Emission Sources - Maximum Allowable Emission Rates

Permit Number 150465

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)
FLARE-1	Flare-1 (6)	VOC	12.56	4.53
		NO_X	406.73	4.37
		SO_2	16243.72	138.00
		CO	3486.65	34.59
		H_2S	172.70	1.47
		HAPs	1.59	0.57
FLARE-1	MSS Flaring - Routine	VOC	121.00	2.02
		NO_X	20.62	0.20
		SO_2	74.78	5.60
		CO	71.69	1.00
		H_2S	1.05	0.06
FLARE-1	MSS Flaring – Purge Gas Startup	VOC	0.94	<0.01
		NO_X	213.67	0.03
		SO_2	44.75	0.01
		CO	1832.00	0.23
		H_2S	0.48	<0.01
FLARE-1	MSS Flaring – Turnaround Blowdown	VOC	444.15	0.22
		NO_X	86.65	0.04
		SO_2	0.22	<0.01
		CO	172.99	0.09
		H_2S	2.36	<0.01
		HAPs	0.20	<0.01

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FLARE-1	MSS Flaring – Turnaround Startup	VOC	355.07	0.43
		NO_X	96.03	0.05
		SO_2	0.13	<0.01
		CO	191.71	0.10
		H_2S	1.56	<0.01
		HAPs	0.08	<0.01
FLARE-2	Flare-2 (7)	VOC	0.01	<0.01
		NO_X	2.81	0.57
		SO_2	85.99	1.81
		CO	23.32	1.50
		H_2S	0.91	0.02
		HAPs	<0.01	<0.01
H-101	Regen Gas Heater	VOC	<0.01	<0.01
		NO_X	0.17	0.76
		SO_2	<0.01	0.02
		PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
		CO	0.35	1.53
		HAPs	<0.01	<0.01
H-102	Heat Medium Heater	VOC	<0.01	<0.01
		NO_X	0.42	1.85
		SO_2	0.01	0.04
		PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
		CO	0.84	3.70
		HAPs	<0.01	<0.01

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H-103	Amine Regen Hot Oil Heater 1	VOC	0.21	0.92
		NO_X	1.26	5.52
		SO_2	0.02	0.10
		PM	0.29	1.27
		PM_{10}	0.29	1.27
		$PM_{2.5}$	0.29	1.27
		CO	2.59	11.34
		HAPs	<0.01	0.01
H-104	Amine Regen Hot Oil Heater 2	VOC	0.23	1.01
		NO_X	1.39	6.08
		SO_2	0.03	0.11
		PM	0.32	1.40
		PM_{10}	0.32	1.40
		$PM_{2.5}$	0.32	1.40
		CO	2.85	12.48
		HAPs	<0.01	0.01
H-105	Glycol Dehydrator Heater	VOC	0.02	0.11
		NO_X	0.14	0.63
		SO_2	<0.01	0.01
		PM	0.03	0.15
		PM_{10}	0.03	0.15
		$PM_{2.5}$	0.03	0.15
		CO	0.37	1.61
		HAPs	<0.01	<0.01
H-106	Reclaimer Heater	VOC	<0.01	<0.01
		NO_X	0.16	0.72
		SO_2	<0.01	0.02
		PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
		CO	0.33	1.44
		HAPs	<0.01	<0.01

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EG-1	Generac SG230	VOC	0.31	0.02
		NO_X	0.02	<0.01
		SO_2	<0.01	<0.01
		PM	0.05	<0.01
		PM_{10}	0.05	<0.01
		$PM_{2.5}$	0.05	<0.01
		CO	0.43	0.02
		HAPs	0.03	<0.01
EG-2	Generac SG400	VOC	0.16	0.01
		NO_X	0.12	0.01
		SO_2	<0.01	<0.01
		PM	0.09	<0.01
		PM_{10}	0.09	<0.01
		$PM_{2.5}$	0.09	<0.01
		CO	0.72	0.04
		HAPs	0.05	<0.01
FUG-1	Fugitives (5)	VOC	4.46	19.54
		HAPs	0.38	1.67
		H_2S	0.30	1.33
FUG-2	Pressurized Loading Fugitives	VOC	0.26	0.41
		HAPs	0.01	0.02
TK-1801	Used Lube Oil Tank	VOC	<0.01	<0.01
TK-1802	New Lube Oil Tank	VOC	<0.01	<0.01
TK-1803	Open Drain Tank	VOC	<0.01	<0.01
TK-1805A/B	Produced Water Tanks	VOC	0.32	1.60
TK-1812	Lube Oil Drain Sump	VOC	<0.01	<0.01
TK-1813	Open Drain Sump	VOC	<0.01	<0.01
TK-1814	AGI Well Open Drain Sump	VOC	<0.01	<0.01
TK-2801	Lean Amine Tank	VOC	<0.01	<0.01
TK-2802	Lean Amine Tank	VOC	<0.01	<0.01
TK-2803	Deionized Water Tank	VOC	<0.01	<0.01
TK-3801	New TEG Tank	VOC	<0.01	<0.01
TK-4801	Lube Oil Supply – Methanol	VOC	<0.01	<0.01
TK-4802	Lube Oil Supply – Refrigeration	VOC	<0.01	<0.01

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TK-4803	Lube Oil Supply – Screw Compressor	VOC	<0.01	<0.01
TK-4804	Lube Oil Supply – AGI Compressor	VOC	<0.01	<0.01
TK-4901	Methanol Supply Tank	VOC	2.84	0.02
		HAPs	2.84	0.02
TK-4902	AGI Well – Methanol Supply Tank	VOC	1.42	0.01
		HAPs	1.42	0.01
TK-8100	Lube Oil Supply – VRU	VOC	<0.01	<0.01
MSS-FUG	MSS Fugitives – Routine	VOC	482.08	11.34
		H_2S	1.45	0.09
		PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
MSS-FUG	MSS Fugitives – Turnaround Blowdown	VOC	3753.00	1.88
		HAPs	0.11	<0.01
		H_2S	3.19	<0.01
MSS-FUG	MSS Fugitives – Turnaround Startup	VOC	442.00	0.68
		HAPs	<0.01	<0.01
		H_2S	<0.01	<0.01

(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
HAPs - hazardous air pollutants as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
(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) Flare-1 emissions include: 1) pilot, 2) AGI well downtime, and 3) truck venting.
(7) Flare-2 emissions include: 1) pilot and 2) AGI well compressor blowdown.

Date: February 3, 2020