

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 8199A

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.

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
16	FL-1 WGAS-ALC HP Flare	NO <sub>x</sub>	6.00	5.59
		CO	53.43	58.03
		VOC	30.51	23.57
		SO <sub>2</sub>	0.01	0.03
		HRVOC	4.85	3.53
17	D-603 MEA Storage Tank	VOC	0.14	<0.01
18	Spent MEA Tank D-605	VOC	0.01	<0.01
23	Tank D-23	VOC	1.71	--
24	Tank D-24	VOC	1.71	--
27	Tank D-27	VOC	1.71	--
D-23 D-24 and D-27	Annual emissions cap for Tanks D-23 D-24 and D-27	VOC	--	0.43
47	Tank D-668	VOC	<0.01	<0.01
48	Tank D-661	VOC	0.08	0.02
50	CO <sub>2</sub> Stripper Vent	CO	20.25	80.64
		VOC	0.41	1.62
52	Tank D-662A	VOC	0.24	0.02
53	Tank D-662B	VOC	0.24	0.02
54	Tank D-662C	VOC	0.24	0.02
58	Loading Scrubber	VOC	7.77	0.63
60	D-6012	VOC	0.18	<0.01

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84	F-10 Boiler- Production operations	NO <sub>x</sub>	1.80	9.40
		NO <sub>x</sub> (MSS)	18.00	--
		CO	6.66	38.75
		CO (MSS)	798.27	--
		PM	0.90	3.94
		PM <sub>10</sub>	0.90	3.94
		PM <sub>2.5</sub>	0.90	3.94
		VOC	2.37	6.23
		SO <sub>2</sub>	4.74	15.17
		NH <sub>3</sub>	0.81	3.54
		HRVOC	0.03	0.15
146	D74 Process Alcohol Liquid Loading	VOC	<0.01	<0.01
601	F-601 Preheater - Production operations	NO <sub>x</sub>	0.38	1.66
		CO	1.15	5.05
		CO (MSS)	1.38	--
		PM	0.10	0.46
		PM <sub>10</sub>	0.10	0.46
		PM <sub>2.5</sub>	0.10	0.46
		VOC	0.08	0.33
		VOC (MSS)	0.09	--
		SO <sub>2</sub>	0.20	0.88
16B	Low Pressure Flare	NO <sub>x</sub>	1.02	1.75
		CO	6.06	13.13
		VOC	8.05	9.19
		SO <sub>2</sub>	0.13	0.25
		HRVOC	<0.01	0.01
CTWR-1	CTWR-1 Cooling Tower	VOC	0.55	0.88
		HRVOC	0.11	0.18

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FUG-F10	F-10 Fugitives (5)	VOC	0.24	1.04
		NH <sub>3</sub>	0.06	0.26
FUG-ALC	Process Alcohol Fugitives (5)	VOC	3.28	14.35
		HRVOC	0.81	3.57
FUG-NH <sub>3</sub>	Ammonia Fugitives (5)	NH <sub>3</sub>	0.07	0.29
FUG-PX	Plasticizer Fugitives (5)	VOC	1.21	5.31
MVLOADING	Marine Loading Loss	VOC	1.31	0.09
PXFILTER	Plast. Filtration Fug.	VOC	1.07	4.69
RRLOADING	Rail Loading Losses	VOC	4.40	--
TTLOADING	Truck Loading Loss	VOC	2.12	--
RRLOADING & TTLOADING	Rail and Truck - annual emissions cap	VOC	--	0.55
103	Powder Unloading Line (POW-UL)	PM	0.03	0.11
		PM <sub>10</sub>	<0.01	0.01
		PM <sub>2.5</sub>	<0.01	0.01
104	Powder Batch Silo (POW-BS)	PM	0.08	0.35
		PM <sub>10</sub>	0.01	0.04
		PM <sub>2.5</sub>	<0.01	0.02
FUG-POW	Powder Handling Fugitives	PM	0.01	0.05
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
CHLOADING	D633LOAD Catalyst Heavies Loading	VOC	<0.01	<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 Administrative Code § 101.1  
 HRVOC - highly reactive volatile organic compounds as defined in 30 TAC § 115.10  
 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

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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>, as represented

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

CO - carbon monoxide

NH<sub>3</sub> - Ammonia

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: May 22, 2017