Emission Sources - Maximum Allowable Emission Rates

Permit Number 84802

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	Source Name (2)	Air Contaminant Name	Emission Rates	
No. (1)	(2)	(3)	Lbs/hour	TPY (4)
Sitewide	Sitewide-CAP (5)	NO _x	-	75.00
		со	-	23.00
		VOC	-	21.00
		PM ₁₀	-	18.24
		SO ₂	-	5.14
		НАР	-	13.15
		NH ₃	-	5.63
		HCI	-	2.50
		HCN	-	0.13
		HF	-	2.00
		HNO ₃	-	0.06
		N ₂ O	-	5.50
		SO₃	-	0.80
		Refrigerants	-	2.70
H018-01	Dual Chamber Incinerator	NO _x	1.10	75.00
		со	0.80	23.00
		VOC	0.10	21.00
		PM ₁₀	13.40	18.24
		SO _x	0.80	5.14
		НАР	0.10	13.15
H025-01	Plastic Shop	VOC	20.00	21.00
		НАР	20.00	13.15
T010-01	Vehicle Fueling Station	VOC	69.10	21.00
		HAP	18.60	13.15

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

21.00				
		PM ₁₀	0.15	18.24
		HAP	12.00	13.15
1016-01	HE Formulation Facility South	VOC	12.00	21.00
	Rotoclone	PM ₁₀	0.15	18.24
		HAP	12.00	13.15
I014-FUG	HE Formulation Facility Fugitives (6)	voc	0.10	21.00
F022-PS1	HE Synthesis Bay 1	NO _x	1.70	75.00
		СО	0.64	23.00
		voc	17.10	21.00
		PM ₁₀	0.10	18.24
		SO _x	0.10	5.14
		NH ₃	13.50	5.63
		HCI	0.10	2.50
		HCN	0.24	0.13
		HNO₃	1.00	0.06
		N ₂ O	7.70	5.50
F022-PS2	HE Synthesis Bay 2	NO _x	1.70	75.00
		СО	0.64	23.00
		voc	17.10	21.00
		PM ₁₀	0.10	18.24
		SO _x	0.10	5.14
		NH ₃	13.50	5.63
		HCI	0.10	2.50
		HCN	0.24	0.13
		HNO₃	1.00	0.06
		N ₂ O	7.70	5.50

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

75.00				
		СО	0.01	23.00
		VOC	11.93	21.00
		PM ₁₀	0.10	18.24
		SO _x	0.10	5.14
		NH ₃	0.50	5.63
		HCI	0.10	2.50
		HCN	0.01	0.13
		HNO ₃	0.05	0.06
		N ₂ O	0.11	5.50
F022-PS4	HE Synthesis Vacuum Pump	NO _x	0.30	75.00
		СО	0.15	23.00
		voc	16.83	21.00
		PM ₁₀	0.10	18.24
		SO _x	0.50	5.14
		NH ₃	2.00	5.63
		HCI	0.10	2.50
		HCN	0.06	0.13
		HNO ₃	0.50	0.06
		N ₂ O	2.07	5.50
F022-VPC TK	HE Synthesis Vacuum Pump Condensate Tank	voc	4.10	21.00
F022 -FUG	HE Synthesis Fugitive	VOC	1.00	21.00
F022-TKS	HE Synthesis Waste Tanks	VOC	6.30	21.00

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

	СО	0.60	-
	VOC	0.09	-
	PM ₁₀	0.15	-
	SO _x	0.02	-
	НАР	0.06	-
	N ₂ O	0.07	-
25,000# Boiler	NO _x	6.00	-
Diesel	со	1.50	-
	VOC	0.06	-
	PM ₁₀	0.60	-
	SO _x	2.13	-
	НАР	0.02	-
	N ₂ O	0.08	-
	SO ₃	0.03	-
25,000# Boiler Annual Cap Natural Gas & Diesel	NO _x	-	75.00
	СО	-	23.00
	VOC	-	21.00
	PM ₁₀	-	18.24
	SO ₂	-	5.14
	НАР	-	13.15
	N ₂ O	-	5.50
	SO ₃	-	0.80
	25,000# Boiler Annual Cap	VOC PM₁0 SO₂ HAP N₂O NO₂ CO VOC PM₁0 SO₃ HAP N₂O SO₃ HAP N₂O SO₃ SO₃ CO VOC PM₁0 SO₃ CO VOC PM₁0 SO₃ CO VOC PM₁0 SO₃ CO VOC PM₁0 SO₂ CO VOC PM₁0 SO₂ HAP N₂O SO₂ HAP N₂O SO₂ HAP N₂O N₂O	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

	со	0.60	-
	voc	0.09	-
	PM ₁₀	0.15	-
	SO ₂	0.02	-
	НАР	0.06	-
	N ₂ O	0.07	-
25,000# Boiler	NO _x	6.00	-
Diesel	СО	1.50	-
	voc	0.06	-
	PM ₁₀	0.60	-
	SO ₂	2.13	-
	НАР	0.02	-
	N ₂ O	0.08	-
	SO₃	0.03	-
25,000# Boiler Annual Cap Natural Gas & Diesel	NO _x	-	75.00
	со	-	23.00
	voc	-	21.00
	PM ₁₀	-	18.24
	SO ₂	-	5.14
	HAP	-	13.15
	N ₂ O	-	5.5
	SO₃	-	0.8
	25,000# Boiler Annual Cap	VOC PM₁0 SO₂ HAP N₂O	VOC 0.09

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

-				
		СО	1.20	-
		VOC	0.17	-
		PM ₁₀	0.30	-
		SO _x	0.04	-
		HAP	0.11	-
		N ₂ O	0.13	
T024-B3	50,000# Boiler	NO _x	12.00	-
	Diesel	СО	3.00	-
		VOC	0.12	-
		PM ₁₀	1.20	-
		SO _x	4.26	-
		НАР	0.04	-
		N ₂ O	0.16	-
		SO ₃	0.06	-
T024-B3	50,000# Boiler Annual Cap Natural Gas & Diesel	NO _x	-	75.00
		СО	-	23.00
		VOC	-	21.00
		PM ₁₀	-	18.24
		SO _x	-	5.14
		HAP	-	13.15
		N ₂ O	-	5.50
		SO ₃	-	0.80

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

-				
		СО	1.20	-
		VOC	0.17	-
		PM ₁₀	0.30	-
		SO _x	0.04	-
		НАР	0.11	-
		N ₂ O	0.13	
T024-B4	50,000# Boiler	NO _x	12.00	-
	Diesel	со	3.00	-
		VOC	0.12	-
		PM ₁₀	1.20	-
		SO _x	4.26	-
		НАР	0.04	-
		N ₂ O	0.16	-
		SO ₃	0.06	-
T024-B4	50,000# Boiler	NO _x	-	75.00
	Annual Cap Natural Gas & Diesel	СО	-	23.00
		VOC	-	21.00
		PM ₁₀	-	18.24
		SO _x	-	5.14
		HAP	-	13.15
		N ₂ O	-	5.50
		SO ₃	-	0.80
T024T1	Diesel Tank	VOC	0.67	21.00

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

75.00				
		со	2161.00	23.00
		VOC	21.60	21.00
		PM ₁₀	126.70	18.24
		SO _x	41.50	5.14
		НАР	336.90	13.15
		HCI	229.70	2.50
		HF	45.16	2.00
Y005	Tray 7	NO _x	223.70	75.00
		со	2161.00	23.00
		VOC	21.60	21.00
		PM ₁₀	126.70	18.24
		SO _x	41.50	5.14
		НАР	336.90	13.15
		HCI	229.70	2.50
		HF	45.16	2.00
Y006	Tray 1	NO _x	223.70	75.00
		со	2161.00	23.00
		VOC	21.60	21.00
		PM ₁₀	126.70	18.24
		SO _x	41.50	5.14
		НАР	336.90	13.15
		HCI	229.70	2.50
		HF	405.16	2.0

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

75.00				
		СО	2161.00	23.00
		VOC	21.60	21.00
		PM ₁₀	126.70	18.24
		SO _x	41.50	5.14
		НАР	336.90	13.15
		HCI	229.70	2.50
		HF	45.16	2.00
Y008	Tray 3	NO _x	223.70	75.00
		со	2161.00	23.00
		VOC	21.60	21.00
		PM ₁₀	126.70	18.24
		SO _x	41.50	5.14
		НАР	336.90	13.15
		HCI	229.70	2.50
		HF	45.16	2.00
Y009	Tray 4	NO _x	223.70	75.00
		со	2161.00	23.00
		VOC	21.60	21.00
		PM ₁₀	126.70	18.24
		SO _x	41.50	5.14
		НАР	336.90	13.15
		HCI	229.70	2.50
		HF	45.16	2.00

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

75.00				
		СО	2161.00	23.00
		VOC	21.60	21.00
		PM ₁₀	126.70	18.24
		SO _x	41.50	5.14
		НАР	336.90	13.15
		HCI	229.70	2.50
		HF	45.16	2.00
Y011	Tray 6	NO _x	223.70	75.00
		со	2161.00	23.00
		VOC	21.60	21.00
		PM ₁₀	126.70	18.24
		SO _x	41.50	5.14
		НАР	336.90	13.15
		HCI	229.70	2.50
		HF	45.16	2.00
Y012	Tray 8	NO _x	223.70	75.00
		СО	2161.00	23.00
		VOC	21.60	21.00
		PM ₁₀	126.70	18.24
		SO _x	41.50	5.14
		НАР	336.90	13.15
		HCI	229.70	2.50
		HF	45.16	2.00

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

75.00				
		СО	2161.00	23.00
		VOC	21.60	21.00
		PM ₁₀	126.70	18.24
		SO _x	41.50	5.14
		HAP	336.90	13.15
		HCI	229.70	2.50
		HF	45.16	2.00
Y014	Tray 10	NO _x	223.70	75.00
		СО	2161.00	23.00
		VOC	21.60	21.00
		PM ₁₀	126.70	18.24
		SO _x	41.50	5.14
		HAP	336.90	13.15
		HCI	229.70	2.50
		HF	45.16	2.00
Y015	Flashing Chamber	NO _x	223.70	75.00
		СО	2161.00	23.00
		VOC	21.60	21.00
		PM ₁₀	126.70	18.24
		SO _x	41.50	5.14
		HAP	336.90	13.15
		HCI	229.70	2.50
		HF	45.16	2.00
T028-P1	Hazardous Waste Treatment/Processing Facility	со	0.50	23.00
		VOC	2.00	21.00
		PM ₁₀	0.32	18.24

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

21.00				
Y025-CAP	Waste Storage Units Cap	VOC	31.20	21.00
		НАР	31.20	13.15
B010FUG	Waste Storage Unit	VOC	31.20	21.00
		НАР	31.20	13.15
B032FUG	Waste Storage Unit	VOC	31.20	21.00
		HAP	31.20	13.15
T027FUG	Waste Storage Unit	VOC	31.20	21.00
		НАР	31.20	13.15
W024FUG	Waste Storage Unit	VOC	31.20	21.00
		НАР	31.20	13.15
W025FUG	Waste Storage Unit	voc	31.20	21.00
		НАР	31.20	13.15
Y026-CAP	Stationary Engine Cap	NO _X	315.01	75.00
		СО	53.63	23.0
		VOC	13.68	21.00
		PM ₁₀	10.35	18.24
		SO _x	0.78	5.14
		HAP	2.76	13.15
Y003	Emergency Engines < 300 hp	NO _X	315.01	75.00
		СО	53.63	23.00
		VOC	13.68	21.00
		PM ₁₀	10.35	18.24
		SO _x	0.78	5.14
		HAP	2.76	13.15

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

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75.00				
		СО	53.63	23.00
		VOC	13.68	21.00
		PM ₁₀	10.35	18.24
		SO _x	0.78	5.14
		HAP	2.76	13.15
A005	Gas Pipeline - MSS	voc	889.00	21.00
FS-CAP	Firing Sites Cap	NO _x	50.10	75.00
		СО	716.00	23.00
		voc	131.00	21.00
		PM ₁₀	97.60	18.24
		SO _x	8.36	5.14
		НАР	76.80	13.15
		NH ₃	1.00	5.63
		HCI	24.00	2.50
		HCN	1.00	0.13
		HF	23.70	2.00
		N ₂ O	1.00	5.50
FS-X011	FS4	NO _x	50.10	75.00
		СО	716.00	23.00
		VOC	131.00	21.00
		PM ₁₀	97.60	18.24
		SO _x	8.36	5.14
		НАР	76.80	13.15
		NH ₃	1.00	5.63
		HCI	24.00	2.50
		HCN	1.00	0.13
		HF	23.70	2.00
		N ₂ O	1.00	5.50
FS-X015	FS10	NO _x	50.10	75.00
		СО	716.00	23.00

Emission Sources - Maximum Allowable Emission Rates

		VOC	121.00	21.00
		VOC	131.00	21.00
		PM ₁₀	97.60	18.24
		SO _x	8.36	5.14
		HAP	76.80	13.15
		NH ₃	1.00	5.63
		HCI	24.00	2.50
		HCN	1.00	0.13
		HF	23.70	2.00
		N ₂ O	1.00	5.50
FS-X022	FS16	NO _x	50.10	75.00
		СО	716.00	23.00
		VOC	131.00	21.00
		PM ₁₀	97.60	18.24
		SO _x	8.36	5.14
		НАР	76.80	13.15
		NH ₃	1.00	5.63
		HCI	24.00	2.50
		HCN	1.00	0.13
		HF	23.70	2.00
		N ₂ O	1.00	5.50

Emission Sources - Maximum Allowable Emission Rates

75.00				
		СО	716.00	23.00
		VOC	131.00	21.00
		PM ₁₀	97.60	18.24
		SO _x	8.36	5.14
		HAP	76.80	13.15
		NH ₃	1.00	5.63
		HCI	24.00	2.50
		HCN	1.00	0.13
		HF	23.70	2.00
		N ₂ O	1.00	5.50
FS-X026	FS22	NO _x	50.10	75.00
		СО	716.00	23.00
		VOC	131.00	21.00
		PM ₁₀	97.60	18.24
		SO _x	8.36	5.14
		НАР	76.80	13.15
		NH ₃	1.00	5.63
		HCI	24.00	2.50
		HCN	1.00	0.13
		HF	23.70	2.00
		N ₂ O	1.00	5.50

Emission Sources - Maximum Allowable Emission Rates

75.00				
		со	716.00	23.00
		VOC	131.00	21.00
		PM ₁₀	97.60	18.24
		SO _x	8.36	5.14
		НАР	76.80	13.15
		NH ₃	1.00	5.63
		HCI	24.00	2.50
		HCN	1.00	0.13
		HF	23.70	2.00
		N ₂ O	1.00	5.50
FS-X030	FS23A	NO _x	50.10	75.00
		СО	716.00	23.00
		VOC	131.00	21.00
		PM ₁₀	97.60	18.24
		SO _x	8.36	5.14
		НАР	76.80	13.15
		NH ₃	1.00	5.63
		HCI	24.00	2.50
		HCN	1.00	0.13
		HF	23.70	2.00
		N₂O	1.00	5.50

Emission Sources - Maximum Allowable Emission Rates

75.00				
		со	716.00	23.00
		VOC	131.00	21.00
		PM ₁₀	97.60	18.24
		SO _x	8.36	5.14
		НАР	76.80	13.15
		NH ₃	1.00	5.63
		НСІ	24.00	2.50
		HCN	1.00	0.13
		HF	23.70	2.00
		N₂O	1.00	5.50
FS-X031B	FS24B	NO _x	50.10	75.00
		СО	716.00	23.00
		VOC	131.00	21.00
		PM ₁₀	97.60	18.24
		SO _x	8.36	5.14
		НАР	76.80	13.15
		NH ₃	1.00	5.63
		нсі	24.00	2.50
		HCN	1.00	0.13
		HF	23.70	2.00
		N ₂ O	1.00	5.50

Emission Sources - Maximum Allowable Emission Rates

75.00				
		со	716.00	23.00
		VOC	131.00	21.00
		PM ₁₀	97.60	18.24
		SO _x	8.36	5.14
		НАР	76.80	13.15
		NH ₃	1.00	5.63
		HCI	24.00	2.50
		HCN	1.00	0.13
		HF	23.70	2.00
		N ₂ O	1.00	5.50
FS-E043B	11-038B	NO _x	50.10	75.00
		СО	716.00	23.00
		VOC	131.00	21.00
		PM ₁₀	97.60	18.24
		SO _x	8.36	5.14
		НАР	76.80	13.15
		NH ₃	1.00	5.63
		HCI	24.00	2.50
		HCN	1.00	0.13
		HF	23.70	2.00
		N₂O	1.00	5.50

Emission Sources - Maximum Allowable Emission Rates

2.70				
		CFC-12	100.00	2.70
		R-22	612.00	2.70
		R-23	100.00	2.70
		R-134A	263.00	2.70
		R-170	100.00	2.70
		R-401A	100.00	2.70
		R-404A	100.00	2.70
		R-407A	100.00	2.70
		R-410A	100.00	2.70
		R-500	100.00	2.70
		R-502	100.00	2.70
		R-503	100.00	2.70
		R-508b	100.00	2.70
Y020-CAP	Cooling Towers Cap	PM ₁₀	2.40	18.24
E002CT	11-014 CT	PM ₁₀	0.11	18.24
F022CT	11-055 CT	PM ₁₀	0.14	18.24
I014CT	12-019 CT	PM ₁₀	0.11	18.24
M004CT	12-036 CT	PM ₁₀	0.13	18.24
O003CT1	12-075 CT1	PM ₁₀	0.05	18.24
O003CT2	12-075 CT2	PM ₁₀	0.05	18.24
P029CT	12-094 CT	PM ₁₀	0.56	18.24
D026CT	11-005 CT	PM ₁₀	0.11	18.24
S009CT1	12-126 CT1	PM ₁₀	0.05	18.24
S009CT2	12-126 CT2	PM ₁₀	0.05	18.24
F026CT1	11-058 CT1	PM ₁₀	0.02	18.24
F026CT2	11-058 CT2	PM ₁₀	0.02	18.24

(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

- volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1 VOC - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5} PM_{10}

- sulfur oxides SO_x - ammonia NH_3

HCI hydrochloric acidhydrogen cyanidenitric acidsulfur trioxide - hydrochloric acid HCN

HNO₃ sulfur trioxidenitrous oxide SO₃ N_2O

- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Refrigerants include all the refrigerants listed in emission point Y002
- (6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: October 13, 2023