month period (rolling total).

4. Emission Testing Requirements:

A. 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. Organic Compound Emissions:

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

D. 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.

E. Fugitive Emissions:

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

6. General Conditions (Procedural):

A. 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.

B. 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.

C. 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.

D. 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.

E. 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.

F. Nuisance or Danger:

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

G. Transfer of Permit to Construct:

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

H. 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.

I. 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.

J. 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.