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
		СО	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	voc	0.08	0.02
	Losses	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 ₂ SO ₄ Tank	H ₂ SO ₄	0.01	0.01
TK1614	Neutralization Tank	H ₂ SO ₄	0.01	0.01

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THOX-Y1907	OSBL Thermal Oxidizer	NO _x	1.00	4.38
	Oxidizei	SO ₂	3.46	15.16
		со	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	NO _x (8)	3.00	-
	Oxidizer Startup	CO (8)	3.30	-
FIRE-PUMPS	Firewater Pumps	NOx	23.25	2.56
		СО	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)	2.08	9.12
		Total HAPs	1.71	7.47
		Hydrazine Hydrate	0.15	0.65
		NH ₃	0.01	0.01
		СО	0.01	0.01

THOX-Y1170	AA Thermal Oxidizer	Total VOC (5)	5.96	23.02
	(6)	Total HAPs	1.72	6.51
		NO _x	13.51	43.93
		SO ₂	2.20	9.64
		СО	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	NO _x (8)	40.53	-
	Startup (6)	CO (8)	47.61	-
SK-1186	AA Thermal Oxidizer (HRSG Stack) (7)	Total VOC (5)	5.82	23.02
	(HK3G Stack) (1)	Total HAPs	1.72	6.53
		NO _x	13.51	43.93
S		SO ₂	2.20	9.64
		СО	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.	NO _x (8)	40.53	-
	(HRSG Stack) (6)	CO (8)	47.61	-
AA-MATL	Material Handling	PM	0.78	0.06
		PM ₁₀	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

СО	0.04	0.01
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- (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

NH₃ - ammonia

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$ PM₁₀ - 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 H₂SO₄ - 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:	July 12, 2018
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