Emission Sources - Maximum Allowable Emission Rates

Permit Number GHGPSDTX170

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)
O_FAF01	Pyrolysis Furnace A	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
O_FBF01	Pyrolysis Furnace B	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
O_FCF01	Pyrolysis Furnace C	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
O_FDF01	Pyrolysis Furnace D	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
O_FEF01	Pyrolysis Furnace E	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
O-FFF01	Pyrolysis Furnace F	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—

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O_FGF01	Pyrolysis Furnace G	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
O_FHF01	Pyrolysis Furnace H	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
O_F_CAP	Pyrolysis Furnaces Cap	CO_2 (5)	1555774.36
		CH_4 (5)	129.80
		N_2O (5)	25.96
		CO_2e	1566755.63
UFFLARE01	Multi-point Ground Flare	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
UFFLARE02	Shared Elevated Flare	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
CAPUFFLR	Shared Elevated and Ground Flare Cap	CO_2 (5)	150087.73
		CH_4 (5)	93.95
		N_2O (5)	1.50
		CO_2e	152883.64
CAPUFFLR	Shared Elevated and Ground Flare Cap (Shakedown Period)	CO_2 (5)	191633.46
		CH_4 (5)	116.32
		N_2O (5)	1.92
		CO_2e	195085.70
O_FUG	Olefins Unit Fugitives	CH_4	10.49
		CO_{2e}	262.21
O-REGEN	Olefins Regeneration Vent	CO_2 (5)	17.18
		CO_2e	17.18

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GFFLARE01	MEG Elevated Flare	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
GBX02	MEG Thermal Oxidizer	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
G_FUG	Glycol Unit Fugitives	CO_2 (5)	0.76
		CH_4 (5)	2.11
		CO_{2e}	53.62
GLYCAP	MEG Elevated Flare and MEG Thermal Oxidizer Cap	CO_2 (5)	428930.74
		CH_4 (5)	195.17
		N_2O (5)	0.94
		CO_2e	434091.18
GLYCAP	MEG Elevated Flare and MEG Thermal Oxidizer Cap (Shakedown Period)	CO_2 (5)	435416.28
		CH_4 (5)	199.23
		N_2O (5)	1.01
		CO_2e	440697.54
USSG01A	Utilities Boiler A	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
USSG01B	Utilities Boiler B	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
USSG01C	Utilities Boiler C	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—

Emission Sources - Maximum Allowable Emission Rates

USSG01CAP	Utilities Boiler Cap	CO_2 (5)	676557.06
		CH_4 (5)	45.63
		N_2O (5)	9.13
		CO_2e	680417.66
UFF01A	Shared Thermal Oxidizer A	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
UFF01B	Shared Thermal Oxidizer B	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
UFF01	Shared Thermal Oxidizer Cap	CO_2 (5)	63536.78
		CH_4 (5)	191.84
		N_2O (5)	0.64
		CO_2e	68522.08
U_FUG	Utilities Fugitives	CH_4	6.27
		CO_{2e}	156.69
EMGGEN01	Olefins Emergency Generator No. 1	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
EMGGEN02	Utilities Emergency Generator No. 2	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
ADMINGEN	Admin Emergency Generator No. 1	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
FWP1	Firewater Pump No.1	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—

Emission Sources - Maximum Allowable Emission Rates

		CO_2e	—
FWP2	Firewater Pump No. 2	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
GLYGEN01	Glycol Emergency Generator No. 1	CO_2 (5)	—
		CH_4 (5)	—
		N_2O (5)	—
		CO_2e	—
ENGINECAP	Emergency Generator and Firewater Pump Cap	CO_2 (5)	1132.44
		CH_4 (5)	0.05
		N_2O (5)	0.01
		CO_2e	1136.33
MSS_CAP	Maintenance, Startup and Shutdown Cap	CO_2 (5)	78.59
		CH_4 (5)	0.24
		N_2O (5)	< 0.01
		CO_2e	84.75
MSS_TANK	Tank Maintenance, Startup and Shutdown Cap	CO_2 (5)	314.34
		CH_4 (5)	0.95
		N_2O (5)	< 0.01
		CO_2e	339.01
PE_FUG	Total Emissions from EPNs E_FUG, C_FUG	CH_4 (5)	0.09
		CO_2e	2.21
PE_REGEN	PE Regeneration Vent	CO_2 (5)	38.40
		CO_2e	38.40
ZWSRCO1A/B	Equalization Tanks Catalytic Oxidizer	CO_2 (5)	573.68
		CH_4 (5)	1.73
		N_2O (5)	< 0.01
		CO_2e	618.69

(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
CO_2e - carbon dioxide equivalents based on the following Global Warming Potentials (1/2015):

Emission Sources - Maximum Allowable Emission Rates

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.

Date: February 4, 2021