

Emission Sources - Maximum Allowable Emission Rates

Permit Number 3715A

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) |
| Multi-Purpose Emission Sources | | | | |
| C-899 | Final Product Loading | PM ₁₀ | 0.72 | 3.05 |
| | | PM _{2.5} | 0.72 | 3.05 |
| K-740 | Thermal Oxidizer System | VOC | 0.87 | 0.50 |
| | | NO _x | 2.52 | 3.73 |
| | | CO | 0.80 | 1.79 |
| | | SO ₂ | 0.05 | 0.22 |
| | | PM ₁₀ | 0.04 | 0.04 |
| | | PM _{2.5} | 0.04 | 0.04 |
| | | NH ₃ | 0.14 | 0.23 |
| | | HCl | 3.02 | 0.01 |
| | | H ₂ SO ₄ | 0.23 | 0.01 |
| FUG-1 | Fugitives (5) | VOC | 1.87 | 8.18 |
| | | Cl ₂ | 0.01 | 0.06 |
| | | NH ₃ | 0.16 | 0.70 |
| C-818 | Solid Raw Material Charging | PM ₁₀ | 0.02 | 0.03 |
| | | PM _{2.5} | 0.02 | 0.03 |
| EK-830 | Cooling Tower (5) | VOC | 0.32 | 1.40 |
| | | PM | 0.006 | 0.026 |
| | | PM ₁₀ | 0.006 | 0.026 |

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| | | | | |
|--|---|-------------------|-------|-------|
| | | PM _{2.5} | 0.006 | 0.026 |
| ED-802 | Drum Charging Vent | VOC | 0.12 | 0.04 |
| | | PM ₁₀ | 0.07 | 0.29 |
| | | PM _{2.5} | 0.07 | 0.29 |
| C-896A | Rework System Vent | PM ₁₀ | 0.06 | 0.01 |
| | | PM _{2.5} | 0.06 | 0.01 |
| J-173 | Tank J-173 | NaCl | 0.47 | 0.01 |
| J-110 | Tank J-110 | NaOH | 0.01 | 0.01 |
| <u>Packout Emission Sources</u> | | | | |
| K-1891 | Tank B-246-A, and B-253-A Carbon Drum | VOC | 0.08 | 0.01 |
| B-256 | Storage Tank | VOC | 4.10 | 0.10 |
| B-257 | Storage Tank | VOC | 4.10 | 0.10 |
| B-258 | Storage Tank | VOC | 4.10 | 0.10 |
| B-259 | Storage Tank | VOC | 4.10 | 0.10 |
| B-260 | Storage Tank | VOC | 0.27 | 0.02 |
| K-1890 | Tank J-1874, 1875, and 1879 Carbon Drum | VOC | 0.01 | <0.01 |
| K-1878 | Tank J-1878 Carbon Drum | VOC | 0.01 | <0.01 |
| K-1892 | Tank J-1880 Carbon Drum | VOC | 0.04 | <0.01 |
| K-1881 | Tank J-1881 Carbon Drum | VOC | 0.06 | <0.01 |
| K-1882 | Tank J-1882 Carbon Drum | VOC | 0.06 | <0.01 |
| J-218 | Storage Tank | VOC | 5.12 | 0.53 |
| J-219 | Storage Tank | VOC | 5.12 | 0.26 |
| J-220 | Storage Tank | VOC | 4.92 | 0.23 |

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| | | | | |
|---|--|-------------------|-------|------|
| B-246-B | Storage Tank | VOC | 4.10 | 1.92 |
| B-253-B | Storage Tank | VOC | 4.10 | 1.92 |
| E-1800TKF | PO Piping Fugitives (5) | VOC | 0.06 | 0.31 |
| E-1800LF | PO Loading Fugitives (5) | VOC | 6.38 | 0.40 |
| <u>Planned Maintenance, Startup, and Shutdown (MSS) Emission Rate Limits</u> | | | | |
| MSS-PO | Sludge Management | VOC | | |
| | Small Equipment | VOC | | |
| | Process Vessel | VOC | | |
| | Tanks | VOC | | |
| | Vacuum Trucks | VOC | | |
| | Maintenance, Start-Up, and Shut-Down for the Pack-Out Plant | VOC | 57.91 | 0.05 |
| MSS-MPP | K-740 Downtime | VOC | | |
| | Sludge Management | VOC | | |
| | Small Equipment | VOC | | |
| | Process Vessel | VOC | | |
| | Tanks | VOC | | |
| | Vacuum Trucks | VOC | | |
| | Loading Fugitive Dust | PM ₁₀ | | |
| | | PM _{2.5} | | |
| | Maintenance, Start-Up, and Shut-Down for the Multi Purpose Plant (MPP) | VOC | 1.96 | 0.03 |
| | | PM ₁₀ | 0.06 | 0.01 |
| | | PM _{2.5} | 0.06 | 0.01 |

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- (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
PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, as represented
CO - carbon monoxide
HCl - hydrogen chloride
H₂SO₄ - sulfuric acid
NH₃ - ammonia
Cl₂ - chlorine
NaOH - sodium hydroxide
NaCl - sodium chloride
- (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.

Date: August 29, 2016