

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Nos. 9397 and PSD-TX-625M1

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 Rates *	Source	Air Contaminant	Emission	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY

Prior to December 28, 1999, the emissions from the manufacturing of rockwool shall be based on the operation of the two cupolas, each utilizing oxygen (O<sub>2</sub>) injection at a minimum usage rate of 38 standard cubic feet per minute (scfm).

2	Cupola 1	PM <sub>10</sub>	2.90	13.00
		NO <sub>x</sub>	11.00	45.00
		CO	1452.00	4705.00
		SO <sub>2</sub>	90.62	345.80
		HF	0.50	1.90
		H <sub>2</sub> S	14.04	53.60
		COS	19.87	75.82
		TRS	33.91	129.42
		HCN	<0.01	0.03
	Cupola 2	PM <sub>10</sub>	2.90	13.00
		NO <sub>x</sub>	11.00	45.00
		CO	1452.00	4705.00
		SO <sub>2</sub>	90.62	345.80
		HF	0.50	1.90
		H <sub>2</sub> S	14.04	53.60
		COS	19.87	75.82
		TRS	33.91	129.42
		HCN	<0.01	0.03

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## AIR CONTAMINANTS DATA

Emission *	Source	Air Contaminant	<u>Emission Rates</u>	
<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	<u>TPY</u>

After December 28, 1999, the emissions from the manufacturing of rockwool shall be based on the operation of one cupola, using O<sub>2</sub> injection at a minimum rate of 38 scfm, and an electric arc furnace.

2	Electric Arc Furnace	PM <sub>10</sub>	0.34	1.30
		NO <sub>x</sub>	1.85	7.06
		CO	25.00	95.40
		SO <sub>2</sub>	59.19	142.00
		HF	0.07	0.20
		H <sub>2</sub> S	1.66	4.00
		COS	<0.01	<0.01
		TRS	1.66	4.00
2	Cupola 1 or Cupola 2	PM <sub>10</sub>	2.90	13.00
		NO <sub>x</sub>	11.00	45.00
		CO	1452.00	4705.00
		SO <sub>2</sub>	90.62	345.80
		HF	0.50	1.90
		H <sub>2</sub> S	14.04	53.60
		COS	19.87	75.82
		TRS	33.91	129.42
		HCN	<0.01	0.03

The following emission sources are limited to the following rates, regardless of whether an electric arc furnace is used.

3	Scrubber	PM <sub>10</sub>	21.20	80.90
		VOC	0.05	0.22
4	Material Handling (includes stockpiles)	PM	1.00	0.70
		PM <sub>10</sub>	0.47	0.38
5	Cupola Building Fugitives <0.01	PM <sub>10</sub>		<0.01
		NO <sub>x</sub>	<0.01	<0.01

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Emission *	Source	Air Contaminant	<u>Emission Rates</u>	
<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	<u>TPY</u>
		CO	0.15	0.47

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Emission * Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
5	Cupola Building Fugitives 0.04	SO <sub>2</sub>		<0.01
		HF	<0.01	<0.01
		H <sub>2</sub> S	<0.01	<0.01
		COS	<0.01	<0.01
		TRS	<0.01	0.01
		HCN	<0.01	<0.01
6	Oil Storage Tank	VOC	1.82	<0.01

(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 30 Texas Administrative Code Section 101.1

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.

NO<sub>x</sub> - nitrogen oxide

CO - carbon monoxide

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

HF - hydrogen fluoride

H<sub>2</sub>S - hydrogen sulfide

COS - carbonyl sulfide

TRS - total reduced sulfur

HCN - hydrogen cyanide

(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

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

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<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	<u>TPY</u>

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

Dated \_\_\_\_\_