

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 19355

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	<u>TPY</u>
S-105	Corn Steeping Tank (a)	SO ₂	0.02	0.09
		VOC 0.20	0.88	
S-106	Corn Steeping Tank (a)	SO ₂	0.02	0.09
		VOC 0.20	0.88	
S-107	Corn Steeping Tank (a)	SO ₂	0.02	0.09
		VOC 0.20	0.88	
S-108	Corn Steeping Tank (a)	SO ₂	0.02	0.09
		VOC 0.20	0.88	
S-109	Corn Steeping Tank (a)	SO ₂	0.02	0.09
		VOC 0.20	0.88	
S-110	Corn Steeping Tank (a)	SO ₂	0.02	0.09
		VOC 0.20	0.88	
S-111	Corn Steeping Tank (a)	SO ₂	0.02	0.09
		VOC 0.20	0.88	
S-112	Corn Steeping Tank (a)	SO ₂	0.02	0.09
		VOC 0.20	0.88	
S-113	Corn Steeping Tank (a)	SO ₂	0.02	0.09
		VOC 0.20	0.88	
S-114	Corn Steeping Tank (a)	SO ₂	0.02	0.09
		VOC 0.20	0.88	

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
S-115	Corn Steeping Tank (a)	SO ₂	0.02	0.09
		VOC 0.20	0.88	
S-116	Corn Steeping Tank (a)	SO ₂	0.02	0.09
		VOC 0.20	0.88	
S-117	Corn Steeping Tank (a)	SO ₂	0.02	0.09
		VOC 0.20	0.88	
S-118	Corn Steeping Tank (a)	SO ₂	0.02	0.09
		VOC 0.20	0.88	
S-119	Corn Steeping Tank (a)	SO ₂	0.02	0.09
		VOC 0.20	0.88	
S-120	Corn Steeping Tank (a)	SO ₂	0.02	0.09
		VOC 0.20	0.88	
S-127	Starch Reslurry Bag Filter (a)	PM ₁₀	0.06	0.26
S-128	Starch Dryer Vent (a)	VOC	0.10	0.44
		NO _x	1.84	8.06
		SO ₂	0.14	0.61
		PM ₁₀	7.20	31.54
		CO	1.54	6.76
S-132	No. 1 CAB Filtrate Vent (a)	SO ₂	0.01	0.04
		VOC 0.02	0.09	
S-133	No. 2 CAB Filtrate Vent (a)	SO ₂	0.01	0.04
		VOC 0.02	0.09	
S-134	North Incubation Tank	SO ₂	0.01	0.04

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	<u>TPY</u>
	Vent (a)	VOC	0.07	0.31
S-135	South Incubation Tank Vent (a)	SO ₂	0.01	0.04
		VOC	0.07	0.31
S-136	West Incubation Tank Vent (a)	SO ₂	0.01	0.04
		VOC	0.07	0.31
S-137	1 st Grind Dilution Tank Vent (a)	SO ₂	0.01	0.04
		VOC	0.07	0.31
S-138	Mill Building Vent Fan (a)	SO ₂	0.01	0.04
		VOC	0.03	0.15
S-139	Mill Building Vent Fan (a)	SO ₂	0.10	0.44
		VOC	0.37	1.62
S-140	Mill Building Vent Fan (a)	SO ₂	0.01	0.04
		VOC	0.03	0.15
S-141	Mill Building Vent Fan (a)	SO ₂	0.01	0.04
		VOC	0.03	0.15
S-142	Mill Building Vent Fan (a)	SO ₂	0.01	0.04
		VOC	0.03	0.15
S-143	Mill Building Vent Fan (a)	SO ₂	0.01	0.04
		VOC	0.03	0.15
S-144	Mill Building Vent Fan (a)	SO ₂	0.10	0.44
		VOC	0.37	1.62
S-145	Mill Building Vent Fan (a)	SO ₂	0.01	0.04
		VOC	0.03	0.15
S-146	Mill Building Vent Fan (a)	SO ₂	0.01	0.04

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY
		VOC 0.03	0.15	
S-147	Mill Building Vent Fan (a)	SO ₂	0.01	0.04
		VOC 0.03	0.15	
S-148	Mill Building Vent Fan (a)	SO ₂	0.01	0.04
		VOC 0.03	0.15	
S-149	Mill Building Vent Fan (a)	SO ₂	0.01	0.04
		VOC 0.03	0.15	
S-150	Mill Building Vent Fan (a)	SO ₂	0.08	0.36
		VOC 0.32	1.42	
S-151	Mill Building Vent Fan (a)	SO ₂	0.03	0.15
		VOC 0.14	0.61	
S-152	Corn Steeping Tank (a)	SO ₂	0.05	0.22
		VOC 0.50	2.19	
S-153	Corn Steeping Tank (a)	SO ₂	0.05	0.22
		VOC 0.50	2.19	
S-154	Corn Steeping Tank (a)	SO ₂	0.05	0.22
		VOC 0.50	2.19	
S-155	Corn Steeping Tank (a)	SO ₂	0.05	0.22
		VOC 0.50	2.19	
S-156	Corn Steeping Tank (a)	SO ₂	0.05	0.22
		VOC 0.50	2.19	
S-157	Corn Steeping Tank (a)	SO ₂	0.05	0.22
		VOC 0.50	2.19	
S-158	No. 1 Germ Dryer Stack (a)	PM ₁₀	0.46	2.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant		Emission Rates	
		Name (3)		lb/hr	TPY
		SO ₂	0.90	3.94	
		VOC	1.07	4.69	
S-159	No. 2 Germ Dryer Stack (a)	PM ₁₀		0.93	4.07
		SO ₂	1.80	7.88	
		VOC	2.14	9.37	
S-160	Germ Transfer Bag Filter (a)	PM ₁₀		0.90	3.94
S-161	Gluten Recycle Bag Filter (a)	PM ₁₀		0.09	0.39
S-162	Mill Building Vent Fan (a)	SO ₂		0.01	0.05
		VOC	0.04	0.19	
S-163	Mill Building Vent Fan (a)	SO ₂		0.01	0.05
		VOC	0.04	0.19	
S-164	Gluten Dryer Scrubber Stack (a)	VOC		19.37	84.84
		NO _x		3.67	16.08
		SO ₂		7.00	30.66
		PM ₁₀		11.47	50.24
		CO		3.08	13.51
S-165	Gluten Transfer Bag Filter (a)	PM ₁₀		0.56	2.45
S-166	Mill Building Vent Fan (a)	SO ₂		0.04	0.17
		VOC	0.16	0.68	
S-167	Mill Building Vent Fan (a)	SO ₂		0.05	0.22
		VOC	0.19	0.85	
S-168	Mill Building Vent Fan (a)	SO ₂		0.05	0.22
		VOC	0.19	0.85	
S-169	Mill Building Vent Fan (a)	SO ₂		0.08	0.35
		VOC	0.24	1.06	

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	<u>TPY</u>
S-170	Mill Building Vent Fan (a)	SO ₂	0.04	0.18
		VOC 0.17	0.75	
S-171	Mill Building Vent Fan (a)	SO ₂	0.08	0.36
		VOC 0.32	1.40	
S-172	Mill Building Vent Fan (a)	SO ₂	0.08	0.36
		VOC 0.24	1.05	
S-173	North Gluten Filter Vent Fan (a)	SO ₂	0.48	2.10
		VOC 2.37	10.40	
S-174	Center Gluten Filter Vent Fan (a)	SO ₂	0.48	2.10
		VOC	2.37	
S-175	South Gluten Filter Vent Fan (a)	SO ₂	0.48	2.10
		VOC	2.37	
S-176	Sluice Line Vent (a)	SO ₂	0.01	0.04
		VOC 0.02	0.10	
S-177	Starch Dewatering Vent (a)	SO ₂	0.01	0.04
		VOC 0.02	0.10	
S-178	South Flotation Cell Vent (a)	SO ₂	0.01	0.04
		VOC 0.02	0.10	
S-179	North Flotation Cell Vent (a)	SO ₂	0.01	0.04
		VOC 0.02	0.10	
S-180	Primary Separator Vent (a)	SO ₂	0.01	0.04
		VOC 0.02	0.10	

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY
S-181	Grind Tanks Vent Fan (a)	SO ₂	1.46	6.40
		VOC	0.15	0.66
S-182	Steepwater Evaporator Condenser Vent (a)	SO ₂	0.01	0.04
		VOC	0.18	0.80
S-183	Gluten Filter Vacuum Pump Vent (a)	SO ₂	0.01	0.04
		VOC	0.09	0.40
S-184	Sluice Tank Vent (a)	SO ₂	0.01	0.04
		VOC	0.02	0.10
S-185	Water Fill Tank Vent (a)	SO ₂	0.01	0.04
S-201	Starch Bin E Bag Filter (a)	PM ₁₀	0.06	0.26
S-202	Starch Bin F Bag Filter (a)	PM ₁₀	0.06	0.26
S-203	Starch Bin G Bag Filter (a)	PM ₁₀	0.06	0.26
S-204	Starch Bin H Bag Filter (a)	PM ₁₀	0.06	0.26
S-205	Starch Bin I Bag Filter (a)	PM ₁₀	0.06	0.26
S-206	Starch Packing Bag Filter (a)	PM ₁₀	0.06	0.26
S-301	Diatomaceous Earth Bin Bag Filter (a)	PM ₁₀	0.01	0.04
S-302	Diatomaceous Earth Transfer Bag Filter (a)	PM ₁₀	0.13	0.57
S-304	Carbon Regeneration Furnace (a)	VOC	0.06	0.27
		NO _x	4.50	19.75
		SO ₂	0.02	0.09
		PM ₁₀	0.70	3.07

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
		CO	0.95	4.16
S-307	Mg Sulfite Tank Scrubber (a)	SO ₂	0.02	0.10
S-308	HCl Scrubber (a)	HCl	0.11	0.48
S-309	NH ₃ Scrubber (a)	NH ₃	0.06	0.26
S-310	Lime Silo Bag Filter (a)	PM ₁₀	0.06	0.26
S-311	Flash Cooler Vent (a)	SO ₂	9.13	40.00
		VOC 0.46	2.01	
S-312	Flash Cooler Vent (a)	SO ₂	9.13	40.00
		VOC 0.46	2.01	
S-402	Millhouse Cooling Tower (a)	PM	0.02	0.11
		VOC 0.01	0.04	
S-403	55 Refinery Cooling Tower (a)	PM	0.10	0.44
		VOC 0.01	0.04	
S-404	Bisulfite Solution Scrubber (a)	SO ₂	0.03	0.13
S-405	No. 2 Fuel Oil Tank (a)	VOC	0.01	0.04
S-406	Murray Boiler (a) (b) [Natural Gas Only]	VOC	0.45	1.97
		NO _x	8.14	35.65
		SO ₂	0.05	0.22
		PM ₁₀	0.62	2.72
		CO	6.83	29.93
	Murray Boiler (c) [Fuel Oil Only]	VOC	0.12	0.37
		NO _x	11.68	37.37
		SO ₂	24.88	79.59
		PM ₁₀	4.67	14.95
		CO	2.92	9.34

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY
S-407	Murray Boiler (d) [Natural Gas and Fuel Oil]	VOC		0.90
		NO _x		50.82
		SO ₂		79.65
		PM ₁₀		15.68
		CO		17.41
	B & W Boiler (a) (b) [Natural Gas Only]	VOC	0.75	3.29
		NO _x	18.98	83.15
		SO ₂	0.08	0.36
		PM ₁₀	1.03	4.51
		CO	11.39	49.89
	B & W Boiler (c) [Fuel Oil Only]	VOC	0.19	0.37
		NO _x	19.46	37.37
		SO ₂	41.45	79.59
		PM ₁₀	7.78	14.95
		CO	4.87	9.34
	B & W Boiler (d) [Natural Gas and Fuel Oil]	VOC		2.21
		NO _x		84.10
		SO ₂		79.79
		PM ₁₀		17.48
		CO		37.36
S-408	Zurn Boiler (a) (b) [Natural Gas]	VOC	0.51	2.23
		NO _x	9.18	40.21
		SO ₂	0.06	0.26
		PM ₁₀	0.70	3.07
		CO	7.71	33.78
S-409	42 Refinery Cooling Tower (a)	PM	0.11	0.50
		VOC	0.01	0.04
S-410	Demin. Aeration Tower (a)	VOC	0.01	0.04

F-101	Bran By-Product Handling (a)		PM ₁₀	0.06	0.26
			SO ₂	0.02	0.10
		VOC	0.02	0.10	
F-102	Millhouse Fugitives (a)		SO ₂	0.01	0.04
		VOC	0.05	0.22	
F-103	Steepwater Unloading Fugitives (a)		SO ₂	0.01	0.04
			VOC	0.05	0.22
F-201	Starch Loadout (a)		PM ₁₀	1.37	6.00
F-301	Carbon Regeneration Furnace Area (a)		PM ₁₀	0.05	0.22
F-302	Diatomaceous Earth Handling Area (a)		PM ₁₀	0.25	1.10
F-401	Fuel Oil Handling (a)		VOC	0.15	0.66
F-402	Propane Storage Area (a)		VOC	0.57	2.50

(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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code (TAC) § 101.1

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

PM - particulate matter, suspended in the atmosphere, including PM₁₀.

PM₁₀ - 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.

CO - carbon monoxide

NH₃ - ammonia

HCl - hydrogen chloride

(a) Emission rates are based on the following maximum operating schedule:

Hrs/day_____ Days/week_____ Weeks/year_____ or Hrs/year 8,760

(b) Emission rates are based on firing sweet natural gas as defined in 30 TAC Chapter 101.

(c) Emission rates are based on firing No. 2 Fuel Oil on a maximum annual throughput of 3,736,800 gallons.

(d) Emission rates are based on firing No. 2 Fuel Oil as a backup on a maximum annual throughput of 3,736,800 gallons and sweet natural gas for the balance of the year.

Dated_____