

## Air Pollution Control Permit to Construct No. ACP-18175 v1.1 Edgewater Compressor Station

## Amendment No. 1

Condition I.B.4. of Permit to Construct No. ACP-18175 v1.0 is rescinded in its entirety and is replaced with the following: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 1,900 bhp manufactured September 2019 (NSPS JJJJ, OOOOa) (MACT ZZZZ)	C1	Cl	Non-Selective Catalytic Reduction (NSCR)
Waukesha L7044GSI (4SRB) natural gas- fired compressor engine rated at 1,900 bhp manufactured September 2019 (NSPS JJJJ, OOOOa) (MACT ZZZZ)	C2	C2	NSCR
Waukesha L5794GSI (4SRB) natural gas- fired compressor engine rated at 1,380 bhp manufactured November 2007 (NSPS JJJJ) (MACT ZZZZ)	C3	C3	NSCR
Caterpillar G3516 (4SLB) natural gas-fired compressor engine rated at 1,380 bhp manufactured February 2019 (NSPS JJJJ, OOOOa) (MACT ZZZZ)	C5	C5	Oxidation Catalyst
Triethylene Glycol (TEG) Reboiler rated at 0.5 x 10 <sup>6</sup> Btu/hr	3	3	None
TEG Dehydration Unit rated at 27 x 10 <sup>6</sup> scfd (MACT HH)	4	3, 5, & 6	BTEX Condenser and TEG Reboiler <sup>A</sup>
Two 400 bbl Produced Water/Condensate Tanks	5 & 6	5 & 6	Submerged Fill Pipe
Fugitive Emissions	FUG	FUG	NA
Compressor Blowdowns	BD	BD	Gas Recycle System B
Produced water truck loading <sup>C</sup>	-	-	-
NGL truck loading <sup>C</sup>	-	-	_
Pigging <sup>C</sup>	-	•	•
Three methanol chemical storage tanks C	-	-	-

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.

C Insignificant source of emissions.

Some blowdowns do not go through the gas recycle system and are vented to atmosphere.

Condition II.A. of Permit to Construct No. ACP-18175 v1.0 is rescinded in its entirety and is replaced with the following: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			Pollutant /	
Description	EU	EP	Parameter	Emission Limit <sup>A</sup>
Two Waukesha			NO <sub>x</sub>	1.0 g/hp-hr or 82 ppmvd @15% O <sub>2</sub>
L7044GSI compressor engines rated at 1,900 bhp each	C1 & C2	C1 & C2	СО	1.0 g/hp-hr <sup>B</sup>
			voc	0.7 g/hp-hr or 60 ppmvd @15% O <sub>2</sub>
			Opacity	20% <sup>D</sup>
Waukesha L5794GSI compressor engine rated at 1,380 bhp	C3	C3	NO <sub>x</sub>	1.0 g/hp-hr <sup>C</sup>
			со	1.0 g/hp-hr <sup>C</sup>
			voc	0.7 g/hp-hr <sup>C</sup>
			Opacity	20% <sup>D</sup>
Caterpillar G3516J compressor engines rated at 1,380 bhp each	C5	C5	NO <sub>x</sub>	1.0 g/hp-hr or 82 ppmvd @15% O <sub>2</sub>
			со	2.0 g/hp-hr or 270 ppmvd @15% O <sub>2</sub>
			VOC	0.7 g/hp-hr or 60 ppmvd @15% $O_2$
			Opacity	20% <sup>D</sup>
TEG reboiler	6	6	Opacity	20% <sup>D</sup>

Emission limits apply to each individual emission point.

Date:\_\_\_\_\_\_\_ By:\_\_\_\_\_\_\_\_
James L. Semerad
Director
Division of Air Quality

Less restrictive 40 CFR 60 Subpart JJJJ limits also apply as follows: CO of 2.0 g/hp-hr or 270 ppmvd @ 15% O<sub>2</sub>.

Less restrictive 40 CFR 60 Subpart JJJJ limits also apply as follows: NO<sub>x</sub> of 2.0 g/hp-hr or 160 ppmvd @ 15% O<sub>2</sub>, CO of 4.0 g/hp-hr or 540 ppmvd @ 15% O<sub>2</sub>, and VOC of 1.0 g/hp-hr or 86 ppmvd @ 15% O<sub>2</sub>.

<sup>40%</sup> opacity is permissible for not more than one six-minute period per hour.