Emission Sources - Maximum Allowable Emission Rates

Permit Number 20948

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.	Source Name (2)	Air Contaminant Name (3)	Emission R	ates (8)
(1)			lbs/hour	TPY (4)
F-8-A	42 Foot Zinc Kettle	РМ	<0.04	0.11
	Baghouse Stack (6)	PM ₁₀	<0.04	0.11
		PM _{2.5}	<0.02	0.06
		NH ₄ CI	0.024	<0.08
		ZnO	<0.01	<0.02
		ZnCl ₂	<0.002	<0.005
		Zn	<0.002	<0.01
		NH ₃	<0.001	0.001
X-2-A	42 Foot Zinc Kettle Burner Stack 1	РМ	0.018	0.04
		PM ₁₀	0.018	0.04
		PM _{2.5}	0.018	0.04
		NO _x	0.23	0.50
		со	0.19	0.42
		VOC	0.013	<0.03
		SO ₂	<0.002	0.003
X-3-A	42 Foot Zinc Kettle Burner Stack 2	РМ	0.018	0.04
		PM ₁₀	0.018	0.04
		PM _{2.5}	0.018	0.04
		NO _x	0.23	0.50
		СО	0.19	0.42
		VOC	0.013	<0.03
		SO ₂	<0.002	0.003

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FUGA	Building A Fugitives	PM	0.21	0.54
	(NaOH Tanks, HCl Tanks, Pre-flux	PM ₁₀	0.21	0.54
	Tank, Pre-flux Tank Heater, and 42 Foot	PM _{2.5}	0.16	0.42
	Zinc Kettle) (5 & 7)	NO _x	0.08	0.16
		со	0.06	0.14
		voc	0.004	0.01
		SO ₂	0.001	0.001
		NH ₄ CI	0.124	0.39
		ZnO	0.03	0.09
		Zn	0.009	0.03
		ZnCl ₂	0.007	0.02
		NH ₃	0.002	0.006
		NaOH	0.03	0.12
		HCI	0.057	0.01
		Zinc Ammonium Chloride	0.027	0.12
F-8-B	61 Foot Zinc Kettle	PM	0.07	0.16
	Baghouse Stack (6)	PM ₁₀	0.07	0.16
		PM _{2.5}	0.04	0.08
		ZnO	0.01	<0.03
		Zn	<0.004	<0.01
		ZnCl ₂	0.003	<0.01
		NH ₃	<0.001	0.002
		NH ₄ CI	0.05	0.11
X-2-B	61 Foot Zinc Kettle	PM	0.04	0.08
	Burner Stack 1	PM ₁₀	0.04	0.08
		PM _{2.5}	0.04	0.08
		NO _x	0.46	1.00
		СО	0.39	0.85
		VOC	0.03	0.06

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		SO ₂	<0.003	0.006
X-3-B	61 Foot Zinc Kettle	PM	0.04	0.08
	Burner Stack 2	PM ₁₀	0.04	0.08
		PM _{2.5}	0.04	0.08
		NO _x	0.46	1.00
		со	0.39	0.85
		VOC	0.03	0.06
		SO ₂	<0.003	0.006
FUGB	Building B Fugitives	PM	0.39	0.82
	(NaOH Tanks, HCI Tanks, Pre-flux	PM ₁₀	0.39	0.82
	Tank, Pre-flux Tank Heater, and 61 Foot	PM _{2.5}	0.30	0.63
	Zinc Kettle) (5 & 7))	NO _x	0.15	0.33
		со	0.13	0.28
		VOC	<0.01	<0.02
		SO ₂	<0.001	<0.002
		NH ₄ Cl	0.27	0.58
		ZnO	0.063	0.14
		Zn	0.02	0.04
		ZnCl ₂	0.016	0.034
		NH ₃	0.004	0.009
		NaOH	0.027	0.12
		HCI	0.106	0.018
		Zinc Ammonium Chloride	0.054	0.24

Emission Sources - Maximum Allowable Emission Rates

	Plant A Caustic Tank Heater Stack	PM	0.015	0.03
		PM ₁₀	0.015	0.03
		PM _{2.5}	0.015	0.03
		NO _x	0.20	0.44
		со	0.17	0.37
		VOC	0.01	0.02
		SO ₂	0.001	<0.003
X-5-B	Plant B Caustic Tank Heater Stack	PM	0.015	0.03
		PM ₁₀	0.015	0.03
		PM _{2.5}	0.015	0.03
		NO _x	0.20	0.44
		СО	0.17	0.37
		VOC	0.01	0.02
		SO ₂	0.001	<0.003

- (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

SO₂ -sulfur dioxide

PM -total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented

PM₁₀ -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

ZnO -zinc oxide ZnCl₂ -zinc chloride NH₃ -ammonia

NH₄Cl -ammonium chloride

Zn -zinc

HCI -hydrogen chloride NaOH -sodium hydroxide

- (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) NH₄Cl, NH₃, ZnO, ZnCl₂, and Zn included in the PM.
- (7) NH₄Cl, NH₃, ZnO, ZnCl₂, Zn, NaOH, HCl, and Zinc Ammonium chloride included in the PM.
- (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.

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Date:	May 11, 2015	
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