Emission Sources - Maximum Allowable Emission Rates

Permit Number 94384

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)
SB-8501	Steam Boiler 8501	NO_x	0.16	-
		CO	0.35	-
		SO_2	0.01	-
		PM	0.09	-
		PM_{10}	0.09	-
		$PM_{2.5}$	0.09	-
		VOC	0.06	-
SB-8502	Steam Boiler 8502	NO_x	0.16	-
		CO	0.35	-
		SO_2	0.01	-
		PM	0.09	-
		PM_{10}	0.09	-
		$PM_{2.5}$	0.09	-
		VOC	0.06	-
SB-8503	Steam Boiler 8503	NO_x	0.16	-
		CO	0.35	-
		SO_2	0.01	-
		PM	0.09	-
		PM_{10}	0.09	-
		$PM_{2.5}$	0.09	-
		VOC	0.06	-

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-				
		CO	0.35	-
		SO_2	0.01	-
		PM	0.09	-
		PM_{10}	0.09	-
		$PM_{2.5}$	0.09	-
		VOC	0.06	-
SB-8505	Steam Boiler 8505	NO_x	0.16	-
		CO	0.35	-
		SO_2	0.01	-
		PM	0.09	-
		PM_{10}	0.09	-
		$PM_{2.5}$	0.09	-
		VOC	0.06	-
SB-8506	Steam Boiler 8506	NO_x	0.16	-
		CO	0.35	-
		SO_2	0.01	-
		PM	0.09	-
		PM_{10}	0.09	-
		$PM_{2.5}$	0.09	-
		VOC	0.06	-
SB-8507	Steam Boiler 8507	NO_x	0.16	-
		CO	0.35	-
		SO_2	0.01	-
		PM	0.09	-
		PM_{10}	0.09	-
		$PM_{2.5}$	0.09	-
		VOC	0.06	-

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-				
		CO	0.35	-
		SO_2	0.01	-
		PM	0.09	-
		PM_{10}	0.09	-
		$PM_{2.5}$	0.09	-
		VOC	0.06	-
SB-8509	Steam Boiler 8509	NO_x	0.16	-
		CO	0.35	-
		SO_2	0.01	-
		PM	0.09	-
		PM_{10}	0.09	-
		$PM_{2.5}$	0.09	-
		VOC	0.06	-
SB-8510	Steam Boiler 8510	NO_x	0.16	-
		CO	0.35	-
		SO_2	0.01	-
		PM	0.09	-
		PM_{10}	0.09	-
		$PM_{2.5}$	0.09	-
		VOC	0.06	-
SB-8511	Steam Boiler 8511	NO_x	0.16	-
		CO	0.35	-
		SO_2	0.01	-
		PM	0.09	-
		PM_{10}	0.09	-
		$PM_{2.5}$	0.09	-
		VOC	0.06	-

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-				
		CO	0.35	-
		SO_2	0.01	-
		PM	0.09	-
		PM_{10}	0.09	-
		$PM_{2.5}$	0.09	-
		VOC	0.06	-
SB-8501 through SB-8512	Steam Boiler (SB-8501 to SB-8512) Combined Annual Cap (6)	NO_x	-	6.72
		CO	-	14.40
		SO_2	-	0.28
		PM	-	3.58
		PM_{10}	-	3.58
		$PM_{2.5}$	-	3.58
		VOC	-	2.59
FWP1	Firewater Pump Engine 1	NO_x	3.45	0.09
		CO	3.51	0.09
		SO_2	1.08	0.03
		PM	0.17	<0.01
		PM_{10}	0.17	<0.01
		$PM_{2.5}$	0.17	<0.01
		VOC	1.30	0.03
FWP2	Firewater Pump Engine 2	NO_x	3.45	0.09
		CO	3.51	0.09
		SO_2	1.08	0.03
		PM	0.17	<0.01
		PM_{10}	0.17	<0.01
		$PM_{2.5}$	0.17	<0.01
		VOC	1.30	0.03

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0.09				
		CO	3.51	0.09
		SO_2	1.08	0.03
		PM	0.17	<0.01
		PM_{10}	0.17	<0.01
		$PM_{2.5}$	0.17	<0.01
		VOC	1.30	0.03
FWP4	Firewater Pump Engine 4	NO_x	3.45	0.09
		CO	3.51	0.09
		SO_2	1.08	0.03
		PM	0.17	<0.01
		PM_{10}	0.17	<0.01
		$PM_{2.5}$	0.17	<0.01
		VOC	1.30	0.03
GENEENG1	Emergency Generator Engine	NO_x	28.22	0.73
		CO	14.75	0.38
		SO_2	1.08	0.03
		PM	0.89	0.02
		PM_{10}	0.89	0.02
		$PM_{2.5}$	0.89	0.02
		VOC	18.77	0.49
T30-1	IFR Tank T30-1	VOC	13.36	-
		H_2S	<0.01	-
T30-2	IFR Tank T30-2	VOC	13.36	-
		H_2S	<0.01	-
T50-1	IFR Tank T50-1	VOC	26.72	-
		H_2S	<0.01	-
T50-2	IFR Tank T50-2	VOC	26.72	-
		H_2S	<0.01	-
T50-3	IFR Tank T50-3	VOC	26.72	-
		H_2S	<0.01	-

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T50-4	IFR Tank T50-4	VOC	26.72	-
		H_2S	<0.01	-
T50-5	IFR Tank T50-5	VOC	26.72	-
		H_2S	<0.01	-
T50-6	IFR Tank T50-6	VOC	26.72	-
		H_2S	<0.01	-
T50-7	IFR Tank T50-7	VOC	26.72	-
		H_2S	<0.01	-
T50-8	IFR Tank T50-8	VOC	26.72	-
		H_2S	<0.01	-
T50-9	IFR Tank T50-9	VOC	26.72	-
		H_2S	<0.01	-
T50-10	IFR Tank T50-10	VOC	26.72	-
		H_2S	<0.01	-
T100-1	IFR Tank T100-1	VOC	29.39	-
		H_2S	<0.01	-
T100-2	IFR Tank T100-2	VOC	29.39	-
		H_2S	<0.01	-
T100-3	IFR Tank T100-3	VOC	29.39	-
		H_2S	<0.01	-
T100-4	IFR Tank T100-4	VOC	29.39	-
		H_2S	<0.01	-
T100-5	IFR Tank T100-5	VOC	29.39	-
		H_2S	<0.01	-
T100-6	IFR Tank T100-6	VOC	29.39	-
		H_2S	<0.01	-

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-				
		H_2S	<0.01	-
T100-11	IFR Tank T100-11	VOC	40.08	-
		H_2S	<0.01	-
T150-1	IFR Tank T150-1	VOC	7.80	-
		H_2S	<0.01	-
T150-2	IFR Tank T150-2	VOC	7.80	-
		H_2S	<0.01	-
T150-3	IFR Tank T150-3	VOC	7.80	-
		H_2S	<0.01	-
T150-4	IFR Tank T150-4	VOC	7.80	-
		H_2S	<0.01	-
T150-5	IFR Tank T150-5	VOC	7.80	-
		H_2S	<0.01	-
T150-6	IFR Tank T150-6	VOC	7.80	-
		H_2S	<0.01	-
T200-1	IFR Tank T200-1	VOC	29.39	-
		H_2S	<0.01	-
T200-2	IFR Tank T200-2	VOC	29.39	-
		H_2S	<0.01	-
T200-3	IFR Tank T200-3	VOC	29.39	-
		H_2S	<0.01	-
T200-4	IFR Tank T200-4	VOC	29.39	-
		H_2S	<0.01	-
T200-5	IFR Tank T200-5	VOC	29.39	-
		H_2S	<0.01	-
T200-6	IFR Tank T200-6	VOC	29.39	-
		H_2S	<0.01	-

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-				
		H_2S	<0.01	-
T200-8	IFR Tank T200-8	VOC	29.39	-
		H_2S	<0.01	-
T009-1	VRT Tank T009-1	VOC	29.39	-
T30-3	VFR Tank T30-3	VOC	13.36	-
T30-4	IFR Tank T30-4	VOC	13.36	-
T100-7	VFR Tank T100-7	VOC	40.08	-
T100-8	VFR Tank T100-8	VOC	40.08	-
T100-13	VFR Tank T100-13	VOC	40.08	-
T100-14	VFR Tank T100-14	VOC	40.08	-
T100-15	VFR Tank T100-15	VOC	40.20	-
T100-16	VFR Tank T100-16	VOC	40.20	-
T100-17	VFR Tank T100-17	VOC	40.20	-
T100-18	VFR Tank T100-18	VOC	40.20	-
T100-19	VFR Tank T100-19	VOC	40.20	-
T100-20	VFR Tank T100-20	VOC	40.20	-
T100-21	VFR Tank T100-21	VOC	40.20	-
T100-22	VFR Tank T100-22	VOC	40.20	-
T100-23	VFR Tank T100-23	VOC	40.20	-
T100-24	VFR Tank T100-24	VOC	40.20	-
T200-9	VFR Tank T200-9	VOC	26.80	-
T200-10	VFR Tank T200-10	VOC	26.80	-
T200-11	VFR Tank T200-11	VOC	26.80	-
T200-12	VFR Tank T200-12	VOC	26.80	-
T320-1	VFR Tank T320-1	VOC	26.80	-
T320-2	VFR Tank T320-2	VOC	26.80	-
T320-3	VFR Tank T320-3	VOC	26.80	-

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71.11				
		H_2S	-	0.02
FUG	Piping Fugitive Components (5)	VOC	1.70	7.45
		H_2S	0.01	0.03
DOCK-1	Dock 1 - Uncontrolled/Uncollected Marine Vessel Loading	VOC	17.63	-
		H_2S	<0.01	-
DOCK-2	Dock 2 - Uncontrolled/Uncollected Marine Vessel Loading	VOC	17.63	-
		H_2S	<0.01	-
DOCK-3	Dock 3 - Uncontrolled/Uncollected Marine Vessel Loading	VOC	17.63	-
		H_2S	<0.01	-
DOCK-4	Dock 4 - Uncontrolled/Uncollected Marine Vessel Loading	VOC	17.63	-
		H_2S	<0.01	-
LOADUNC	Uncontrolled/Uncollected Marine Loading Annual Emission Cap	VOC	-	15.85
		H_2S	-	<0.01
TK-LAND	Uncontrolled Routine Tank Roof Landings	VOC	42.29	1.58
		H_2S	0.01	0.01
TKVCU-1	Tank Roof Landing VCU No. 1	NO_x	9.50	-
		CO	19.00	-
		SO_2	3.83	-
		H_2S	0.04	-
		PM	0.71	-
		PM_{10}	0.71	-
		$PM_{2.5}$	0.71	-
		VOC	2.03	-

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-				
		CO	19.00	-
		SO_2	3.83	-
		H_2S	0.04	-
		PM	0.71	-
		PM_{10}	0.71	-
		$PM_{2.5}$	0.71	-
		VOC	2.03	-
TKVCU-1 & TKVCU-2	Tank Roof Landing VCU Annual Emission Cap (TKVCU-1 & TKVCU-2)	NO_x	-	2.23
		CO	-	3.08
		SO_2	-	0.16
		H_2S		<0.01
		PM	-	0.11
		PM_{10}	-	0.11
		$PM_{2.5}$	-	0.11
		VOC	-	0.16
VCU-1	VCU-1 Controlled Marine Vessel Loading	NO_x	12.75	-
		CO	17.00	-
		SO_2	9.87	-
		H_2S	0.10	-
		PM	0.63	-
		PM_{10}	0.63	-
		$PM_{2.5}$	0.63	-
		VOC	5.25	-

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-				
		CO	17.00	-
		SO_2	9.87	-
		H_2S	0.10	-
		PM	0.63	-
		PM_{10}	0.63	-
		$PM_{2.5}$	0.63	-
		VOC	5.25	-
VCU-3	VCU-3 Controlled Marine Vessel Loading	NO_x	12.75	-
		CO	17.00	-
		SO_2	9.87	-
		H_2S	0.10	-
		PM	0.63	-
		PM_{10}	0.63	-
		$PM_{2.5}$	0.63	-
		VOC	5.25	-
VCU-4	VCU-4 Controlled Marine Vessel Loading	NO_x	12.75	-
		CO	17.00	-
		SO_2	9.87	-
		H_2S	0.10	-
		PM	0.63	-
		PM_{10}	0.63	-
		$PM_{2.5}$	0.63	-
		VOC	5.25	-

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11.82				
		CO	-	15.76
		SO_2	-	5.84
		H_2S	-	0.06
		PM	-	0.59
		PM_{10}	-	0.59
		$PM_{2.5}$	-	0.59
		VOC	-	3.19
MSS	MSS Emission Cap	NO_x	8.64	2.39
		CO	15.85	4.36
		SO_2	6.33	1.84
		H_2S	0.09	0.01
		PM	0.59	0.16
		PM_{10}	0.59	0.16
		$PM_{2.5}$	0.59	0.16
		VOC	178.69	2.70

(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) NO_x - total oxides of nitrogen
CO - carbon monoxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$
PM_{10} - total 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
SO_2 - sulfur dioxide
H_2S - hydrogen sulfide
(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: April 17, 2023