## Emission Sources - Maximum Allowable Emission Rates

## Permit Number 2175

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)	
301M354	Nylon cooling tower	VOC	3.5	11	
302M331 and 302M460	Boilers 5 and 6 Combined Emission Limits	NO <sub>x</sub>	243	1,104	
		СО	72	328	
		VOC	2.0	6.4	
		SO <sub>2</sub>	33	56	
		PM	6.6	29	
302M3069	Boiler 8: gas-fired, 355 MMBtu/hr	NO <sub>x</sub> (5)	12	24.6	
		NO <sub>x</sub> (6)	3.6	15.6	
		NO <sub>x</sub> (MSS) (7)	24		
		CO	13	59	
		CO (MSS) (7)	73		
		VOC	0.09	0.39	
		SO <sub>2</sub>	4.8	21	
		PM	2.6	11	
		PM <sub>10</sub>	2.6	11	
		PM <sub>2.5</sub>	2.6	11	
		NH <sub>3</sub> (6)	1.6	7.0	
302M3077	Boiler 9: hazardous waste liquid and gas-fired, 200 MMBtu/hr	NO <sub>x</sub>	24	106	
		NO <sub>x</sub> (MSS) (7)	43		
		CO	7.8	34	
		CO (MSS) (7)	39		
		VOC	1.5	6.8	
		SO <sub>2</sub>	2.6	11	
		РМ	4.3	19	
		PM <sub>10</sub>	4.5	19	
		PM <sub>2.5</sub>	4.3	19	

302F	Utilities equipment fugitives	VOC	3.3	15
	(includes fuels components/piping,	СО	0.22	0.95
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			NH <sub>3</sub>	0.02	0.07
302 ANAL	Boiler stack emission analyzer vents		СО	4.4	14
			VOC	3.7	1.6
302GB	Reformer guard bed regeneration		SO <sub>2</sub>	49	1.9
302V3014	Lime silo baghouse		РМ	0.10	0.45
			PM <sub>10</sub>	0.10	0.45
			PM <sub>2.5</sub>	0.10	0.45
303M1239	Ethylene flare	Normal operation	NO <sub>x</sub>	54	26
			СО	282	135
			VOC	310	77
			SO <sub>2</sub>	7.2	4.5
		Vinyl Acetate and	NO <sub>x</sub>	80	0.2
		Utilities units: Maintenance,	СО	445	0.6
	Startup, and Shutdown (MSS) Operations	VOC	419	0.5	
		SO <sub>2</sub>	5.0	0.05	
304M024,	Selas reformer girdlers I and II Combined Emission Limits		NO <sub>x</sub>	43	70
304M375, and 304M490			СО	24	59
			VOC	1.6	3.9
			SO <sub>2</sub>	0.17	0.42
			PM <sub>10</sub>	2.2	5.3
304V206	MEA Offloading	MEA Offloading		0.85	0.02
304V375	MEA Storage	MEA Storage		5.6	0.73
304V440	MEA Storage		VOC	0.05	0.15
AREA7	Wastewater treatment plant		VOC	1.1	1.6
308F	Wastewater fugitives (8)		VOC	0.01	0.03
308M2309	Sludge dryer		NO <sub>x</sub>	1.3	1.6
			CO	1.1	1.4
			VOC	0.07	0.09
			SO <sub>2</sub>	0.01	0.01
			PM	0.10	0.12

<sup>(1)</sup> Emission point identification - either specific equipment designation or emission point number from plot plan.

(3) NO<sub>x</sub> - total oxides of nitrogen

CO - carbon monoxide

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

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>

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<sup>(2)</sup> Specific point source name. For fugitive sources, use area name or fugitive source name.

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PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>

PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter

NH<sub>3</sub> - ammonia

- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. Annual MSS emissions are included in normal operation annual limits.
- (5) Emission limits applicable in normal (not MSS) operation before startup of selective catalytic reduction (SCR) emission control.
- (6) Emission limits applicable in normal (not MSS) operation after startup of SCR emission control.
- (7) Higher hourly emission limit applies during maintenance, startup, and shutdown (MSS) operations. During boiler MSS, normal operations emissions limits apply to all pollutants not shown with separate MSS limits.
- (8) Fugitive emission rate is an estimate and is enforceable through compliance with the applicable special conditions and permit application representations.

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