Emission Sources - Maximum Allowable Emission Rates

Permit Number 37979 and N009

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 (7)
BOIL-Y1801	30-Barg Boiler	NO_x	1.99	8.72
		SO_2	0.29	1.28
		CO	13.93	30.51
		PM	1.54	6.76
		PM_{10}	1.54	6.76
		$PM_{2.5}$	1.54	6.76
		VOC	1.09	4.79
		NH_3	0.92	4.01
	Boiler startup	NO_x (8)	20.00	-
		CO (8)	41.79	-
CTWR-1701	Cooling Tower	PM	0.12	0.53
		PM_{10}	0.12	0.53
		$PM_{2.5}$	0.12	0.53
		VOC	1.26	5.52
LOAD-FUG	Tank Truck Loading Losses	VOC	0.08	0.02
		Organic HAPs	0.08	0.02
OSBL-FUG	Fugitives (4)	VOC	0.73	3.20
		HAPs	0.49	2.12
		NH_3	0.01	0.06
V-1609	H_2SO_4 Tank	H_2SO_4	0.01	0.01
TK1614	Neutralization Tank	H_2SO_4	0.01	0.01

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THOX-Y1907	OSBL Thermal Oxidizer	NO_x	1.00	4.38
		SO_2	3.46	15.16
		CO	1.10	4.82
		PM	1.23	5.39
		PM_{10}	1.23	5.39
		$PM_{2.5}$	1.23	5.39
		VOC	5.96	0.62
		Organic HAPs	1.73	0.11
	OSBL Thermal Oxidizer Startup	NO_x (8)	3.00	-
		CO (8)	3.30	-
FIRE-PUMPS	Firewater Pumps	NO_x	23.25	2.56
		CO	5.01	0.55
		SO_2	1.54	0.17
		PM	1.65	0.18
		PM_{10}	1.65	0.18
		$PM_{2.5}$	1.65	0.18
		VOC	1.89	0.21
DIESEL-TNK	Diesel Fuel Storage Tanks	VOC	0.02	0.01
GAS-TK	Gasoline Storage Tank	VOC	4.15	0.02
DIESEL-TK2	Diesel Storage Tank	VOC	0.74	0.02
LUBE-TK	Lube Oil Storage Tank	VOC	0.14	0.01
TK-1703	Tank 1703	VOC	0.09	0.01
AA-FUG	AA Fugitives (4)	Total VOC (5)	2.09	9.14
		Total HAPs	1.71	7.49
		Hydrazine Hydrate	0.15	0.65
		NH_3	0.01	0.01
		CO	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

THOX-Y1170	AA Thermal Oxidizer (6)	Total VOC (5)	5.96	23.02
		Total HAPs	1.72	6.51
		NO_x	13.51	43.93
		SO_2	2.20	9.64
		CO	15.87	50.24
		PM	14.17	52.12
		PM_{10}	14.17	52.12
		$PM_{2.5}$	14.17	52.12
		NH_3	<0.01	0.01
	AA Thermal Oxidizer Startup (6)	NO_x (8)	40.53	-
		CO (8)	47.61	-
SK-1186	AA Thermal Oxidizer (HRSG Stack) (6)	Total VOC (5)	5.82	23.02
		Total HAPs	1.72	6.53
		NO_x	13.51	43.93
		SO_2	2.20	9.64
		CO	15.87	50.24
		PM	14.17	52.12
		PM_{10}	14.17	52.12
		$PM_{2.5}$	14.17	52.12
	AA Thermal Oxidizer Startup. (HRSG Stack) (6)	NO_x (8)	40.53	-
		CO (8)	47.61	-
AA-MATL	Material Handling	PM	0.78	0.06
		PM_{10}	0.78	0.06
		$PM_{2.5}$	0.78	0.06
DEGREASE-1	Degreaser	VOC	0.01	0.01
WASH-PAD	Wash Pad	VOC	0.26	0.12
		Organic HAPs	0.26	0.12
AA-MNTC	Maintenance Activities	Total VOC	19.47	1.09
		NO_x	0.04	0.01

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		CO	0.04	0.01

(1) Emission point identification - either specific equipment designation or emission point number (EPN) 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.
NH_3 - ammonia
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$
PM_{10} - particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
H_2SO_4 - sulfuric acid
HAP - hazardous air pollutants
(4) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(5) The total VOC emissions include propylene and organic HAPs.
(6) Emissions represent total combined emission rates from EPNs THOX-Y1170 and SK1186.
(7) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(8) Annual emissions from MSS activities (startup) are included in annual limits for the respective production EPNs.

Date: March 11, 2019