

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 25027

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. 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*	
			lb/hr	TPY
CR-1	Scrubber Stack	Cr VI	<0.00002	<0.00006
		HNO <sub>3</sub>	0.004	0.0018
		H <sub>3</sub> PO <sub>4</sub>	0.0183	0.0801
		H <sub>2</sub> SO <sub>4</sub>	<0.00001	<0.00001
CR-2	Scrubber Stack	Cr VI	0.00147	0.0064
CR-3	Scrubber Stack	Cr VI	0.00123	0.0054
		MgF <sub>2</sub>	<0.00015	<0.00065
		H <sub>3</sub> PO <sub>4</sub>	0.0049	0.0215
		NaOH	0.00456	0.020
CR-4	CR-4 Chrome Line (11) Tanks	CrVI	<0.000005	<0.000016
A/A-1	Scrubber Stack (5and 10)	HCl	0.00197	0.0402
		HF	0.00141	0.00618
		H <sub>3</sub> PO <sub>4</sub>	0.337	1.54
		NaF	<0.00008	<0.00034
		NaOH	0.0575	0.252
A/A-2	Scrubber Stack (5 and 10)	H <sub>2</sub> SO <sub>4</sub>	0.0021	0.00915
		HCl	<0.00001	<0.00005
		HNO <sub>3</sub>	<0.00009	<0.00004
		H <sub>3</sub> PO <sub>4</sub>	<0.00004	<0.00015
		NaOH	0.0046	0.0201
A/A-3	Scrubber Stack (5 and 10)	H <sub>2</sub> SO <sub>4</sub>	<0.00001	<0.00001
		HCl	<0.00004	0.00014

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates*	
			lb/hr	TPY
		NiCl <sub>2</sub>	<0.00001	<0.00001
		NiSO <sub>4</sub>	0.0488	0.0214
		HNO <sub>3</sub>	0.00073	0.00319
		Na <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>	<0.00001	<0.00001
		NaOH	0.00621	0.0272
		H <sub>2</sub> SO <sub>4</sub>	<0.00002	0.00005
A/A-4	Scrubber Stack (5 and 10)	HCl	0.00069	0.0031
		NiCl <sub>2</sub>	0.00036	0.00157
		NiSO <sub>4</sub>	0.00938	0.0411
		NaOH	0.00318	0.0139
		H <sub>2</sub> SO <sub>4</sub>	0.00002	0.00006
A/A-5	Scrubber Stack (5 and 10)	HCl	0.00136	0.00596
		NiCl <sub>2</sub>	0.00008	0.00036
		NiSO <sub>4</sub>	<0.00003	<0.0001
		HNO <sub>3</sub>	0.0135	0.059
		H <sub>3</sub> PO <sub>4</sub>	<0.00002	<0.00007
		NaOH	0.0109	0.0479
		ZnO	0.00012	0.00051
A/A-6	Scrubber Stack (5 and 10)	CH <sub>3</sub> COOH	<0.00001	<0.00003
		FeCl <sub>3</sub>	<0.00001	<0.00001
		HCl	<0.00004	<0.00017
		HF	0.00304	0.0133
		HNO <sub>3</sub>	0.00059	0.00259
		KHF <sub>2</sub>	<0.00001	<0.00001
		NaHSO <sub>4</sub>	0.0108	0.047
		NaF	0.00022	0.00098
		NaOH	0.0104	0.0456
		H <sub>2</sub> SO <sub>4</sub>	0.00117	0.00512
		Na <sub>3</sub> PO <sub>4</sub>	0.0115	0.0504
		ZnO	<0.00001	0.00002
A/A-7	Scrubber Stack (5 and 10)	HNO <sub>3</sub>	0.00044	0.00192
		NaOH	0.0135	0.0591

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates*	
			lb/hr	TPY
		NaNO <sub>3</sub>	<0.00001	<0.00001
		H <sub>2</sub> SO <sub>4</sub>	<0.00001	<0.00001
		Na <sub>3</sub> PO <sub>4</sub>	0.00154	0.00675
CN-1	Scrubber Stack (5 and 10)	CuCN	0.0011	0.00482
		K <sub>2</sub> CO <sub>3</sub>	<0.00001	<0.00001
		KCN	0.0014	0.00648
		KOH	<0.00001	<0.00001
		AgCN	0.00004	0.00018
		NaCN	0.00529	0.0223
		NaOH	<0.00003	0.00012
EG-1	Emergency Generator Exhaust (6 and 10)	PM <sub>10</sub>	0.418	0.013
		NO <sub>x</sub>	7.790	0.234
		SO <sub>2</sub>		0.456 0.014
		CO	0.836	0.025
		VOC	0.418	0.013
B-1A/B	Hot Water Boiler Stack (7 and 10)	PM <sub>10</sub>	0.08	0.42
		NO <sub>x</sub>	0.68	3.56
		SO <sub>2</sub>	0.004	0.02
		CO	0.14	0.73
		VOC	0.04	0.21
B-2A/B	Hot Water Boiler Stack (7 and 10)	PM <sub>10</sub>	0.08	0.42
		NO <sub>x</sub>	0.68	3.56
		SO <sub>2</sub>	0.004	0.02
		CO	0.14	0.73
		VOC	0.04	0.21
DC-1	Abrasive Cleaning Filter Exhaust (8 and 10)	PM <sub>10</sub>	0.73	0.32
FUG-1	Waste Water (4, 9, and 10) Treatment Equipment	SO <sub>2</sub>	0.0002	0.001

(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.

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(3) PM <sub>10</sub>	- particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
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
CO	- carbon monoxide
Cr VI	- hexavalent chrome
HNO <sub>3</sub>	- nitric acid
H <sub>3</sub> PO <sub>4</sub>	- phosphoric acid
H <sub>2</sub> SO <sub>4</sub>	- sulfuric acid
MgF <sub>2</sub>	- magnesium fluoride
NaOH	- sodium hydroxide
HCl	- hydrogen chloride
HF	- hydrogen fluoride
NaF	- sodium fluoride
NiCl <sub>2</sub>	- nickel chloride
NiSO <sub>4</sub>	- nickel sulfate
Na <sub>2</sub> Cr <sub>2</sub> CO <sub>7</sub>	- sodium dichromate
ZnO	- zinc oxide
CH <sub>3</sub> COOH	- acetic acid
FeCl <sub>3</sub>	- ferric chloride
HF	- hydrogen fluoride
KHF <sub>2</sub>	- potassium bifluoride
NaHSO <sub>4</sub>	- sodium bisulfate
Na <sub>3</sub> PO <sub>4</sub>	- trisodium phosphate
NaNO <sub>3</sub>	- sodium nitrate
CuCN	- cuprous cyanide
K <sub>2</sub> CO <sub>3</sub>	- potassium carbonate
KCN	- potassium cyanide
KOH	- potassium hydroxide
AgCN	- silver cyanide
NaCN	- sodium cyanide

(4) Fugitive emissions are an estimate only.

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- (5) Emissions are from operations conducted per the criteria of Standard Exemption No. 41.
- (6) Emissions are from emergency generator operating per the criteria of Permit by Rule 106.511 dated September 4, 2000.
- (7) Emissions are from direct-fired hot water boilers operated per the criteria of Permit by Rule 106.183 dated September 4, 2000.
- (8) Emissions are from the abrasive cleaning operation conducted per the criteria of Permit by Rule 106.452 dated September 4, 2000.
- (9) Emissions are from the wastewater treatment operation conducted per the criteria of Permit by Rule 106.452 dated September 4, 2000.
- (10) Emission sources operating per the criteria of a Standard Exemption or Permit by Rule are listed for clarification and information only and are not authorized by this permit.
- (11) The CR-4 tanks exhaust into the building.

Dated February 8, 2008