Emission Sources - Maximum Allowable Emission Rates

Permit Number 156656

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 (6)	
			lbs/hour	TPY (4)
FUG1	Grinding and Polishing Fugitives (5)	PM	0.29	1.02
		PM_{10}	0.29	1.02
		$PM_{2.5}$	0.29	1.02
S-1	Scrubber Stack 1 (Barrel and Continuous Plating [Chromium and Nickel], HCl Pickle Tanks, Chrome Stripping Tank, Nickel Stripping Tank)	PM	6.56E-04	2.87E-03
		PM_{10}	6.56E-04	2.87E-03
		$PM_{2.5}$	6.56E-04	2.87E-03
		VOC	0.03	0.05
		Chromium Compounds	1.85E-05	8.09E-05
		Nickel Compounds	6.17E-04	2.70E-03
		HCl	8.20E-03	0.04
S-2	Scrubber Stack 2 (Dallas Plating [Chromium and Nickel], HCl Storage Tank, HCl Pickle Tanks)	PM	2.94E-04	1.29E-03
		PM_{10}	2.94E-04	1.29E-03
		$PM_{2.5}$	2.94E-04	1.29E-03
		Chromium Compounds	1.39E-05	6.07E-05
		Nickel Compounds	2.65E-04	1.16E-03
		HCl	0.23	8.94E-03
S-3	Scrubber Stack 3 (Black Oxide Tank)	VOC	0.21	0.22
FUG2	Plating Process Fugitives (Chromium and Nickel Plating, HCl Pickle Tanks, Quench Oil Process, Chrome Stripping Tank, Nickel Stripping Tank, Black Oxide Tank, Vibratory Polishing Process) (5)	PM	1.94E-04	8.49E-04
		PM_{10}	1.94E-04	8.49E-04
		$PM_{2.5}$	1.94E-04	8.49E-04
		VOC	1.18	1.51
		Chromium Compounds	6.60E-06	2.89E-05
		Nickel Compounds	1.80E-04	7.88E-04
		HCl	1.74E-03	7.63E-03

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HTBF-1-ST1	Endo Gas Generator – S2153 Stack 1	CO	0.46	2.00
		NO_x	0.01	0.06
		PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
		SO_2	<0.01	<0.01
		VOC	<0.01	<0.01
HTBF-1-ST2	Endo Gas Generator – S2153 Stack 2	CO	0.46	2.00
		NO_x	0.01	0.06
		PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
		SO_2	<0.01	<0.01
		VOC	<0.01	<0.01
HTBF-2-ST1	Endo Gas Generator – S2545 Stack 1	CO	0.46	2.00
		NO_x	0.01	0.06
		PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
		SO_2	<0.01	<0.01
		VOC	<0.01	<0.01
HTBF-2-ST2	Endo Gas Generator – S2545 Stack 2	CO	0.46	2.00
		NO_x	0.01	0.06
		PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
		SO_2	<0.01	<0.01
		VOC	<0.01	<0.01
HTBF-3-ST1	Beavermatic with Box Quench and Box	CO	0.07	0.30

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		NO_x	0.08	0.35
		PM	<0.01	0.03
		PM_{10}	<0.01	0.03
		$PM_{2.5}$	<0.01	0.03
		SO_2	<0.01	<0.01
		VOC	<0.01	0.02
HTBF-3-ST2	Beavermatic with Box Quench and Box Wash – S0298 Stack 2	CO	0.07	0.30
		NO_x	0.08	0.35
		PM	<0.01	0.03
		PM_{10}	<0.01	0.03
		$PM_{2.5}$	<0.01	0.03
		SO_2	<0.01	<0.01
		VOC	<0.01	0.02
HTBF-4-ST1	Continuous Harden and Temper Furnace - C1 and Endo Gas Generator – C1 Stack 1	CO	2.34	10.24
		NO_x	0.32	1.42
		PM	0.02	0.11
		PM_{10}	0.02	0.11
		$PM_{2.5}$	0.02	0.11
		SO_2	<0.01	<0.01
		VOC	0.02	0.08
HTBF-4-ST2	Continuous Harden and Temper Furnace - C1 and Endo Gas Generator – C1 Stack 2	CO	2.34	10.24
		NO_x	0.32	1.42
		PM	0.02	0.11
		PM_{10}	0.02	0.11
		$PM_{2.5}$	0.02	0.11
		SO_2	<0.01	<0.01
		VOC	0.02	0.08
HTBF-5-ST1	Continuous Harden and Temper Furnace - C2 and Endo Gas Generator – C2 Stack	CO	2.34	10.24
		NO_x	0.32	1.42

Emission Sources - Maximum Allowable Emission Rates

		PM	0.02	0.11
		PM_{10}	0.02	0.11
		$PM_{2.5}$	0.02	0.11
		SO_2	<0.01	<0.01
		VOC	0.02	0.08
HTBF-5-ST2	Continuous Harden and Temper Furnace - C2 and Endo Gas Generator – C2 Stack 2	CO	2.34	10.24
		NO_x	0.32	1.42
		PM	0.02	0.11
		PM_{10}	0.02	0.11
		$PM_{2.5}$	0.02	0.11
		SO_2	<0.01	<0.01
		VOC	0.02	0.08
BOX-4-ST1	Box 4 (internal quench) – S2148 Stack 1	CO	0.05	0.20
		NO_x	0.05	0.24
		PM	<0.01	0.02
		PM_{10}	<0.01	0.02
		$PM_{2.5}$	<0.01	0.02
		SO_2	<0.01	<0.01
		VOC	<0.01	0.01
BOX-4-ST2	Box 4 (internal quench) – S2148 Stack 2	CO	0.05	0.20
		NO_x	0.05	0.24
		PM	<0.01	0.02
		PM_{10}	<0.01	0.02
		$PM_{2.5}$	<0.01	0.02
		SO_2	<0.01	<0.01
		VOC	<0.01	0.01
BOX-5-ST1	Box 5 (internal quench) – S2147 Stack 1	CO	0.05	0.20
		NO_x	0.05	0.24
		PM	<0.01	0.02

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		PM_{10}	<0.01	0.02
		$PM_{2.5}$	<0.01	0.02
		SO_2	<0.01	<0.01
		VOC	<0.01	0.01
BOX-5-ST2	Box 5 (internal quench) – S2147 Stack 2	CO	0.05	0.20
		NO_x	0.05	0.24
		PM	<0.01	0.02
		PM_{10}	<0.01	0.02
		$PM_{2.5}$	<0.01	0.02
		SO_2	<0.01	<0.01
		VOC	<0.01	0.01
BLR-1	Boiler 1 Stack	CO	0.34	1.51
		NO_x	0.41	1.80
		PM	0.03	0.14
		PM_{10}	0.03	0.14
		$PM_{2.5}$	0.03	0.14
		SO_2	<0.01	0.01
		VOC	0.02	0.10
BLR-2	Boiler 2 Stack	CO	0.28	1.21
		NO_x	0.33	1.44
		PM	0.02	0.11
		PM_{10}	0.02	0.11
		$PM_{2.5}$	0.02	0.11
		SO_2	<0.01	0.01
		VOC	0.02	0.08
BLR-3	Boiler 3 Stack	CO	0.21	0.01
		NO_x	0.25	0.01
		PM	0.02	<0.01
		PM_{10}	0.02	<0.01

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		$PM_{2.5}$	0.02	<0.01
		SO_2	<0.01	<0.01
		VOC	0.01	<0.01
BLR-4	Boiler 4 Stack	CO	0.37	1.62
		NO_x	0.44	1.93
		PM	0.03	0.15
		PM_{10}	0.03	0.15
		$PM_{2.5}$	0.03	0.15
		SO_2	<0.01	0.01
		VOC	0.02	0.11

(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
SO_2 - sulfur dioxide
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
CO - carbon monoxide
HCl - hydrochloric acid
(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) Planned startup and shutdown emissions are included. Maintenance activities are not authorized by this permit.

Date: September 19, 2019