

Emission Sources - Maximum Allowable Emission Rates

Permit Number 95145

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)
T-6201	Alkoxylate Filter Feed Storage Tank	VOC	0.52	0.01
T-7125	Wastewater (Bio-San) Storage Tank	VOC	0.57	0.23
T-7126	Wastewater (Bio-San) Storage Tank	VOC	0.57	0.23
T-6139	Glacial Acetic Acid Storage Tank	VOC	0.26	0.01
T-6101	C-1214 Alcohol Storage Tank	VOC	0.01	< 0.01
T-6102	C-911 Alcohol Storage Tank	VOC	0.17	< 0.01
T-6103	C-13 Alcohol Storage Tank	VOC	2.21	0.06
T-6104	C-1215 Alcohol Storage Tank	VOC	2.25	0.05
T-6108	Flex Raw Storage Tank	VOC	0.08	< 0.01
T-6109	Flex Raw Storage Tank	VOC	0.04	< 0.01
T-6114	C-911 Alcohol Ethoxylate Storage Tank	VOC	0.09	< 0.01
T-6115	C-10 Alcohol Storage Tank	VOC	1.75	0.01
T-6116	C-13 Alcohol Ethoxylate Storage Tank	VOC	0.09	< 0.01
T-6117	Tallow Amine Ethoxylate Storage Tank	VOC	0.01	< 0.01
T-6118	Agent 601-31 Storage Tank	VOC	0.09	< 0.01
T-6119	Tallow Amine Ethoxylate Storage Tank	VOC	0.01	< 0.01
T-6120	C-1214 Alcohol Ethoxylate Storage Tank	VOC	0.01	0.01
T-6122	C-1214 Alcohol Ethoxylate Storage Tank	VOC	0.01	< 0.01
T-6123	C-1215 Alcohol Ethoxylate Storage Tank	VOC	0.16	< 0.01

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T-6124	TOX 8320 Alkoxyate Storage Tank	VOC	< 0.01	< 0.01
T-6128	Nonyl Phenol Ethoxylate Storage Tank	VOC	0.16	< 0.01
T-6129	Decyl Alcohol Ethoxylate Storage Tank	VOC	0.16	< 0.01
T-6131	C-11 Alcohol Storage Tank	VOC	< 0.01	< 0.01
T-6132	Nonyl Phenol Ethoxylate Storage Tank	VOC	0.10	< 0.01
T-6137	Finished Flex Filtered Storage Tank	VOC	0.58	0.03
T-6138	Flex Product Storage Tank	VOC	0.05	< 0.01
T-6140	C-911 Alcohol Ethoxylate Storage Tank	VOC	0.16	< 0.01
T-6141	Flex Raw Storage Tank	VOC	< 0.01	< 0.01
T-6142	C-1016 Alcohol Ethoxylate Storage Tank	VOC	<0.01	< 0.01
T-6143	C-11 Alcohol Ethoxylate Storage Tank	VOC	0.16	< 0.01
T-6144	Flex Product Storage Tank	VOC	0.04	< 0.01
T-6145	Flex Product Storage Tank	VOC	0.05	< 0.01
T-6148	Nonyl Phenol Storage Tank	VOC	<0.01	< 0.01
T-6220	Tallow Amine Storage Tank	VOC	2.59	0.11
WW-FUG	Wastewater Fugitive Components	VOC	0.06	0.28
EGEN-1	Emergency Generator Engine No. 1	VOC	1.95	0.10
		CO	21.46	1.07
		SO ₂	0.03	< 0.01
		NO _x	37.07	1.85
		PM	1.24	0.06
		PM ₁₀	1.24	0.06
		PM _{2.5}	1.24	0.06
EGEN-2	Emergency Generator Engine No. 2	VOC	1.95	0.10
		CO	11.17	0.56

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		SO ₂	0.01	< 0.01
		NO _x	19.64	0.98
		PM	0.64	0.03
		PM ₁₀	0.64	0.03
		PM _{2.5}	0.64	0.03
EGEN-3	Emergency Generator Engine No. 3	VOC	11.17	0.56
		CO	19.64	0.98
		SO ₂	0.64	0.03
		NO _x	0.64	0.03
		PM	0.64	0.03
		PM ₁₀	0.01	<0.01
		PM _{2.5}	0.68	0.03
EGEN-4	Emergency Generator Engine No. 4	VOC	11.17	0.56
		CO	19.64	0.98
		SO ₂	0.64	0.03
		NO _x	0.64	0.03
		PM	0.64	0.03
		PM ₁₀	0.01	<0.01
		PM _{2.5}	0.68	0.03
EGEN-5	Emergency Generator Engine No. 5	VOC	11.17	0.56
		CO	19.64	0.98
		SO ₂	0.64	0.03
		NO _x	0.64	0.03
		PM	0.64	0.03
		PM ₁₀	0.01	<0.01
		PM _{2.5}	0.68	0.03
EGEN-6	Emergency Generator Engine No. 6	VOC	11.17	0.56
		CO	19.64	0.98

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		SO ₂	0.64	0.03
		NO _x	0.64	0.03
		PM	0.64	0.03
		PM ₁₀	0.01	<0.01
		PM _{2.5}	0.68	0.03
EGEN-7	Emergency Generator Engine No. 7	VOC	3.27	0.16
		CO	3.46	0.17
		SO ₂	0.19	0.01
		NO _x	0.19	0.01
		PM	0.19	0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	0.3	0.01
FWP-1	Fire Water Pump No. 1	VOC	0.38	0.02
		CO	4.15	0.21
		SO ₂	0.03	< 0.01
		NO _x	7.16	0.36
		PM	0.24	0.01
		PM ₁₀	0.24	0.01
		PM _{2.5}	0.24	0.01
FWP-2	Fire Water Pump No. 2	VOC	0.38	0.02
		CO	4.15	0.21
		SO ₂	0.03	< 0.01
		NO _x	7.16	0.36
		PM	0.24	0.01
		PM ₁₀	0.24	0.01
		PM _{2.5}	0.24	0.01
FWP-3	Fire Water Pump No. 3	VOC	0.03	< 0.01
		CO	1.55	0.08

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		SO ₂	< 0.01	< 0.01
		NO _x	1.19	0.06
		PM	0.09	< 0.01
		PM ₁₀	0.09	< 0.01
		PM _{2.5}	0.09	< 0.01
EGEN-1TK	Emergency Generator 1 Diesel Tank	VOC	< 0.01	< 0.01
EGEN-2TK	Emergency Generator 2 Diesel Tank	VOC	0.01	< 0.01
EGEN-3TK	Emergency Generator 3 Diesel Tank	VOC	0.01	< 0.01
EGEN-4TK	Emergency Generator 4 Diesel Tank	VOC	0.01	< 0.01
EGEN-5TK	Emergency Generator 5 Diesel Tank	VOC	0.01	< 0.01
EGEN-6TK	Emergency Generator 6 Diesel Tank	VOC	0.01	< 0.01
EGEN-7TK	Emergency Generator 7 Diesel Tank	VOC	0.01	< 0.01
FWP-1 TK	Fire Water Pump 1 Diesel Tank	VOC	0.01	< 0.01
FWP-2 TK	Fire Water Pump 2 Diesel Tank	VOC	0.01	< 0.01
FWP-3 TK	Fire Water Pump 3 Diesel Tank	VOC	0.01	< 0.01
VENT STK 1	Vent Stack 1	VOC	0.10	0.01
LAB-VENT	QC/Environmental Lab Vent	VOC	0.10	0.43
CAT-LOAD 1	Reactor 1 Catalyst Loading	PM	< 0.01	< 0.01
		PM ₁₀	< 0.01	< 0.01
		PM _{2.5}	< 0.01	< 0.01
CAT-LOAD 2	Reactor 2 Catalyst Loading	PM	< 0.01	< 0.01
		PM ₁₀	< 0.01	< 0.01
		PM _{2.5}	< 0.01	< 0.01
CAT-LOAD 3	Reactor 3 Catalyst Loading	PM	< 0.01	< 0.01
		PM ₁₀	< 0.01	< 0.01
		PM _{2.5}	< 0.01	< 0.01

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EQU-CLNMSS	Equipment Cleaning MSS	VOC	0.10	< 0.01
LIN-OPNMSS	Line Opening MSS	VOC	0.03	0.02
TK-WASHMSS	Tank Washing MSS	VOC	0.01	0.01
		H ₂ SO ₄	0.01	< 0.01
VAC-TRKMSS	Vacuum Truck MSS	VOC	0.04	< 0.01
		H ₂ SO ₄	< 0.01	< 0.01
VES-DEPMSS	Vessel Depressuring MSS	VOC	< 0.01	< 0.01
Phase 1 (6)				
CWT-1	Cooling Tower (Phase 1)	VOC	0.48	2.10
		PM	0.04	0.13
		PM ₁₀	0.03	0.11
		PM _{2.5}	<0.01	<0.01
T-1403	Spent Acid from Oxide Scrubber Storage Tank	VOC	0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
SCRUBBER	Scrubber (Phase 1)	VOC	0.41	0.02
		PM	< 0.01	< 0.01
		PM ₁₀	< 0.01	< 0.01
		PM _{2.5}	< 0.01	< 0.01
VENT STK 2	Vent Stack 2 (Phase 1)	VOC	0.05	< 0.01
RC-LOAD	Railcar Loading (Phase 1)	VOC	1.03	0.45
TT-LOAD	Tank Truck Loading (Phase 1)	VOC	0.24	0.45
PIPE-FUG1	Piping Fugitive Components (Unloading) (Phase 1) (5)	VOC	0.05	0.21
PIPE-FUG2	Piping Fugitive Components (Process) (Phase 1) (5)	VOC	0.29	1.26
PIPE-FUG3	Piping Fugitive Components (Non EO-PO) (Phase 1) (5)	VOC	0.63	2.76
Phase 2 (7)				
CWT-1	Cooling Tower (Phase 2)	VOC	0.64	2.81
		PM	0.05	0.18

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		PM10	0.04	0.14
		PM2.5	<0.01	<0.01
SCRUBBER	Scrubber (Phase 2)	VOC	0.54	0.03
		PM	< 0.01	< 0.01
		PM ₁₀	< 0.01	< 0.01
		PM _{2.5}	< 0.01	< 0.01
VENT STK 2	Vent Stack 2 (Phase 2)	VOC	0.10	0.01
RC-LOAD	Railcar Loading (Phase 2)	VOC	1.03	0.59
TT-LOAD	Tank Truck Loading (Phase 2)	VOC	0.24	0.59
PIPE-FUG1	Piping Fugitive Components (Unloading) (Phase 2) (5)	VOC	0.06	0.28
PIPE-FUG2	Piping Fugitive Components (Process) (Phase 2) (5)	VOC	0.38	1.68
PIPE-FUG3	Piping Fugitive Components (Non EO-PO) (Phase 2) (5)	VOC	0.86	3.76
CAT-LOAD 4	Reactor 4 Catalyst Loading (Phase 2)	PM	< 0.01	< 0.01
		PM ₁₀	< 0.01	< 0.01
		PM _{2.5}	< 0.01	< 0.01
T-6121	Flex Product Storage Tank (Phase 2 only)	VOC	0.01	< 0.01

- (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
 - SO₂
 - sulfur dioxide
 - H₂S
 - hydrogen sulfide
 - H₂SO₄
 - sulfuric acid
 - PM₁₀
 - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented.
 - PM_{2.5}
 - particulate matter equal to or less than 2.5 microns in diameter
 - CO
 - carbon monoxide
- (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.
- (6) Emission rates for Phase 1 are effective upon issuance of the permit amendment application dated December 20, 2019.
- (7) Emission rates for Phase 2 are effective upon Phase 1 completion and construction of Reactor 4 and the associated equipment.

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Date: December 13, 2023