Emission Sources - Maximum Allowable Emission Rates

Permit Number 8414, PSDTX328M4, PSDTX485M1

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-1-1	Inlet/Treated Gas Compressor Allison 501-KC5	NO_x	19.10	79.20
		CO	19.90	91.40
		VOC	0.50	2.20
		PM	0.30	1.31
		PM_{10}	0.30	1.31
		$PM_{2.5}$	0.30	1.31
		SO_2	0.15	0.66
E-1-2	Inlet/Treated Gas Compressor Allison 501-KC5	NO_x	19.10	79.20
		CO	19.90	91.40
		VOC	0.50	2.20
		PM	0.30	1.31
		PM_{10}	0.30	1.31
		$PM_{2.5}$	0.30	1.31
		SO_2	0.15	0.66
E-1-3	Inlet/Treated Gas Compressor Allison 501-KC5	NO_x	19.10	79.20
		CO	19.90	91.40
		VOC	0.50	2.20
		PM	0.30	1.31
		PM_{10}	0.30	1.31
		$PM_{2.5}$	0.30	1.31
		SO_2	0.15	0.66

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
E-1-4	Inlet/Treated Gas Compressor Allison 501-KC5	NO_x	19.10	79.20
		CO	19.90	91.40
		VOC	0.50	2.20
		PM	0.30	1.31
		PM_{10}	0.30	1.31
		$PM_{2.5}$	0.30	1.31
		SO_2	0.15	0.66
E-1-5	Inlet/Treated Gas Compressor Allison 501-KC5	NO_x	19.10	79.20
		CO	19.90	91.40
		VOC	0.50	2.20
		PM	0.30	1.31
		PM_{10}	0.30	1.31
		$PM_{2.5}$	0.30	1.31
		SO_2	0.15	0.66
E-1-6	Inlet/Treated Gas Compressor Allison 501-KC5	NO_x	19.10	79.20
		CO	19.90	91.40
		VOC	0.50	2.20
		PM	0.30	1.31
		PM_{10}	0.30	1.31
		$PM_{2.5}$	0.30	1.31
		SO_2	0.15	0.66

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
E-2-1	Refrigeration Compressor A -Turbine with Supplemental Duct Burner	NO_x	71.80	286.30
		CO	55.30	293.30
		VOC	0.90	6.10
		PM	1.75	6.98
		PM_{10}	1.75	6.98
		$PM_{2.5}$	1.75	6.98
		SO_2	0.63	2.70
E-2-2	Refrigeration Compressor B -Turbine with Supplemental Duct Burner	NO_x	71.80	286.30
		CO	55.30	293.30
		VOC	0.90	6.10
		PM	1.75	6.98
		PM_{10}	1.75	6.98
		$PM_{2.5}$	1.75	6.98
		SO_2	0.63	2.70
E-2-3	Refrigeration Compressor C -Turbine with Supplemental Duct Burner	NO_x	71.80	286.30
		CO	55.30	293.30
		VOC	0.90	6.10
		PM	1.75	6.98
		PM_{10}	1.75	6.98
		$PM_{2.5}$	1.75	6.98
		SO_2	0.63	2.70

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
E-3	Auxiliary Boiler 65.5 MMBtu/hr	NO_x	7.00	18.00
		CO	11.00	22.00
		VOC	0.60	1.30
		PM	0.49	1.34
		PM_{10}	0.49	1.34
		$PM_{2.5}$	0.49	1.34
		SO_2	0.04	0.11
EMERFLARE	Plant Flare Pilot	NO_x	0.05	0.24
		CO	0.46	2.02
		VOC	0.04	0.19
EMERFLARE	Plant Flare (6)	NO_x	1.31	0.32
		CO	11.26	2.77
		VOC	9.01	2.19
		SO_2	94.11	23.15
		H_2S	0.98	0.24
EMERFLARE	Plant Flare – MSS (7)	NO_x	127.04	9.53
		CO	456.51	32.87
		VOC	442.72	33.20
		SO_2	3121.75	224.77
		H_2S	31.27	2.25
FL-1	Emergency Field Flare	NO_x	0.01	0.05
		CO	0.09	0.40
		VOC	0.01	0.04
FUG-1	Plant Piping Fugitives (5)	VOC	4.42	19.34
		H_2S	0.73	3.20

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
E4-A	SRU 1	NO_x	1.50	6.60
		CO	200.00	876.00
		VOC	0.30	1.30
		PM	1.00	4.40
		PM_{10}	1.00	4.40
		$PM_{2.5}$	1.00	4.40
		SO_2 (8)	300.00	508.00
		SO_2 (9)	300.00	-
		SO_2 (10)	220.00	-
		SO_2 (11)	-	508.00
		H_2S	0.60	2.60
E4-B	SRU 2	NO_x	1.50	6.60
		CO	200.00	876.00
		VOC	0.30	1.30
		PM	1.00	4.40
		PM_{10}	1.00	4.40
		$PM_{2.5}$	1.00	4.40
		SO_2 (8)	300.00	508.00
		SO_2 (9)	300.00	-
		SO_2 (10)	220.00	-
		SO_2 (11)	-	508.00
		H_2S	0.60	2.60
E4-A/B Cap	SRU1 and SRU2 Cap	SO_2 (9)	300.00	-
		SO_2 (10)	220.00	-
		SO_2 (11)	-	1016.00
E5-A	Sulfur Pit 1	H_2S	1.12	4.91
E5-B	Sulfur Pit 2	H_2S	1.12	4.91

Emission Sources - Maximum Allowable Emission Rates

(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
H_2S - hydrogen sulfide
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
(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) EMERFLARE authorized emissions before implementation of project described in Special Condition 7.
(7) EMERFLARE authorized emissions after implementation of project described in Special Condition 7.
(8) Authorized emissions before implementation of project described in Special Condition 7.
(9) Authorized emissions after implementation of project described in Special Condition 7. Emissions represent total combined emission rates from EPNs E-4A and E-4B during periods when MSS flaring from EPN EMERFLARE is not occurring.
(10) Authorized emissions after implementation of project described in Special Condition 7. Emissions represent total combined emission rates from EPNs E-4A and E-4B during periods when MSS flaring from EPN EMERFLARE is occurring.
(11) Authorized emissions after implementation of project described in Special Condition 7.

Date: March 6, 2020