

Emission Sources - Maximum Allowable Emission Rates

Permit Number 35215

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)
Thermal Oxidizer No. 1 (Front-end) (6)				
EP11	Thermal Oxidizer No. 1A Oxidation Ovens (5)	NO _x	1.00	3.96
		CO	0.60	2.38
		VOC	0.69	2.74
		PM ₁₀	0.45	1.78
		PM _{2.5}	0.45	1.78
		SO ₂	0.01	0.04
		HCN	2.00	7.92
EP21	Thermal Oxidizer No. 1B Oxidation Ovens (5)	NO _x	1.00	3.96
		CO	0.60	2.38
		VOC	0.69	2.74
		PM ₁₀	0.45	1.78
		PM _{2.5}	0.45	1.78
		SO ₂	0.01	0.04
		HCN	2.00	7.92

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EP31	Thermal Oxidizer No. 1C Oxidation Ovens (5)	NO _x	1.00	3.96
		CO	0.60	2.38
		VOC	0.69	2.74
		PM ₁₀	0.45	1.78
		PM _{2.5}	0.45	1.78
		SO ₂	0.01	0.04
		HCN	2.00	7.92
EP41	Thermal Oxidizer No. 1D Oxidation Ovens (5)	NO _x	1.00	3.96
		CO	0.60	2.38
		VOC	0.69	2.74
		PM ₁₀	0.45	1.78
		PM _{2.5}	0.45	1.78
		SO ₂	0.01	0.04
		HCN	2.0	7.92
EP51	Thermal Oxidizer No. 1E Oxidation Ovens (5)	NO _x	1.00	3.96
		CO	0.60	2.38
		VOC	0.69	2.74
		PM ₁₀	0.45	1.78
		PM _{2.5}	0.45	1.78
		SO ₂	0.01	0.04
		HCN	2.0	7.92
Thermal Oxidizer No. 2 (Back-end) (6)				
EP12	Thermal Oxidizer No. 2A Low and High Temperature Furnaces	NO _x	2.50	9.90
		CO	0.30	1.19

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		VOC	0.14	0.57
		PM ₁₀ /PM _{2.5}	0.72	2.86
		HCN	0.12	0.48
EP22	Thermal Oxidizer No. 2B Low and High Temperature Furnaces	NO _x	2.50	9.90
		CO	0.30	1.19
		VOC	0.14	0.57
		PM ₁₀	0.72	2.86
		PM _{2.5}	0.72	2.86
		HCN	0.12	0.48
EP32	Thermal Oxidizer No. 2C Low and High Temperature Furnaces	NO _x	2.50	9.90
		CO	0.30	1.19
		VOC	0.14	0.57
		PM ₁₀ /PM _{2.5}	0.72	2.86
		HCN	0.12	0.48
EP42	Thermal Oxidizer No. 2D Low and High Temperature Furnaces	NO _x	2.50	9.90
		CO	0.30	1.19
		VOC	0.14	0.57
		PM ₁₀ /PM _{2.5}	0.72	2.86
		HCN	0.12	0.48
EP52	Thermal Oxidizer No. 2E Low and High Temperature Furnaces	NO _x	2.50	9.90
		CO	0.30	1.19
		VOC	0.14	0.57
		PM ₁₀ /PM _{2.5}	0.72	2.86
		HCN	0.12	0.48

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- (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 reported as methane; for the purposes of this permit.
 - NO_x - total oxides of nitrogen
 - SO₂ - sulfur dioxide
 - PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
 - PM_{2.5} - total particulate matter equal to or less than 2.5 microns in diameter
 - CO - carbon monoxide
 - HCN - hydrogen cyanide
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) The emission rates for EP11, EP21, EP31, EP41, and EP51 are based on a maximum natural gas firing rate of 2.0 MMBtu/hr.
- (6) Only one continuous carbonization line (consisting of one front-end thermal oxidizer and one back-end thermal oxidizer) and one additional back-end thermal oxidizer shall be operated simultaneously. EPNs authorized to operate under this amendment include the following: front-end thermal oxidizers EPNs: EP11, EP21, EP31 and any one of the back-end thermal oxidizers. **(12/12)**

Date: December 4, 2012