

# Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 19005 and PSDTX753

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)
SAR-SARSTK	SAR Unit Main Stack	NO <sub>x</sub>	24.72	55.66
		SO <sub>2</sub>	121.67	498.23
		H <sub>2</sub> SO <sub>4</sub>	4.40	19.25
		VOC	0.22	0.96
SAR-PAPHA	North Process Air Preheater	NO <sub>x</sub>	4.80	21.03
		SO <sub>2</sub>	0.02	0.11
		PM	0.30	1.33
		PM <sub>10</sub>	0.30	1.33
		PM <sub>2.5</sub>	0.30	1.33
		CO	3.36	14.72
		VOC	0.22	0.96
SAR-PAPHB	South Process Air Preheater	NO <sub>x</sub>	3.20	14.02
		SO <sub>2</sub>	0.02	0.11
		PM	0.30	1.33
		PM <sub>10</sub>	0.30	1.33
		PM <sub>2.5</sub>	0.30	1.33
		CO	3.36	14.72
		VOC	0.22	0.96

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SAR-SARUS	SAR Unit Start-Up Stack (5)	NO <sub>x</sub>	5.88	3.14
		SO <sub>2</sub>	0.04	0.02
		PM	0.45	0.24
		PM <sub>10</sub>	0.45	0.24
		PM <sub>2.5</sub>	0.45	0.24
		CO	4.94	2.64
		VOC	0.32	0.17
SAR-OLSCBR	Oleum Tank Scrubber Vent	H <sub>2</sub> SO <sub>4</sub>	0.01	0.01
SAR-PIT	SAR Unit Sulfur	H <sub>2</sub> S	0.14	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) 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
    - 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
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Emission rates for the Start-Up Stack (EPN SAR-SARUS) are based on and the facility is limited by a maximum operating schedule of 1600 hours per year.

Date: May 31, 2019