

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 52505

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 (10)	
			lbs/hour	TPY (4)
001	Building A Chrome Stack (6) (Chrome Tanks T1, T2, T3, and T4)	PM	0.00001	0.00005
		PM <sub>10</sub>	0.00001	0.00005
		PM <sub>2.5</sub>	0.00001	0.00005
		Cr	6.0E-06	0.00002
002	Building B Chrome Stack (6) (Chrome Tanks T5 and T6)	PM	0.00002	0.00009
		PM <sub>10</sub>	0.00002	0.00009
		PM <sub>2.5</sub>	0.00002	0.00009
		Cr	0.00001	0.00004
003	Building C Chrome Stack (6) (Chrome Tanks T7, T8, T9, and T10)	PM	0.00005	0.00024
		PM <sub>10</sub>	0.00005	0.00024
		PM <sub>2.5</sub>	0.00005	0.00024
		Cr	0.000026	0.00011
004	Heat Treat Furnace Stack FIN: OV-1	PM	0.001	0.005
		PM <sub>10</sub>	0.001	0.005
		PM <sub>2.5</sub>	0.001	0.005
		NO <sub>x</sub>	0.015	0.06
		CO	0.012	0.05
		SO <sub>2</sub>	<0.0001	0.0004
		VOC	0.0008	0.004

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005	Heat Treat Furnace Stack FIN: OV-2	PM	0.0009	0.004
		PM <sub>10</sub>	0.0009	0.004
		PM <sub>2.5</sub>	0.0009	0.004
		NO <sub>x</sub>	0.011	0.05
		CO	0.009	0.04
		SO <sub>2</sub>	<0.0001	0.0003
		VOC	0.0006	0.003
006	Large Boiler Stack	PM	0.062	0.273
		PM <sub>10</sub>	0.062	0.273
		PM <sub>2.5</sub>	0.062	0.273
		NO <sub>x</sub>	0.821	3.59
		CO	0.689	3.02
		SO <sub>2</sub>	0.005	0.022
		VOC	0.045	0.198
007	Small Boiler Stack	PM	0.016	0.068
		PM <sub>10</sub>	0.016	0.068
		PM <sub>2.5</sub>	0.016	0.068
		NO <sub>x</sub>	0.21	0.90
		CO	0.17	0.76
		SO <sub>2</sub>	0.001	0.005
		VOC	0.011	0.05

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008	Water Evaporator EV-1 Stack	PM	<0.001	0.003
		PM <sub>10</sub>	<0.001	0.003
		PM <sub>2.5</sub>	<0.001	0.003
		NO <sub>x</sub>	0.009	0.04
		CO	0.008	0.034
		SO <sub>2</sub>	<0.0001	<0.001
		VOC	<0.001	0.002
PSBFUG1	Building Fugitives -Polk Street FINs: Chrome Tanks, Heat Treat Ovens OV-1 and OV-2, Large Boiler, Small Boiler, Evaporator, and Welding (8 & 9)	PM	0.13	0.37
		PM <sub>10</sub>	0.13	0.37
		PM <sub>2.5</sub>	0.13	0.37
		VOC	0.09	0.39
		Cr	0.019	0.078
CL1	Acid Strip Tank Scrubber Stack (3 Hydrochloric Acid Tanks)	HCl	<0.0001	0.0001
CL2	Abrasive Blast Filter Stack	PM	<0.001	<0.001
		PM <sub>10</sub>	<0.001	<0.001
		PM <sub>2.5</sub>	<0.001	<0.001
CL3	Clay Street Boiler Stack	PM	0.004	0.02
		PM <sub>10</sub>	0.004	0.02
		PM <sub>2.5</sub>	0.004	0.02
		NO <sub>x</sub>	0.05	0.21
		CO	0.04	0.18
		SO <sub>2</sub>	<0.001	0.001
		VOC	0.003	0.01

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CL4	Thermal Spray Booth Stack (7) (HVOF Gun)	PM	<0.0061	<0.031
		PM <sub>10</sub>	<0.0061	<0.031
		PM <sub>2.5</sub>	<0.0061	<0.031
		NO <sub>x</sub>	<0.06	<0.26
		CO	0.015	<0.07
		VOC	<0.005	<0.01
CL5	Thermal Spray Booth Stack (7) (HVOF Gun)	PM	<0.0061	<0.031
		PM <sub>10</sub>	<0.0061	<0.031
		PM <sub>2.5</sub>	<0.0061	<0.031
		NO <sub>x</sub>	<0.06	<0.26
		CO	0.015	<0.07
		VOC	<0.005	<0.01
CSB-FUG1	Building Fugitives-Clay Street FINs: Acid Strip Tanks, Boiler, and Kerosene Piping (5)	VOC	0.06	0.27
		HCl	<0.001	0.003
Permit by rule (PBR) sources incorporated by reference. Sources remain authorized by the PBR(s) as listed below:				
106.320- Miscellaneous Metallic Treatment				
010	Electric Curing Oven (5)	VOC	<0.0001	<0.0001
106.375- Aqueous Solutions for Electrolytic and Electroless Processes				
PSBFUG2	NaOH Tanks, Ni Process Tanks, H <sub>2</sub> SO <sub>4</sub> Etching Tanks, HCl Pickling Tanks, Passivation Tank, Phosphate Coating Tanks, Electrocleaning Tank (5)	NaOH	0.001	0.001
		Ni	0.16	0.69
		HNO <sub>3</sub>	0.001	0.001
		H <sub>2</sub> SO <sub>4</sub>	0.001	0.001
		HCl	0.007	0.03
		H <sub>2</sub> PO <sub>4</sub>	0.001	0.001

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		Mn	0.004	0.007
106.265-Hand Held and Manually Operated Machines				
CSBFUG3	Grinding Booth (5)	PM	0.00314	0.00795
		PM <sub>10</sub>	0.00314	0.00795
		PM <sub>2.5</sub>	0.00314	0.00795
106.265- Hand Held and Manually Operated Machines				
PSBFUG2	Grinding/Polishing/Machining Operations (5)	PM	0.15	0.28
		PM <sub>10</sub>	0.15	0.28
		PM <sub>2.5</sub>	0.15	0.28
		Cr	0.08	0.14
		Ni	0.006	0.01
106.371-Cooling water Units				
CT-FUG	Cooling Tower (5)	PM	0.15	0.70
		PM <sub>10</sub>	0.15	0.70
		PM <sub>2.5</sub>	0.15	0.70
106.472- Organic and Inorganic -Liquid Loading and Unloading				
SASTK	Sulfuric Acid Storage Tank (5)	H <sub>2</sub> SO <sub>4</sub>	<0.001	<0.001
106.474-Hydrochloric Acid Storage				
HASTK	Hydrochloric Acid Storage Tank (5)	HCl	<0.001	<0.001
106.532-Water and wastewater Treatment				
WWT-FUG	Waste Water Treatment (5)	PM	<0.001	<0.004
		PM <sub>10</sub>	<0.001	<0.004
		PM <sub>2.5</sub>	<0.001	<0.004

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

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- (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 as defined in 30 TAC § 115.10
  - NO<sub>x</sub> - total oxides of nitrogen
  - SO<sub>2</sub> - sulfur dioxide
  - PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
  - PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
  - PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
  - CO - carbon monoxide
  - NaOH - sodium hydroxide
  - HCl - hydrochloric acid
  - H<sub>2</sub>SO<sub>4</sub> - sulfuric acid
  - HNO<sub>3</sub> - nitric acid
  - H<sub>2</sub>PO<sub>4</sub> - phosphoric acid
  - Cr - chromium
  - Mn - manganese
  - Ni - nickel
- (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) Cr included in the PM, PM<sub>10</sub>, and PM<sub>2.5</sub>.
- (7) Trace quantities of tungsten carbide, chromium, cobalt, and lead included in the particulate matter.
- (8) Trace quantities of chromium, cobalt, manganese and nickel may be included in the particulate matter.
- (9) Chromium and nickel included in the particulate matter.
- (10) Planned startup and shutdown emissions are included. Maintenance activities are not authorized by this permit.

Date: October 11, 2013