

Emission Sources - Maximum Allowable Emission Rates

Permit Number 20006

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 | |
|------------------------|-------------------------|--------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| Building A | | | | |
| A2 | Dryer Line 5 Stack | NO _x | 0.112 | 0.50 |
| | | CO | 0.05 | 0.22 |
| | | VOC | 0.003 | 0.014 |
| | | PM | 0.011 | 0.048 |
| | | SO ₂ | 0.0005 | 0.003 |
| A3-1 | Dryer Line 6 Vent 1 | NO _x | 0.112 | 0.50 |
| | | CO | 0.05 | 0.22 |
| | | VOC | 0.003 | 0.014 |
| | | PM | 0.011 | 0.048 |
| | | SO ₂ | 0.0005 | 0.003 |
| A3-2 | Dryer Line 6 Vent 2 | NO _x | 0.112 | 0.50 |
| | | CO | 0.05 | 0.22 |
| | | VOC | 0.003 | 0.014 |
| | | PM | 0.011 | 0.048 |
| | | SO ₂ | 0.001 | 0.003 |
| AB1 | Tunnel Kiln No. 4 Stack | NO _x | 3.00 | 13.14 |
| | | CO | 13.10 | 57.4 |
| | | VOC | 1.68 | 7.4 |
| | | PM | 4.25 | 18.6 |
| | | SO ₂ | 1.60 | 7.0 |
| | | HCl | 0.42 | 1.82 |
| | | HF | 0.06 | 0.27 |

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| | | | | |
|------|-------------------------|-------------------|--------|--------|
| AC1 | Tunnel Kiln No. 5 Stack | NH ₃ | 2.7 | 9.4 |
| | | Pb | 0.0002 | 0.0007 |
| | | NO _x | 3.00 | 13.14 |
| | | CO | 13.10 | 57.4 |
| | | VOC | 1.68 | 7.4 |
| | | PM | 3.00 | 12.20 |
| | | PM ₁₀ | 2.10 | 8.50 |
| | | PM _{2.5} | 1.58 | 6.40 |
| | | SO ₂ | 1.21 | 5.30 |
| | | HCl | 0.22 | 1.00 |
| AD1 | Tunnel Kiln No. 6 Stack | HF | 0.06 | 0.27 |
| | | NO _x | 3.00 | 13.14 |
| | | CO | 13.10 | 57.4 |
| | | VOC | 1.68 | 7.4 |
| | | PM | 3.00 | 12.2 |
| | | PM ₁₀ | 2.10 | 8.5 |
| | | PM _{2.5} | 1.58 | 6.4 |
| | | SO ₂ | 1.21 | 5.30 |
| | | HCl | 0.22 | 1.00 |
| | | HF | 0.06 | 0.27 |
| D(1) | Tunnel Kiln No. 3 Stack | NO _x | 3.00 | 13.14 |
| | | CO | 13.10 | 57.4 |
| | | VOC | 1.68 | 7.4 |
| | | PM | 4.25 | 18.6 |
| | | SO ₂ | 1.60 | 7.0 |
| | | HCl | 0.42 | 1.82 |
| | | HF | 0.11 | 0.47 |
| | | NH ₃ | 2.7 | 9.4 |
| | | Pb | 0.0002 | 0.0007 |

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| | | | | |
|------------|----------------------------|-------------------|--------|--------|
| G | Bldg A – Boiler | NO _x | 0.20 | 0.876 |
| | | CO | 0.08 | 0.351 |
| | | VOC | 0.01 | 0.044 |
| | | PM | 0.02 | 0.088 |
| | | SO ₂ | 0.01 | 0.044 |
| H | Tunnel Kiln No. 1 Stack | NO _x | 3.10 | 13.14 |
| | | CO | 13.10 | 57.2 |
| | | VOC | 1.68 | 7.4 |
| | | PM ₁₀ | 2.50 | 11.0 |
| | | SO ₂ | 1.21 | 5.3 |
| | | HCl | 0.22 | 0.04 |
| | | HF | 0.36 | 0.66 |
| | | Pb | 0.0002 | 0.0007 |
| N | Tunnel Kiln No. 2 Stack | NO _x | 3.00 | 13.14 |
| | | CO | 13.10 | 57.4 |
| | | VOC | 1.68 | 7.4 |
| | | PM | 4.25 | 11.0 |
| | | SO ₂ | 1.21 | 5.3 |
| | | HCl | 0.22 | 0.04 |
| | | HF | 0.36 | 0.66 |
| | | Pb | 0.0002 | 0.0007 |
| Building D | | | | |
| A5 | Bldg D - Boiler | NO _x | 0.4 | 1.75 |
| | | CO | 0.16 | 0.70 |
| | | VOC | 0.02 | 0.09 |
| | | PM ₁₀ | 0.04 | 0.18 |
| | | PM _{2.5} | 0.04 | 0.18 |
| | | SO ₂ | 0.02 | 0.09 |
| B | Bldg D - Rotary Kiln Stack | NO _x | 0.20 | 0.876 |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|------------|-------------------------------------|--------------------------------|-------|-------|
| | | CO | 0.08 | 0.351 |
| | | VOC | 0.01 | 0.044 |
| | | PM | 0.02 | 0.088 |
| | | SO ₂ | 0.01 | 0.044 |
| C | Bldg D - Rotary Kiln Scrubber Stack | HF | 0.024 | 0.109 |
| | | NH ₃ | 0.02 | 0.088 |
| | | NH ₄ F | 0.138 | 0.43 |
| E | Bldg D – U1 Dryer Scrubber Stack | NO _x | 0.5 | 2.19 |
| | | CO | 0.7 | 3.07 |
| | | VOC | 0.15 | 0.66 |
| | | PM | 0.4 | 1.75 |
| | | PM ₁₀ | 0.2 | 0.88 |
| | | PM _{2.5} | 0.1 | 0.44 |
| | | SO ₂ | 0.13 | 0.57 |
| | | CH ₂ O ₂ | 2.0 | 8.76 |
| | | HF | 0.4 | 1.75 |
| | | NH ₃ | 1.6 | 7.01 |
| X | Bldg D – U2 Dryer Scrubber Stack | NO _x | 0.8 | 3.50 |
| | | CO | 0.7 | 3.07 |
| | | VOC | 0.2 | 0.88 |
| | | PM | 0.4 | 1.75 |
| | | PM ₁₀ | 0.2 | 0.88 |
| | | PM _{2.5} | 0.1 | 0.44 |
| | | SO ₂ | 0.13 | 0.57 |
| | | CH ₂ O ₂ | 3.0 | 13.14 |
| | | HF | 0.6 | 2.63 |
| | | NH ₃ | 2.6 | 11.39 |
| Building E | | | | |
| EkC | Bldg E – Rotary Kiln Stack | NO _x | 0.8 | 3.50 |

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| | | | | |
|-----|---|-------------------|------|------|
| | | CO | 0.24 | 1.05 |
| | | VOC | 0.5 | 0.22 |
| | | PM | 1.0 | 4.38 |
| | | PM ₁₀ | 0.2 | 0.88 |
| | | PM _{2.5} | 0.02 | 0.09 |
| | | SO ₂ | 0.3 | 1.31 |
| EkP | Bldg E – Rotary Kiln - Baghouse-Scrubber Stack | PM | 1.0 | 4.38 |
| | | PM ₁₀ | 0.2 | 0.88 |
| | | PM _{2.5} | 0.02 | 0.09 |
| | | HCl | 0.15 | 0.66 |
| | | HF | 0.2 | 0.88 |
| | | NH ₃ | 0.06 | 0.26 |

- (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)
- NO_x - total oxides of nitrogen
 - CH₂O₂ - formic acid
 - CO - carbon monoxide
 - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}
 - PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}
 - PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 - SO₂ - sulfur dioxide
 - HCl - hydrogen chloride
 - HF - hydrogen fluoride
 - NH₃ - ammonia
 - NH₄F - ammonium fluoride
 - Pb - lead
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

Date: September 21, 2017