

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 144784 and PSDTX994M1

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)
B72SH1	Pyrolysis Furnace H1	CO	45.27	-
		CO (Decoking)	181.08	-
		NO _x	30.86	-
		SO ₂	0.72	-
		SO ₂ (Decoking)	65.90	-
		PM	3.83	-
		PM ₁₀	3.83	-
		PM _{2.5}	3.83	-
		VOC	2.77	-
		Ethylene	0.80	-
B72SH2	Pyrolysis Furnace H ₂	CO	45.27	-
		CO (Decoking)	181.08	-
		NO _x	30.86	-
		SO ₂	0.72	-
		SO ₂ (Decoking)	65.90	-
		PM	3.83	-
		PM ₁₀	3.83	-
		PM _{2.5}	3.83	-
		VOC	2.77	-
		Ethylene	0.80	-
B72SH3	Pyrolysis Furnace H3	CO	45.27	-
		CO (Decoking)	181.08	-
		NO _x	30.86	-
		SO ₂	0.72	-

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			lbs/hour	TPY (4)
		SO ₂ (Decoking)	65.90	-
		PM	3.83	-
		PM ₁₀	3.83	-
		PM _{2.5}	3.83	-
		VOC	2.77	-
		Ethylene	0.80	-
B72SH4	Pyrolysis Furnace H4	CO	45.27	-
		CO (Decoking)	181.08	-
		NO _x	30.86	-
		SO ₂	0.72	-
		SO ₂ (Decoking)	65.90	-
		PM	3.83	-
		PM ₁₀	3.83	-
		PM _{2.5}	3.83	-
		VOC	2.77	-
		Ethylene	0.80	-
B72SH5	Pyrolysis Furnace H5	CO	45.27	-
		CO (Decoking)	181.08	-
		NO _x	30.86	-
		SO ₂	0.72	-
		SO ₂ (Decoking)	65.90	-
		PM	3.83	-
		PM ₁₀	3.83	-
		PM _{2.5}	3.83	-
		VOC	2.77	-
		Ethylene	0.80	-
B72SH1, B72SH2, B72SH3, B72SH4, B72SH5	Furnace Source Group Cap	CO	-	158.65
		NO _x	-	469.26
		SO ₂	-	2.59

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			lbs/hour	TPY (4)
		PM	-	58.63
		PM ₁₀	-	58.63
		PM _{2.5}	-	58.63
		VOC	-	49.36
		Ethylene	-	6.93
B72CT1	CT-1 Cooling Tower	VOC	3.25	13.71
		Ethylene	2.05	4.51
		Propylene	3.25	11.03
		PM	4.02	5.87
		PM ₁₀	0.69	3.03
		PM _{2.5}	<0.01	0.03
B72FU1	B-7200 Process Area Fugitives (5)	VOC	11.45	49.99
		Ethylene	6.20	26.99
		Propylene	2.45	10.71
		Cl ₂	0.01	0.05
		HCl	0.08	0.35
B72GE01	Emergency Generator	CO	1.14	0.05
		NO _x	2.87	0.14
		SO ₂	0.35	0.02
		PM	0.37	0.02
		PM ₁₀	0.37	0.02
		PM _{2.5}	0.37	0.02
		VOC	0.42	0.02
B72SC02	B-7202 Degreasing	VOC	0.31	1.34
B72SH1, B72SH2, B72SH3, B72SH4, B72SH5, B72CT1, B72FU1, B72GE01, B72SC02	Compliance Cap (includes Furnaces, Cooling Tower, Fugitives, Emergency Degreaser and Degreasing)	CO	227.49	150.17
		NO _x	157.15	467.80
		SO ₂	95.17	7.64
		PM	22.05	73.62
		PM ₁₀	22.05	73.62

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			lbs/hour	TPY (4)
		PM2.5	22.05	73.62
		VOC	17.92	73.53
		Cl ₂	0.01	0.05
		HCl	0.08	0.35
B72SH1	Furnace Purge (MSS), H-1	VOC	0.01	<0.01
B72SH2	Furnace Purge (MSS), H-2	VOC	0.01	<0.01
B72SH3	Furnace Purge (MSS), H-3	VOC	0.01	<0.01
B72SH4	Furnace Purge (MSS), H-4	VOC	0.01	<0.01
B72SH5	Furnace Purge (MSS), H-5	VOC	0.01	<0.01
B72FU1 B72GE01	FS-1 Large Elevated Flare (Routine Emissions)	CO	207.59	174.59
		NO _x	40.74	34.26
		SO ₂	0.60	0.25
		VOC	202.29	12.02
		Ethylene	95.00	0.88
		Propylene	75.00	2.19
	FS-1 Large Elevated Flare (MSS Emissions)	CO	2602.53	100.10
		NO _x	360.30	15.90
		SO ₂	6.40	0.20
		VOC	2168.77	76.93
		Ethylene	1820.00	174.59
		Propylene	1284.28	34.26
B72SC02	FS-2 Small Elevated Flare (operating as steam assisted) (6)	CO	5.58	24.42
		NO _x	1.08	4.73
		SO ₂	0.09	0.08
		VOC	0.21	0.88
	FS-2 Small Elevated Flare (operating as unassisted)	CO	8.73	38.25
		NO _x	1.02	4.46
		SO ₂	0.09	0.08
		VOC	0.21	0.88

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
B72MEFU1	Attachment A	VOC	2.06	0.23
	Attachments B	VOC	3.65	0.11
	Equipment Opening (MSS) Attachments C	VOC	271.11	0.27

(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

CO carbon monoxide

NO_x total oxides of nitrogen

SO₂ sulfur dioxide

PM total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented

Cl₂ chlorine

HCl hydrogen chloride

(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) EPN FS-2 Small Elevated Flare is authorized to operate as steam-assisted for up to 180 days after issuance of permit amendment.

Date: April 16, 2019