

AIR POLLUTION CONTROL PERMIT TO CONSTRUCT

Permittee: Name: Hess North Dakota Pipelines LLC	Permit Number: ACP-18259 v1.0
Address: 3015 16th St. SW, Suite 20 Minot, North Dakota 58701	Permit Description: Synthetic Minor
Source Name & Location: Blue Buttes Compressor Station 2 Lat/Long: 47.86373/-102.87478 SW ¼, Sec. 29, T151N, R96W McKenzie County, North Dakota	Source Type: Compressor Station [Gathering/Boosting]
Date of Application: July 31, 2024	

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 emissions units removed with this permit action.

Table 1-2 lists all the permitted emission units associated with Blue Buttes Compressor Station 2.

Table 1-1: Emission Units Removed

Emission Unit Description ^A	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Natural gas-fired line heater rated at 1.5 x 10 ⁶ Btu/hr	LH-1	LH-1	None

^A All emission unit ratings are considered nominal ratings.

Table 1-2: Facility Emission Units

Emission Unit Description ^A	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Triethylene glycol (TEG) dehydration unit rated at 65 MMscfd (MACT HH)	STILLVNT ^B	TO-1 (S-795003)	TO-1 (S-795003)
Glycol reboiler rated at 0.512 x 10 ⁶ Btu/hr	GLYRBLR (E-794090) ^B	GLYRBLR (E-794090)	None
Two 400-bbl slop storage tanks	SLOPST ^B (TK-791301 & TK-791401)	TO-1 (S-795003)	Submerged Fill Pipe (SFP) & TO-1 (S-795003)
Four 400-bbl oil storage tanks	OILST ^B (TK-791302, TK-791402, TK-791502, & TK-791602)	TO-1 (S-795003)	SFP & TO-1
400-bbl water storage tank	WTRST ^B (TK-791701)	TO-1 (S-795003)	SFP & TO-1
400-bbl triazene storage tank	MAKEUPTNK (TK-796002) ^C	MAKEUPTNK (TK-796002)	None

Emission Unit Description^A	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
150-bbl methanol storage tank	MeOHST (TK-796004) ^C	MeOHST (TK-796004)	SFP
150-bbl TEG storage tank	GLYST (TK-796003) ^C	GLYST (TK-796003)	None
200-bbl spent triazene storage tank	SPNTCHMTNK (TK-794110) ^C	SPNTCHMTNK (TK-794110)	TO-1 (S-795003)
High pressure (HP) flare	HPFLARE (S-795101) ^B	HPFLARE (S-795101)	None
Thermal oxidizer (NSPS OOOOa)	TO-1 (S-795003) ^B	TO-1 (S-795003)	None
Truck loading oil	LOADOIL ^{C, D}	LOADOIL	None
Fugitive emissions (NSPS OOOOa)	FUG ^C	FUG	Leak Detection & Repair (LDAR) Program
Ten electric-driven compressors (NSPS OOOOa)	EC-1 through EC-10 ^{C, D}	EC-1 through EC-10	NSPS OOOOa

^A All emission unit ratings are considered nominal ratings.

^B Emission unit description modified with this permit action. No physical modifications or regulatory applicability changes to these emission units with this permit action.

^C Insignificant or fugitive emission sources (no specific emission limit).

^D Existing emission unit(s) incorporated with this permit action. There are no physical modifications or regulatory applicability changes to the emission unit(s) with this permit action.

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 OOOOa – Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 (EU FUG). The electric-driven compressors (EUs EC-1 through EC-10) 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 HH – National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities (EU STILLVNT). (Applicability to this subpart is not affected with this permit action.)

C. Thermal Oxidizer Restriction for Control of Storage Vessels (EU TO-1)

Emissions from the storage tanks (EUs SLOPST, OILST, & WTRST; collectively the “Tank Battery”) shall be controlled by the thermal oxidizer (EU TO-1) 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 methane and VOC in the gases vented to the device by 95.0 percent by weight or greater as determined in accordance with the requirements of § 60.5413a(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 § 60.5413a(b).
- 3) The permittee must operate at a minimum temperature of 760 °Celsius, 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 § 60.5413a(b).

D. Thermal Oxidizer Requirements for Control of Storage Vessels (EU TO-1)

- 1) The permittee must ensure that thermal oxidizer 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.

- 4) The permittee must measure and record the flow of waste gas to EU TO-1. The permittee may use direct flow meters or other parameter monitoring systems combined with engineering calculations, such as inlet line pressure, line size, and burner nozzle dimensions, to satisfy, this requirement. The monitoring instrument must have an accuracy of + 10 percent or better at the maximum expected flow rate.

E. 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.D.3.
- 2) Records of waste gas flow to the thermal oxidizer required by Condition 2.D.4.
- 3) Records of initial and subsequent periodic performance tests for the thermal oxidizer (TO-1).

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

- 4) 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 OOOOb.
- 5) 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.G. The report shall include the following:

- 6) Records of thermal oxidizer (EU TO-1) performance testing, if conducted during the preceding year.

- 7) Records of VOC and methane emissions that demonstrate that VOC and methane emissions remains below 6 tpy and 20 tpy, respectively. The VOC and methane emissions must be determined using a generally accepted model or calculation methodology that accounts for flashing, working, and breathing losses.

3. Emission Unit Limits:

Emission limits from the operation of the source unit(s) identified in Table 1-2 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
Two 400-bbl slop storage tanks	SLOPST (TK-791301 & TK-791401)	TO-1 (S-795003)	VOC	Condition 3.A
Four 400-bbl oil storage tanks	OILST (TK-791302, TK-791402, TK-791502, & TK-791602)			
400-bbl water storage tank	WTRST (TK-791701)			
Ten electric-driven compressors	EC-1 through EC-10 ^A	EC-1 through EC-10	VOC	Per NSPS, Subpart OOOOa

^A Emission limit not affected with this permit action. These are existing emission units incorporated for table completeness. There are no physical modifications or regulatory applicability changes to these emission units with this permit action.

A. VOC Emissions Restrictions (EUs SLOPST, OILST, & WTRST):

- 1) The permittee shall operate the tank battery with annual emissions of less than 6 tons per year of VOC and 20 tons per year of methane. The tank battery potential to emit VOC and methane emissions are based on throughput of slop tanks, oil tanks and water tank.
- 2) Tank battery emissions shall be controlled pursuant to the requirements of Condition 2.C. Compliance with the recordkeeping requirements of Condition 2.E shall be recorded and reported to the Department pursuant to the requirements of Conditions 2.E.6) through 2.E.7).

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. Organic Compound Emissions:

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

C. Fugitive Emissions:

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

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. 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.

G. 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.

H. 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.

I. Nuisance or Danger:

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

J. Transfer of Permit to Construct:

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

K. 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.

L. 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.

M. 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.