AIR QUALITY EFFECTS ANALYSIS
FOR
PERMIT TO CONSTRUCT
ACP-18218 v1.0

Applicant:

Targa Badlands, LLC
811 Louisiana Street, Suite 2100
Houston, TX 77002

Facility Location:

Hawkeye Compressor Station
McKenzie County, North Dakota
NW ¼, NE ¼, Sec. 24, T152N, R95W

Introduction (and Background):

Targa Badlands, LLC submitted a permit to construct application to the North Dakota Department of Environmental Quality – Division of Air Quality (Department) on August 10, 2023. The application was for the expansion of an existing natural gas pipeline compressor station (Hawkeye Compressor Station or facility) located in McKenzie County, North Dakota.

The Hawkeye Compressor Station operates under Air Permit to Operate No. AOP-28410 v1.0 issued on April 20, 2022. The facility receives gas from producing oil wells in the area and sends it to Targa's Little Missouri Gas Plant for further processing. The gas entering the compressor station flows to a triethylene glycol (TEG) dehydrator which removes moisture from the gas. The gas is then compressed by the natural gas-driven compressor engines and sent through a pipeline to the Little Missouri Gas Plant.

The proposed modifications (Project) include the addition of three natural gas-fired reciprocating compressor engines (EUs 16, 17, & 18). Additionally, the Project includes updates to the potential annual throughputs and associated emissions for the condensate tanks (EUs TK-1 & TK-7), two vapor combustors (EUs V-1 & V-2), a produced water storage tank (EU TK-2), and the fugitive emissions (EU FS-2).

Once the modifications described above are complete, the facility will remain a PSD minor source and will remain subject to Title V.

Table 1 lists the emissions units associated with the Hawkeye Compressor Station after completion of the Project.

Table 1 - Source-wide Permitted Equipment.

Emission Unit Description [A]	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Caterpillar 3516B (4SLB) natural gas-fired compressor engine rated at approximately 1,380 bhp (NSPS JJJJ & MACT ZZZZ)	1 (CM-301)	1	Catalytic Oxidizer
Caterpillar 3516B (4SLB) natural gas-fired compressor engine rated at approximately 1,380 bhp (NSPS JJJJ & MACT ZZZZ)	2 (CM-302)	2	Catalytic Oxidizer
Caterpillar 3516B (4SLB) natural gas-fired compressor engine rated at approximately 1,380 bhp (NSPS JJJJ & MACT ZZZZ)	3 (CM-303)	3	Catalytic Oxidizer
Caterpillar 3516B (4SLB) natural gas-fired compressor engine rated at approximately 1,380 bhp (NSPS JJJJ & MACT ZZZZ)	4 (CM-304)	4	Catalytic Oxidizer
Triethylene glycol (TEG) reboiler rated at approximately 0.675 MMBtu/hr and fired on natural gas	5	5	Condenser and Reboiler [B]
TEG dehydration unit with a rated capacity of approximately 22 MMscfd (MACT HH)	6 (PK-501)		
Waukesha L7042GSI S5 (4SRB) natural gas-fired compressor engine rated at 1,500 bhp (NSPS JJJJ & MACT ZZZZ)	7 (CM-305)	7	Non-Selective Catalytic Reduction (NSCR)
Waukesha L7042GSI S5 (4SRB) natural gas-fired compressor engine rated at 1,500 bhp (NSPS JJJJ & MACT ZZZZ)	8 (CM-306)	8	NSCR
Triethylene glycol (TEG) reboiler rated at approximately 0.975 MMBtu/hr and fired on natural gas	11	11	Condenser and Reboiler [B]
TEG dehydration unit with a rated capacity of approximately 24 MMscfd (MACT HH)	12 (PK-502)		
Distillate oil-fired emergency generator rated at 1,340 bhp (MACT ZZZZ)	13 [C] (G-910)	13	None
Filter (Dehy) blowdowns	14 [D, E]	14	None

Emission Unit Description [A]	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Liquid-liquid separator blowdowns	15 [D, E]	15	None
Waukesha L5794GSI (4SRB) natural gas-fired compressor engine rated at 1,347 bhp (NSPS JJJJ & MACT ZZZZ)	16 [F]	16	NSCR
Waukesha L7042-S5 (4SRB) natural gas-fired compressor engine rated at 1,500 bhp (NSPS JJJJ & MACT ZZZZ)	17 [F]	17	NSCR
Waukesha L7044-S5 (4SRB) natural gas-fired compressor engine rated at 1,790 bhp (NSPS JJJJ & MACT ZZZZ)	18 [F]	18	NSCR
400 bbl condensate tank #1	TK-1 [D, G]	V-1	Submerged Fill Pipe (SFP) & Combustor (V-1)
400 bbl produced water tank	TK-2 [D, G]	TK-2	SFP
200 bbl coolant tank	TK-3 [D]	TK-3	None
1,000-gallon glycol tank	TK-4 [D]	TK-4	None
1,050-gallon methanol tank	TK-5 [D]	TK-5	None
200 bbl lube oil storage tank	TK-6 [D]	TK 6	None
400 bbl condensate tank #2	TK-7 [D, G]	V-1	SFP & Combustor (V-1)
2,000-gallon methanol storage tank	TK-12 [D]	TK-12	SFP
Various 500-gallon lube oil tanks	TK-13 to TK-16 [D]	TK-13 to TK-16	None
Various 500-gallon coolant tanks	TK-17 to TK-20 [D]	TK-17 to TK-20	None
500-gallon TEG makeup tank	TK-21 [D]	TK-21	None
Vapor combustor #1	V-1 [G] (FL-901)	V-1	N/A
Vapor combustor #2	V-2 [G] (FL-902)	V-2	N/A
Truck loading	FS-1 [D, G]	FS-1	None
Fugitive emissions (NSPS OOOO, OOOOa, and OOOOb)	FS-2 [D, G]	FS-2	Leak Detection and Repair Program (LDAR)
Pigging fugitive emissions	FS-3 [D, G]	FS-3	None

Emission Unit Description [A]	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Fugitive emissions from blowdowns of compressor engines	FS-6 [D, G]	FS-6	None

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

[B] Emissions from the TEG dehydration unit still vent are combusted in the TEG dehydration unit reboiler.

[C] The potential to emit for an emergency stationary reciprocating internal combustion engine (RICE) is based on operating no more hours per year than is allowed by the subpart (40 CFR 63, Subpart ZZZZ) for other than emergency situations. For engines to be considered emergency stationary RICE under the RICE rules, engine operations must comply with the operating hour limits as specified in the applicable subpart. There is no time limit on the use of emergency stationary RICE in emergency situations [40 CFR 63, Subpart ZZZZ, §63.6640 (f)].

[D] Insignificant source (no specific emission limit).

[E] Existing unit included for ease of permit renewal.

[F] New unit associated with the Project.

[G] Potential annual throughputs and associated emissions affected by the Project.

Facility Wide Emissions Profile
Potential to Emit (PTE)

Table 2 – Project PTE (tons per year) [A]

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	CO	NO_X	SO_2	VOCs	PM	Total HAPs	Formaldehyde (Largest HAP)
Natural gas-fired compressor engine	16	16	26.0	8.2	0.0	8.3	1.0	0.9	0.3
Natural gas-fired compressor engine	17	17	29.0	9.1	0.0	2.6	1.1	1.0	0.4
Natural gas-fired compressor engine	18	18	34.6	10.9	0.0	2.2	1.2	1.2	0.4
Condensate tank [B]	TK-1	V-1	-	-	-	3.1	-	0.7	-
Condensate tank [B]	TK-7								
Vapor combustor #1 [B]	V-1		6.2	1.4	0.0	0.0	-	0.0	0.0
Vapor combustor #2 [B]	V-2	V-2							
Produced water tank [B]	TK-2	TK-2	-	-	-	0.0	-	0.0	-
Truck [B]	FS-1	FS-1	-	-	-	31.8	-	0.7	-
Fugitives [B]	FS-2	FS-2	-	-	-	52.1	-	10.6	-
Total (with fugitives):			95.7	29.6	0.1	100.1	3.3	15.3	1.1
Total (without fugitives)[C]:			**95.7**	**29.6**	**0.1**	**48.0**	**3.3**	**4.6**	**1.1**

[A] Abbreviations:
PM: combined $PM/PM_{10}/PM_{2.5}$ filterable and condensable particulate matter
SO_2: sulfur dioxide
NO_X: oxides of nitrogen
CO: carbon monoxide
VOCs: volatile organic compounds
HAPs: hazardous air pollutants as defined in Section 112(b) of the Clean Air Act

[B] Existing emissions unit, updated emissions associated with this Project

[C] Fugitive emissions for this facility are not considered when determining applicability to major source threshold under Title V and PSD.

Project Emissions Changes

Table 3-Project and Post Project Facility PTE for NSR Pollutants (in tons per year)

Facility-wide Emissions	CO	NO_X	SO_2	VOCs	PM	HAPs
Existing Facility [A]	120.2	49.9	0.2	116.6	4.0	17.2
New and Modified Equipment	95.7	29.6	0.1	48.0	3.3	4.6
Facility-wide Post Project [B]	209.1	77.7	0.3	137.7	7.4	20.8

[A] Existing PSD minor stationary source.

[B] PSD minor stationary source upon project completion.

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[1].

Applicability and Expected Compliance

The facility is not subject to PSD nor does the Project's PTE trigger the modeling thresholds listed in the "Criteria Pollutant Modeling Requirements for a Permit to Construct", therefore, preconstruction modeling for this Project was not required. Based on the facility and Project PTE, 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 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

[1] 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

Based on Department experience with similar engines and other fuel gas combustion devices fired on pipeline quality natural gas, visible air contaminants from the Project are expected to comply with the 20% opacity limit.

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

The facility is subject to this chapter and will comply with all open burning regulations.

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

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

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 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

The Project is exempt from this chapter since each engine (EUs 16, 17, & 18) will be fired on gas containing no more than 2 grains of sulfur per 100 standard cubic feet.

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

This chapter establishes requirements for organic compound facilities and the disposal of organic compounds.

Applicability and Expected Compliance

The existing produced water tank (EU TK-2) complies with this chapter by operating the tank with a submerged fill pipe.

For leak detection and repair of equipment in VOC service (EU FS-2), the facility complies with the applicable requirements under New Source Performance Standard (NSPS) Subpart OOOO and/or OOOOa, as applicable to each affected facility. The facility also complies with the pumps and compressors provision maintaining appropriate seals for their service and operating conditions. New equipment in VOC service (EU FS-2) added as a result of this Project will be subject to NSPS OOOOb.

The engines associated with the Project (EUs 16, 17, & 18) will comply with the compressors provision by installing and maintaining appropriate seals for their service and operating conditions.

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 16, 17, & 18) are also subject to opacity requirements under NDAC 33.1-15-03-02 and subject to the requirements of NSPS Subpart JJJJ. As a result of expected compliance with these provisions, 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.

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 Hawkeye Compressor Station is subject to the following subparts under 40 CFR Part 60 which have been adopted by North Dakota:

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. In addition, any changes to the facility after it is built will be evaluated with respect to this subpart as well as others.

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) manufactured on or after July 1, 2007, regardless of size. SI ICE are categorized in this subpart by usage, size and fuel type.

Applicability and Expected Compliance

The natural gas compressor engines (EUs 16, 17, & 18) are subject to the requirements of NSPS Subpart JJJJ. The Project engines are rated at 1,347 brake horsepower (bhp), 1,500 bhp, and 1,790 bhp, respectively. Each engine will be equipped with non-selective catalytic reduction (NSCR) control.

Subpart JJJJ requires each engine to comply with the following emissions standards:

- 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

Beyond the Subpart JJJJ limits, the Project is restricted to lower engine emissions limits based on representation made in the permit application and to avoid classification as a PSD major source upon Project completion. As a result, Condition 3 of ACP-18218 v1.0 established the following limits:

For EU 16:

- NOx of 0.63 g/hp-hr
- CO of 2.0 g/hp-hr or 270 ppmvd @ 15% O_2
- VOC of 0.64 g/hp-hr

For EU 17:

- NOx of 0.63 g/hp-hr
- CO of 2.0 g/hp-hr or 270 ppmvd @ 15% O_2
- VOC of 0.18 g/hp-hr

For EU 18:

- NOx of 0.63 g/hp-hr
- CO of 2.0 g/hp-hr or 270 ppmvd @ 15% O_2
- VOC of 0.13 g/hp-hr

To demonstrate compliance with the above limits, the facility must conduct emissions testing every 8,760 hours of operations or every three years, whichever comes first.

The facility is also expected to comply with Subpart 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 operate the engines in a manner consistent with good air pollution control for minimizing emissions.

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

The Project compressors and fugitive emissions (EU FS-2) are subject to the requirements of Subpart OOOOb.

The compressors driven by the natural gas compressor engines (EUs 16, 17, & 18) are considered affected facilities under Subpart OOOOb. The compressors are expected to comply with the applicable standards for reciprocating compressors under Subpart OOOOb.

The fugitive emissions (EU FS-2) components that have a potential to emit VOCs are considered affected facilities under Subpart OOOOb. The facility is expected to comply with the applicable fugitive emissions VOC standards through development and implementation of a leak detection and repair (LDAR) program in compliance with Subpart

OOOOb requirements. The LDAR program, at a minimum, shall require monitoring, reporting, and recordkeeping.

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 adopts most of the National Emission Standards for Hazardous Air Pollutants (NESHAP) under 40 CFR Part 61.

Applicability and Expected Compliance

The facility does not appear to have any applicable requirements under this chapter.

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 requires the facility to obtain a Permit to Construct and a Permit to Operate.

Applicability and Expected Compliance

The facility has submitted an application for a permit to construct and has met all requirements necessary to obtain a permit to construct. The Project is a synthetic minor project as federally enforceable restrictions are put in place to restrict the CO and VOC emissions beyond the NSPS JJJJ standards.

The permit must undergo public comment per NDAC 33.1-15-14-06.5.a.

Once the facility completes the Project, a facility inspection will be performed by the Department. Pending a satisfactory facility inspection, the facility will be issued a permit to operate by the Department.

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. A facility is subject to PSD review if it is classified as a "major stationary source" under 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 new source review (NSR) pollutant[2] exceed 250 tpy (excluding fugitive emissions). The PTE for this Project, and the PTE for the overall facility, as shown in Table 2 and Table 3, respectively, are below the 250 tpy threshold. As a result, the Project is not subject to PSD review and the facility will remain a PSD minor source.

[2] 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)

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.

Applicability and Expected Compliance

Based on Department experience with sources having similar emission units, processes, and low hydrogen sulfide concentrations, the facility is expected to comply with this chapter.

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

This Chapter restricts fugitive emissions from particulate matter or other visible air contaminates 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). This chapter also restricts the use of dispersion techniques to affect the concentration of a pollutant in the ambient air.

Applicability and Expected Compliance

The stack height of the new engines (EUs 16, 17, & 18) shall be at least 1.5 times the nearby building height. A nearby building is any building located a distance of less than five times the building height from the stack.

S. NDAC 33.1-15-19 – Visibility Protection

This chapter applies to new major stationary sources as defined in Section 33.1-15-15-01.

Applicability and Expected Compliance

The facility is not a new major stationary source and therefore is not subject to the requirements of this chapter. Given the minor source levels of the visibility impairing air pollutants, such as NO_X, SO_2, and $PM_{2.5}$, it is expected that the facility will not adversely contribute 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

The facility is not an oil or gas well facility and is therefore not subject to the requirements of this chapter.

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 the 40 CFR Part 63 regulations which regulates hazardous air pollutants (HAPs) from regulated source categories. Typically, these standards apply to major sources of air pollution that are 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) (i.e. 40 CFR 63, Subpart ZZZZ area source provisions have not been adopted by the Department).

Applicability

The facility's potential HAP emissions are less than 10 tons/year of any single HAP and are less than 25 tons/year of any combination of HAPs, so the facility is an area (minor) source of HAPs. As shown in the Table 3, total potential HAPs from the facility upon Project completion are approximately 20.8 tons/year. The greatest single potential HAP from non-fugitive sources is n-hexane at less than 6 tons/year.[3]

Subpart A – General Provisions

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

[3] See Permit to Construct Application, Targa Badlands LLC, Hawkeye Compressor Station. August 2023, PDF page 28.

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emissions from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

Applicability and Expected Compliance

The Project has engines (EUs 16, 17, & 18) subject to the requirements under this subpart. The requirements of Subpart ZZZZ for the engines are met by complying with the requirements of NDAC 33.1-15-12 [40 CFR 60], Subpart JJJJ.

W. NDAC 33.1-15-23 – Fees

This chapter requires a filing fee of $325 for permit to construct applications, plus any additional fees based on actual processing costs. The additional fees based on processing costs will be assessed upon issuance of the draft permit to construct. The annual operating permit fee is also applicable.

The applicant has paid the $325 filing fee and may be required to pay the additional fees associated with the permit processing.

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 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

The facility is an existing minor PSD source, and the Project is a minor modification to the source. Based on low PTE of visibility impairment pollutants (NO_X, SO_2, and $PM_{2.5}$) from the Project, the facility is not expected to contribute to visibility impairment. Therefore, the facility is not subject to the requirements of this chapter.

Summary:

A complete review of the proposed project indicates that the Hawkeye Compressor Station 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 Permit to Construct for the Hawkeye Compressor Station following the completion of a 30-day public comment period. The public comment period will run from March 13, 2024, through April 12, 2024

Update post comment period:
[Reserved]

Date of Draft Analysis: March 13, 2024
Date of Final Analysis: [Reserved]

Analysis By:

Raina Cardwell
Environmental Scientist
Division of Air Quality

RLC: