Emission Sources - Maximum Allowable Emission Rates

Permit Number 19592

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)
REGEN-4	Regeneration Heater 741	VOC	0.08	0.37
		NO_x	1.54	6.73
		CO	1.29	5.65
		PM	0.12	0.51
		PM_{10}	0.12	0.51
		$PM_{2.5}$	0.12	0.51
		SO_2	0.01	0.04
		HAP	0.03	0.13
HTR-TRTR-1	Heater Treater	VOC	0.03	0.11
		NO_x	0.46	2.02
		CO	0.39	1.70
		PM	0.04	0.15
		PM_{10}	0.04	0.15
		$PM_{2.5}$	0.04	0.15
		SO_2	0.01	0.01
		HAP	0.01	0.04
BOILER-1	Steam Boiler 721	VOC	0.14	0.59
		NO_x	2.46	10.78
		CO	2.07	9.05
		PM	0.19	0.82
		PM_{10}	0.19	0.82
		$PM_{2.5}$	0.19	0.82
		SO_2	0.01	0.06
		HAP	0.05	0.20

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BU-BOILER	Backup Steam Boiler	VOC	0.14	0.03
		NO_x	2.46	0.62
		CO	2.07	0.52
		PM	0.19	0.05
		PM_{10}	0.19	0.05
		$PM_{2.5}$	0.19	0.05
		SO_2	0.01	0.01
		HAP	0.05	0.01
HMOHTR-1	HMO Heater 781	VOC	0.07	0.31
		NO_x	1.29	5.67
		CO	1.09	4.76
		PM	0.10	0.43
		PM_{10}	0.10	0.43
		$PM_{2.5}$	0.10	0.43
		SO_2	0.01	0.03
		HAP	0.02	0.11
C1AMINE-HTR	C1 Amine Boiler	VOC	0.06	0.25
		NO_x	1.03	4.51
		CO	0.86	3.79
		PM	0.08	0.34
		PM_{10}	0.08	0.34
		$PM_{2.5}$	0.08	0.34
		SO_2	0.01	0.03
		HAP	0.02	0.09

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C1REGEN-HTR	C1 Regen Heater	VOC	0.04	0.18
		NO_x	0.74	3.22
		CO	0.62	2.71
		PM	0.06	0.24
		PM_{10}	0.06	0.24
		$PM_{2.5}$	0.06	0.24
		SO_2	0.01	0.02
		HAP	0.01	0.06
C1-HOH	C1 Hot Oil Heater	VOC	0.05	0.22
		NO_x	0.92	4.04
		CO	0.77	3.39
		PM	0.07	0.31
		PM_{10}	0.07	0.31
		$PM_{2.5}$	0.07	0.31
		SO_2	0.01	0.02
		HAP	0.02	0.08
EGEN2	Multiquip TWD740GE	VOC	0.82	0.02
		NO_x	9.93	0.26
		CO	2.15	0.06
		PM	0.60	0.02
		PM_{10}	0.60	0.02
		$PM_{2.5}$	0.60	0.02
		SO_2	0.01	0.01
		HAP	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

EGEN3	Cummins 4BT3.3-G5	VOC	0.02	0.01
		NO_x	0.41	0.02
		CO	0.11	0.01
		PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
		SO_2	0.01	0.01
		HAP	0.01	0.01
EGEN4	Cummins 4BT3.3-G5	VOC	0.02	0.01
		NO_x	0.41	0.02
		CO	0.11	0.01
		PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
		SO_2	0.01	0.01
		HAP	0.01	0.01
EGEN5	Cummins 4BT3.3-G5	VOC	0.02	0.01
		NO_x	0.41	0.02
		CO	0.11	0.01
		PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
		SO_2	0.01	0.01
		HAP	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

EGEN6	Generaco Guardian 8 kW	VOC	0.01	0.01
		NO_x	0.27	0.01
		CO	0.45	0.02
		PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
		SO_2	0.01	0.01
		HAP	0.01	0.01
ENG-A14	Caterpillar 3608 TALE	VOC	1.37	6.01
		NO_x	3.66	16.02
		CO	1.37	6.01
		PM	0.16	0.68
		PM_{10}	0.16	0.68
		$PM_{2.5}$	0.16	0.68
		SO_2	0.01	0.04
		HAP	0.52	2.28
ENG-A15	Caterpillar 3606 TALE	VOC	0.68	2.98
		NO_x	2.74	12.00
		CO	0.98	4.29
		PM	0.12	0.51
		PM_{10}	0.12	0.51
		$PM_{2.5}$	0.12	0.51
		SO_2	0.01	0.03
		HAP	0.20	0.85
ENG-A17	Caterpillar 3606 TALE	VOC	0.68	2.98
		NO_x	2.74	12.00
		CO	0.98	4.29
		PM	0.12	0.53

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	0.12	0.53
		$PM_{2.5}$	0.12	0.53
		SO_2	0.01	0.03
		HAP	0.20	0.87
ENG-A18	Caterpillar 3516B TALE	VOC	0.70	3.06
		NO_x	2.13	9.33
		CO	0.74	3.24
		PM	0.10	0.45
		PM_{10}	0.10	0.45
		$PM_{2.5}$	0.10	0.45
		SO_2	0.01	0.03
		HAP	0.26	1.14
ENG-B26	Caterpillar G3606LE	VOC	0.54	2.35
		NO_x	2.74	12.00
		CO	0.98	4.29
		PM	0.12	0.51
		PM_{10}	0.12	0.51
		$PM_{2.5}$	0.12	0.51
		SO_2	0.01	0.03
		HAP	0.17	0.76
ENG-B31	Caterpillar 3606 TALE	VOC	0.78	3.43
		NO_x	1.96	8.57
		CO	0.98	4.29
		PM	0.12	0.51
		PM_{10}	0.12	0.51
		$PM_{2.5}$	0.12	0.51
		SO_2	0.01	0.03
		HAP	0.30	1.30
TK-824A	Contact Water	VOC	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

TK-850	Condensate / Contact Water	VOC	15.18	4.00
		HAP	0.25	0.02
		H_2S	0.01	0.01
TK-851	Condensate	VOC	14.65	3.82
		HAP	0.20	0.01
		H_2S	0.01	0.01
TK-853	Contact Water	VOC	0.01	0.01
ST-01	Condensate / Contact Water	VOC	6.09	0.74
		HAP	0.26	0.03
		H_2S	0.01	0.01
ST-02	Condensate / Contact Water	VOC	6.09	0.74
		HAP	0.26	0.03
		H_2S	0.01	0.01
ST-03	Condensate / Contact Water	VOC	6.09	0.74
		HAP	0.26	0.03
		H_2S	0.01	0.01
ST-04	Condensate / Contact Water	VOC	6.09	0.74
		HAP	0.26	0.03
		H_2S	0.01	0.01
ST-05	Condensate / Contact Water	VOC	6.09	0.74
		HAP	0.26	0.03
		H_2S	0.01	0.01
ST-06	Condensate / Contact Water	VOC	6.09	0.74
		HAP	0.26	0.03
		H_2S	0.01	0.01
ST-07	Condensate / Contact Water	VOC	6.09	0.74
		HAP	0.26	0.03
		H_2S	0.01	0.01
TK-PW	Produced Water	VOC	5.14	1.62

Emission Sources - Maximum Allowable Emission Rates

		HAP	0.01	0.01
		H_2S	0.01	0.01
TANK-2	Gasoline	VOC	56.64	0.57
		HAP	0.51	0.01
TK-M1	Methanol	VOC	5.76	0.04
		HAP	5.76	0.04
TK-M2	Methanol	VOC	1.44	0.01
		HAP	1.44	0.01
TK-RA	Rich Amine Tank	VOC	0.82	0.01
TK-LA	Lean Amine Tank	VOC	0.82	0.01
TK-B1	Breaxit	VOC	0.89	0.02
TK-B2	Breaxit	VOC	0.46	0.02
TK-B3	Emulsion Breaker	VOC	0.46	0.02
TK-COR1	Corrosion Inhibitor	VOC	0.24	0.03
TK-COR2	Corrosion Inhibitor	VOC	0.24	0.03
TK-COR3	Corrosion Inhibitor	VOC	0.07	0.03
TK-D1	Diesel	VOC	0.03	0.01
TK-D2	Diesel	VOC	0.01	0.01
TK-D3	Diesel	VOC	0.01	0.01
TK-D4	Diesel	VOC	0.01	0.01
TK-Foam1	Defoamer	VOC	0.01	0.01
TK-SOAP	Soap	VOC	0.27	0.01
TK-DEG	Degreaser	VOC	0.27	0.01
TK-CLEAN	EC1538A CleanNcore	VOC	0.92	0.01
FUG-1	Equipment Leak Fugitives (5)	VOC	5.71	25.02
		H_2S	0.01	0.01
C1-Flare	C1-Flare - Pilot Gas, Dehy Waste Gas, and Amine Acid Gas	VOC	9.77	16.85
		NO_x	5.58	20.81
		CO	22.23	82.86

Emission Sources - Maximum Allowable Emission Rates

		H_2S	0.08	0.34
		SO_2	7.08	30.96
		HAP	2.53	0.73

(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) H_2S - hydrogen sulfide
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
HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
MSS - maintenance, startup, and shutdown emissions
(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.

Date: DRAFT