

Air Pollution Control
Permit to Construct No. ACP-17848 v1.1
Alex Compressor Station

Amendment No. 1

Condition I.B.4. of Permit to Construct No. ACP-17848 v1.0 is rescinded in its entirety and is replaced with the following:

4. Equipment at the Facility:

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Waukesha L7044GSI (4SRB) natural gas-fired compressor engine rated at 1,680 bhp manufactured June 2014 (NSPS JJJJ, OOOOa) (MACT ZZZZ)	C1	C1	Non-Selective Catalytic Reduction (NSCR)
Waukesha L7044GSI (4SRB) natural gas-fired compressor engine rated at 1,680 bhp manufactured January 2014 (NSPS JJJJ, OOOOa) (MACT ZZZZ)	C2	C2	NSCR
Waukesha L7042GSI (4SRB) natural gas-fired compressor engine rated at 1,478 bhp manufactured December 2004 (MACT ZZZZ)	C3	C3	NSCR
Waukesha L7044GSI (4SRB) natural gas-fired compressor engine rated at 1,680 bhp manufactured October 2013 (NSPS JJJJ, OOOOa) (MACT ZZZZ)	C4	C4	NSCR
Two 400 barrel (bbl) condensate tanks	2 & 3	2 & 3	Submerged Fill Pipe
Triethylene Glycol (TEG) reboiler rated at 0.5×10^6 Btu/hr	7	7	None
TEG dehydration unit rated at 20×10^6 scfd (MACT HH)	8	2, 3, & 7	BTEX Condenser & TEG Reboiler ^A
Fugitive emissions	FUG	FUG	Leak Detection and Repair (LDAR) Program
Compressor blowdowns	BD	BD	Gas Recycle System ^B
Pigging ^C	-	-	-
Produced water truck loading ^C	-	-	-
NGL truck loading ^C	-	-	-
Two methanol storage tanks ^C	-	-	-

- A Emissions from the TEG dehydration unit flash tank are recycled back into the process. Emissions from the TEG reboiler still column are controlled by a BTEX condenser, with non-condensable vapors exiting the condenser combusted in the TEG reboiler firebox.
- B Some blowdowns do not go through the gas recycle system and are vented to atmosphere.
- C Insignificant source of emissions.

Condition II.A. of Permit to Construct No. ACP-17848 v1.0 is rescinded in its entirety and is replaced with the following:

- A. **Emission Limits:** Emission limits from the operation of the source unit(s) identified in Item I.B 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.

Emission Unit Description	EU	EP	Pollutant / Parameter	Emission Limit ^A
Three Waukesha engines rated at 1,680 bhp each	C1, C2, and C4	C1, C2, and C4	NO _x	1.0 g/hp-hr or 82 ppmvd at 15% O ₂
			CO	1.0 g/hp-hr ^B
			VOC	0.7 g/hp-hr or 60 ppmvd at 15% O ₂
			Opacity	20% ^C
Waukesha engine rated at 1,478 bhp	C3	C3	NO _x	3.30 lb/hr
			CO	6.60 lb/hr
			Opacity	20% ^C
TEG reboiler	7	7	Opacity	20% ^C

^A Emission limits apply to each individual emission point.

^B Less restrictive 40 CFR 60 Subpart JJJJ limits also apply as follows: CO of 2.0 g/hp-hr or 270 ppmvd @ 15% O₂.

^C 40% opacity is permissible for not more than one six-minute period per hour.

FOR THE NORTH DAKOTA DEPARTMENT
OF ENVIRONMENTAL QUALITY

Date: _____

By: _____

James L. Semerad
Director
Division of Air Quality