Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 160299 and PSDTX1576M1

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)
E-55-201	Feed Treating Heater	NO_x	2.35	5.75
		NOx (MSS)	10.08	(6)
		CO	4.63	8.28
		CO (MSS)	23.17	(6)
		VOC	0.36	1.16
		SO_2	2.00	1.54
		PM	0.5	1.60
		PM_{10}	0.5	1.60
		$PM_{2.5}$	0.5	1.60
E-55-202	Isomerization Heater	NO_x	1.91	5.13
		NOx (MSS)	8.19	(6)
		CO	3.76	7.36
		CO (MSS)	18.82	(6)
		VOC	0.29	1.04
		SO_2	1.62	1.38
		PM	0.41	1.44
		PM_{10}	0.41	1.44
		$PM_{2.5}$	0.41	1.44
C-DGDPM	Pre-Treatment Solid Material Handling	PM	0.07	0.16
		PM_{10}	0.03	0.06
		$PM_{2.5}$	<0.01	0.01
C-DGDVOC	Pre-Treatment Process Tanks and Vessels	VOC	0.60	3.13
C-DGDUNLD	Bleached Earth/Filter Aid Unloading	PM	0.29	1.22
		PM_{10}	0.29	1.22
		$PM_{2.5}$	0.13	0.55
E-BE-DGD	Bleached Earth Storage Silos	PM	0.06	0.56
		PM_{10}	0.06	0.56
		$PM_{2.5}$	0.03	0.26

Emission Sources - Maximum Allowable Emission Rates

E-FA-DGD	Filter Aid Storage Silos	PM	0.06	0.05
		PM_{10}	0.06	0.05
		$PM_{2.5}$	0.03	0.02
E-CT-350	Cooling Tower	VOC	1.16	5.06
		PM	0.34	1.21
		PM_{10}	0.34	1.19
		$PM_{2.5}$	0.08	0.27
C-DGDFUG	Piping Fugitives	VOC	5.95	26.08
		NH_3	<0.01	0.02
		H_2S	<0.01	0.02
E-30-FLARE	Flare 30	NO_x	52.43	6.86
		CO	255.83	29.75
		VOC	149.31	24.11
		SO_2	412.64	11.98
		H_2S	4.27	0.10
C-DGDWWTU	Wastewater Pretreatment (DGD)	VOC	5.10	1.17
T-304	Flex Fat Tank	VOC	1.05	0.54
T-301	Blend Tank 1	VOC	1.05	-
T-302	Blend Tank 2	VOC	1.05	-
T-303	Blend Tank 3	VOC	1.05	-
	Blend Tank Annual Cap	VOC	-	0.78
T-54-001	Hydration Tank	VOC	13.55	2.62
T-325	Slop Oil Tank	VOC	7.29	3.38
T-56-012	Citric Acid Tank	VOC	0.18	<0.01
T-311	Treated Fat Tank No. 1	VOC	9.13	-
T-312	Treated Fat Tank No. 2	VOC	9.13	-
T-313	Treated Fat Tank No. 3	VOC	9.13	-
	Treated Fat Tank Annual Cap	VOC	-	6.78
T-321	Naphtha Rundown Tank	VOC	3.78	5.78
T-322	Naphtha Shipment Tank	VOC	5.65	7.68
T-103	Renewable Diesel Rundown Tank (T-103)	VOC	12.62	(7)
T-2301	Renewable Diesel Shipment Tank 1	VOC	13.19	-
T-2302	Renewable Diesel Shipment Tank 2	VOC	13.19	-
	Renewable Diesel / Jet Tank Annual Subcap	VOC	-	112.52
C-CMSSDGD	Controlled MSS	NO_x	3.00	0.51
		CO	4.00	0.70

Emission Sources - Maximum Allowable Emission Rates

		VOC	10.0	0.36
		SO_2	<0.01	<0.01
		PM	0.15	0.03
		PM_{10}	0.15	0.03
		$PM_{2.5}$	0.15	0.03
C-UMSSDGD	Uncontrolled MSS	VOC	51.02	0.73
E-01-EMGEN	500 kW Emergency Generator	NO_x	8.02	0.21
		CO	4.38	0.11
		VOC	8.02	0.21
		SO_2	0.01	<0.01
		PM	0.25	0.01
		PM_{10}	0.25	0.01
		$PM_{2.5}$	0.25	0.01
E-02-EMGEN	300 kW Emergency Generator	NO_x	3.16	0.08
		CO	2.76	0.07
		VOC	3.16	0.08
		SO_2	0.01	<0.01
		PM	0.16	<0.01
		PM_{10}	0.16	<0.01
		$PM_{2.5}$	0.16	<0.01
GEN1-TK	Emergency Generator Tank 1	VOC	0.11	<0.01
GEN2-TK	Emergency Generator Tank 2	VOC	0.07	<0.01
C-MSSCAT	Reactor Catalyst Changeout	PM	0.12	<0.01
		PM_{10}	0.08	<0.01
		$PM_{2.5}$	0.02	<0.01
C-LPGLOAD	Propane/Butanes LPG Loading Hose Disconnects	VOC	3.96	0.72
E-59-701	SAF Fractionator Reboiler Heater	NO_x	3.45	14.45
		CO	15.86	33.21
		VOC	1.24	4.72
		SO_2	6.84	6.27
		PM	1.71	6.53
		PM_{10}	1.71	6.53
		$PM_{2.5}$	1.71	6.53
		NH_3	0.96	3.67
C_FUGSAF	Piping Fugitives (SAF)	VOC	1.22	5.35
		NH_3	0.18	0.80

Emission Sources - Maximum Allowable Emission Rates

T-2303	Renewable Jet Fuel Rundown Tank	VOC	28.59	(7)
T-2304	Renewable Jet Fuel Shipment Tank	VOC	85.89	(7)
T-2305	Renewable Jet Fuel Shipment Tank	VOC	85.89	(7)

(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
CO - carbon monoxide
SO_2 - sulfur dioxide
H_2S - hydrogen sulfide
NH_3 - ammonia
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
(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) Annual MSS emissions are included as part of annual emissions authorized for normal facility operation.
(7) Annual emissions are included as part of the Renewable Diesel / Jet Tank Annual Subcap.

Date: November 3, 2022

Emission Sources - Maximum Allowable Emission Rates

Permit Number GHGPSDTX200M1

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	
			lbs/hour	TPY (4)
E-55-201	Feed Treating Heater	CO_2 (5)	-	25,106
		CH_4 (5)	-	0.47
		N_2O (5)	-	0.05
		CO_{2e}	-	25,132
E-55-202	Isomerization Heater	CO_2 (5)	-	22,544
		CH_4 (5)	-	0.42
		N_2O (5)	-	0.04
		CO_{2e}	-	22,567
C-DGDFUG	Piping Fugitives	CH_4 (5)	-	2.30
		CO_{2e}	-	57.00
E-30-FLARE	Flare Cap	CO_2 (5)	-	8,002
		CH_4 (5)	-	0.19
		N_2O (5)	-	0.02
		CO_{2e}	-	8,012
C-CMSSDGD	Controlled MSS	CO_2 (5)	-	43.00
		CH_4 (5)	-	<0.01
		N_2O (5)	-	<0.01

Emission Sources - Maximum Allowable Emission Rates

		CO_{2e}	-	43.00
E-01-EMGEN	500 kW Emergency Generator	CO_2 (5)	-	23.00
		CH_4 (5)	-	<0.01
		N_2O (5)	-	<0.01
		CO_{2e}	-	23.00
E-02-EMGEN	300 kW Emergency Generator	CO_2 (5)	-	14.00
		CH_4 (5)	-	<0.01
		N_2O (5)	-	<0.01
		CO_{2e}	-	14.05
E-59-701	SAF Fractionator Reboiler Heater	CO_2 (5)	-	102,472.00
		CH_4 (5)	-	1.93
		N_2O (5)	-	0.19
		CO_{2e}	-	102,578

(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
CO_2e - carbon dioxide equivalents based on the following Global Warming Potentials (GWP) found in Table A-1 of Subpart A 40 CFR Part 98 (78 FR 71904) for each pollutant: CO_2 (1), N_2O (298), CH_4(25)
(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.

Date: November 3, 2022