Emission Sources - Maximum Allowable Emission Rates

Permit Number 20662

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 (8) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY (4) |
| PLANT No. 1 | | | | |
| KP-1 | Zinc Kettle No. 1 Baghouse Stack | PM (6) | 0.14 | 0.20 |
| | | $PM_{10}$ (6) | 0.10 | 0.14 |
| | | $PM_{2.5}$ (6) | 0.02 | 0.02 |
| | | $NH_4Cl$ | 0.09 | 0.13 |
| | | ZnO | 0.02 | 0.03 |
| | | $ZnCl_2$ | 0.007 | 0.01 |
| | | Zn | 0.005 | 0.008 |
| | | $NH_3$ | 0.001 | 0.002 |
| FE-1 | Zinc Kettle No.1 (5) | PM (6) | 0.28 | 0.40 |
| | | $PM_{10}$ (6) | 0.20 | 0.28 |
| | | $PM_{2.5}$ (6) | 0.03 | 0.05 |
| | | $NH_4Cl$ | 0.19 | 0.27 |
| | | ZnO | 0.05 | 0.06 |
| | | $ZnCl_2$ | 0.01 | 0.02 |
| | | Zn | 0.01 | 0.02 |
| | | $NH_3$ | 0.003 | 0.004 |
| KB-1 | Zinc Kettle No. 1 Burner stack | PM | 0.03 | 0.08 |
| | | $PM_{10}$ | 0.03 | 0.08 |
| | | $PM_{2.5}$ | 0.03 | 0.08 |

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| | | | | |
|---|---|---|---|---|
| | | $NO_x$ | 1.32 | 4.20 |
| | | CO | 1.11 | 3.53 |
| | | VOC | 0.07 | 0.23 |
| | | $SO_2$ | 0.01 | 0.03 |
| B-1 | Primary Gas-Fired Boiler Stack | PM | <0.001 | <0.001 |
| | | $PM_{10}$ | <0.001 | <0.001 |
| | | $PM_{2.5}$ | <0.001 | <0.001 |
| | | $NO_x$ | 0.01 | 0.02 |
| | | CO | 0.01 | 0.01 |
| | | VOC | 0.001 | 0.001 |
| | | $SO_2$ | <0.001 | <0.001 |
| RF-1 | Roof Fan 1 | HCl (7) | 0.02 | - |
| RF-2 | Roof Fan 2 | HCl (7) | 0.02 | - |
| RF-3 | Roof Fan 3 | HCl (7) | 0.02 | - |
| RF-4 | Roof Fan 4 | HCl (7) | 0.02 | - |
| | Total Roof Fan Emissions ( Fans 1-4) | | - | 0.08 |
| 8A | Cooling Tower (5) | Cr VI (7) | <0.00004 | - |
| 8B | Cooling Tower (5) | Cr VI (7) | <0.00004 | - |
| 8A and 8B | Total Cooling Towers Emissions | Cr VI (7) | - | <0.0004 |
| 9 | Quench Tank (5) | Cr VI (7) | <0.00008 | <0.0003 |

Emission Sources - Maximum Allowable Emission Rates

| Plant No. 2 | | | | |
|---|---|---|---|---|
| KP-2 | Zinc kettle No. 2 Baghouse stack | PM (6) | 0.04 | 0.12 |
| | | $PM_{10}$ (6) | 0.03 | 0.08 |
| | | $PM_{2.5}$ (6) | 0.01 | 0.01 |
| | | $NH_4Cl$ | 0.03 | 0.08 |
| | | ZnO | 0.01 | 0.02 |
| | | $ZnCl_2$ | 0.002 | 0.006 |
| | | Zn | 0.002 | 0.005 |
| | | $NH_3$ | <0.001 | 0.001 |
| KB-2 | Zinc Kettle Burner Stack | PM | 0.03 | 0.08 |
| | | $PM_{10}$ | 0.03 | 0.08 |
| | | $PM_{2.5}$ | 0.03 | 0.08 |
| | | $NO_x$ | 1.32 | 4.20 |
| | | CO | 1.11 | 3.53 |
| | | VOC | 0.07 | 0.23 |
| | | $SO_2$ | 0.01 | 0.03 |
| B-2 | Waste Heat Boiler Stack | PM | 0.0002 | 0.0004 |
| | | $PM_{10}$ | 0.0002 | 0.0004 |
| | | $PM_{2.5}$ | 0.0002 | 0.0004 |
| | | $NO_x$ | 0.01 | 0.02 |
| | | CO | 0.004 | 0.009 |
| | | VOC | 0.001 | 0.001 |
| | | $SO_2$ | 0.0001 | 0.001 |
| RF-5 | Roof Fan 5 | HCl (7) | 0.03 | - |
| RF-6 | Roof Fan 6 | HCl (7) | 0.03 | - |

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| | | | | |
|---|---|---|---|---|
| RF-7 | Roof Fan 7 | HCl (7) | 0.03 | - |
| | Total Roof Fans Emissions (Fans 5-7) | HCl (7) | - | 0.09 |
| 10 | Cooling Tower (5) | Cr VI (7) | <0.00003 | <0.0001 |
| 11 | Quench Tank (5) | Cr VI (7) | <0.00004 | <0.0002 |

(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
$SO_2$ - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including $PM_{10}$ and $PM_{2.5}$, as represented
$PM_{10}$ - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - total particulate matter equal to or less than 2.4 microns in diameter
NH4Cl - ammonium chloride
ZnO - zinc oxide
ZnCl2 - zinc chloride
Zn - zinc
NH3 - ammonium
CO - carbon monoxide
HCl - hydrogen chloride
CrVI - hexavalent chromium
(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) Includes $NH_4Cl$, $NH_3$, ZnO, $ZnCl_2$, and Zn.
(7) The combination of all Hazardous Air Pollutants (HAPs) shall not exceed 25 TPY and the facility shall not emit more than 10 TPY of a single HAP.
(8) Planned startup and shutdown emissions are included. Maintenance activities are not authorized by this permit and will need separate authorization unless the activity can meet the conditions of 30 TAC §116.119.

Date: September 21, 2016