

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 9335

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)
33	Scrubber Stack (WO-2)	VOC	5.32	19.30
		NO <sub>x</sub>	0.60	2.63
		SO <sub>2</sub>	(5)	(5)
		PM	1.50	6.50
		CO	2.75	11.12
34	Scrubber Stack (ST-WO-2)	VOC	0.16	0.71
		NO <sub>x</sub>	1.06	4.64
		SO <sub>2</sub>	(5)	(5)
		PM	0.93	4.14
		CO	0.51	2.23
		H <sub>2</sub> S	0.001	0.005
35	Scrubber Stack	VOC	0.25	1.09
		NO <sub>x</sub>	0.70	3.00
		SO <sub>2</sub>	(5)	(5)
		PM	0.75	3.30
		CO	0.37	1.62
		H <sub>2</sub> S	0.18	0.77
36	Calciner #3	VOC	0.25	1.07
		NO <sub>x</sub>	0.73	2.84
		SO <sub>2</sub>	(5)	(5)
		PM	0.58	2.54
		PM <sub>10</sub>	0.58	2.54
		PM <sub>2.5</sub>	0.58	2.54
		CO	0.23	0.71
		H <sub>2</sub> S	0.18	0.77
SO2CAP	Scrubber SO <sub>2</sub> Emissions Cap (5)	SO <sub>2</sub>	75.00	89.93

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35-1 through 35-5	Burner Vents 1-5 Total Emissions	VOC	0.02	0.10
		NO <sub>x</sub>	0.41	1.80
		SO <sub>2</sub>	0.06	0.25
		PM	0.03	0.13
		PM <sub>10</sub>	0.03	0.13
		PM <sub>2.5</sub>	0.03	0.13
		CO	0.34	1.50
36-1 through 36-5	Burner Vents 1-5 Total Emissions	VOC	0.02	0.10
		NO <sub>x</sub>	0.40	1.76
		SO <sub>2</sub>	0.06	0.26
		PM	0.03	0.13
		PM <sub>10</sub>	0.03	0.13
		PM <sub>2.5</sub>	0.03	0.13
		CO	0.34	1.48
39-1 through 39-5	CPU1 Heaters 1-5 Total Emissions	VOC	0.038	0.17
		NO <sub>x</sub>	0.07	0.31
		SO <sub>2</sub>	0.10	0.45
		PM	0.052	0.23
		PM <sub>10</sub>	0.052	0.23
		PM <sub>2.5</sub>	0.052	0.23
		CO	0.13	0.58
38	Unit 3 Stack	VOC	2.88	8.00
		NO <sub>x</sub>	0.58	1.75
		SO <sub>2</sub>	4.00	9.01
		PM	4.94	15.79
		PM <sub>10</sub>	4.94	15.79
		PM <sub>2.5</sub>	0.012	0.039
		CO	33.71	29.05

FUG1	Fugitives (6)	VOC	0.11	0.44
		H <sub>2</sub> S	0.15	0.64

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FUG2	Fugitives (6)	VOC	0.11	0.49
		H <sub>2</sub> S	0.16	0.70
FUG3	Calciner #3 Fugitives (6)	VOC	0.11	0.44
		H <sub>2</sub> S	0.15	0.64
FUGR3	Piping Fugitives Regen 3 (6)	VOC	0.061	0.27
RBH	Regeneration Baghouse	PM	0.02	0.11
RWS	Regeneration Wet Scrubber	PM	0.51	2.23
HAP	Hazardous Air Pollutants (Individual)	HAP	-	<10
HAP	Hazardous Air Pollutants (Total)	HAP	-	<25

- (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
  - 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
  - H<sub>2</sub>S - hydrogen sulfide
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Sulfur dioxide emission rates of 75 lbs/hour and 89.93 tpy represent the emissions from EPNs 33, 34, 35, and 36 combined.
- (6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: April 16, 2020