

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 7320

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 (8)	
			lbs/hour	TPY (4)
NGCS-1	East Zinc Kettle Burner Stack No. 1	CO	0.26	0.98
		NO <sub>x</sub>	0.31	1.17
		PM	0.02	0.09
		PM <sub>10</sub>	0.02	0.09
		PM <sub>2.5</sub>	0.02	0.09
		SO <sub>2</sub>	<0.01	0.01
		VOC	0.02	0.06
NGCS-2	East Zinc Kettle Burner Stack No. 2	CO	0.26	0.98
		NO <sub>x</sub>	0.31	1.17
		PM	0.02	0.09
		PM <sub>10</sub>	0.02	0.09
		PM <sub>2.5</sub>	0.02	0.09
		SO <sub>2</sub>	<0.01	0.01
		VOC	0.02	0.06
BGHSE-1	East Zinc Kettle Baghouse Stack  (6)	PM	0.04	0.10
		PM <sub>10</sub>	0.04	0.10
		PM <sub>2.5</sub>	0.04	0.10
		NH <sub>4</sub> Cl	0.03	0.07
		ZnO	0.01	0.02
		ZnCl <sub>2</sub>	<0.01	<0.01
		Zn	<0.01	<0.01
		NH <sub>3</sub>	<0.01	<0.01

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BLDGFUG	HCl Acid Tanks, Caustic Clean Tanks, Preflux Tanks, Zinc Kettles, East Preflux Tank, and HCl Tank Stick Heater (5 and 6)	CO	0.06	0.22
		NO <sub>x</sub>	0.07	0.26
		PM	0.62	1.48
		PM <sub>10</sub>	0.62	1.48
		PM <sub>2.5</sub>	0.62	1.48
		SO <sub>2</sub>	<0.01	<0.01
		VOC	<0.01	0.01
		HCl	0.21	0.38
		NH <sub>4</sub> Cl	0.38	0.80
		ZnO	0.09	0.19
		ZnCl <sub>2</sub>	0.02	0.04
		Zn	0.03	0.06
		NH <sub>3</sub>	0.01	0.01
		NaOH	0.03	0.11
PTHT-1	Caustic Tank Heater Stack	CO	0.05	0.19
		NO <sub>x</sub>	0.06	0.23
		PM	<0.01	0.02
		PM <sub>10</sub>	<0.01	0.02
		PM <sub>2.5</sub>	<0.01	0.02
		SO <sub>2</sub>	<0.01	<0.01
		VOC	<0.01	0.01
ABFUG	Abrasive Blasting  (5)	PM	0.13	0.43
		PM <sub>10</sub>	0.02	0.05
		PM <sub>2.5</sub>	0.01	0.03

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ZMSFUG	Zinc Metal Spraying (5 and 7)	CO	<0.01	<0.01
		NO <sub>x</sub>	0.01	0.01
		PM	0.96	0.87
		PM <sub>10</sub>	0.96	0.87
		PM <sub>2.5</sub>	0.96	0.87
		SO <sub>2</sub>	<0.01	<0.01
		VOC	<0.01	<0.01
VGNHCL-1	East Hydrochloric Acid Storage Tank Vent	HCl	0.45	<0.005
NGCS-3	West Zinc Kettle Burner Stack	CO	0.74	2.77
		NO <sub>x</sub>	0.88	3.30
		PM	0.07	0.25
		PM <sub>10</sub>	0.07	0.25
		PM <sub>2.5</sub>	0.07	0.25
		SO <sub>2</sub>	0.01	0.02
		VOC	0.05	0.18
BGHSE-2	West Zinc Kettle Baghouse Stack (6)	PM	0.07	0.12
		PM <sub>10</sub>	0.07	0.12
		PM <sub>2.5</sub>	0.07	0.12
		NH <sub>4</sub> Cl	0.05	0.08
		ZnO	0.01	0.02
		ZnCl <sub>2</sub>	<0.01	<0.01
		Zn	<0.01	0.01
		NH <sub>3</sub>	<0.01	<0.01
PTHT-3	Caustic and Preflux Heater Stack	CO	0.16	0.62
		NO <sub>x</sub>	0.20	0.73
		PM	0.01	0.06
		PM <sub>10</sub>	0.01	0.06
		PM <sub>2.5</sub>	0.01	0.06

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		SO <sub>2</sub>	<0.01	<0.01
		VOC	0.01	0.04
VGNHCL-2	West Hydrochloric Acid Storage Tank Vent	HCl	0.45	<0.005

- (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<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
- HCl - hydrochloric acid
- NaOH - sodium hydroxide
- NH<sub>4</sub>Cl - ammonium chloride
- ZnCl<sub>2</sub> - zinc chloride
- ZnO - zinc oxide
- Zn - zinc
- NH<sub>3</sub> - ammonia
- (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) NH<sub>4</sub>Cl, ZnCl<sub>2</sub>, ZnO, Zn, and NH<sub>3</sub> are included in the PM, PM<sub>10</sub>, and PM<sub>2.5</sub>.
- (7) Particulate matter is estimated to be 99.9% zinc.
- (8) Planned startup and shutdown emissions are included. Maintenance activities are not authorized by this permit and will need separate authorization unless the activity can meet conditions of 30 TAC 116.119.

Date: November 12, 2014