

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 20365 and PSD-TX-785M4

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 lb/hr | Rates |
|--------------------------------|---|--|----------------------|-----------------------|
| <u>TPY</u> | | | | |
| 11 | No. 2 Bleach Plant ClO ₂ Scrubber Stack | ClO ₂ | 0.01 | 0.04 |
| 70 | No. 4 Bleach Plant Scrubber Stack | Cl ₂ ClO ₂ | 1.60 0.14 | 7.00 0.60 |
| 71 | No. 4 Bleach Plant Diffusion Washer Stack | Cl ₂ ClO ₂ | 1.60 0.14 | 7.00 0.60 |
| 72 | Monox-L Mixer Scrubber Vent | Cl ₂ | <0.01 | <0.01 |
| 73 | No. 5 Bleach Plant Diffusion Washer (E/O) Stack | VOC | 2.33 | 10.20 |
| 74 | No. 5 Bleach Plant Diffusion Washer (P) Stack | VOC | 0.23 | 1.00 |
| 75 | No. 5 Bleach Plant Scrubber Stack | VOC ClO ₂ Cl ₂ | 2.33 0.09 0.04 | 10.20 0.37 0.18 |
| 77 | No. IV Diffusion Washer Vent | VOC | 26.70 | 117.10 |
| 78 | No. V Diffusion Washer Vent | VOC | 37.40 | 164.00 |
| 19A | No. 1 Bulk Starch Unloading Vent | TSP PM ₁₀ | 0.01 0.01 | 0.04 0.04 |
| 19B | No. 2 Bulk Starch Unloading Vent | TSP PM ₁₀ | 0.01 0.01 | 0.04 0.04 |

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AIR CONTAMINANTS DATA

| Emission * Point No. (1) TPY | Source Name (2) | Air Contaminant Name (3) | Emission Rates lb/hr |
|---------------------------------------|--------------------|-----------------------------|----------------------------|
|---------------------------------------|--------------------|-----------------------------|----------------------------|

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

| Emission * | Source | Air Contaminant | Emission | Rates |
|---------------|--------------------------------------|--------------------------------|----------|---------|
| Point No. (1) | Name (2) | Name (3) | lb/hr | |
| <u>TPY</u> | | | | |
| 19C | No. 3 Bulk Starch Unloading Vent | TSP | 0.01 | 0.04 |
| | | PM ₁₀ | 0.01 | 0.04 |
| 5a | No. 2 Smelt Dissolve Tank Vent | TSP | 4.70 | 20.70 |
| | | PM ₁₀ | 4.70 | 20.70 |
| | | NO _x | 1.20 | 5.10 |
| | TRS | | 1.20 | 5.25 |
| | | VOC | 2.20 | 9.60 |
| | | SO ₂ | 5.00 | 21.90 |
| 5b | No. 3 Smelt Dissolve Tank Vent | TSP | 5.70 | 24.80 |
| | | PM ₁₀ | 5.70 | 24.80 |
| | | NO _x | 1.80 | 7.70 |
| | TRS | | 1.70 | 7.50 |
| | | VOC | 3.30 | 14.40 |
| | | SO ₂ | 7.10 | 31.00 |
| 2 | No. 2 Recovery Boiler Stack | TSP | 60.00 | 262.80 |
| | PM ₁₀ | 60.00 | 262.80 | |
| | | VOC | 8.00 | 35.00 |
| | | NO _x | 62.78 | 275.00 |
| | | SO ₂ | 308.40 | 1350.60 |
| | | CO | 251.37 | 1101.00 |
| | | H ₂ SO ₄ | 5.50 | 24.10 |
| | | TRS | 10.90 | 47.80 |
| | | Fluorides | 0.12 | 0.60 |
| 3 | No. 3 Recovery Boiler North Stack | TSP | 10.00 | 44.00 |
| | | PM ₁₀ | 10.00 | 44.00 |
| | | VOC | 5.20 | 22.80 |
| | | NO _x | 32.00 | 140.00 |
| | | SO ₂ | 27.80 | 121.70 |
| | | CO | 60.80 | 266.30 |
| | | H ₂ SO ₄ | 3.00 | 13.10 |
| | | TRS | 1.50 | 6.50 |

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AIR CONTAMINANTS DATA

| Emission * Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission lb/hr | Rates |
|--------------------------------|--------------------|-----------------------------|-------------------|-------|
| TPY | | Fluorides | 0.06 | 0.30 |

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

| Emission * | Source | Air Contaminant | Emission | Rates |
|---------------|--|--------------------------------|----------|---------|
| Point No. (1) | Name (2) | Name (3) | lb/hr | |
| <u>TPY</u> | | | | |
| 4 | No. 3 Recovery Boiler South Stack | TSP | 10.00 | 44.00 |
| | | PM ₁₀ | 10.00 | 44.00 |
| | | VOC | 5.20 | 22.80 |
| | | NO _x | 32.00 | 140.00 |
| | | SO ₂ | 27.80 | 121.70 |
| | | CO | 60.80 | 266.30 |
| | | H ₂ SO ₄ | 3.00 | 13.10 |
| | | TRS | 1.50 | 6.50 |
| 26 | No. 4 Recovery Boiler and Smelt Dissolve Tank Stack | Fluorides | 0.06 | 0.30 |
| | | TSP | 50.00 | 219.00 |
| | | PM ₁₀ | 50.00 | 219.00 |
| | | VOC | 17.90 | 78.40 |
| | | NO _x | 171.60 | 751.60 |
| | | SO ₂ | 119.40 | 522.90 |
| | | CO | 261.10 | 1143.80 |
| | | H ₂ SO ₄ | 12.80 | 56.00 |
| | | TRS | 6.30 | 27.80 |
| | | Fluorides | 0.30 | 1.30 |
| 60 | No. 1 NCG Incinerator* Stack* | TSP | 2.10 | 9.40 |
| | | PM ₁₀ | 2.10 | 9.40 |
| | | NO _x | 2.20 | 9.80 |
| | | SO ₂ | 19.10 | 83.60 |
| | | CO | 14.90 | 65.20 |
| | | VOC | 0.10 | 0.50 |
| | | TRS | 0.20 | 0.74 |
| | | | | |
| 61 | No. 2 NCG Incinerator Stack | TSP | 2.10 | 9.40 |
| | | PM ₁₀ | 2.10 | 9.40 |
| | | NO _x | 0.98 | 4.30 |
| | | SO ₂ | 5.48 | 24.00 |
| | | CO | 6.50 | 28.50 |
| | | VOC | 0.02 | 0.10 |
| | | TRS | 0.09 | 0.40 |

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

| Emission * Point No. (1) TPY | Source Name (2) | Air Contaminant Name (3) | Emission Rates lb/hr |
|---------------------------------------|--------------------|-----------------------------|----------------------------|
|---------------------------------------|--------------------|-----------------------------|----------------------------|

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

| Emission * Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission lb/hr | Rates |
|--------------------------------|--|-----------------------------|-------------------|---------|
| <u>TPY</u> | | | | |
| 1 | No. 1 Power Boiler Stack PM ₁₀ | TSP | 1.14 | 5.01 |
| | | 1.14 | 5.01 | |
| | | NO _x | 34.36 | 150.50 |
| | | SO ₂ | 0.14 | 0.60 |
| | | CO | 56.85 | 249.00 |
| | | VOC | 0.32 | 1.40 |
| 1 | No. 2 Power Boiler Stack PM ₁₀ | TSP | 55.00 | 240.90 |
| | | 55.00 | 240.90 | |
| | | VOC | 20.00 | 87.60 |
| | | NO _x | 268.00 | 1173.80 |
| | | SO ₂ | 2.30 | 10.10 |
| | | CO | 190.00 | 832.20 |
| 50 | No. 6 Power Boiler Stack PM ₁₀ | TSP | 72.00 | 315.36 |
| | | 72.00 | 315.36 | |
| | | NO _x | 190.40 | 834.00 |
| | | SO ₂ | 0.20 | 0.88 |
| | | CO | 360.00 | 1576.80 |
| | | VOC | 23.20 | 100.00 |
| 51 | No. 5 Power Boiler Stack PM ₁₀ | TSP | 1.63 | 7.14 |
| | | 1.63 | 7.14 | |
| | | NO _x | 16.94 | 74.20 |
| | | SO ₂ | 0.20 | 0.88 |
| | | CO | 30.50 | 133.59 |
| | | VOC | 3.07 | 13.45 |
| 13 | No. 4 Slaker Stack (4) | TSP | 1.37 | 6.00 |
| | | PM ₁₀ 1.37 | 6.00 | |
| 14 | No. 1 Slaker Stack (4) | TSP | 1.37 | 6.00 |
| | | PM ₁₀ 1.37 | 6.00 | |
| 16-A | No. 7 Slaker Stack (4) | TSP | 1.37 | 6.00 |

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AIR CONTAMINANTS DATA

| Emission * Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission lb/hr | Rates |
|--------------------------------|--------------------|-----------------------------|-------------------|-------|
| TPY | | PM ₁₀ 1.37 | 6.00 | |

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AIR CONTAMINANTS DATA

| Emission * Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission lb/hr | Rates |
|--------------------------------|---|-----------------------------|-------------------|--------|
| <u>TPY</u> | | | | |
| 43 | No. 1 Lime Kiln Stack | TSP | 10.00 | 43.80 |
| | | PM ₁₀ | 10.00 | 43.80 |
| | | VOC | 0.07 | 0.30 |
| | | NO _x | 15.87 | 69.50 |
| | | SO ₂ | 3.79 | 16.60 |
| | | CO | 19.34 | 84.70 |
| | | TRS | 0.53 | 2.30 |
| 9 | No. 3 Lime Kiln Stack | TSP | 7.23 | 31.10 |
| | | PM ₁₀ | 7.23 | 31.10 |
| | | VOC | 0.07 | 0.31 |
| | | NO _x | 20.64 | 90.40 |
| | | SO ₂ | 4.93 | 21.60 |
| | | CO | 25.11 | 110.00 |
| | | TRS | 0.71 | 3.10 |
| 7 | No. 4 Lime Kiln Stack | TSP | 6.92 | 30.29 |
| | | PM ₁₀ | 6.92 | 30.29 |
| | | VOC | 8.01 | 35.10 |
| | | NO _x | 29.77 | 130.40 |
| | | SO ₂ | 7.14 | 31.28 |
| | | CO | 36.23 | 158.70 |
| | | TRS | 0.95 | 4.16 |
| 48 | Fresh Lime Handling (4) System, including: | TSP | 0.07 | 0.30 |
| | | PM ₁₀ | 0.07 | 0.30 |
| 48a | Fresh Lime Silo No. 1 Vent Filter | | | |
| 48b | Fugitive Dust Pickup Filter | | | |
| 48c | Fresh Lime Silo No. 4 Vent Filter | | | |
| 90 | No. 5 Paper Machine Vents | TSP | 0.06 | 0.27 |
| | PM ₁₀ | 0.06 | 0.27 | |

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| AIR CONTAMINANTS DATA | | | | |
|--------------------------------|----------------------------------|-----------------------------|-------------------|-------|
| Emission * Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission lb/hr | Rates |
| <u>TPY</u> | | | | |
| | | NO _x | 3.19 | 13.97 |
| | | SO ₂ | 0.01 | 0.03 |
| | | CO | 0.49 | 2.16 |
| | | VOC | 0.02 | 0.08 |
| F100/101 | Effluent Treatment System (4) | VOC | - | 5.72 |

(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) TSP - particulate matter including PM₁₀.

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

TRS - total reduced sulfur

Cl₂ - chlorine

ClO₂ - chlorine dioxide

H₂SO₄ - sulfuric acid

(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

Based on a maximum 12-month calendar year average throughput 2,400 tons per day of bleached air dry pulp.

Hrs/day 24 Days/week 7

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| | | | AIR CONTAMINANTS DATA | |
|---------------|----------|-----------------|-----------------------|-------------|
| Emission * | Source | Air Contaminant | Emission | Rates |
| Point No. (1) | Name (2) | Name (3) | lb/hr | |
| TPY | | | | |
| | | Weeks/year | 52 | or Hrs/year |
| | | 8,760 | | |

** NCG Incinerator maximum allowable emission rates are effective after the Incinerator is relocated.