

## Emission Sources - Maximum Allowable Emission Rates

Permit Number 6580 and PSDTX151

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)
SF-1	Secondary Filter	PM <sub>10</sub>	2.40	10.50
SF-2	Secondary Filter	PM <sub>10</sub>	1.50	6.60
SF-3	Secondary Filter	PM <sub>10</sub>	1.40	6.10
DF-1A	Dryer Filter Unit No. 1	PM <sub>10</sub>	0.10	0.20
DF-1B	Dryer Filter Unit No. 1	PM <sub>10</sub>	0.10	0.20
DF-2	Dryer Filter Unit Nos. 2 and 3	PM <sub>10</sub>	0.20	0.80
7A	Dryer Stack Unit Nos. 1 and 2	PM <sub>10</sub>	25.00	109.50
		H <sub>2</sub> S	3.60	14.00
		SO <sub>2</sub>	815.20	3175.10
		C <sub>2</sub> H <sub>2</sub>	8.50	37.20
		CO	739.00	3237.00
		COS	1.40	5.40
		CS <sub>2</sub>	5.00	19.40
		NO <sub>x</sub>	41.60	182.30

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12A	Dryer Stack Unit No. 3	PM <sub>10</sub>	11.80	51.90
		H <sub>2</sub> S	1.50	5.70
		SO <sub>2</sub>	333.40	1297.90
		C <sub>2</sub> H <sub>2</sub>	4.00	17.50
		CO	420.00	1840.00
		COS	0.60	2.20
		CS <sub>2</sub>	2.00	7.90
		NO <sub>x</sub>	20.00	87.60
13A	Incinerator (with Heat Recovery Steam Generator)	PM <sub>10</sub>	7.50	32.90
		H <sub>2</sub> S	8.70	34.00
		SO <sub>2</sub>	2201.60	8571.70
		C <sub>2</sub> H <sub>2</sub>	21.60	94.60
		CO	501.00	2194.40
		COS	0.70	2.80
		CS <sub>2</sub>	4.60	17.90
		NO <sub>x</sub>	132.00	578.00
BHU1RRN	Unit 1 Rerun Bag Filter	PM <sub>10</sub> /PM <sub>2.5</sub>	0.26	1.12
BHU2SHIP	Unit 2 Rerun Bag Filter	PM <sub>10</sub> /PM <sub>2.5</sub>	0.18	0.81
BHVACBAG	Vacuum Bag Filter	PM <sub>10</sub> /PM <sub>2.5</sub>	0.03	0.15
OIL SAMPLE	Carbon black oil feedstock sampling.	VOC	0.01	0.01
BLACK SAMPLE	In-situ carbon black sampling.	PM	0.02	0.02
		PM <sub>10</sub> /PM <sub>2.5</sub>	0.01	0.01

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## Maintenance, Startup, And Shutdown (MSS) Emissions

Flare-1	Flare 1 (5)	PM <sub>10</sub>	1.90	0.70
		H <sub>2</sub> S	1.50	0.60
		SO <sub>2</sub>	595.00	236.00
		C <sub>2</sub> H <sub>2</sub>	5.70	2.30
		CO	103.30	40.90
		COS	0.510	0.20
		CS <sub>2</sub>	1.50	0.60
		NO <sub>x</sub>	8.30	3.30
Flare-2	Flare 2 (5)	PM <sub>10</sub>	1.40	0.60
		H <sub>2</sub> S	1.20	0.50
		SO <sub>2</sub>	477.00	189.00
		C <sub>2</sub> H <sub>2</sub>	4.10	1.60
		CO	78.30	31.00
		COS	0.50	0.20
		CS <sub>2</sub>	1.20	0.50
		NO <sub>x</sub>	6.70	2.70

Flare-3	Flare 3 (5)	PM <sub>10</sub>	1.20	0.50
		H <sub>2</sub> S	1.20	0.50

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		SO <sub>2</sub>	449.00	178.00
		C <sub>2</sub> H <sub>2</sub>	2.70	1.10
		CO	69.30	27.40
		COS	0.40	0.20
		CS <sub>2</sub>	1.20	0.50
		NO <sub>x</sub>	5.60	2.20
13A	Incinerator Stack MSS	NO <sub>x</sub>	10.00	0.35
		CO	8.4	0.29
		VOC	0.55	0.02
		PM <sub>10</sub> /PM <sub>2.5</sub>	0.76	0.03
		SO <sub>2</sub>	0.06	0.01
7A / 12A	Cap for Dryers 7A and 12A MSS	NO <sub>x</sub>	0.21	0.01
		CO	0.20	0.01
		VOC	0.02	0.01
		PM <sub>10</sub> /PM <sub>2.5</sub>	0.02	0.01
		SO <sub>2</sub>	0.01	0.01

RVS	Cap for the 13 Reactor Vents	NO <sub>x</sub>	2.50	8.31
		CO	2.10	6.98
		VOC	0.14	0.46
		PM <sub>10</sub> /PM <sub>2.5</sub>	0.192	0.63

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		SO <sub>2</sub>	0.02	0.05
CanMSS	Solvent and Aerosol Can Usage (greater than 64 ounces per day)	VOC	3.38	1.80
ORIFICE	Orifice Changeout	VOC	0.01	0.02
REFRACTORY	Recasting furnace refractory	PM	0.03	0.01
		PM <sub>10</sub> /PM <sub>2.5</sub>	0.02	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 Title 30 Texas Administrative Code § 101.1
  - H<sub>2</sub>S - hydrogen sulfide
  - C<sub>2</sub>H<sub>2</sub> - acetylene (ethyne)
  - NO<sub>x</sub> - total oxides of nitrogen
  - SO<sub>2</sub> - sulfur dioxide
  - PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>
  - PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter
  - PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
  - CO - carbon monoxide
  - COS - carbonyl sulfide
  - CS<sub>2</sub> - carbon disulfide
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Only the planned maintenance, startup, or shutdown (MSS) emissions due to boiler or steam turbine (or associated equipment and ductwork) which is less than or equal to these flare maximum allowable emission rates are authorized. MSS emissions from the flares due to the failure of a process, process equipment, or pollution control equipment to operate in a normal or usual manner are not authorized by this permit. **(8/11)**

Date: \_\_\_\_\_