

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 74278

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
P1-4-10	Natural GasFired Boiler No. 1	PM	0.57	2.50
		PM <sub>10</sub>	0.14	0.62
		VOC	0.41	1.81
		NO <sub>x</sub>	0.75	3.29
		CO	2.63	11.50
		SO <sub>2</sub>	0.05	0.20
		NH <sub>3</sub>	0.23	1.01
P1-4-11	Natural Gas-Fired Boiler No. 2	PM	0.57	2.50
		PM <sub>10</sub>	0.14	0.62
		VOC	0.41	1.81
		NO <sub>x</sub>	0.75	3.29
		CO	2.63	11.50
		SO <sub>2</sub>	0.05	0.20
		NH <sub>3</sub>	0.23	1.01
P1-4-12	Natural Gas-Fired Boiler No. 3	PM	0.57	2.50
		PM <sub>10</sub>	0.14	0.62
		VOC	0.41	1.81
		NO <sub>x</sub>	0.75	3.29
		CO	2.63	11.50
		SO <sub>2</sub>	0.05	0.20
		NH <sub>3</sub>	0.23	1.01
P1-1-13	Grain Storage	PM	(5)	(5)
		PM <sub>10</sub>	(5)	(5)
P1-1-14	Grain Storage	PM	(5)	(5)
		PM <sub>10</sub>	(5)	(5)

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY**
P1-1-15	Grain Storage	PM PM <sub>10</sub> (5)	(5) (5)	(5)
P1-1-16	Grain Storage	PM PM <sub>10</sub> (5)	(5) (5)	(5)
<b>Total Allowables for Grain Storage (5)</b>		<b>PM</b> <b>PM<sub>10</sub> 0.03</b>	<b>0.10</b> <b>0.11</b>	<b>0.44</b>
C1-1	Grain Receiving and DDGS Loading Controlled Emissions	PM/PM <sub>10</sub>	0.28	0.23
C1-2	Grain Handling Emissions	PM/PM <sub>10</sub>	0.85	3.74
C1-3	Grain Milling Operations No. 1	PM/PM <sub>10</sub>	0.34	1.48
C1-4	Grain Milling Operations No. 2	PM/PM <sub>10</sub>	0.34	1.48
C1-5	Grain Milling Operations No. 3	PM/PM <sub>10</sub>	0.34	1.48
C2-1	Fermentation Scrubber No. 1	VOC Acetaldehyde Formaldehyde Acrolein 2-Furaldehyde Methanol	3.08 1.00 0.01 0.01 0.01 0.01	13.49 4.39 0.04 0.05 0.06 0.05
C2-2	Fermentation Scrubber No. 2	VOC Acetaldehyde Formaldehyde Acrolein 2-Furaldehyde Methanol	1.54 0.50 0.01 0.01 0.01 0.01	6.75 2.19 0.02 0.03 0.03 0.02
C7-1	Ethanol Loadout Flare No. 1	VOC	2.44	2.67

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			lb/hr	TPY**
		NO <sub>x</sub> 0.22	0.38	
		CO 1.18	2.06	
		SO <sub>2</sub> 0.01	0.01	
		Benzene	0.02	0.02
		Toluene	0.02	0.02
		Trimethylbenzene	0.01	0.01
		Xylene	0.01	0.01
		Hexane	0.03	0.03
C7-2	Ethanol Loadout Flare No. 2	VOC	2.36	1.26
		NO <sub>x</sub> 0.11	0.19	
		CO 0.59	0.52	
		SO <sub>2</sub> 0.01	0.01	
		Benzene	0.02	0.01
		Toluene	0.02	0.01
		Trimethylbenzene	0.01	0.01
		Xylene	0.01	0.01
		Hexane	0.01	0.01
C5-1	Regenerative Thermal Oxidizer No. 1	PM	0.93	4.08
		PM <sub>10</sub>	0.64	2.80
		VOC 0.74	3.25	
		NO <sub>x</sub> 5.91	25.89	
		CO 2.15	9.42	
		SO <sub>2</sub> 0.06	0.26	
		Acetaldehyde	0.03	0.12
		Formaldehyde	0.01	0.05
		Acrolein	0.01	0.01
		2-Furaldehyde	0.01	0.02
		Methanol	0.01	0.03
C5-2	Regenerative Thermal Oxidizer No. 2	PM	0.46	1.91
		PM <sub>10</sub>	0.31	1.36

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
		VOC	0.36	1.57
		NO <sub>x</sub>	1.61	7.04
		CO	0.74	3.24
		SO <sub>2</sub> 0.02	0.07	
		Acetaldehyde	0.01	0.06
		Formaldehyde	0.01	0.02
		Acrolein	0.01	0.01
		2-Furaldehyde	0.01	0.01
		Methanol	0.01	0.01
C5-3	DDGS Storage Controlled Emissions (4)	PM/PM <sub>10</sub>	0.01	0.02
DDGSSTORFUG	DDGS Storage Fugitive Emissions (4)	PM	0.14	0.62
		PM <sub>10</sub>	0.04	0.16
C5-4	DDGS Handling Controlled Emissions (4)	PM/PM <sub>10</sub>	0.13	0.24
DDGSHANDFUG	DDGS Handling Fugitive Emissions (4)	PM	3.29	6.01
		PM <sub>10</sub>	1.83	3.35
P5-1-13	DDGS Loading Fugitives (4)	PM	0.43	1.88
		PM <sub>10</sub> 0.15	0.64	
ETHLOAD	Ethanol Loadout Fugitives (4)	VOC	0.52	0.23
ETHPLNTFUG	Equipment Leak Fugitives (4)	VOC	0.63	2.77
		Ammonia	0.01	0.02
GRNRECFUG	Grain Receiving Fugitives (4)	PM	2.68	0.63
		PM <sub>10</sub>	0.39	0.09
P6-1-10	Cooling Tower No. 1	PM/PM <sub>10</sub>	0.18	0.80
		VOC 0.68	2.96	

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			lb/hr	TPY**
P6-1-11	Cooling Tower No. 2	PM/PM <sub>10</sub>	0.09	0.40
		VOC	0.34	1.48
T-01	Denatured Ethanol Storage Tank No. 1	VOC	0.23	(6)
T-02	Denatured Ethanol Storage Tank No. 2	VOC	0.23	(6)
<b>Total Annual Allowable for Denatured Ethanol Storage Tanks T-01 and T-02 (6)</b>				
<b>0.58</b>				
T-04	Denaturant (Gas) Storage Tank	VOC	0.53	1.43
T-03	Ethanol Storage Shift Tank	VOC	0.09	(7)
T-05	Ethanol Storage Shift Tank	VOC	0.09	(7)
T-06	Ethanol Storage Shift Tank	VOC	0.09	(7)
<b>Total Annual Allowable for Ethanol Storage Shift Tanks T-03, T-05 and T-06 (7)</b>				
<b>0.66</b>				
T-07	Ammonia Storage Tank	NH <sub>3</sub>	0.01	0.01

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
- (3) PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>.  
PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.  
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1  
NO<sub>x</sub> - total oxides of nitrogen  
CO - carbon monoxide  
SO<sub>2</sub> - sulfur dioxide  
NH<sub>3</sub> - ammonia
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Total short term and annual allowables for all grain storage activities
- (6) Total annual allowables for Denature Ethanol Storage Tanks T-01 and T-02**
- (7) Total Annual Allowable for Ethanol Storage Shift Tanks T-03, T-05, and T-06**

\* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

\*\* Compliance with annual emission limits is based on a rolling 12-month period.

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year