

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 36155

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.

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY
VFB-BGH	Vibrating Fluidized Bed Dryer Baghouse	IPA or Ethanol	1.96	4.99
		PM <sub>10</sub>	1.83	8.01
		NO <sub>x</sub>	0.48	2.10
		CO	0.67	2.94
		VOC	0.04	0.19
		SO <sub>2</sub>	<0.01	0.02
3	ACM Mill Baghouse	PM <sub>10</sub>	0.13	0.63
7	Impact Mill Baghouse	PM <sub>10</sub>	0.22	1.02
8	Flash Dryer	IPA or Ethanol	1.64	4.99
		PM <sub>10</sub>	0.57	2.65
		NO <sub>x</sub>	0.44	1.64
		CO	0.37	1.38
		SO <sub>2</sub>	<0.01	0.01
		VOC	0.02	0.09
BLR10	EPCON Boiler (Thermal Oxidizer No. 1)	IPA or Ethanol	3.90	12.60
		PM <sub>10</sub>	0.03	0.11
		NO <sub>x</sub>	0.42	1.57
		CO	0.35	1.31
		SO <sub>2</sub>	<0.01	<0.01
		VOC	0.01	0.04
FUG	Equipment Leak Fugitives (4)	IPA or Ethanol	0.73	3.20
ROOF1	Roof Vent No. 1 (4)	IPA or Ethanol	1.56	6.25
ROOF2	Roof Vent No. 2 (4)	IPA or Ethanol	1.56	6.25

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
ROOF3	Roof Vent No. 3 (4)	IPA or Ethanol	1.56	6.25
P6	No. 6 Pond (4)*	IPA or Ethanol	21.50	9.60
P6	No. 6 Pond (4)*	IPA or Ethanol	4.00	15.20
TK1	Amine Storage Tank No. 1 (4)	IPA or Ethanol	27.00	1.00
TK2	Amine Storage Tank No. 2 (4)	IPA or Ethanol	27.00	1.00
TK3	Amine Storage Tank No. 3 (4)	IPA or Ethanol	27.00	1.00
TK4	Amine Storage Tank No. 4 (4)	IPA or Ethanol	27.00	1.00
TK5	Amine Storage Tank No. 5 (4)	IPA or Ethanol	27.00	1.00
TK6	Amine Storage Tank No. 6 (4)	IPA or Ethanol	27.00	1.00
RBGR	Organo Rebagger Baghouse	PM <sub>10</sub>	0.48	1.80
BLR11	Thermal Oxidizer No. 2	IPA or Ethanol	12.70	23.36
		PM <sub>10</sub>	0.09	0.40
		NO <sub>x</sub>	1.20	5.26
		CO	1.01	4.42
		SO <sub>2</sub>	<0.01	0.03
		VOC	0.07	0.29
12	Filter Receiver	PM <sub>10</sub>	0.06	0.14
DM5	Raymond Mill No. 2	PM <sub>10</sub>	0.09	0.36
DM6	Raymond Mill No. 1	PM <sub>10</sub>	0.11	0.43
DM12-C	Product Silo/Raymond Mills	PM <sub>10</sub>	0.06	0.24
FBDRYER	Special Products Unit Fluid Bed Dryer	IPA or Ethanol	6.10	6.70
		PM <sub>10</sub>	0.17	0.73

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			lb/hr	TPY
		NO <sub>x</sub>	0.17	0.63
		CO	0.14	0.53
		SO <sub>2</sub>	<0.01	0.01
		VOC	0.01	0.04
BAGGER	Special Products Unit Bagging Machine (4)	Bentonite	0.12	0.53
BLR12	Thermal Oxidizer No. 3	IPA or Ethanol	1.96	7.35
		PM <sub>10</sub>	0.02	0.09
		NO <sub>x</sub>	0.27	1.03
		CO	0.23	0.86
		SO <sub>2</sub>	<0.01	0.01
		VOC	0.02	0.06

\* Additional emissions during operation of Special Products Unit Plant with unevaporated quat.

- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources use area name or fugitive source name.
- (3) IPA - isopropyl alcohol  
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 PM greater than 10 microns is emitted.  
NO<sub>x</sub> - total oxides of nitrogen  
CO - carbon monoxide  
SO<sub>2</sub> - sulfur dioxide  
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code ' 101.1
- (4) Fugitive emissions are an estimate only.

Dated January 17, 2008