

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 5665A

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.

DATA			AIR CONTAMINANTS	
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY**
COM-7	667-hp Superior 8G825 Inlet Compressor Engine, w/ NSCR Catalyst	NO <sub>x</sub>	2.21	9.66
		CO	4.41	19.32
		VOC	0.44	1.93
		SO <sub>2</sub>	0.01	0.01
		PM <sub>10</sub>	0.10	0.44
COM-8RA	467-hp Superior 6G825 Refrigeration Compresso Engine w/ NSCR Catalyst	NO <sub>x</sub>	2.06	9.02
		CO	3.09	13.53
		VOC	1.03	4.51
		SO <sub>2</sub>	0.01	0.01
		PM <sub>10</sub>	0.07	0.32
COM-9RA	467-hp Superior 6G825 Refrigeration Compressor Engine w/ NSCR Catalyst	NO <sub>x</sub>	2.06	9.02
		CO	3.09	13.53
		VOC	1.03	4.51
		SO <sub>2</sub>	0.01	0.01
		PM <sub>10</sub>	0.07	0.32
COM-10RA	800-hp Superior 8G825 Inlet Compressor Engine w/ NSCR Catalyst	NO <sub>x</sub>	3.53	15.45
		CO	5.29	23.18
		VOC	1.76	7.73
		SO <sub>2</sub>	0.01	0.02
		PM <sub>10</sub>	0.12	0.53
COM-11RA	800-hp Superior 8G825 Inlet Compressor Engine w/ NSCR Catalyst	NO <sub>x</sub>	3.53	15.45
		CO	5.29	23.18
		VOC	1.76	7.73
		SO <sub>2</sub>	0.01	0.02
		PM <sub>10</sub>	0.12	0.53

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY**
COM-12R	800-hp Superior 8G825 Inlet Compressor Engine w/ NSCR Catalyst	NO <sub>x</sub>	3.53	15.45
		CO	5.29	23.18
		VOC	1.76	7.73
		SO <sub>2</sub>	0.01	0.02
		PM <sub>10</sub>	0.12	0.53
COM-13R	667-hp Superior 8G825 Inlet Compressor Engine, w/ NSCR Catalyst	NO <sub>x</sub>	2.94	12.88
		CO	4.41	19.32
		VOC	1.47	6.44
		SO <sub>2</sub>	0.01	0.01
		PM <sub>10</sub>	0.10	0.44
COM-22R	800-hp Superior 8G825 Inlet Compressor Engine w/ NSCR Catalyst	NO <sub>x</sub>	3.53	15.45
		CO	5.29	23.18
		VOC	1.76	7.73
		SO <sub>2</sub>	0.01	0.02
		PM <sub>10</sub>	0.12	0.53
COM-23R	467-hp Superior 6G825 Refrigeration Compressor Engine w/ NSCR Catalyst	NO <sub>x</sub>	2.06	9.02
		CO	3.09	13.53
		VOC	1.03	4.51
		SO <sub>2</sub>	0.01	0.01
		PM <sub>10</sub>	0.07	0.32
COM-28R	800-hp Superior 8G825 Inlet Compressor Engine w/ NSCR Catalyst	NO <sub>x</sub>	3.53	15.45
		CO	5.29	23.18
		VOC	1.76	7.73
		SO <sub>2</sub>	0.01	0.02
		PM <sub>10</sub>	0.12	0.53
COM-29R	1,085-hp Caterpillar G-3516LE Compressor Engine w/Lean Operation	NO <sub>x</sub>	4.78	20.95
		CO	4.78	20.95
		VOC	1.20	5.24
		SO <sub>2</sub>	0.01	0.02
		PM <sub>10</sub>	0.08	0.35
	1,085-hp Caterpillar	NO <sub>x</sub>	4.78	20.95

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COM-30R	G-3516LE Compressor Engine w/Lean Operation	CO	4.78	20.95
		VOC	1.20	5.24
		SO <sub>2</sub>	0.01	0.02
		PM <sub>10</sub>	0.08	0.35
COM-31	1,085-hp Caterpillar G-3516LE Compressor Engine w/Lean Operation	NO <sub>x</sub>	4.78	20.95
		CO	4.71	20.64
		VOC	1.20	5.24
		SO <sub>2</sub>	0.01	0.02
		PM <sub>10</sub>	0.08	0.35
COM-32R	1,085-hp Caterpillar G-3516LE Compressor Engine w/Lean Operation	NO <sub>x</sub>	4.78	20.95
		CO	4.78	20.95
		VOC	1.20	5.24
		SO <sub>2</sub>	0.01	0.02
		PM <sub>10</sub>	0.08	0.35
BLR-1	13.0 MMBtu/hr Steam Boiler	NO <sub>x</sub>	1.30	5.69
		CO	1.09	4.78
		VOC	0.07	0.31
		SO <sub>2</sub>	0.01	0.03
		PM <sub>10</sub>	0.10	0.43
HOHHTR-1	22.0 MMBtu/hr Hot Oil Heater (5)	NO <sub>x</sub>	2.20	9.64
		CO	1.85	8.09
		VOC	0.12	0.53
		SO <sub>2</sub>	0.01	0.06
		PM <sub>10</sub>	0.17	0.73
HTR-1	7.0 MMBtu/hr Mole Sieve Regeneration Heater (5)	NO <sub>x</sub>	0.70	3.07
		CO	0.59	2.58
		VOC	0.04	0.17
		SO <sub>2</sub>	0.01	0.02
		PM <sub>10</sub>	0.05	0.23
HTR-14	1.8 MMBtu/hr Mole Sieve Regeneration Heater	NO <sub>x</sub>	0.18	0.79
		CO	0.15	0.66
		VOC	0.01	0.04
		SO <sub>2</sub>	0.01	<0.01
		PM <sub>10</sub>	0.01	0.06

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FLARE-HP	High Pressure Acid Gas Flare	NO <sub>x</sub>	2.40	10.52
		CO	20.60	90.21
		VOC	0.56	2.46
		SO <sub>2</sub>	8.33	36.47
		H <sub>2</sub> S	0.09	0.39
TK-18	Methanol Storage Tank (5)	VOC	0.09	0.41
FUG	Sitewide Fugitives	VOC (4)	3.52	15.40

- (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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
  - NO<sub>x</sub> - total oxides of nitrogen
  - SO<sub>2</sub> - sulfur dioxide
  - PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter
  - CO - carbon monoxide
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) These emissions are authorized under Permits-by-Rule (PBR) and incorporated by reference only into this permit. The PBRs utilized are listed below:

EPN No.	PBR Registration No.	PBR Claimed
HOHHTR-1	44907	106.183
HTR-1	35535	106.183
TK-18	Unregistered	106.352

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

24 Hrs/day 7 Days/week 52 Weeks/year or    Hrs/year

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

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Date November 3, 2008