Emission Sources - Maximum Allowable Emission Rates

Permit Number 8052

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)
138	Multipurpose Spray Dryer and Baghouse FC/FD-11-038	PM_{10}	2.03	8.90
		SO_2	0.01	0.04
		CO	0.39	1.71
		VOC	1.77	7.79
		NO_x	0.04	0.18
		Methanol (7)	1.71	7.51
151	Ammonia Scrubber	NH_3	4.02	17.61
		VOC	0.92	3.24
		CH_2O (7)	0.58	2.54
		CO	0.15	0.07
172	Hydrogen Cyanide Scrubber	HCN	0.03	0.09
		VOC	0.01	0.01
185	Flash Dryer	PM_{10}	0.02	0.09
		SO_2	0.01	0.01
		CO	0.04	0.17
		VOC	0.01	0.01
		NO_X	0.05	0.20
203	H_2SO_4 Storage Tank	H_2SO_4	0.01	0.01
232	Flash Dryer	PM_{10}	0.01	0.04
		SO_2	0.01	0.01
		CO	0.03	0.11
		VOC	0.01	0.01
		NO_X	0.03	0.13
237	Hydrogen Cyanide Tank Scrubber	HCN	<0.01	<0.01
245	Formaldehyde Storage Tank Scrubber	CH_2O (7)	0.01	0.01
		VOC	0.26	0.11
		CO	0.01	0.01
262	Amine Scrubber	VOC	0.02	0.02

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407	DAXAD Storage Tank 1	VOC	1.70	0.11
		Methanol (7)	1.19	0.07
		CH_2O (7)	0.01	0.01
		Naphthalene (7)	0.50	0.03
408	Loading Rack No. 4	VOC	0.57	0.22 (6)
		Methanol (7)	0.03	0.21 (6)
		CH_2O (7)	<0.01	0.01 (6)
430	Spray Dryer	VOC	14.55	63.73
		CH_2O (7)	0.98	4.29
		CO	3.60	14.05
		PM_{10}	2.40	10.51
		SO_2	0.01	0.03
		NO_X	0.85	3.72
442	DAXAD Storage Tank 4	VOC	1.70	0.11
		Methanol (7)	1.19	0.07
		CH_2O (7)	0.01	0.01
		Naphthalene (7)	0.50	0.03
443	DAXAD Storage Tank 3	VOC	1.70	0.11
		Methanol (7)	1.19	0.07
		CH_2O (7)	0.01	0.01
		Naphthalene (7)	0.50	0.03
444	DAXAD Storage Tank 2	VOC	1.70	0.11
		Methanol (7)	1.19	0.07
		CH_2O (7)	0.01	0.01
		Naphthalene (7)	0.50	0.03
516	Furan Utility Tank	VOC	0.12	0.08
		Methanol (7)	0.12	0.07
		CH_2O (7)	<0.01	0.01
531	DAXAD Storage Tank 5	VOC	1.28	0.11
		Methanol (7)	0.89	0.07
		CH_2O (7)	0.01	0.01
		Naphthalene (7)	0.38	0.03

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546	Fluid Bed Dryer	VOC	8.32	35.44
		CH_2O (7)	0.10	0.44
		CO	5.68	22.70
		PM_{10}	0.53	2.32
		SO_2	0.01	0.01
		NO_X	4.91	21.51
566	Storage Tank A	VOC	0.71	0.01
568	Filter Aid Tank	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
569	Cake Wash Tank	VOC	0.27	0.01
		Methanol	0.22	<0.01
		CH_2O (7)	<0.01	<0.01
		Naphthalene (7)	0.04	<0.01
573	Filter Press	VOC	0.03	0.03
		Methanol (7)	0.01	0.01
		CH_2O (7)	0.01	0.01
		Naphthalene (7)	0.01	0.01
598	DAXAD Thermal Oxidizer	VOC	1.05	4.36
		CH_2O (7)	0.06	0.24
		Methanol (7)	0.96	3.99
		PM	0.06	0.26
		PM_{10}	0.06	0.26
		$PM_{2.5}$	0.06	0.26
		SO_2	0.01	0.01
		NO_X	0.50	2.19
		CO	0.67	2.84
		Combustion VOC (7)	0.03	0.13
723	East Cooling Tower	PM	0.02	0.07
		PM_{10}	0.01	0.05
		$PM_{2.5}$	<0.01	<0.01
772	West Cooling Tower	PM	0.02	0.07
		PM_{10}	0.01	0.05
		$PM_{2.5}$	<0.01	<0.01
817	Fuel Oil Tank	VOC	0.01	0.01
819	Firewater Pump	PM_{10}	0.26	0.01

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		SO_2	0.24	0.01
		CO	0.80	0.01
		VOC	0.29	0.01
		NO_X	3.70	0.05
859	Boilers A, B and C (3 total)	PM_{10}	0.32	1.41
		SO_2	0.03	0.11
		CO	4.57	20.02
		VOC	0.73	3.2
		NO_X	3.25	14.24
895	Naphthalene Storage Tank B	VOC	1.71	1.72
		Naphthalene (7)	1.71	1.72
1290	DSIDA Tank	VOC	0.01	0.01
1560	Purge Liquor Tank	VOC	0.01	0.01
2914	Naphthalene Storage Tank C	VOC	1.71	1.63
		Naphthalene (7)	1.71	1.63
4032	Soda Ash Silo Baghouse	PM	0.05	<0.01
		PM_{10}	0.05	<0.01
		$PM_{2.5}$	0.05	<0.01
4033	Soda Ash Solution Mix Tank	PM	0.06	<0.01
		PM_{10}	0.06	<0.01
		$PM_{2.5}$	0.06	<0.01
4037	LCA DAXAD Filter Press	VOC	0.04	0.08
		Methanol (7)	0.01	0.03
		CH_2O (7)	0.01	0.01
		Naphthalene (7)	0.02	0.04
4297	Loading Rack No. 2	VOC	0.57	(6)
		Methanol (7)	0.03	(6)
		CH_2O (7)	<0.01	(6)
4338	Third Filter Press	VOC	0.05	0.04
		Methanol (7)	0.01	0.01
		CH_2O (7)	0.01	0.01
		Naphthalene (7)	0.03	0.02
5019	Bersworth Reactor I	NH_3	0.93	0.17
		VOC	0.42	0.08
5319	Bersworth Reactor II	NH_3	0.93	0.17
		VOC	0.42	0.08

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5357	DSIDA Centrifuge	HCN	0.03	0.02
5361	DSIDA Steam Jet	HCN	0.03	0.02
6032	Storage Tank 7	VOC	0.71	0.01
6034	DAXAD Storage Tank 9	VOC	1.70	0.39
		Methanol (7)	1.19	0.27
		CH_2O (7)	0.01	0.01
		Naphthalene (7)	0.50	0.11
6036	NTA-150 Storage Tank	VOC	0.01	0.01
6121	Loading Rack No. 9	VOC	0.57	(6)
		Methanol (7)	0.57	(6)
		CH_2O (7)	<0.01	(6)
8000	DSIDA Storage Tank	VOC	0.01	0.01
1700901	Glycine Storage Silo Cartridge Dust Collector	PM_{10}	0.01	0.01
1700905	Glycine Conditioning Train Baghouse	PM_{10}	0.03	0.14
Fugitives	Fugitives (4)	VOC	0.26	1.14
		NH_3	0.06	0.26
FU-1	DAXAD Product Fugitives (4)	VOC	0.04	0.17
		Methanol (7)	0.02	0.11
		CH_2O (7)	0.01	0.01
		Naphthalene (7)	0.01	0.05

(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_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
HCN - hydrogen cyanide
CH_2O - formaldehyde
NH_3 - ammonia
H_2SO_4 - sulfuric acid
(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.
(6) Annual emissions from EPN 408 are the sum of annual emissions from EPNs 408, 4297 and 6121.
(7) The speciated emission rate is included in the VOC emission rate.

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Date: January 11, 2019