Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 19201 and PSDTX1232M1

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)
2-HDPE	Downstream Pellet Handling	VOC	0.99	4.34
3-HDPE	Downstream Pellet Handling	VOC	0.69	3.02
3T-501	3T-501 Hexane Tank	VOC	0.31	0.56
3T502	3T-502 Hexane Tank	VOC	0.34	1.01
3T-503	3T-503 Hexane Tank	VOC	0.34	1.01
5T6010	Tank T-501	VOC	0.32	0.53
5T6020	Tank T-502	VOC	0.36	1.12
5T6030	Tank 2T-502	VOC	0.36	1.12
5T6040	Tank T-503	VOC	0.36	1.12
5T6050	Tank 2T-503	VOC	0.36	1.12
V-960	Caustic storage tank	NaOH	0.01	0.01
V-961	Caustic storage tank	NaOH	0.01	0.01
3V-961	Caustic storage tank	NaOH	0.01	0.01
D-301	HDPE Train A Dryer Vent	VOC	44.00	11.80
2D-301	HDPE Train B Dryer Vent	VOC	44.00	
3D-301	HDPE Train C Dryer Vent	VOC	44.00	
F-302	Powder Silo Bag Filter	PM	0.09	0.42
		PM_{10}	0.09	0.42
		$PM_{2.5}$	0.09	0.42
2F-302	Powder Silo Bag Filter	PM	0.09	0.42
		PM_{10}	0.09	0.42
		$PM_{2.5}$	0.09	0.42
3F302	Powder Silo Bag Filter	PM	0.16	0.62
		PM_{10}	0.16	0.62
		$PM_{2.5}$	0.16	0.62
F-401	Powder Feed Hopper Bag Filter	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

2F401	Powder Feed Hopper Bag Filter	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
3F401	Powder Feed Hopper Bag Filter	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
F408	Powder Feed Hopper Bag Filter	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
2F408	Powder Feed Hopper Bag Filter	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
3F408	Powder Feed Hopper Bag Filter	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
3F708A	Elutriate Bag Filter	PM	1.34	4.33
		PM_{10}	1.34	4.33
		$PM_{2.5}$	1.34	4.33
F-701	Blend Silo Bag Filter	PM	0.09	0.37
		PM_{10}	0.09	0.37
		$PM_{2.5}$	0.09	0.37
2F-701	Blend Silo Bag Filter	PM	0.09	0.37
		PM_{10}	0.09	0.37
		$PM_{2.5}$	0.09	0.37
3F701A	Blending Silo Bag Filter	PM	0.35	1.54
		PM_{10}	0.35	1.54
		$PM_{2.5}$	0.35	1.54
3F701B	Blending Silo Bag Filter	PM	0.35	1.54
		PM_{10}	0.35	1.54
		$PM_{2.5}$	0.35	1.54
F-708A	Hopper Car Bag Filter F-708A	PM	0.05	0.21
		PM_{10}	0.05	0.21

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.05	0.21
F-708B	Hopper Car Bag Filter F-708B	PM	0.05	0.21
		PM_{10}	0.05	0.21
		$PM_{2.5}$	0.05	0.21
S-705	Packer Silo Cyclone Separator	PM	0.06	0.28
		PM_{10}	0.06	0.28
		$PM_{2.5}$	0.06	0.28
2S-705	Packer Silo Cyclone Separator	PM	0.06	0.28
		PM_{10}	0.06	0.28
		$PM_{2.5}$	0.06	0.28
S-707	Packer Silo Cyclone Separator	PM	0.06	0.28
		PM_{10}	0.06	0.28
		$PM_{2.5}$	0.06	0.28
2S-707	Packer Silo Cyclone Separator	PM	0.06	0.28
		PM_{10}	0.06	0.28
		$PM_{2.5}$	0.06	0.28
S-708A	Hopper Silo Cyclone Separator	PM	0.06	0.28
		PM_{10}	0.06	0.28
		$PM_{2.5}$	0.06	0.28
S-708B	Hopper Silo Cyclone Separator	PM	0.06	0.28
		PM_{10}	0.06	0.28
		$PM_{2.5}$	0.06	0.28
S-709A	Product Silos Cyclone Separator S-709A	PM	0.06	0.28
		PM_{10}	0.06	0.28
		$PM_{2.5}$	0.06	0.28
S-709B	Product Silos Cyclone Separator S-709B	PM	0.06	0.28
		PM_{10}	0.06	0.28
		$PM_{2.5}$	0.06	0.28

S-405	Recycle Pellet Cyclone	PM	0.28	0.10
		PM_{10}	0.28	0.10
		$PM_{2.5}$	0.28	0.10
2S405	Recycle Pellet Cyclone	PM	0.28	0.10
		PM_{10}	0.28	0.10

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.28	0.10
3S405	Recycle Pellet Cyclone	PM	0.28	0.10
		PM_{10}	0.28	0.10
		$PM_{2.5}$	0.28	0.10
V-102	Catalyst Dip Pot	VOC	0.53	0.03
Z405	Additive Dust Collector	PM	0.02	0.08
		PM_{10}	0.02	0.08
		$PM_{2.5}$	0.02	0.08
2Z405	Additive Dust Collector	PM	0.02	0.08
		PM_{10}	0.02	0.08
		$PM_{2.5}$	0.02	0.08
Z410	Powder Vacuum Cleaner	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
PO-CT	Cooling Tower	VOC	1.32	5.79
		PM	1.72	4.80
		PM_{10}	0.35	1.74
		$PM_{2.5}$	0.01	0.01
		HOCl	0.01	0.01
H923A	Thermal Incinerator (6),	CO	15.49	-
		NO_x	10.25	-
		SO_2	0.09	-
		VOC	0.96	-
		PM	0.96	-
		PM_{10}	0.96	
		$PM_{2.5}$	0.96	

Emission Sources - Maximum Allowable Emission Rates

		CO (MSS)	75.00	18.70
		NO_x (MSS)	-	1.00
		SO_2 (MSS)	0.10	0.10
		VOC (MSS)	-	0.20
H923B	Thermal Incinerator (6),	CO	15.49	-
		NO_x	10.25	-
		SO_2	0.09	-
		VOC	0.96	-
		PM	0.96	-
		PM_{10}	0.96	
		$PM_{2.5}$	0.96	
		CO (MSS)	75.00	18.70
		NO_x (MSS)	-	1.00
		SO_2 (MSS)	0.10	0.10
		VOC (MSS)	-	0.20
H923A/B	Thermal Incinerators Annual Cap (6)	CO	-	55.97
		NO_x	-	44.90
		SO_2	-	0.38
		VOC	-	4.19
		PM	-	4.21
		PM_{10}	-	4.21
		$PM_{2.5}$	-	4.21
2F-302B	Powder Silo Bag Filter	PM	0.10	0.45
		PM_{10}	0.10	0.45
		$PM_{2.5}$	0.10	0.45
3F708B	Railcar Bag Filter	PM	0.52	1.59
		PM_{10}	0.52	1.59
		$PM_{2.5}$	0.52	1.59
3V305	Seal Dip Pot	VOC	0.01	0.01
PE-FUG	Plant Process Fugitives (5)	VOC	23.42	102.59
		Cl_2	0.01	0.02
DRYRVNTMSS	Dryer Vent MSS Activities	VOC	132.00	37.50
HDPE-MAINT	MSS to Atmosphere	VOC	80.60	2.50
		PM	0.20	0.30
		PM_{10}	0.20	0.30

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.20	0.30
MSS HOURLY CAP-VOC	Total planned MSS VOC emissions from 1018, 1067, H923A, and H923B	VOC	66.00	-
MSS HOURLY CAP-SO_2	Total planned MSS SO_2 emissions from H923A and H923B	SO_2	0.10	-
1018, 1067, OL3-FLRA, OL3-FLRB, OL3-FLRC, EGF-1, EGF-2, EGF-3, EGF-4	Routine Waste Gas Flaring Hourly Cap (6)	CO (Elevated Flare option)	10.31	-
		NO_x (Elevated Flare option)	2.02	-
		SO_2 (Elevated Flare option)	0.01	-
		VOC	13.74	-
		CO (EGF option)	16.36	-
		NO_x (EGF option)	1.91	-
		SO_2 (EGF option)	0.01	
1018, 1067, OL3-FLRA, OL3-FLRB, OL3-FLRC, EGF-1, EGF-2, EGF-3, EGF-4	MSS Waste Gas Flaring Hourly Cap (6)	CO (Elevated Flare option)	65.30	-
		NO_x (Elevated Flare option)	9.00	-
		VOC	243.20	-
		CO (EGF option)	103.58	-
		NO_x (EGF option)	12.08	-
FLARECAP	Elevated and Enclosed Ground Flares Annual Cap (8)	CO	-	42.99
		NO_X	-	5.32
		SO_2	-	0.01
		VOC	-	36.10
MSSFLARECAP	Elevated and Enclosed Ground Flares MSS Annual Cap (8)	CO	-	15.70
		NO_x	-	1.83
		VOC	-	16.70

(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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
NaOH - sodium hydroxide
HOCl - hypochlorous acid

Emission Sources - Maximum Allowable Emission Rates

Cl_2 - chlorine

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

(6) The emissions from the incinerator stacks are the total emissions related to disposal of waste gases from the high density polyethylene, linear low density polyethylene and polypropylene plants.

(7) Maximum hourly emission rate for waste gas flaring may occur from any combination of EPNs.

(8) 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 GHGPSDTX219

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)	17,082.69
		CH_4 (5)	51.56
		N_2O (5)	0.17
		CO_2e	18,422.69

(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