

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
	TPY **		lb/hr	

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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. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
107	Ammonia PSV	Emergency Relief Only (6)		
138	Multipurpose Spray Dryer and Baghouse FC/FD-11-038	SO <sub>2</sub>	0.01	0.04
		CO	0.39	1.71
		VOC	0.06	0.28
		NO <sub>x</sub>	1.54	6.75
		Methanol	1.71	7.51
		CH <sub>2</sub> O	0.58	2.54
		PM <sub>10</sub>	2.03	8.90
151	Ammonia Scrubber	NH <sub>3</sub>	3.52	15.42
		VOC	0.34	0.70
		CO	0.15	0.07
172	Hydrogen Cyanide Scrubber	HCN	0.026	0.09
		VOC	0.01	0.01
185	Flash Dryer	PM <sub>10</sub>	0.02	0.09
		SO <sub>2</sub>	0.01	0.01
		CO	0.04	0.17
		VOC	0.01	0.01
		NO <sub>x</sub>	0.05	0.20

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	TPY **			
203	H <sub>2</sub> SO <sub>4</sub> Storage Tank	H <sub>2</sub> SO <sub>4</sub>	0.01	0.01
225	HCN Surge Tank	Emergency Relief Only (6)		
232	Flash Dryer	PM <sub>10</sub>	0.01	0.04
		SO <sub>2</sub>	0.01	0.01
		CO	0.03	0.11
		VOC	0.01	0.01
		NO <sub>x</sub>	0.03	0.13
237	Hydrogen Cyanide Tank Scrubber	HCN	0.0009	0.0002
239	Formaldehyde P/V Vent	Emergency Relief Only (6)		
242	Aqua Ammonia Storage Tank	Emergency Relief Only (6)		
245	Formaldehyde Storage Tank Scrubber	CH <sub>2</sub> O	0.01	0.01
		VOC (5)	0.25	0.10
		CO	0.01	0.01
262	Amine Scrubber	VOC	0.02	0.02
407	DAXAD Storage Tank 1	Methanol	1.19	0.07
		CH <sub>2</sub> O 0.01	0.01	
		Naphthalene	0.50	0.03
408	Loading Rack No. 4	Methanol	0.76	0.21(7)
		CH <sub>2</sub> O 0.01	0.01(7)	
		Naphthalene	0.32	0.09(7)
430	Spray Dryer	PM <sub>10</sub>	2.40	10.51
		SO <sub>2</sub>	0.01	0.03
		CO	4.10	16.00
		NO <sub>x</sub>	2.35	10.29
		CH <sub>2</sub> O	0.98	4.29
		VOC (5)	21.77	92.42

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	TPY **			
442	DAXAD Storage Tank 4	Methanol	1.19	0.07
		CH <sub>2</sub> O 0.01	0.01	
		Naphthalene	0.50	0.03
443	DAXAD Storage Tank 3	Methanol	1.19	0.07
		CH <sub>2</sub> O 0.01	0.01	
		Naphthalene	0.50	0.03
444	DAXAD Storage Tank 2	Methanol	1.19	0.07
		CH <sub>2</sub> O 0.01	0.01	
		Naphthalene	0.50	0.03
516	Furan Utility Tank	Methanol	1.19	0.02
		CH <sub>2</sub> O 0.01	0.01	
		Naphthalene	0.50	0.01
531	DAXAD Storage Tank 5	Methanol	0.89	0.07
		CH <sub>2</sub> O 0.01	0.01	
		Naphthalene	0.38	0.03
546	Fluid Bed Dryer	VOC (5)	8.22	35.00
		NO <sub>x</sub>	0.91	4.00
		SO <sub>2</sub>	0.01	0.01
		PM <sub>10</sub>	0.53	2.32
		CO	0.68	3.00
		CH <sub>2</sub> O	0.10	0.44
566	Naphthalene Storage Tank A	VOC	6.04	1.63
568	Filter Aid Tank	Methanol	1.17	0.01
		CH <sub>2</sub> O 0.01	0.01	
		Naphthalene	0.50	0.01
569	Cake Wash Tank	Methanol	0.59	0.02
		CH <sub>2</sub> O 0.01	0.01	
		Naphthalene	0.25	0.01
571	Product Receiver Tank	Emergency Relief Only (6)		

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572	Prefilter Tank	Emergency Relief Only (6)		
573	Filter Press	Methanol	0.01	0.01
		CH <sub>2</sub> O	0.01	0.01
		Naphthalene	0.01	0.01
598	DAXAD Thermal Oxidizer	CH <sub>2</sub> O	0.06	0.24
		Methanol	0.96	3.99
		PM <sub>10</sub>	0.06	0.26
		SO <sub>2</sub>	0.01	0.01
		CO	0.17	0.58
		Combustion VOC	0.03	0.13
		NO <sub>x</sub>	0.50	2.19
723	East Cooling Tower	VOC	0.01	0.01
772	Cooling Tower	VOC	0.01	0.01
817	Fuel Oil Tank	VOC	0.01	0.01
819	Firewater Pump	PM <sub>10</sub>	0.26	0.01
		SO <sub>2</sub>	0.24	0.01
		CO	0.80	0.01
		VOC	0.29	0.01
		NO <sub>x</sub>	3.70	0.05
859	Boiler (3 total)	PM <sub>10</sub>	0.32	1.41
		SO <sub>2</sub>	0.03	0.11
		CO	3.57	15.64
		VOC	0.23	1.02
		NO <sub>x</sub>	4.25	18.62
895	Naphthalene Storage Tank B	Naphthalene	6.04	1.72
1129	Glycine Saponifier A	Water Vapor Only		
1132	Glycine Saponifier B	Water Vapor Only		

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	TPY **			
1134	Glycine Saponifier C	Water Vapor Only		
1290	DSIDA Tank	VOC	0.01	0.01
1560	Purge Liquor Tank	VOC	0.01	0.01
1744	GR Hotwell Tank	Water Vapor Only		
1749	GR CSEP Feed Tank	Water Vapor Only		
1775	GR Neutralization Tank	Water Vapor Only		
1776	GR Evaporator Feed Tank	Water Vapor Only		
1807	Evaporator Condenser	Water Vapor Only		
1808	Evaporator Condenser	Water Vapor Only		
2914	Naphthalene Storage Tank C	Naphthalene	4.84	0.96
4032	Lime Silo Baghouse	PM <sub>10</sub>	0.08	0.01
4033	Lime Slaker Scrubber	PM <sub>10</sub>	0.06	0.01
4034	LCA DAXAD Prefilter Tank	Methanol	0.88	0.09
		CH <sub>2</sub> O 0.01	0.01	
		Naphthalene	0.37	0.04
4035	LCA DAXAD Unfiltered Water Tank	Methanol	0.88	0.03
		CH <sub>2</sub> O	0.01	0.01
		Naphthalene	0.37	0.01
4037	LCA DAXAD Filter Press	Methanol	0.01	0.03
		CH <sub>2</sub> O 0.01	0.01	
		Naphthalene	0.02	0.04

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	TPY **			
4038	LCA DAXAD Cake Wash H <sub>2</sub> O Tank	Methanol CH <sub>2</sub> O Naphthalene	0.88 0.01 0.37	0.03 0.01 0.01
4039	LCA DAXAD Product Receiver H <sub>2</sub> O Tank	Methanol CH <sub>2</sub> O Naphthalene	0.89 0.01 0.38	0.09 0.01 0.04
4040	Third Product Receiver Tank H <sub>2</sub> O Tank	Methanol CH <sub>2</sub> O Naphthalene	0.90 0.01 0.38	0.09 0.01 0.04
4290	DAXAD Product Receiver H <sub>2</sub> O Tank	Methanol CH <sub>2</sub> O Naphthalene	0.90 0.01 0.38	0.08 0.01 0.04
4297	Loading Rack No. 2	CH <sub>2</sub> O Methanol Naphthalene	0.01 0.76 0.32	(7) (7) (7)
4338	Third Filter Press	CH <sub>2</sub> O Methanol Naphthalene	0.01 0.01 0.03	0.01 0.01 0.02
4513	Prefilter Tank H <sub>2</sub> O Tank	Methanol CH <sub>2</sub> O Naphthalene	0.89 0.01 0.38	0.11 0.01 0.04
5019	Bersworth Reactor I	NH <sub>3</sub> VOC	0.93 0.42	0.17 0.08
5319	Bersworth Reactor II	NH <sub>3</sub> VOC	0.93 0.42	0.17 0.08
5357	DSIDA Centrifuge	HCN	0.028	0.02

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	
	TPY **			
5361	DSIDA Steam Jet	HCN	0.028	0.02
6031	DAXAD Storage Tank 6	CH <sub>2</sub> O	0.01	0.01
		Methanol	0.89	0.29
		Naphthalene	0.38	0.12
6032	DAXAD Storage Tank 7	CH <sub>2</sub> O	0.01	0.01
		Methanol	1.19	0.28
		Naphthalene	0.50	0.12
6034	DAXAD Storage Tank 9	CH <sub>2</sub> O	0.01	0.01
		Methanol	1.19	0.27
		Naphthalene	0.50	0.11
6036	NTA-150 Storage Tank	VOC	0.01	0.01
6064	Loading Rack No. 5	CH <sub>2</sub> O	0.01	(7)
		Methanol	0.76	(7)
		Naphthalene	0.32	(7)
6065	Loading Rack No. 1	CH <sub>2</sub> O	0.01	(7)
		Methanol	0.76	(7)
		Naphthalene	0.32	(7)
6121	Loading Rack No. 9	CH <sub>2</sub> O	0.01	(7)
		Methanol	0.76	(7)
		Naphthalene	0.32	(7)
6122	Loading Rack No. 8	CH <sub>2</sub> O	0.01	(7)
		Methanol	0.76	(7)
		Naphthalene	0.32	(7)
6123	Loading Rack No. 7	CH <sub>2</sub> O	0.01	(7)
		Methanol	0.76	(7)
		Naphthalene	0.32	(7)
7432	CH <sub>2</sub> O PV	Emergency Relief Only (6)		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	
	TPY **			
7717	DAXAD Storage Tank 12	CH <sub>2</sub> O	0.01	0.01
		Methanol	1.19	0.12
		Naphthalene	0.50	0.05
8000	DSIDA Storage Tank	VOC	0.01	0.01
8003	Chelate Acid Centrifuge Discharge Hopper	PM <sub>10</sub>	0.03	0.03
155171	DAXAD Storage Tank A	CH <sub>2</sub> O	0.01	0.01
		Methanol	1.19	0.10
		Naphthalene	0.50	0.04
155181	DAXAD Storage Tank B	CH <sub>2</sub> O	0.01	0.01
		Methanol	0.59	0.10
		Naphthalene	0.25	0.04
0600201	Cooling Tower	Water Vapor Only		
1700901	Cartridge Dust Collector	PM <sub>10</sub>	0.01	0.01
1700905	Glycine Conditioning Train Baghouse	PM <sub>10</sub>	0.03	0.14
Fugitives	Fugitives (4)	VOC	0.26	1.14
		NH <sub>3</sub>	0.06	0.26
FU-1	DAXAD Product Fugitives (4)	CH <sub>2</sub> O	0.01	0.01
		Methanol	0.02	0.11
		Naphthalene	0.01	0.05



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- (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) PM<sub>10</sub> - particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
  - 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
  - CO - carbon monoxide
  - HCN - hydrogen cyanide
  - CH<sub>2</sub>O - formaldehyde
  - NH<sub>3</sub> - ammonia
  - H<sub>2</sub>SO<sub>4</sub> - sulfuric acid
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Volatile organic compounds exclusive of formaldehyde.
- (6) There are no emissions authorized by this permit at these points.
- (7) Sum of annual emissions from EPN's 408, 4297, 6064, 6065, 6121, 6122, and 6123.

\* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

Hrs/day\_\_\_\_Days/week\_\_\_\_Weeks/year\_\_\_\_or Hrs/year 8,760

\*\* Compliance with annual emission limits is based on a rolling 12-month period.

Dated \_\_\_\_\_