

Emission Sources - Maximum Allowable Emission Rates

Permit Number 38383

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 (5)	
			lbs/hour	TPY (4)
N1	Fluoride Ion Cleaning	Hydrogen	1.95	7.14
		Hydrogen Fluoride	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
N2	Fluoride Ion Cleaning	Hydrogen	1.56	5.50
		Hydrogen Fluoride	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
L	Glo-Bar Furnace (FR-01)	Hydrogen	0.52	1.80
		PM	0.01	0.04
		PM ₁₀	0.01	0.04
		PM _{2.5}	0.01	0.04
M	Glo-Bar Furnace (FR-20)	Hydrogen	0.52	1.81
		PM	0.01	0.04
		PM ₁₀	0.01	0.04
		PM _{2.5}	0.01	0.04
Q	Glo-Bar Furnace (FR-03)	Hydrogen	0.52	1.83
		PM	0.01	0.04
		PM ₁₀	0.01	0.04
		PM _{2.5}	0.01	0.04

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R	Glo-Bar Furnace (FR-15)	Hydrogen	0.52	1.85
		PM	0.01	0.04
		PM ₁₀	0.01	0.04
		PM _{2.5}	0.01	0.04
E	Vacuum Furnace (FR-08)	VOC	0.05	0.02
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
F	Vacuum Furnace (FR-10)	VOC	0.05	0.02
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
G	Vacuum Furnace (FR-09)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
H	Vacuum Furnace (FR-05)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
I	Vacuum Furnace (FR-02)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
J	Vacuum Furnace (FR-19)	VOC	0.05	0.02
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01

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V	Vacuum Furnace (FR-44) (Horizontal Vent)	VOC	0.05	0.02
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
X	Vacuum Furnace (FR-30) (Horizontal Vent)	VOC	0.05	0.02
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
Z	Vacuum Furnace (FR-45) (Horizontal Vent)	VOC	0.05	0.02
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
C	Vapor Phase Aluminide Furnace	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
B	Vapor Phase Aluminide Furnace	Hydrogen	1.04	4.15
		PM	0.01	0.05
		PM ₁₀	0.01	0.05
		PM _{2.5}	0.01	0.05
K	Vapor Phase Aluminide	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
D	Vapor Phase Aluminide	Hydrogen	1.04	4.15
		PM	0.01	0.05
		PM ₁₀	0.01	0.05
		PM _{2.5}	0.01	0.05

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O	Sodium Hydroxide Clean, Acid Strip, and Platinum Plating	Acids	0.06	0.06
		Bases	<0.01	0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		Platinum	<0.01	<0.01
W	Powder Mixing	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
T	Abrasive Blasting	PM	0.03	0.14
		PM ₁₀	0.03	0.14
		PM _{2.5}	0.03	0.14
U and Y	Plasma Spray	Hydrogen	0.21	0.10
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
AA1	CVD 2025	HCl	0.10	0.19
AA2	CVD 2029	HCl	0.10	0.19
AA3	Platinum Plating and HCl Storage	HCl	<0.01	0.01
		PM	<0.01	0.01
		PM ₁₀	<0.01	0.01
		PM _{2.5}	<0.01	0.01
BB	Platinum Plating	PM	0.01	0.04
		PM ₁₀	0.01	0.04
		PM _{2.5}	0.01	0.04
		Ammonium Hydroxide	0.01	0.04
Site-wide	All Sources	Individual HAP	--	<10.0
		Total HAPs	--	<25.0

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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
PM	- total particulate matter, suspended in the atmosphere, including PM ₁₀ and PM _{2.5} , as represented
PM ₁₀	- 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
Bases	- sodium hydroxide
Acids	- phosphoric acid, nitric acid, acetic acid, and hydrochloric acid
HAP	- hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) The allowable emission rates include planned startup and shutdown.

Date: December 20, 2023