

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 37887

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)
ACIDSCRB	Acid Scrubbers	VOC	0.01	0.01
		NH <sub>3</sub>	0.62	0.01
		HCL	0.01	0.01
		HF (7)	0.18	0.04
		HNO <sub>3</sub>	0.01	0.01
		H <sub>3</sub> PO <sub>4</sub>	0.01	0.01
		H <sub>2</sub> O <sub>2</sub>	0.01	0.01
ANHFSCRB	Anhydrous HF Area Scrubbers	HF (7)	0.21	0.09
BOILER	Boiler	CO	0.12	0.52
		NOx	0.68	2.12
		PM <sub>10</sub>	0.04	0.16
		SO <sub>2</sub>	0.07	0.30
		VOC	0.03	0.12
DIESLTK	Diesel Storage Tank	VOC	0.01	0.01
GENERTR	Diesel Generator (6)	CO	2.69	1.16
		NOx	2.47	5.36
		PM <sub>10</sub>	0.89	0.38
		SO <sub>2</sub>	0.83	0.36
		VOC	1.01	0.43
HFTOTE	HF Tote and Drum Loading	HF	0.01	0.01

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AMMTOTE	NH <sub>4</sub> OH Tote/Drum Loading	NH <sub>4</sub> OH	0.01	0.01
LAB	Lab Vent	IPA	1.10	0.01
NH <sub>3</sub> SCRUB	Ammonia	NH <sub>4</sub> OH (7)	0.62	0.36
		HF	0.01	0.01
		NH <sub>3</sub> (8)	3.20	0.01
NH <sub>3</sub> UNLD	NH <sub>3</sub> Railcar Unloading	NH <sub>3</sub>	0.08	0.01
TOTE	Industrial HF Tote/Drum Loading	HF	0.01	0.01
FUGITIVE	Process Fugitives (5)	VOC	0.41	1.81
		H <sub>2</sub> SO <sub>4</sub>	0.01	0.02
		HNO <sub>3</sub>	0.01	0.01
		H <sub>3</sub> PO <sub>4</sub>	0.01	0.01
		H <sub>2</sub> O <sub>2</sub>	0.01	0.01
		HF	0.06	0.26
		NH <sub>3</sub>	0.11	0.48
		NH <sub>4</sub> OH	0.01	0.03
		NH <sub>4</sub> F	0.01	0.01
ETCHTOTE	Ethchant Tote/Drum Loading	VOC	0.01	0.01
		HF	0.01	0.01
		HNO <sub>3</sub>	0.01	0.01
		H <sub>2</sub> O <sub>2</sub>	0.01	0.01
		H <sub>3</sub> PO <sub>4</sub>	0.01	0.01
AFBOETOTE	NH <sub>4</sub> F/BOE Tote/Drum Loading	NH <sub>3</sub>	0.01	0.01
		HF	0.01	0.01
MAINT	Uncontrolled MSS	NH <sub>3</sub>	0.04	0.01

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	HF	0.01	0.01
	H <sub>2</sub> O <sub>2</sub>	0.27	0.14
	SO <sub>2</sub>	0.001	0.01
	PM <sub>10</sub> /PM <sub>2.5</sub>	0.0004	0.01
	VOC	0.73	0.02

- (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) Exempt Solvent - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.
- VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- NH<sub>3</sub> - ammonia
- HCL - hydrogen fluoride
- HF - hydrogen fluoride
- HNO<sub>3</sub> - nitric acid
- H<sub>3</sub>PO<sub>4</sub> - phosphoric acid
- H<sub>2</sub>O<sub>2</sub> - hydrogen peroxide
- NOx - total oxides of nitrogen
- SO<sub>2</sub> - sulfur dioxide
- PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
- PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
- PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
- CO - carbon monoxide
- NH<sub>4</sub>OH - ammonium hydroxide
- IPA - isopropyl alcohol
- NH<sub>4</sub>F - ammonium fluoride
- H<sub>2</sub>SO<sub>4</sub> - sulfuric acid
- (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.
- (6) The diesel generator is limited to 860 operating hours per year.
- (7) Emissions include normal production and authorized planned maintenance, start-up, and shutdown activities.
- (8) Emissions include authorized planned maintenance, start-up, and shutdown activities only.

Date June 22, 2011

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