

Emission Sources - Maximum Allowable Emission Rates

Permit Number 20246

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)
INDOK001	Vapor Combustor – Post LTO Project (6)	VOC	16.60	11.42
		NO _x	4.55	5.23
		CO	2.00	2.30
		PM	0.29	0.58
		PM ₁₀	0.29	0.58
		PM _{2.5}	0.29	0.58
		SO ₂	3.54	1.13
		H ₂ S	0.02	0.01
LODOK001	Dock Loading (Uncontrolled) – Post LTO Project (6)	VOC	21.97	6.16
		H ₂ S	0.08	0.07
TKTKF009	Tank 9	VOC	2.01	0.74
TKTKF051	Tank 51 – Post LTO Project (6)	VOC	4.29	3.23
		H ₂ S	0.32	0.24
TKTKF065	Tank 65 – Post LTO Project (6)	VOC	0.35	0.46
		H ₂ S	0.01	0.01
TKTKF202	Tank 202 – Post LTO Project (6)	VOC	0.23	1.40
		H ₂ S	0.01	0.06
		NH ₃	<0.01	<0.01
TKTKF205	Tank 205 – Post LTO Project (6)	VOC	2.51	3.85
		H ₂ S	0.16	0.24
TKTKF309	Tank 309 – Post LTO Project (6)	VOC	0.16	0.38
		H ₂ S	0.01	0.03
		NH ₃	<0.01	<0.01
TKTKF335	Tank 335 – Post LTO Project (6)	VOC	0.01	0.02
		H ₂ S	0.01	0.01

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TKTKF336	Tank 336 – Post LTO Project (6)	VOC	0.01	<0.01
		H ₂ S	0.01	<0.01
TKTKF337	Tank 337 – Post LTO Project (6)	VOC	0.01	<0.01
		H ₂ S	0.01	<0.01
TKTKF340	Tank 340	VOC	0.75	0.45
TKTKF341	Tank 341	VOC	0.66	0.44
TKTKF342	Tank 342	VOC	2.11	4.24
TKTKF345	Tank 345 – Post LTO Project (6)	VOC	0.04	0.29
		H ₂ S	0.01	0.06
		NH ₃	<0.01	<0.01
TKTKF353	Tank 353	VOC	0.86	0.46
TKTKF400	Tank 400 – Post LTO Project (6)	VOC	3.52	0.71
		H ₂ S	0.06	0.01
TKTKF807	Tank 807 – Post LTO Project (6)	VOC	1.40	0.48
		H ₂ S	0.03	0.01
TKTKF808	Tank 808 – Post LTO Project (6)	VOC	4.93	3.69
		H ₂ S	<0.01	<0.01
TKTKF814	Tank 814 – Post LTO Project (6)	VOC	1.37	2.92
		Benzene	<0.01	<0.01
		H ₂ S	<0.01	<0.01
TKTKF817	Tank 817 – Post LTO Project (6)	VOC	2.26	0.34
		H ₂ S	<0.01	<0.01
TKTKF824	Tank 824	VOC	2.23	4.83
TKTKFD48	Tank D48 – Post LTO Project (6)	VOC	0.12	0.03
		H ₂ S	<0.01	<0.01
TKTKF097	Tank 97 – Post LTO Project (6)	VOC	12.86	-
		H ₂ S	0.02	-
TKTKF250	Tank 250 – Post LTO Project (6)	VOC	4.97	-
		H ₂ S	0.03	-
	Annual Cap for Tanks 97 and 250 – Post LTO Project (6)	VOC	-	11.10

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		H ₂ S	-	0.02
TKTKF332	Tank 332 – Post LTO Project (6)	VOC	2.48	-
		Benzene	0.01	0.03
		H ₂ S	<0.01	-
TKTKF343	Tank 343 – Post LTO Project (6)	VOC	1.09	-
		H ₂ S	<0.01	-
TKTKF349	Tank 349 – Post LTO Project (6)	VOC	2.34	-
		H ₂ S	<0.01	-
TKTKF350	Tank 350 – Post LTO Project (6)	VOC	2.02	-
		H ₂ S	<0.01	-
TKTKF812	Tank 812 – Post LTO Project (6)	VOC	5.06	-
	Annual Cap for Tanks 332, 343, 349, 350, and 812 – Post LTO Project (5) (6)	VOC	-	22.20
		H ₂ S	-	0.01
TKTKF301	Tank 301 – Post LTO Project (6)	VOC	0.92	-
		H ₂ S	0.01	-
TKTKF328	Tank 328 – Post LTO Project (6)	VOC	0.35	-
		H ₂ S	<0.01	-
	Annual Cap for Tanks 301 and 328 – Post LTO Project (6)	VOC	-	0.88
		H ₂ S	-	0.01
TKTKF210	Tank 210 – Post LTO Project (6)	VOC	16.21	-
		H ₂ S	0.93	-
TKTKF211	Tank 211 (6)	VOC	16.43	-
		H ₂ S	0.93	-
	Annual Cap for Tanks 210 and 211 – Post LTO Project (6)	VOC	-	7.47
		H ₂ S	-	0.43
TKTKF825	Tank 825 – Post LTO Project (6)	VOC	3.35	-
TKTKF826	Tank 826 – Post LTO Project (6)	VOC	0.67	-
TKTKF827	Tank 827 – Post LTO Project (6)	VOC	0.14	-
	Annual Cap for Tanks 825, 826, and 827 – Post LTO Project (6)	VOC	-	2.96
TKTKF307	Tank 307 – Post LTO Project (6)	VOC	13.53	-

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TKTKF308	Tank 308 – Post LTO Project (6)	VOC	13.53	-
TKTKF330	Tank 330 – Post LTO Project (6)	VOC	10.35	-
TKTKF331	Tank 331 – Post LTO Project (6)	VOC	35.51	-
TKTKF820	Tank 820 – Post LTO Project (6)	VOC	2.91	-
	Annual Cap for Tanks 307, 308, 330, 331, and 820 – Post LTO Project (6)	VOC	-	22.35
TKTKF810	Tank 810 – Post LTO Project (6)	VOC	5.62	-
TKTKF811	Tank 811 – Post LTO Project (6)	VOC	4.78	-
TKTKF818	Tank 818 – Post LTO Project (6)	VOC	4.91	-
	Annual Cap for Tanks 810, 811, and 818 – Post LTO Project (6)	VOC	-	14.93
TKTKF815	Tank 815 – Post LTO Project (6)	VOC	5.78	-
		H ₂ S	<0.01	-
TKTKF822	Tank 822 – Post LTO Project (6)	VOC	4.93	-
		H ₂ S	<0.01	-
	Annual Cap for Tank 815 and 822 – Post LTO Project (6)	VOC	-	13.78
		H ₂ S	-	<0.01
TKTKF813	Tank 813 – Post LTO Project (6)	VOC	6.03	-
		H ₂ S	<0.01	-
TKTKF816	Tank 816 – Post LTO Project (6)	VOC	5.73	-
		H ₂ S	<0.01	-
TKTKF830	Tank 830 – Post LTO Project (6)	VOC	8.86	-
		H ₂ S	<0.01	-
TKTKF831	Tank 831 – Post LTO Project (6)	VOC	8.86	-
		H ₂ S	<0.01	-
	Annual Cap for Tanks 813, 816, 830, 831 – Post LTO Project (6)	VOC	-	22.23
		H ₂ S	-	0.01
VTFCC003	FCC Seal Pot Vent (FCC MSS) – Pre LTO Project (7)	CO	260.56	4.95
		NO _x	179.11	3.40
		SO ₂	249.38	4.74
		VOC	8.19	0.16

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		PM	634.40	12.05
		PM ₁₀	312.44	5.94
		PM _{2.5}	113.98	2.17
VTFCC001	Fresh Catalyst Filter – Pre LTO Project (7)	PM ₁₀	46.00	2.20
VTFCC002	Spent Catalyst Filter – Pre LTO Project (7)	PM ₁₀	50.00	0.92
FUFCC002	Fugitive Catalyst Handling – Pre LTO Project (7)	PM ₁₀	1.60	0.04
INDOK001	Vapor Combustor – Pre LTO Project (7)	VOC	15.76	2.70
		NO _x	4.55	3.92
		CO	2.00	1.73
		PM	0.33	0.50
		PM ₁₀	0.33	0.50
		PM _{2.5}	0.33	0.50
		SO ₂	0.22	0.07
LODOK001	Dock Loading (Uncontrolled) – Pre LTO Project (7)	VOC	10.23	11.24
TKTKF051	Tank 51 – Pre LTO Project (7)	VOC	6.56	3.35
TKTKF065	Tank 65 – Pre LTO Project (7)	VOC	0.45	0.82
TKTKF202	Tank 202 – Pre LTO Project (7)	VOC	0.27	0.77
		NH ₃	0.01	0.01
		H ₂ S	0.01	0.02
TKTKF205	Tank 205 – Pre LTO Project (7)	VOC	3.52	2.29
TKTKF309	Tank 309 – Pre LTO Project (7)	VOC	0.17	0.02
		NH ₃	0.02	0.01
		H ₂ S	0.04	0.01
TKTKF335	Tank 335 – Pre LTO Project (7)	VOC	0.01	0.01
		H ₂ S	0.01	0.01
TKTKF336	Tank 336 – Pre LTO Project (7)	VOC	0.61	0.01
		H ₂ S	0.03	0.11
TKTKF337	Tank 337 – Pre LTO Project (7)	VOC	0.61	0.01
		H ₂ S	0.05	0.16

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TKTKF345	Tank 345 – Pre LTO Project (7)	VOC	0.18	0.70
		NH ₃	0.01	0.02
		H ₂ S	0.01	0.03
TKTKF400	Tank 400 – Pre LTO Project (7)	VOC	13.68	0.98
TKTKF807	Tank 807 – Pre LTO Project (7)	VOC	5.53	1.97
TKTKF808	Tank 808 – Pre LTO Project (7)	VOC	6.62	-
TKTKF814	Tank 814 – Pre LTO Project (7)	VOC	2.90	7.90
		Benzene	0.02	0.04
		H ₂ S	0.01	0.01
TKTKF817	Tank 817 – Pre LTO Project (7)	VOC	9.50	3.99
TKTKFD48	Tank D48 – Pre LTO Project (7)	VOC	0.12	0.02
TKTKF097	Tank 97 – Pre LTO Project (7)	VOC	11.83	0.93
TKTKF250	Tank 250 – Pre LTO Project (7)	VOC	4.73	1.50
TKTKF332	Tank 332 – Pre LTO Project (7)	VOC	4.10	6.71
		Benzene	0.02	0.03
		H ₂ S	0.01	0.01
TKTKF343	Tank 343 – Pre LTO Project (7)	VOC	1.28	2.16
TKTKF349	Tank 349 – Pre LTO Project (7)	VOC	1.30	1.08
TKTKF350	Tank 350 – Pre LTO Project (7)	VOC	1.16	0.90
TKTKF812	Tank 812 – Pre LTO Project (7)	VOC	6.45	-
TKTKF301	Tank 301 – Pre LTO Project (7)	VOC	0.89	0.22
TKTKF328	Tank 328 – Pre LTO Project (7)	VOC	0.35	0.27
TKTKF210	Tank 210 – Pre LTO Project (7)	VOC	23.44	5.96
TKTKF700	Tank 700 – Pre LTO Project (7)	VOC	0.01	0.01
TKTKF710	Tank 710 – Pre LTO Project (7)	VOC	0.01	0.01
TKTKF825	Tank 825 – Pre LTO Project (7)	VOC	5.26	5.78
TKTKF826	Tank 826 – Pre LTO Project (7)	VOC	2.89	3.95
TKTKF827	Tank 827 – Pre LTO Project (7)	VOC	7.50	13.00
TKTKF307	Tank 307 – Pre LTO Project (7)	VOC	12.10	-
TKTKF308	Tank 308 – Pre LTO Project (7)	VOC	12.10	-

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TKTKF330	Tank 330 – Pre LTO Project (7)	VOC	12.13	-
TKTKF331	Tank 331 – Pre LTO Project (7)	VOC	35.83	4.32
TKTKF820	Tank 820 – Pre LTO Project (7)	VOC	3.07	-
	Annual for Tanks 307, 308, 330 & 820 – Pre LTO Project (7)	VOC	-	7.27
TKTKF810	Tank 810 – Pre LTO Project (7)	VOC	6.39	-
TKTKF811	Tank 811 – Pre LTO Project (7)	VOC	5.91	-
TKTKF818	Tank 818 – Pre LTO Project (7)	VOC	6.03	-
	Annual for Tanks 808, 810, 811, 812, & 818 – Pre LTO Project (7)	VOC	-	24.31
TKTKF815	Tank 815 – Pre LTO Project (7)	VOC	4.44	3.55
TKTKF822	Tank 822 – Pre LTO Project (7)	VOC	3.43	2.27
TKTKF813	Tank 813 – Pre LTO Project (7)	VOC	4.65	2.91
TKTKF816	Tank 816 – Pre LTO Project (7)	VOC	4.43	5.47
TKTKF830	Tank 830 – Pre LTO Project (7)	VOC	7.15	3.61
TKTKF831	Tank 831 – Pre LTO Project (7)	VOC	7.15	3.61

- (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
CO - carbon monoxide
SO₂ - sulfur dioxide
PM - particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}
PM₁₀ - particulate matter (PM) 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
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Although included as part of the annual cap, Tank 812 is authorized for VOC emissions only and is not included as part of the annual H₂S emission cap.
- (6) Post LTO Project emission rates in this table shall be applicable upon startup of the project represented in the permit amendment applications dated June 15, 2021 (TCEQ Project Nos. 330179, 330180, 330181, and 330182).
- (7) Pre LTO Project emission rates (current authorized emissions) are void upon startup of the project represented in the permit amendment applications dated June 15, 2021 (TCEQ Project Nos. 330179, 330180, 330181, and 330182).

Date: July 15, 2022