

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 78440

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, sources, and related activities. 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 | |
|---------------------------|--|--------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| S20 | Unloading Baghouse | PM/PM ₁₀ | 1.65 | 7.21 |
| S30 | Hammermill Baghouse | PM/PM ₁₀ | 0.96 | 4.20 |
| S70 | DDGS Cooler Baghouse | PM/PM ₁₀ | 1.03 | 4.51 |
| | | VOC | 1.55 | 6.81 |
| S90 | DDGS Loading Baghouse | PM/PM ₁₀ | 0.31 | 1.37 |
| S110A | Boiler Stack 1 | PM/PM ₁₀ | 0.91 | 3.99 |
| | | NO _x | 2.40 | 5.26 |
| | | SO ₂ | 0.07 | 0.32 |
| | | CO | 4.20 | 18.40 |
| | | VOC | 0.66 | 2.89 |
| S110B | Boiler Stack 2 | PM/PM ₁₀ | 0.91 | 3.99 |
| | | NO _x | 2.40 | 5.26 |
| | | SO ₂ | 0.07 | 0.32 |
| | | CO | 4.20 | 18.40 |
| | | VOC | 0.66 | 2.89 |
| S10 | Regenerative Thermal Oxidizer and Dryers | PM/PM ₁₀ | 6.67 | 19.47 |
| | | NO _x | 10.00 | 24.09 |
| | | SO ₂ | 10.03 | 43.95 |
| | | CO | 6.89 | 30.17 |

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| | | | | |
|--------|---|---------------------|-------|-------|
| | | VOC | 2.22 | 9.73 |
| S40 | Fermentation Scrubber | VOC | 11.42 | 50.00 |
| | | PM/PM ₁₀ | 0.14 | 0.60 |
| S60 | Biomethanator Flare | NO _x | 0.45 | 1.95 |
| | | CO | 2.38 | 10.41 |
| | | VOC | 0.33 | 1.46 |
| S50 | Ethanol Loadout Flare | NO _x | 0.85 | 3.74 |
| | | CO | 4.60 | 20.13 |
| | | VOC | 0.65 | 2.83 |
| T1 | 190 Proof Storage Tank | VOC | 0.12 | 0.53 |
| T2 | 200 Proof Storage Tank | VOC | 0.12 | 0.53 |
| T3 | Denaturant Storage Tank | VOC | 0.37 | 1.63 |
| T4 | Denatured Ethanol Storage 1 | VOC | 0.09 | 0.38 |
| T5 | Denatured Ethanol Storage 2 | VOC | 0.09 | 0.38 |
| T6 | Corrosion Inhibitor | VOC | 0.01 | 0.01 |
| PL-FUG | Product Loading (5) (Truck Loading Fugitives) | VOC | 1.33 | 5.84 |
| S100 | Emergency Fire Water Pump | PM/PM ₁₀ | 0.06 | 0.01 |
| | | NO _x | 3.45 | 0.86 |
| | | SO ₂ | 0.39 | 0.10 |
| | | CO | 0.18 | 0.05 |
| | | VOC | 0.09 | 0.02 |
| EQ-FUG | Equipment Leak | VOC | 2.02 | 8.84 |

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| | | | | |
|--|---------------------------|----------------------------|--------------------|--------------------|
| | Fugitives (5) | | | |
| GH-FUG and RL-FUG | Grain and DDGS Fugitives | PM/PM ₁₀ | 0.92/0.41 | 4.01/1.81 |
| PV-FUG | Insig. Process Vents | VOC | 0.15 | 0.65 |
| WD-FUG | Wetcake Fugitives | VOC PM/PM ₁₀ | 0.95 0.01/0.001 | 4.14 0.03/0.005 |
| | | | | |
| <u>MAINTENANCE, STARTUP, AND SHUTDOWN (MSS) EMISSIONS</u> | | | | |
| | | | | |
| MSS_EP | Equipment Painting | VOC | 3.32 | 0.02 |
| MSS_FERM | Fermentation Equipment | VOC | 15.08 | 0.18 |
| MSS_DIST | Distillation Equipment | VOC | 18.21 | 0.07 |
| MSS_TANK | Tank Farm | VOC | 21.59 | 1.51 |
| MSS_LOAD | Ethanol Loading Operation | VOC | 1.66 | 0.01 |
| MSS_S100 | Firewater Pump | VOC | 0.01 | 0.01 |
| | | NO _x | 0.01 | 0.01 |
| | | CO | 0.01 | 0.01 |
| | | PM ₁₀ | 0.01 | 0.01 |

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- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3)

| | |
|------------------|--|
| VOC | - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1 |
| NO _x | - total oxides of nitrogen |
| SO ₂ | - sulfur dioxide |
| PM represented | - total particulate matter, suspended in the atmosphere, including PM ₁₀ and PM _{2.5} , as represented |
| PM ₁₀ | - total particulate matter equal to or less than 10 microns in diameter, including PM _{2.5} , as represented |
| CO | - carbon monoxide |
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: _____