

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 8221A

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
2	Bean Trash Receiving Cyclone Stack	PM	2.09	0.10
		PM ₁₀	1.77	0.09
5	Bean Cleaner Baghouse Stack (6)	PM/PM ₁₀	0.17	<0.01
7A	T-820s Splits Transfer Out Baghouse Stack (6)	PM/PM ₁₀	0.03	0.04
7B	T-820s Splits Transfer out Baghouse Stack (6)	0.04 PM/PM ₁₀		0.03
8	T-820s Splits Transfer Out Baghouse Stack (6)	0.28 PM/PM ₁₀		0.16
9	Splits Railcar Unloading Baghouse Stack (6)	PM/PM ₁₀	0.03	0.06
10	Bean Trash Screw Baghouse Stack (6)	PM/PM ₁₀	0.28	0.01
12	Meal Storage Tank Baghouse Stack (6)	PM/PM ₁₀	0.34	0.51
13	Meal Storage Tank Baghouse Stack (6)	PM/PM ₁₀	0.34	0.51
14	Meal Bulk Loading Baghouse Stack (6)	PM/PM ₁₀	1.48	1.11

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			lb/hr	TPY
21	Bean Transfer Baghouse Stack (6)	PM/PM ₁₀	0.03	0.07
22	TK 1-4 Baghouse Stack (6)	PM/PM ₁₀	0.03	0.06
23	TPS Bean Cleaner Baghouse Stack (6)	PM/PM ₁₀	0.07	0.04
24	TK 1-4 Tunnel Baghouse Stack (6) 0.23	PM/PM ₁₀		0.10
25	TK 13-14 Outlet Baghouse Stack (6)	PM/PM ₁₀	0.13	0.20
29	Purified Splits PR Dust Collector (6)	PM/PM ₁₀	0.03	0.13
30	Pre-Secondary Sifter Dust Collector (6)	PM/PM ₁₀	0.28	1.15
31	Rotary Furnace Cyclone Stack	PM	0.16	0.28
		PM ₁₀	0.14	0.25
		NO _x	0.65	1.14
		CO	0.55	0.96
		VOC	0.04	0.06
		SO ₂	0.09	0.17
36	Secondary Screw Dust Collector (6)	PM/PM ₁₀	0.05	0.20
37	Product Bagging Dust Collector (6) 0.04	PM/PM ₁₀		0.17
38	Dump Back Dust Collector (6) 0.07	PM/PM ₁₀		0.09

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			lb/hr	TPY
39	Pre-Primary Sifter PR Cyclone	PM	0.90	3.04
		PM ₁₀	0.77	2.58
47	TK 809 A, B Foersberg Dump Scale Baghouse Stack (6)	PM/PM ₁₀	0.09	0.18
49A	TK No. 811 A Baghouse Stack (6)	PM/PM ₁₀	0.07	0.07
49B	TK No. 811 B Baghouse Stack (6)	PM/PM ₁₀	0.07	0.07
54	TK No. 809A Baghouse Stack (6)	PM/PM ₁₀	0.03	0.07
55	TK No. 809B Baghouse Stack (6)	PM/PM ₁₀	0.03	0.07
56	TK No. 801A Baghouse Stack (6)	PM/PM ₁₀	0.03	0.07
57	TK No. 801B Baghouse Stack (6)	PM/PM ₁₀	0.03	0.07
58	TK No. 801X Baghouse Stack (6)	PM/PM ₁₀	0.03	0.07
59	TK No. 801Y Baghouse Stack (6)	PM/PM ₁₀	0.03	0.07
60	M2 7E Blowers (Food Grade) Cyclone Stack [Furnace]	PM	0.95	3.94
		PM ₁₀	0.81	3.38
		NO _x	0.76	3.35
		CO	0.64	2.81
		VOC	0.04	0.18
		SO ₂	0.11	0.49
61	M2 Secondary Sifter Baghouse Stack (6)	PM/PM ₁₀	0.44	1.84
63A	M2 Hydration Conveyor Hood	VOC (Acetic Acid)	0.15	0.61

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY
64	Std. Guar Splits Surge Tank Baghouse Stack (6)	PM/PM ₁₀	0.04	0.06
66	Std. Guar M-2 Splits H.C. Receiving Baghouse Stack (6)	PM/PM ₁₀	<0.01	0.03
67	M-2 Fin. Product Baghouse Stack (6)	PM/PM ₁₀	0.36	1.17
70	901, 902, 903 Splits HB Baghouse Stack (6)	PM/PM ₁₀	0.15	0.66
72	Scrubber Vent	VOC (4)	-	-
87	903 Flame Arrestor Service 902 and 903 Reactor Vents	VOC (4)	-	-
88	902 Flame Arrestor on Recycle Conveyor Reactor Vents	VOC (4) -	-	-
89	901 Flame Arrestor on Recycle Conveyor Reactor Vents	VOC (4)	-	-
92	Reactors Vac Jet Blowdown Pot -	VOC (4)	-	-
PP-3	Pilot Plant VOC Vent	VOC (4)	-	-
	Total Reactor Operations	VOC (4)	5.33	5.07
80	Splits Receiving Before 902s and 903s Baghouse Stack (6)	PM/PM ₁₀ 0.14		0.05
81	Splits Rec Before M-1 and M-2 Baghouse Stack (6)	PM/PM ₁₀	0.09	0.14

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY
82	Splits Receiver for Milling 1 and 2 Baghouse Stack (6)	PM/PM ₁₀	0.09	0.14
124	Mill 1 Product Receiving (Presifted) Baghouse Stack 3.35 [Furnace] (6)	PM/PM ₁₀	0.58	0.77
		NO _x		0.76
		CO	0.64	2.81
		VOC	0.04	0.18
		SO ₂	0.11	0.49
127	Mill 1 Product Receiving (Sifted) Baghouse Stack (6)	PM/PM ₁₀ 0.06		0.06
128	Mill 1 Hydration Conveyor Fume Hood	VOC (Acetic Acid)	0.48	1.94
131	Mill 4 A Product Receiving Cyclone Stack [Furnace]	PM	1.58	6.58
		PM ₁₀	1.35	5.61
		NO _x	0.41	1.79
		CO	0.34	1.50
		VOC	1.77	0.11
		SO ₂	0.06	0.26
132	Mill 4 B Product Receiving Cyclone Stack [Furnace]	PM	1.87	7.78
		PM ₁₀	1.60	6.63
		NO _x	0.41	1.79
		CO	0.34	1.50
		VOC	1.77	0.11
		SO ₂	0.06	0.26
133	Mill 4 D Product Receiving Cyclone Stack [Furnace]	PM	1.30	5.39
		PM ₁₀	1.11	4.60
		NO _x	0.41	1.79

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY
		CO	0.34	1.50
		VOC	1.77	0.11
		SO ₂	0.06	0.26
134	Mill 4 C Product Receiving Cyclone Stack [Furnace]	PM	1.58	6.58
		PM ₁₀	1.35	5.61
		NO _x	0.41	1.79
		CO	0.34	1.50
		VOC	1.77	0.11
		SO ₂	0.06	0.26
135	Mill 4 Side A Sifter Baghouse Stack (6)	PM/PM ₁₀	0.05	0.21
136	Mill 4 Side B Sifter Baghouse Stack (6)	PM/PM ₁₀	0.05	0.21
137	Mill 4 Side A Product Receiving Baghouse Stack (6)	PM/PM ₁₀	0.02	0.09
138	Mill 4 Side B Product Receiving Baghouse Stack (6)	0.09 PM/PM ₁₀		0.02
139A	Mill 4 Product Receiving Cyclone Stack	PM	0.08	0.34
		PM ₁₀	0.07	0.29
139B	Mill 4 Product Receiving Cyclone Stack	PM	0.08	0.34
		PM ₁₀	0.07	0.29
140	Old Bulk 10K Headbin Baghouse Stack	PM/PM ₁₀	0.18	0.18

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY
	(Food Grade) (6)			
141	Food Grade 40K Storage Tank Baghouse Stack (6)	PM/PM ₁₀	0.18	0.18
143	Old Bulk 20K Blender Baghouse Stack (6)	PM/PM ₁₀	0.18	0.18
145	89 Blender Baghouse Stack (6)	PM/PM ₁₀	0.77	0.39
146A	Old Bulk Bagging Station for 20K Blender Baghouse Stack (6)	PM/PM ₁₀	0.28	0.28
146B	Old Bulk Bagging Station for 20K Blender Baghouse Stack (6)	PM/PM ₁₀	0.28	0.28
152	Old Bulk Dump Back Station Baghouse Stack (6)	PM/PM ₁₀	0.26	0.13
153	Food Grade 40K Storage Tank Baghouse Stack (6)	PM/PM ₁₀	0.18	0.18
154	C Section Blender Baghouse Stack (6)	PM/PM ₁₀	0.28	0.28
155	Food Grade 10K Blender Baghouse Stack (6)	PM/PM ₁₀	0.18	0.22
157A	Dry Enzyme Dump Station Baghouse Stack (6)	PM/PM ₁₀	0.10	0.05
157B	Dry Enzyme Dump Station Baghouse Stack (6)	PM/PM ₁₀	0.07	0.03

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY
158	Food Grade Dump Back Station	PM/PM ₁₀	0.10	0.10
	Baghouse Stack (6)			
160	Bulk 1 10K Weighbin Baghouse	PM/PM ₁₀	0.66	0.66
	Stack (6)			
161	Bulk 1 10K Blender Baghouse	PM/PM ₁₀	0.08	0.37
	Stack (6)			
162	Bulk 1 20K Blender Baghouse	PM/PM ₁₀	0.07	0.31
	Stack (6)			
164	Bulk 1 Offline Bagging	PM/PM ₁₀	0.24	0.54
	Baghouse Stack (6)			
165	Bulk 1 Tank 1 Baghouse Stack (6)	PM/PM ₁₀	0.12	0.12
	0.06			
166	Bulk 1 Tank 2 Baghouse Stack (6)	PM/PM ₁₀	0.12	0.12
	0.06			
167	Bulk 1 Tank 3 Baghouse Stack (6)	PM/PM ₁₀	0.12	0.12
	0.06			
168	Bulk 1 Tank 4 Baghouse Stack (6)	PM/PM ₁₀	0.12	0.12
	0.06			
169	Bulk 1 Tank 5 Baghouse Stack (6)	PM/PM ₁₀	0.12	0.12
	0.06			
170	Bulk 1 Tank 6 Baghouse Stack (6)	PM/PM ₁₀	0.12	0.12
	0.06			
171	Bulk 1 Tank 7 Baghouse Stack (6)	PM/PM ₁₀	0.12	0.12
	0.06			

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY
172	Bulk 1 Tank 8 Baghouse Stack (6)	PM/PM ₁₀	0.12	0.06
173	Bulk 1 Dump Back Station Baghouse Stack (6)	PM/PM ₁₀	0.08	0.32
176	Bulk 1 Vacuum System Baghouse Stack (6)	PM/PM ₁₀	0.03	0.10
180A	Bulk 2 10K Weighbin Baghouse Stack (6)	PM/PM ₁₀	0.05	0.19
180B	Bulk 2 10K Weighbin Baghouse Stack (6)	PM/PM ₁₀	0.05	0.19
181	Bulk 2 10K Blender Baghouse Stack (6)	PM/PM ₁₀ VOC (Acetic Acid)	0.07 15.00	0.31 2.73
182	Bulk 2 Vacuum System Baghouse Stack (6)	PM/PM ₁₀	0.01	0.06
183	Bulk 3 Vacuum System Baghouse Stack (6)	PM/PM ₁₀	0.01	0.06
184	Bulk 2 Offline Bagging East Baghouse Stack (6)	0.97 PM/PM ₁₀		0.24
186	Bulk 2 Offline Bagging East Baghouse Stack (6)	PM/PM ₁₀	0.43	1.75
188	Bulk 2 Dump Back Station Baghouse Stack (6)	PM/PM ₁₀	0.22	0.22
189	Bulk 2 Tank 16 Baghouse Stack (6)	PM/PM ₁₀	0.24	0.12

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY
190	Bulk 2 Tank 15 Baghouse Stack (6)	PM/PM ₁₀	0.24	0.12
191	Bulk 2 Tank 14 Baghouse Stack (6)	PM/PM ₁₀	0.24	0.12
192	Bulk 2 Tank 13 Baghouse Stack (6)	PM/PM ₁₀	0.24	0.12
193	Bulk 2 Tank 12 Baghouse Stack (6)	PM/PM ₁₀	0.24	0.12
194	Bulk 2 Tank 11 Baghouse Stack (6)	PM/PM ₁₀	0.24	0.12
195	Bulk 2 Tank 10 Baghouse Stack (6)	PM/PM ₁₀	0.24	0.12
196	Bulk 2 Tank 9 Baghouse Stack (6)	PM/PM ₁₀	0.24	0.12
202	Quaternary Amine Storage Tank	VOC		0.07
		<0.01 (Quaternary Amine)		
203	Boiler No. 3 Stack	PM/PM ₁₀	0.14	0.61
		NO _x	1.83	8.01
		CO	1.54	6.73
		VOC	0.10	0.44
		SO ₂	0.27	1.16
204	Boiler No. 2 Stack	PM/PM ₁₀	0.14	0.61
		NO _x	1.83	8.01
		CO	1.54	6.73
		VOC	0.10	0.44
		SO ₂	0.27	1.16
206	Propane Tank	VOC	0.02	0.09
210	Brine Maker Operation	PM/PM ₁₀	1.00	0.08

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY
220	Mill 5 A Product Receiving Cyclone Stack	PM	0.05	0.19
		PM ₁₀	0.04	0.16
221	Mill 5 B Product Receiving Cyclone Stack	PM	0.05	0.19
		PM ₁₀	0.04	0.16
222	Mill 5 A Product Receiving Cyclone Stack [Furnace]	PM	1.31	5.43
		PM ₁₀	1.12	4.64
		NO _x	0.49	2.15
		CO	0.41	1.81
		VOC	0.03	0.12
		SO ₂	0.07	0.31
223	Mill 5 B Product Receiving Cyclone Stack [Furnace]	PM	1.31	5.43
		PM ₁₀	1.12	4.64
		NO _x	0.49	2.15
		CO	0.41	1.81
		VOC	0.03	0.12
		SO ₂	0.07	0.31
224	Mill 5 A Product Receiving Cyclone Stack [Furnace]	PM	1.31	5.43
		PM ₁₀	1.12	4.64
		NO _x	0.49	2.15
		CO	0.41	1.81
		VOC	0.03	0.12
		SO ₂	0.07	0.31
225	Mill 5 B Product Receiving Cyclone Stack [Furnace]	PM	1.31	5.43
		PM ₁₀	1.12	4.64
		NO _x	0.49	2.15
		CO	0.41	1.81
		VOC	0.03	0.12
		SO ₂	0.07	0.31

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY
226	Mill 5 A Sect Recycle Collector Baghouse Stack (6)	PM/PM ₁₀	0.04	0.16
227	Mill 5 B Sect Recycle Collector Baghouse Stack (6)	PM/PM ₁₀ 0.16		0.04
228	Mill 5 A Sect Product Receiver Baghouse Stack (6)	PM/PM ₁₀ 0.06		0.02
229	Mill 5 B Sect Product Receiver Baghouse Stack (6)	PM/PM ₁₀ 0.06		0.02
230	Mill 5 A Regrind Product Collector Baghouse Stack (6)	PM/PM ₁₀ 0.69		0.29
240	Bulk 3 20K Headbin Baghouse Stack (6)	PM/PM ₁₀	0.39	1.57
241	Bulk 3 Bagging Station Baghouse Stack (6)	PM/PM ₁₀	0.24	0.97
242	Bulk 3 Bagging Station Baghouse Stack (6)	PM/PM ₁₀	1.47	5.94
243	Bulk 3 Air Mix Blender Baghouse Stack (6)	PM/PM ₁₀	0.38	1.52
244	Bulk 3 Dry Chem Additive Station Baghouse Stack (6)	PM/PM ₁₀	0.47	0.83
245	Granulated Guar Process	PM/PM ₁₀	0.26	0.13

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY
	Baghouse Stack (6)			
247	LGC Baghouse Stack (6)	PM/PM ₁₀	0.05	0.03
250	LGC Baghouse Stack (6)	PM/PM ₁₀	0.03	0.03
251	LGC Unit for HPG Baghouse Stack (6)	PM/PM ₁₀	0.05	0.02
252	LGC Unit for HPG Baghouse Stack (6)	PM/PM ₁₀	0.05	0.02
254	Cooling Tower C Stack	PM/PM ₁₀	0.21	0.90
255	Cooling Tower D Stack	PM/PM ₁₀	0.17	0.75
PP-1	Pilot Plant Primary Cyclone Stack	PM	0.04	0.09
		PM ₁₀	0.04	0.07
PP-2	Pilot Plant Secondary Cyclone Stack	PM	0.04	0.09
		PM ₁₀	0.04	0.07
260	Milling 4 Vacuum System Baghouse Stack (6)	PM/PM ₁₀	0.03	0.14
261	Milling 5 Vacuum System Baghouse Stack (6)	PM/PM ₁₀	0.02	0.08
FV-101	Prox Equipment Leak Fugitives (5)	VOC (4)	1.12	4.86

(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.

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
(3)	PM	- particulate matter, suspended in the atmosphere, including PM ₁₀		
	PM ₁₀	- particulate matter 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 _x	- total oxides of nitrogen		
	CO	- carbon monoxide		
	VOC	- volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1		
	SO ₂	- sulfur dioxide		
(4)	All VOC emissions from these sources are propylene oxide which is a hazardous air pollutant.			
(5)	Fugitive emissions are an estimate only.			
(6)	Bag or pleated filter replacement is an authorized maintenance, start-up, and shutdown (MSS) activity. The MSS emissions are de minimis.			

Dated August 12, 2008