Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 19200 and PSDTX1237M1

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, sources, and related activities. 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)	Emission Rates	
			lbs/hour	TPY (4)
B-242	Co-Catalyst Area Dip Pot	VOC	0.03	0.01
B-292A	Peroxide Dip Pot	VOC	0.05	0.01
B-292B	Peroxide Dip Pot	VOC	0.05	0.01
B-360	Pellet Buffer Vessel	PM	0.01	0.06
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
B-406	Catalyst Slurry Prep System Dip Pot	VOC	0.05	0.01
B-460	Pellet Buffer Vessel	PM	0.01	0.06
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
B-560	Pellet Buffer Vessel	PM	0.01	0.06
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
B-760	Pellet Buffer Vessel	PM	0.01	0.06
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
F-343	Powder Vent Gas Filter	VOC	0.01	0.01
		PM	0.04	0.06
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
F-346	Additive Feed Conveying Gas Filter	VOC	0.01	0.01
		PM	0.02	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
F-367	Pellet Water Pre-separator Sieve	PM	0.03	0.14
		PM_{10}	0.01	0.03
		$PM_{2.5}$	0.01	0.02
F-368	Classifier	PM	0.03	0.14
		PM_{10}	0.01	0.03

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.01	0.02
F-387A	Silos Cyclone Separator, Train No. 1	PM	0.40	1.06
		PM_{10}	0.08	0.21
		$PM_{2.5}$	0.07	0.19
F-443	Powder Vent Gas Filter	VOC	0.01	0.01
		PM	0.04	0.06
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
F-446	Additive Feed Conveying Gas Filter	VOC	0.01	0.01
		PM	0.02	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
F-467	Pellet Water Pre-separator Sieve	PM	0.03	0.14
		PM_{10}	0.01	0.03
		$PM_{2.5}$	0.01	0.02
F-468	Classifier	PM	0.03	0.14
		PM_{10}	0.01	0.03
		$PM_{2.5}$	0.01	0.02
F-487A	Silos Cyclone Separator, Train No. 2	PM	0.40	1.06
		PM_{10}	0.08	0.21
		$PM_{2.5}$	0.07	0.19
F-541	500 Line-Off Spec Silo Bag Filter	PM	0.20	0.86
		PM_{10}	0.04	0.17
		$PM_{2.5}$	0.04	0.16
F-543	Powder Vent Gas Filter	VOC	0.01	0.01
		PM	0.04	0.06
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
F-546	Additive Feed Conveying Gas Filter	VOC	0.01	0.01
		PM	0.02	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
F-567	Pellet Water Pre-separator Sieve	PM	0.03	0.14
		PM_{10}	0.01	0.03
		$PM_{2.5}$	0.01	0.02
F-568	Classifier	PM	0.03	0.14

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	0.01	0.03
		$PM_{2.5}$	0.01	0.02
F-575	300/400 Line - Off Spec Silo Bag Filter	PM	0.59	2.29
		PM_{10}	0.12	0.46
		$PM_{2.5}$	0.11	0.41
F-587A	Silos Cyclone Separator, Train No. 3	PM	0.40	1.06
		PM_{10}	0.08	0.21
		$PM_{2.5}$	0.07	0.19
F-705	Auto Packer Cyclone	PM	0.14	0.59
		PM_{10}	0.03	0.12
		$PM_{2.5}$	0.02	0.11
F-706A	Truck Silo Cyclone	PM	0.14	0.59
		PM_{10}	0.03	0.12
		$PM_{2.5}$	0.02	0.11
F-706B	Auto Packer Cyclone	PM	0.16	0.69
		PM_{10}	0.03	0.14
		$PM_{2.5}$	0.03	0.12
F-711A	Hopper Silo Cyclone, Train No. 1	PM	0.14	0.59
		PM_{10}	0.03	0.12
		$PM_{2.5}$	0.02	0.11
F-711B	PP1 Railcar Vacuum Cleaning System	PM	0.14	0.59
		PM_{10}	0.03	0.12
		$PM_{2.5}$	0.02	0.11
F-711G	Streamer Remover Bag Filter, Train No. 4	PM	0.40	1.59
		PM_{10}	0.08	0.32
		$PM_{2.5}$	0.07	0.29
F-741	700 Line Off Spec Silo Bag Filter	PM	0.12	0.48
		PM_{10}	0.02	0.10
		$PM_{2.5}$	0.02	0.09
F-743	Additive Vent Gas Filter	VOC	0.01	0.01
		PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
F-743A	Powder Vent Bag Filter	VOC	0.01	0.01
		PM	0.01	0.01
		PM_{10}	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.01	0.01
F-746	Additive Feed Conveying Gas Filter	VOC	0.01	0.01
		PM	0.02	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
F-747 A	Bag Dumping Unit	PM	0.02	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
F-747 B	Bag Dumping Unit	PM	0.02	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
F-747 C	Bag Dumping Unit	PM	0.02	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
F-767	Pellet Water Pre-separator Sieve	PM	0.03	0.14
		PM_{10}	0.01	0.03
		$PM_{2.5}$	0.01	0.02
F-768	Classifier	PM	0.03	0.14
		PM_{10}	0.01	0.03
		$PM_{2.5}$	0.01	0.02
F-781A	Product Silo Cyclone Train No. 1	PM	0.38	1.64
		PM_{10}	0.08	0.33
		$PM_{2.5}$	0.07	0.30
F-781B	Product Silo Cyclone Train No. 2	PM	0.38	1.64
		PM_{10}	0.08	0.33
		$PM_{2.5}$	0.07	0.30
F-781C	Product Silo Cyclone Train No. 3	PM	0.38	1.64
		PM_{10}	0.08	0.33
		$PM_{2.5}$	0.07	0.30
F-787	Silo Air Filters Train No. 4	PM	0.48	1.87
		PM_{10}	0.10	0.37
		$PM_{2.5}$	0.09	0.34
F-787A	Silos Cyclone Separator, Train No. 4	PM	0.40	1.06
		PM_{10}	0.08	0.21
		$PM_{2.5}$	0.07	0.19
F-875	B Train Loading Station Cyclone Separator	PM	0.30	0.61

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	0.06	0.12
		$PM_{2.5}$	0.05	0.11
F-902	Filter Receiver	PM	0.03	0.07
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
F-975	C Train Loading Station Cyclone Separator	PM	0.30	0.61
		PM_{10}	0.06	0.12
		$PM_{2.5}$	0.05	0.11
F-981	Product Silo Air Cyclone Train No. 4	PM	1.01	3.98
		PM_{10}	0.20	0.80
		$PM_{2.5}$	0.18	0.72
PO-CT	Cooling Tower	VOC	1.32	5.79
		PM	0.86	2.40
		PM_{10}	0.20	0.87
		$PM_{2.5}$	0.01	0.01
		Chlorine compounds	0.01	0.01
PP1-300	Downstream Pellet Handling PP-1, Train No. 1 (7)	VOC	3.30	3.64
PP1-400	Downstream Pellet Handling PP-1, Train No. 2 (8)	VOC	3.46	3.77
PP1-500	Downstream Pellet Handling PP-1, Train No. 3 (9)	VOC	2.87	3.79
PP1-700	Downstream Pellet Handling PP-1, Train No. 4 (10)	VOC	1.27	3.55
PP1-CT	Cooling Tower	VOC	0.44	1.93
		PM	0.29	0.80
		PM_{10}	0.07	0.29
		$PM_{2.5}$	0.01	0.01
		Chlorine compounds	0.01	0.01
PP1-FUG	Fugitives PP-1 Unit (5)	VOC	13.19	57.76
		PM	0.05	0.27
		PM_{10}	0.05	0.27
		$PM_{2.5}$	0.05	0.27
		Cl_2	0.01	0.02
T-367	Dryer Train No. 1	PM	0.33	1.21
		PM_{10}	0.07	0.24
		$PM_{2.5}$	0.06	0.22
T-467	Dryer Train No. 2	PM	0.45	1.89
		PM_{10}	0.09	0.38

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.08	0.34
T-567	Dryer Train No. 3	PM	0.33	1.21
		PM_{10}	0.07	0.24
		$PM_{2.5}$	0.06	0.22
T-767	Dryer Train No. 4	PM	0.41	1.76
		PM_{10}	0.08	0.35
		$PM_{2.5}$	0.07	0.32
PP1-MAINT	MSS to Atmosphere	VOC	102.27	1.81
		PM	3.19	0.42
		PM_{10}	3.19	0.42
		$PM_{2.5}$	3.19	0.42
1018, 1067, OL3-FLRA, OL3-FLRB, OL3-FLRC, EGF-1, EGF-2, EGF-3, EGF-4	Routine Waste Gas Flaring Hourly Cap (11)	NO_x (Elevated Flare option)	3.02	-
		CO (Elevated Flare option)	15.40	-
		SO_2 (Elevated Flare option)	0.01	-
		VOC (Elevated Flare option)	12.47	-
		NO_x (EGF option)	2.85	-
		CO (EGF option)	24.43	-
		SO_2 (EGF option)	0.02	-
		VOC (EGF option)	12.45	-
1018, 1067, OL3-FLRA, OL3-FLRB, OL3-FLRC, EGF-1, EGF-2, EGF-3, EGF-4, PP2-TEMP	MSS Waste Gas Flaring Hourly Cap (11)	NO_x (Elevated Flare option)	71.24	-
		CO (Elevated Flare option)	513.54	-
		VOC	949.97	-
		NO_x (EGF option)	202.31	-
		CO (EGF option)	403.89	-
FLARECAP	Elevated and Enclosed Ground Flares Annual Cap (12)	NO_x	-	8.40
		CO	-	67.87
		SO_2	-	0.07
		VOC	-	18.48
MSSFLARECAP	Elevated and Enclosed Ground Flares MSS Annual Cap (12)	NO_x	-	10.35
		CO	-	26.27
		VOC	-	39.05

(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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
(4) NO_x - total oxides of nitrogen

Emission Sources - Maximum Allowable Emission Rates

(5) SO_2 - sulfur dioxide
(6) PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
(7) PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
(8) $PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
(9) CO - carbon monoxide
(10) Cl_2 - chlorine
(11) Chlorine compounds - hypochlorous acid and hydrogen chloride

(12) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(13) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(14) PP1 vents shall all be routed to one flare or the other.
(15) Total VOC emissions from the following emissions points: B-360, F-367, F-368, F-387A, F-575, F-705, F-706A, F-706B, F-781A, F-711A, F-711G, F-711B, F-975, and T-367.
(16) Total VOC emissions from the following emissions points: B-460, F-467, F-468, F-487A, F-575, F-705, F-706A, F-706B, F-711A, F-711B, F-711G, F-781B, F-975, and T-467.
(17) Total VOC emissions from the following emissions points: B-560, F-541, F-567, F-568, F-587A, F-705, F-706A, F-706B, F-711A, F-711B, F-711G, F-781C, F-975, and T-567.
(18) Total VOC emissions from the following emissions points: B-760, F-705, F-706A, F-706B, F-711A, F-711B, F-711G, F-741, F-767, F-768, F-787, F-787A, F-975, F-981, and T-767.
(19) Maximum hourly emission rate for waste gas flaring may occur from any combination of EPNs.
(20) Emissions in the cap are authorized to be emitted from any combination of the following flare EPNs: 1018, 1067, OL3-FLRA/B/C, EGF-1, EGF-2, EGF-3, and EGF-4.

Date: TBD

Emission Sources - Maximum Allowable Emission Rates

Permit Number GHGPSDTX218

This table lists the maximum allowable emission rates of greenhouse gas (GHG) emissions, as defined in Title 30 Texas Administrative Code § 101.1, for all sources of GHG air contaminants on the applicant's property that are authorized 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, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities authorized by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates
			TPY (4)
GHGFLARECAP	Elevated and Enclosed Ground Flares GHG Annual Cap (routine and MSS) (6)	CO_2 (5)	38,115.84
		CH_4 (5)	115.05
		N_2O (5)	0.38
		CO_2e	41,105.70

(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) CO_2 - carbon dioxide
N_2O - nitrous oxide
CH_4 - methane
HFCs - hydrofluorocarbons
PFCs - perfluorocarbons
SF_6 - sulfur hexafluoride
CO_2e - carbon dioxide equivalents based on the following Global Warming Potentials (1/2015): CO_2 (1), N_2O (298), CH_4(25), SF_6 (22,800), HFC (various), PFC (various)
(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. These rates include emissions from maintenance, startup, and shutdown.
(5) Emission rate is given for informational purposes only and does not constitute enforceable limit.
(6) Emissions in the cap are authorized to be emitted from any combination of the following flare EPNs: 1018, 1067, OL3-FLRA/B/C, EGF-1, EGF-2, EGF-3, and EGF-4.

Date: TBD