Emission Sources - Maximum Allowable Emission Rates

Permit Number 139561

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)
EDG1	Emergency Diesel Generator #1	NO_x	26.81	1.34
		CO	15.43	0.77
		VOC	1.41	0.07
		PM	0.44	0.02
		PM_{10}	0.44	0.02
		$PM_{2.5}$	0.44	0.02
		SO_2	0.01	<0.01
		HAPs	0.01	<0.01
EDG2	Emergency Diesel Generator #2	NO_x	26.81	1.34
		CO	15.43	0.77
		VOC	1.41	0.07
		PM	0.44	0.02
		PM_{10}	0.44	0.02
		$PM_{2.5}$	0.44	0.02
		SO_2	0.01	<0.01
		HAPs	0.01	<0.01
EDG3	Emergency Diesel Generator #3	NO_x	26.81	1.34
		CO	15.43	0.77
		VOC	1.41	0.07
		PM	0.44	0.02
		PM_{10}	0.44	0.02
		$PM_{2.5}$	0.44	0.02
		SO_2	0.01	<0.01
		HAPs	0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
EDG4	Emergency Diesel Generator #4	NO_x	8.04	0.40
		CO	4.63	0.23
		VOC	0.42	0.02
		PM	0.13	0.01
		PM_{10}	0.13	0.01
		$PM_{2.5}$	0.13	0.01
		SO_2	<0.01	<0.01
		HAPs	<0.01	<0.01
EDG5	Emergency Diesel Generator #5	NO_x	20.11	1.01
		CO	11.57	0.58
		VOC	1.06	0.05
		PM	0.33	0.02
		PM_{10}	0.33	0.02
		$PM_{2.5}$	0.33	0.02
		SO_2	0.01	<0.01
		HAPs	0.02	<0.01
FWP1	Emergency Firewater Pump #1	NO_x	3.37	0.17
		CO	3.11	0.16
		VOC	0.18	0.01
		PM	0.18	0.01
		PM_{10}	0.18	0.01
		$PM_{2.5}$	0.18	0.01
		SO_2	0.40	0.02
		HAPs	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
FWP2	Emergency Firewater Pump #2	NO_x	3.37	0.17
		CO	3.11	0.16
		VOC	0.18	0.01
		PM	0.18	0.01
		PM_{10}	0.18	0.01
		$PM_{2.5}$	0.18	0.01
		SO_2	0.40	0.02
		HAPs	<0.01	<0.01
FWP3	Emergency Firewater Pump #3	NO_x	3.37	0.17
		CO	3.11	0.16
		VOC	0.18	0.01
		PM	0.18	0.01
		PM_{10}	0.18	0.01
		$PM_{2.5}$	0.18	0.01
		SO_2	0.40	0.02
		HAPs	<0.01	<0.01
FWP4	Emergency Firewater Pump #4	NO_x	3.37	0.17
		CO	3.11	0.16
		VOC	0.18	0.01
		PM	0.18	0.01
		PM_{10}	0.18	0.01
		$PM_{2.5}$	0.18	0.01
		SO_2	0.40	0.02
		HAPs	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
FWP5	Emergency Firewater Pump #5	NO_x	3.37	0.17
		CO	3.11	0.16
		VOC	0.18	0.01
		PM	0.18	0.01
		PM_{10}	0.18	0.01
		$PM_{2.5}$	0.18	0.01
		SO_2	0.40	0.02
		HAPs	<0.01	<0.01
FWP6	Emergency Firewater Pump #6	NO_x	8.10	0.40
		CO	4.66	0.23
		VOC	0.43	0.02
		PM	0.27	0.01
		PM_{10}	0.27	0.01
		$PM_{2.5}$	0.27	0.01
		SO_2	0.60	0.03
		HAPs	<0.01	<0.01
FWP7	Emergency Firewater Pump #7	NO_x	8.10	0.40
		CO	4.66	0.23
		VOC	0.43	0.02
		PM	0.27	0.01
		PM_{10}	0.27	0.01
		$PM_{2.5}$	0.27	0.01
		SO_2	0.60	0.03
		HAPs	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
FWP8	Emergency Firewater Pump #8	NO_x	8.10	0.40
		CO	4.66	0.23
		VOC	0.43	0.02
		PM	0.27	0.01
		PM_{10}	0.27	0.01
		$PM_{2.5}$	0.27	0.01
		SO_2	0.60	0.03
		HAPs	<0.01	<0.01
HTF1	Heat Transfer Fluid Heater #1	NO_x	1.19	5.22
		CO	2.94	12.87
		VOC	0.41	1.79
		PM	0.56	2.47
		PM_{10}	0.56	2.47
		$PM_{2.5}$	0.56	2.47
		SO_2	0.04	0.20
		HAPs	0.14	0.61
MSS-HTF1	Heat Transfer Fluid Heater #1 MSS Emissions	NO_x	1.28	<0.01
		CO	3.15	<0.01
		VOC	0.44	<0.01
		PM	0.60	<0.01
		PM_{10}	0.60	<0.01
		$PM_{2.5}$	0.60	<0.01
		SO_2	0.05	<0.01
		HAPs	0.15	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
HTF2	Heat Transfer Fluid Heater #2	NO_x	1.19	5.22
		CO	2.94	12.87
		VOC	0.41	1.79
		PM	0.56	2.47
		PM_{10}	0.56	2.47
		$PM_{2.5}$	0.56	2.47
		SO_2	0.04	0.20
		HAPs	0.14	0.61
MSS-HTF2	Heat Transfer Fluid Heater #2 MSS Emissions	NO_x	1.28	<0.01
		CO	3.15	<0.01
		VOC	0.44	<0.01
		PM	0.60	<0.01
		PM_{10}	0.60	<0.01
		$PM_{2.5}$	0.60	<0.01
		SO_2	0.05	<0.01
		HAPs	0.15	<0.01
FLR1	Cold Dry Flare	NO_x	0.04	0.18
		CO	0.36	1.58
		VOC	<0.01	<0.01
		H_2S	<0.01	<0.01
		SO_2	<0.01	<0.01
		HAPs	<0.01	<0.01
MSS-FLR1	Cold Dry Flare MSS Emissions	NO_x	456.09	46.52
		CO	910.52	92.87
		VOC	15.52	1.58
		H_2S	<0.01	<0.01
		SO_2	2.13	0.22
		HAPs	1.43	0.15

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
FLR2	Warm Wet Flare	NO_x	0.04	0.18
		CO	0.36	1.58
		VOC	<0.01	<0.01
		H_2S	<0.01	<0.01
		SO_2	<0.01	<0.01
		HAPs	<0.01	<0.01
MSS-FLR2	Warm Wet Flare MSS Emissions	NO_x	455.60	10.93
		CO	909.54	21.83
		VOC	23.66	0.57
		H_2S	<0.01	<0.01
		SO_2	2.13	0.05
		HAPs	1.44	0.03
FLR3	Spare Flare	NO_x	0.04	0.18
		CO	0.36	1.58
		VOC	<0.01	<0.01
		H_2S	<0.01	<0.01
		SO_2	<0.01	<0.01
		HAPs	<0.01	<0.01
FLR4	Acid Gas Flare	NO_x	0.04	0.18
		CO	0.36	1.58
		VOC	<0.01	<0.01
		H_2S	<0.01	<0.01
		SO_2	<0.01	<0.01
		HAPs	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
MSS-FLR4	Acid Gas Flare MSS Emissions	NO_x	19.11	1.15
		CO	38.16	2.29
		VOC	0.73	0.04
		H_2S	<0.01	<0.01
		SO_2	0.28	0.02
		HAPs	<0.01	<0.01
FLR5	Marine Flare	NO_x	0.02	0.08
		CO	0.16	0.70
		VOC	<0.01	<0.01
		H_2S	<0.01	<0.01
		SO_2	<0.01	<0.01
		HAPs	<0.01	<0.01
MSS-FLR5	Marine Flare MSS Emissions	NO_x	96.79	12.78
		CO	193.22	25.51
		VOC	<0.01	<0.01
		H_2S	<0.01	<0.01
		SO_2	0.49	0.06
		HAPs	<0.01	<0.01
TO1	Thermal Oxidizer #1	NO_x	1.13	4.20
		CO	1.91	7.05
		VOC	0.14	0.50
		PM	0.17	0.64
		PM_{10}	0.17	0.64
		$PM_{2.5}$	0.17	0.64
		SO_2	10.26	37.95
		H_2S	<0.01	0.02
		HAPs	0.01	0.03

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
TO2	Thermal Oxidizer #2	NO_x	1.13	4.20
		CO	1.91	7.05
		VOC	0.14	0.50
		PM	0.17	0.64
		PM_{10}	0.17	0.64
		$PM_{2.5}$	0.17	0.64
		SO_2	10.26	37.95
		H_2S	<0.01	0.02
		HAPs	0.01	0.03
TK1	Used Solvent Storage Tank	VOC	<0.01	<0.01
TK2	Heat Transfer Fluid Storage Tank	VOC	2.07	<0.01
TK3	Process Water Collection Tank	VOC	0.79	0.15
TK4	Diesel Storage Tank	VOC	0.05	<0.01
TK6	Condensate Tank #1	VOC	<0.01	<0.01
		HAPs	<0.01	<0.01
TK7	Condensate Tank #2	VOC	<0.01	<0.01
		HAPs	<0.01	<0.01
F01a	Equipment Leaks (5)	VOC	0.66	2.91
		HAPs	0.06	0.28
F01b	Equipment Leaks (5)	VOC	0.66	2.91
		HAPs	0.06	0.28
F02	Truck Loading Fugitives (5)	VOC	0.01	0.06

(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
H_2S - hydrogen sulfide
SO_2 - sulfur dioxide
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented

Emission Sources - Maximum Allowable Emission Rates

$PM_{2.5}$	-	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

(4) Compliance with annual emission limits (tons per year) is measured in short tons (2,000 lbs/ton) and 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: May 12, 2020