

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 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)	<u>Emission Rates *</u>	
			lb/hr	TPY
CR-1	Scrubber Stack	Cr VI	<0.00002	<0.00006
		HNO ₃	0.004	0.0018
		H ₃ PO ₄	0.0183	0.0801
		H ₂ SO ₄	<0.00001	<0.00001
CR-2	Scrubber Stack	Cr VI	0.00012	0.00053
CR-3	Scrubber Stack	Cr VI	0.00029	0.00124
		MgF ₂	<0.00015	<0.00065
		H ₃ PO ₄	0.0049	0.0215
		NaOH	0.00456	0.020
A/A-1	Scrubber Stack (5)	HCl	0.00197	0.0402
		HF	0.00141	0.00618
		H ₃ PO ₄	0.337	1.54
		NaF	<0.00008	<0.00034
		NaOH	0.0575	0.252
		H ₂ SO ₄	0.0021	0.00915
A/A-2	Scrubber Stack (5)	HCl	<0.00001	<0.00005
		HNO ₃	<0.00009	<0.00004
		H ₃ PO ₄	<0.00004	<0.00015
		NaOH	0.0046	0.0201
		H ₂ SO ₄	<0.00001	<0.00001
A/A-3	Scrubber Stack (5)	HCl	<0.00004	0.00014
		NiCl ₂	<0.00001	<0.00001
		NiSO ₄	0.0488	0.0214
		HNO ₃	0.00073	0.00319
		Na ₂ Cr ₂ O ₇	<0.00001	<0.00001
		NaOH	0.00621	0.0272
		H ₂ SO ₄	<0.00002	0.00005

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A/A-4	Scrubber Stack (5)	HCl	0.00069	0.0031
		NiCl ₂	0.00036	0.00157
		NiSO ₄	0.00938	0.0411
		NaOH	0.00318	0.0139
		H ₂ SO ₄	0.00002	0.00006

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			lb/hr	TPY
A/A-5	Scrubber Stack (5)	HCl	0.00136	0.00596
		NiCl ₂	0.00008	0.00036
		NiSO ₄	<0.00003	<0.0001
		HNO ₃	0.0135	0.059
		H ₃ PO ₄	<0.00002	<0.00007
		NaOH	0.0109	0.0479
		ZnO	0.00012	0.00051
A/A-6	Scrubber Stack (5)	CH ₃ COOH	<0.00001	<0.00003
		FeCl ₃	<0.00001	<0.00001
		HCl	<0.00004	<0.00017
		HF	0.00304	0.0133
		HNO ₃	0.00059	0.00259
		KHF ₂	<0.00001	<0.00001
		NaHSO ₄	0.0108	0.047
		NaF	0.00022	0.00098
		NaOH	0.0104	0.0456
		H ₂ SO ₄	0.00117	0.00512
		Na ₃ PO ₄	0.0115	0.0504
		ZnO	<0.00001	0.00002
A/A-7	Scrubber Stack (5)	HNO ₃	0.00044	0.00192
		NaOH	0.0135	0.0591
		NaNO ₃	<0.00001	<0.00001
		H ₂ SO ₄	<0.00001	<0.00001
		Na ₃ PO ₄	0.00154	0.00675
CN-1	Scrubber Stack (5)	CuCN	0.0011	0.00482
		K ₂ CO ₃	<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)	PM ₁₀	0.418	0.013
		NO _x	7.790	0.234
		SO ₂	0.456	0.014

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CO	0.836	0.025
VOC	0.418	0.013

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
B-1A/B	Hot Water Boiler Stack (7)	PM ₁₀	0.08	0.42
		NO _x	0.68	3.56
		SO ₂	0.004	0.02
		CO	0.14	0.73
		VOC	0.04	0.21
B-2A/B	Hot Water Boiler Stack (7)	PM ₁₀	0.08	0.42
		NO _x	0.68	3.56
		SO ₂	0.004	0.02
		CO	0.14	0.73
		VOC	0.04	0.21
DC-1	Abrasive Cleaning Filter Exhaust (8)	PM ₁₀	0.73	0.32
PB-1	Paint Booth Filter Exhaust (9)	VOC	5.99	<13.00
FUG-1	Waste Water (4 & 10) Treatment Equipment	SO ₂	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.
- (3)
 - PM₁₀ - particulate matter less than 10 microns
 - VOC - volatile organic compounds as defined in General Rule 101.1
 - NO_x - total oxides of nitrogen
 - SO₂ - sulfur dioxide
 - CO - carbon monoxide
 - Cr VI - chromium

HNO ₃	- nitric acid
H ₃ PO ₄	- phosphoric acid
H ₂ SO ₄	- sulfuric acid
MgF ₂	- magnesium fluoride
NaOH	- sodium hydroxide
HCl	- hydrogen chloride
HF	- hydrogen fluoride
NaF	- sodium fluoride
NiCl ₂	- nickel chloride
NiSO ₄	- nickel sulfate
Na ₂ Cr ₂ O ₇	- sodium dichromate
ZnO	- zinc oxide
CH ₃ COOH	- acetic acid
FeCl ₃	- ferric chloride
HF	- hydrogen fluoride
KHF ₂	- potassium bifluoride
NaHSO ₄	- sodium bisulfate
Na ₃ PO ₄	- trisodium phosphate
NaNO ₃	- sodium nitrate
CuCN	- cuprous cyanide
K ₂ CO ₃	- potassium carbonate
KCN	- potassium cyanide
KOH	- potassium hydroxide
AgCN	- silver cyanide
NaCN	- sodium cyanide

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Emissions are from operations registered under Standard Exemption No. 41.
- (6) Emissions are from emergency generator registered under Standard Exemption No. 5.
- (7) Emissions are from direct-fired hot water boilers registered under Standard Exemption No. 7.
- (8) Emissions are from the abrasive cleaning operation registered under Standard Exemption No. 102.
- (9) Emissions are from the spray paint booth registered under Standard Exemption No. 75.
- (10) Emissions are from the wastewater treatment operation registered under Standard Exemption No. 61.

* Emission rates are based on and the facilities are limited to a maximum rectifier capacity of 11,000 amperes on the chrome plating line and 300 amperes on the chromic anodizing line and by the following maximum operating schedule:

Hrs/day 24 Days/week 7 Weeks/year 52 or Hrs/year 8,736

Dated _____