## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## Permit Number 22914

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

Source	Air Contaminant	Emission F	Emission Rates *	
Name (2)	Name (3)	lb/hr	TPY**	
Pan Area (Liquids Loading)	VOC Acids CRA	5.39 0.12 0.02	2.05 0.02 0.01	
Vacuum Pump Discharge (Solids Loading)	PM <sub>10</sub>	0.67	0.47	
Fume Scrubber 1 (5)	HCl H <sub>2</sub> SO <sub>4</sub> H₃PO <sub>4</sub> 0.02 FeCl <sub>2</sub> FeCl <sub>3</sub>	0.22 0.01 0.01 0.01 0.01	0.04 0.01 0.01 0.01	
Fume Scrubber 2 (5)	(see note)			
Diesel Tank	VOC	0.01	0.01	
Boiler	$\begin{array}{c} VOC \\ NO_{x} \\ CO \\ SO_{2} \\ PM_{10} \end{array}$	0.01 0.29 0.07 0.61 0.01	0.01 0.05 0.01 0.11 0.01	
Ethanol Loading 1	Ethanol	4.82	2.95	
Ethanol Loading 2	Ethanol	4.82	2.95	
Ethanol Loading 3	Ethanol	4.82	2.95	
Ethanol Loading 4	Ethanol	4.82	2.95	
	Pan Area (Liquids Loading)  Vacuum Pump Discharge (Solids Loading)  Fume Scrubber 1 (5)  Fume Scrubber 2 (5)  Diesel Tank  Boiler  Ethanol Loading 1  Ethanol Loading 2  Ethanol Loading 3	Pan Area (Liquids Loading)  Pan Area (Liquids Loading)  Vacuum Pump Discharge (Solids Loading)  Fume Scrubber 1 (5)  Fume Scrubber 2 (5)  Diesel Tank  VOC  Boiler  VOC  NO <sub>x</sub> CO  SO <sub>2</sub> PM <sub>10</sub> Ethanol Loading 2  Ethanol  Ethanol  Ethanol  Ethanol  Ethanol  Ethanol  SOC  NOx  CO  SOC  Ethanol  Ethanol  Ethanol  Ethanol	Name (2)         Name (3)         bb/hr           Pan Area (Liquids Loading)         VOC (CRA)         5.39 (CRA)           Vacuum Pump Discharge (Solids Loading)         PM₁0 (CRA)         0.67 (CRA)           Fume Scrubber 1 (5)         HCI (CRA)         0.22 (CRA)           H₂SO₄ (CRA)         0.01 (CRA)         0.01 (CRA)           Fecl₂ (CRA)         0.01 (CRA)         0.01 (CRA)           Fume Scrubber 2 (5)         (see note)         0.01 (CRA)           Diesel Tank         VOC (CRA)         0.01 (CRA)           Boiler         VOC (CRA)         0.01 (CRA)           NOx (CRA)         0.02 (CRA)           CO (CRA)         0.01 (CRA)           NOx (CRA)         0.02 (CRA)           NOx (CRA)         0.01 (CRA)           NOx (CRA)	

Load E-5	Ethanol Loading 5	Ethanol	4.82	2.95
FUGITIVES	Piping Fugitives (4)	VOC HCI	0.12 0.01	0.50 0.01
		H <sub>3</sub> PO <sub>4</sub>	0.01	0.01
		$H_2SO_4$	0.01	0.01
		NaOH	0.01	0.01
		Corn Syrup	0.01	0.01
		Latex	0.01	0.01
		NaSi	0.01	0.01
		Beet Molasses	0.01	0.01
		Kaolin Liquid	0.01	0.01
		TiO <sub>2</sub>	0.01	0.01
		$CO_2$	0.01	0.01

- (1) Emission point identification either specific equipment designation or emission point number from plot plan.
- (2) Specific point source names. 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

HCl - hydrogen chloride

H₃PO₄ - phosphoric acid (in aqueous solution)

H<sub>2</sub>SO<sub>4</sub> - sulfuric acid (in aqueous solution)

NaOH - sodium hydroxide (in aqueous solution)

CRA - cresylic acid

 $PM_{10}$  - particulate matter (PM) 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.

FeCl<sub>2</sub> - ferrous chloride

FeCl<sub>3</sub> - ferric chloride NO<sub>x</sub> - nitrogen oxides

NO<sub>x</sub> - nitrogen oxides CO - carbon monoxide

SO<sub>2</sub> - sulfur dioxide

NaSi - sodium silicate (in aqueous solution)
TiO<sub>2</sub> - titanium dioxide (in aqueous solution)

CO<sub>2</sub> - carbon dioxide

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Emissions limits shall be combined limits for both scrubbers.

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

^	schedule:
	Hrs/day Days/week Weeks/year or Hrs/year <u>8760</u>
**	Compliance with annual emission limits is based on a rolling 12-month period.
	Dated April 11, 2006