

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 5168

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	3.52	15.42
		PM <sub>10</sub>	0.06	0.26
		NO <sub>x</sub>	0.47	2.06
		CO	0.66	2.89
		VOC	0.04	0.19
		SO <sub>2</sub>	<0.01	0.02
3	ACM Mill Baghouse	PM <sub>10</sub>	0.69	2.15
7	Impact Mill Baghouse	PM <sub>10</sub>	0.91	2.85
8	Flash Dryer	IPA or Ethanol	2.66	11.63
		PM <sub>10</sub>	0.04	0.19
		NO <sub>x</sub>	0.56	2.45
		CO	0.47	2.06
		SO <sub>2</sub>	<0.01	0.01
		VOC	0.03	0.13
BLR10	EPCON Boiler (Thermal Oxidizer No. 1)	IPA or Ethanol	0.10	0.43
		PM <sub>10</sub>	0.03	0.14
		NO <sub>x</sub>	0.41	1.80
		CO	0.99	1.51
		SO <sub>2</sub>	<0.01	<0.01
		VOC	0.02	0.10
FUG	Equipment Leak Fugitives (4)	IPA or Ethanol	1.22	5.34
ROOF1	Roof Vent No. 1 (4)	IPA or Ethanol	0.11	0.50
ROOF2	Roof Vent No. 2 (4)	IPA or Ethanol	0.11	0.50

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ROOF3	Roof Vent No. 3 (4)	IPA or Ethanol	0.11	0.50
P6	No. 6 Pond (4)	IPA or Ethanol	1.74	7.62
TK2	Amine Storage Tank No. 2 (4)	IPA or Ethanol	4.06	0.33
TK3	Amine Storage Tank No. 3 (4)	IPA or Ethanol	4.06	0.33
TK4	Amine Storage Tank No. 4 (4)	IPA or Ethanol	4.06	0.33
TK5	Amine Storage Tank No. 5 (4)	IPA or Ethanol	4.06	0.33
TK6	Amine Storage Tank No. 6 (4)	IPA or Ethanol	4.06	0.33
RBGR	Organo Rebagger Baghouse	PM <sub>10</sub>	0.69	2.16
BLR11	Boiler (Thermal Oxidizer No. 2)	IPA or Ethanol	0.24	1.05
		PM <sub>10</sub>	0.09	0.39
		NO <sub>x</sub>	1.18	5.15
		CO	0.99	4.33
		SO <sub>2</sub>	0.01	0.03
		VOC	0.06	0.28
DM12-C	Product Silo/Raymond Mills Baghouse	PM <sub>10</sub>	1.84	5.75
FBDRYER	Special Products Unit Fluid Bed Dryer	IPA or Ethanol	0.37	1.64
		PM <sub>10</sub>	0.01	0.05
		NO <sub>x</sub>	0.16	0.69
		CO	0.13	0.58
		SO <sub>2</sub> <0.01	<0.01	
		VOC	0.01	0.04
BAGGER	Special Products Unit Bagging Machine Baghouse	Bentonite	0.20	0.30

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BLR12	(Thermal Oxidizer No. 3)	IPA or Ethanol	0.10	0.45
		PM <sub>10</sub>	0.02	0.09
		NO <sub>x</sub>	0.26	1.16
		CO	0.22	0.97
		SO <sub>2</sub>	<0.01	0.01
		VOC	0.01	0.06
DC 1	Blunger Tanks Dust Collector Stack	PM/PM <sub>10</sub> (a)	0.22	0.48
DC 2	Pulverizer Dust Collector Stack	PM/PM <sub>10</sub> (a)	0.22	0.48
DC 3	Weigh Hopper and Mixer Dust Collector Stack	PM/PM <sub>10</sub> (a)	0.22	0.48
DC 4	Bagger and Bag Hopper Dust Collector Stack w/ In-line Heater	PM/PM <sub>10</sub> (a)	0.22	0.48
		SO <sub>2</sub>	<0.01	<0.01
		NO <sub>x</sub>	0.15	0.42
		CO	0.12	0.35
		VOC	0.01	0.02
DC5	Dry Process - Mill Fabric filter baghouse	PM/PM <sub>10</sub>	0.71	2.24
DC 6	Pulverizer Mill and Dust Collector Stack	PM/PM <sub>10</sub> (b)	0.81	1.74
BLR 2	Cleaver Brooks Boiler Stack (Serial No. L-63685)	PM/PM <sub>10</sub> (c)	0.06	0.18
		SO <sub>2</sub>	<0.01	0.01
		NO <sub>x</sub>	0.82	2.36
		CO	0.69	1.98
		VOC	0.05	0.13
BLR 3	Cleaver Brooks Boiler Stack (Serial No. 8422)	PM/PM <sub>10</sub> (c)	0.10	0.28
		SO <sub>2</sub>	0.01	0.02
		NO <sub>x</sub>	1.27	3.65
		CO	1.07	3.06
		VOC	0.07	0.20

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DM1-C	Bulk Product Silo No. 3 Fabric filter baghouse	PM <sub>10</sub>	0.92	2.88
DM1-D	Bulk Product Silo No. 4 Fabric filter baghouse	PM <sub>10</sub>	0.92	2.88
DM13	Feed Silo Fabric filter baghouse	PM <sub>10</sub>	1.61	5.06
RX1	Reaction Tank No. 1	VOC	0.03	0.14
RX2	Reaction Tank No. 2	VOC	0.03	0.14

(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 - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>.

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.

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

Dated May 26, 2009