

Emission Sources - Maximum Allowable Emission Rates

Permit Number 156537

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 (6) | |
|------------------------|---------------------------|--------------------------|--------------------|---------|
| | | | lbs/hour | TPY (4) |
| RE-01 | Roaster Afterburner Stack | PM | 0.05 | 0.16 |
| | | PM ₁₀ | 0.05 | 0.16 |
| | | PM _{2.5} | 0.05 | 0.16 |
| | | NO _x | 0.05 | 0.14 |
| | | VOC | 0.02 | 0.06 |
| | | CO | 0.25 | 0.74 |
| | | SO ₂ | 0.01 | 0.06 |
| | | CH ₃ CHO | <0.01 | <0.01 |
| | | CH ₂ O | <0.01 | <0.01 |
| | | CH ₂ CHCHO | <0.01 | <0.01 |
| | | CH ₃ COOH | 0.01 | 0.02 |
| RE-02 | Roaster Afterburner Stack | PM | 0.05 | 0.16 |
| | | PM ₁₀ | 0.05 | 0.16 |
| | | PM _{2.5} | 0.05 | 0.16 |
| | | NO _x | 0.05 | 0.14 |
| | | VOC | 0.02 | 0.06 |
| | | CO | 0.25 | 0.74 |
| | | SO ₂ | 0.01 | 0.06 |
| | | CH ₃ CHO | <0.01 | <0.01 |
| | | CH ₂ O | <0.01 | <0.01 |
| | | CH ₂ CHCHO | <0.01 | <0.01 |
| | | CH ₃ COOH | 0.01 | 0.02 |
| RE-03 | Roaster Afterburner Stack | PM | 0.05 | 0.16 |
| | | PM ₁₀ | 0.05 | 0.16 |

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|------------------------|---------------------------|--------------------------|--------------------|---------|
| | | | lbs/hour | TPY (4) |
| | | PM _{2.5} | 0.05 | 0.16 |
| | | NO _x | 0.05 | 0.14 |
| | | VOC | 0.02 | 0.06 |
| | | CO | 0.25 | 0.74 |
| | | SO ₂ | 0.01 | 0.06 |
| | | CH ₃ CHO | <0.01 | <0.01 |
| | | CH ₂ O | <0.01 | <0.01 |
| | | CH ₂ CHCHO | <0.01 | <0.01 |
| | | CH ₃ COOH | 0.01 | 0.02 |
| RE-04 | Roaster Afterburner Stack | PM | 0.05 | 0.16 |
| | | PM ₁₀ | 0.05 | 0.16 |
| | | PM _{2.5} | 0.05 | 0.16 |
| | | NO _x | 0.05 | 0.14 |
| | | VOC | 0.02 | 0.06 |
| | | CO | 0.25 | 0.74 |
| | | SO ₂ | 0.01 | 0.06 |
| | | CH ₃ CHO | <0.01 | <0.01 |
| | | CH ₂ O | <0.01 | <0.01 |
| | | CH ₂ CHCHO | <0.01 | <0.01 |
| | | CH ₃ COOH | 0.01 | 0.02 |
| RE-05 | Roaster Afterburner Stack | PM | 0.05 | 0.16 |
| | | PM ₁₀ | 0.05 | 0.16 |
| | | PM _{2.5} | 0.05 | 0.16 |
| | | NO _x | 0.05 | 0.14 |
| | | VOC | 0.02 | 0.06 |
| | | CO | 0.25 | 0.74 |
| | | SO ₂ | 0.01 | 0.06 |

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|------------------------|---------------------------|--------------------------|--------------------|---------|
| | | | lbs/hour | TPY (4) |
| | | CH ₃ CHO | <0.01 | <0.01 |
| | | CH ₂ O | <0.01 | <0.01 |
| | | CH ₂ CHCHO | <0.01 | <0.01 |
| | | CH ₃ COOH | 0.01 | 0.02 |
| CE-01 | Cooler Cyclone Stack | PM | 0.01 | 0.04 |
| | | PM ₁₀ | 0.01 | 0.02 |
| | | PM _{2.5} | <0.01 | 0.01 |
| CE-02 | Cooler Cyclone Stack | PM | 0.01 | 0.04 |
| | | PM ₁₀ | 0.01 | 0.02 |
| | | PM _{2.5} | <0.01 | 0.01 |
| CE-03 | Cooler Cyclone Stack | PM | 0.01 | 0.04 |
| | | PM ₁₀ | 0.01 | 0.02 |
| | | PM _{2.5} | <0.01 | 0.01 |
| CE-04 | Cooler Cyclone Stack | PM | 0.01 | 0.04 |
| | | PM ₁₀ | 0.01 | 0.02 |
| | | PM _{2.5} | <0.01 | 0.01 |
| CE-05 | Cooler Cyclone Stack | PM | 0.01 | 0.04 |
| | | PM ₁₀ | 0.01 | 0.02 |
| | | PM _{2.5} | <0.01 | 0.01 |
| NR-01 | Roaster Afterburner Stack | PM | 0.11 | 0.24 |
| | | PM ₁₀ | 0.11 | 0.24 |
| | | PM _{2.5} | 0.11 | 0.24 |
| | | NO _x | 0.09 | 0.20 |
| | | VOC | 0.04 | 0.09 |
| | | CO | 0.48 | 1.08 |
| | | SO ₂ | 0.01 | 0.06 |
| | | CH ₃ CHO | <0.01 | <0.01 |

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| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates (6) | |
|------------------------|---------------------------|--------------------------|--------------------|---------|
| | | | lbs/hour | TPY (4) |
| | | CH ₂ O | <0.01 | <0.01 |
| | | CH ₂ CHCHO | <0.01 | <0.01 |
| | | CH ₃ COOH | 0.02 | 0.04 |
| NR-02 | Roaster Afterburner Stack | PM | 0.11 | 0.24 |
| | | PM ₁₀ | 0.11 | 0.24 |
| | | PM _{2.5} | 0.11 | 0.24 |
| | | NO _x | 0.09 | 0.20 |
| | | VOC | 0.04 | 0.09 |
| | | CO | 0.48 | 1.08 |
| | | SO ₂ | 0.01 | 0.06 |
| | | CH ₃ CHO | <0.01 | <0.01 |
| | | CH ₂ O | <0.01 | <0.01 |
| | | CH ₂ CHCHO | <0.01 | <0.01 |
| | | CH ₃ COOH | 0.02 | 0.04 |
| NR-03 | Roaster Afterburner Stack | PM | 0.11 | 0.24 |
| | | PM ₁₀ | 0.11 | 0.24 |
| | | PM _{2.5} | 0.11 | 0.24 |
| | | NO _x | 0.09 | 0.20 |
| | | VOC | 0.04 | 0.09 |
| | | CO | 0.48 | 1.08 |
| | | SO ₂ | 0.01 | 0.06 |
| | | CH ₃ CHO | <0.01 | <0.01 |
| | | CH ₂ O | <0.01 | <0.01 |
| | | CH ₂ CHCHO | <0.01 | <0.01 |
| | | CH ₃ COOH | 0.02 | 0.04 |
| NR-04 | Roaster Afterburner Stack | PM | 0.11 | 0.24 |
| | | PM ₁₀ | 0.11 | 0.24 |

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| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates (6) | |
|------------------------|--------------------|--------------------------|--------------------|---------|
| | | | lbs/hour | TPY (4) |
| | | PM _{2.5} | 0.11 | 0.24 |
| | | NO _x | 0.09 | 0.20 |
| | | VOC | 0.04 | 0.09 |
| | | CO | 0.48 | 1.08 |
| | | SO ₂ | 0.01 | 0.06 |
| | | CH ₃ CHO | <0.01 | <0.01 |
| | | CH ₂ O | <0.01 | <0.01 |
| | | CH ₂ CHCHO | <0.01 | <0.01 |
| | | CH ₃ COOH | 0.02 | 0.04 |
| NC-01 | Cooler Filter Vent | PM | 0.02 | 0.06 |
| | | PM ₁₀ | 0.01 | 0.03 |
| | | PM _{2.5} | 0.01 | 0.01 |
| NC-02 | Cooler Filter Vent | PM | 0.02 | 0.06 |
| | | PM ₁₀ | 0.01 | 0.03 |
| | | PM _{2.5} | 0.01 | 0.01 |
| NC-03 | Cooler Filter Vent | PM | 0.02 | 0.06 |
| | | PM ₁₀ | 0.01 | 0.03 |
| | | PM _{2.5} | 0.01 | 0.01 |
| NC-04 | Cooler Filter Vent | PM | 0.02 | 0.06 |
| | | PM ₁₀ | 0.01 | 0.03 |
| | | PM _{2.5} | 0.01 | 0.01 |

(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

CH₃CHO - acetaldehyde

Emission Sources - Maximum Allowable Emission Rates

CH₂O - formaldehyde
CH₂CHCHO - acrolein
CH₃COOH - acetic acid

- (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) Planned startup and shutdown emissions are included. Maintenance activities are not authorized by this permit.

Date: March 24, 2020