

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number S-18925

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<br>Point No. (1) | Source<br>Name (2)  | Air Contaminant<br>Name (3) | Emission Rates * |       |
|---------------------------|---|-----------------------------|------------------|-------|
|                           |   |                             | lb/hr            | TPY** |
| EP-1                      | Processing Area Stack A                                   | VOC                         | 0.01             | 0.01  |
| EP-2                      | Processing Area Stack B                                   | Inorganics                  | 0.19             | 0.82  |
| EP-5                      | Fugitives - Tank<br>Farm (4)                              | VOC                         | 0.03             | 0.12  |
|                           |   | Inorganics                  | 0.01             | 0.01  |
| EP-5A                     | Fugitives - Bleach Tank<br>Farm (4)                       | Inorganics                  | 0.01             | 0.01  |
| EP-7A                     | Truck Loadings<br>excluding Bleach -<br>Total VOC loading | VOC                         | 0.82             | 0.43  |
| EP-7B                     | Emissions   |                             |                  |       |
| EP-7C                     | Truck Loading<br>of Bleach                                | Inorganics                  | 0.01             | 0.01  |
| EP-8                      | Fugitives - Manufacturing<br>Building                     | VOC                         | 5.10             | 2.66  |
|                           |   | Exempt VOC                  | 0.01             | 0.01  |
|                           |   | Inorganics                  | 0.02             | 0.02  |
|                           |   | PM 0.02                     | 0.03             |       |
| EP-9 (5)                  | Regenerative Thermal Oxidizer                             | VOC                         | 1.53             | 2.07  |
|                           |   | Exempt VOC                  | 0.97             | 2.52  |
|                           |   | Inorganics                  | 0.37             | 1.64  |
|                           |   | CO                          | 0.02             | 0.07  |
|                           |   | NO <sub>x</sub>             | 0.08             | 0.36  |
|                           |   | PM                          | 0.01             | 0.04  |
|                           |   | SO <sub>2</sub>             | 0.01             | 0.01  |

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|---------------------------|---|-----------------------------|-------------------------|--------------|
|                           |   |                             | <u>lb/hr</u>            | <u>TPY**</u> |
| EP-9 (5)                  | Carbon Adsorption System                          | VOC                         | 0.19                    | 0.82         |
|                           |   | Exempt VOC                  | 0.22                    | 0.95         |
|                           |   | Inorganics                  | 0.01                    | 0.01         |
| EP-12                     | Boiler No. 2                                      | VOC                         | 0.13                    | 0.55         |
|                           |   | CO                          | 0.77                    | 3.38         |
|                           |   | NO <sub>x</sub>             | 3.00                    | 8.21         |
|                           |   | PM                          | 0.50                    | 0.69         |
|                           |   | SO <sub>2</sub>             | 6.39                    | 2.36         |
| EP-23                     | Boiler No. 4                                      | VOC                         | 0.11                    | 0.46         |
|                           |   | CO                          | 0.64                    | 2.81         |
|                           |   | NO <sub>x</sub>             | 1.48                    | 6.47         |
|                           |   | PM                          | 0.11                    | 0.46         |
|                           |   | SO <sub>2</sub>             | 0.01                    | 0.05         |
| EP-24                     | Neutralization Tank No. 1                         | VOC                         | 0.01                    | 0.01         |
| EP-24A                    | Neutralization Tank No. 2                         | VOC                         | 0.01                    | 0.01         |
| EP-24B                    | Neutralization Tank No. 3                         | VOC                         | 0.01                    | 0.01         |
| EP-25                     | Fugitives - Production and<br>Cell Building No. 1 | VOC                         | 0.02                    | 0.01         |
|                           |   | Inorganics                  | 0.08                    | 0.29         |
| EP-25A                    | Fugitives - Production and<br>Cell Building No. 2 | VOC                         | 0.01                    | 0.01         |
|                           |   | Inorganics                  | 0.06                    | 0.28         |
| EP-30                     | Collection Tank No. 1                             | VOC                         | 0.01                    | 0.01         |
| EP-30A                    | Collection Tank No. 2                             | VOC                         | 0.01                    | 0.01         |

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|---------------------------|-------------------------------|-----------------------------|-------------------------|-------|
|                           |                               |                             | lb/hr                   | TPY** |
| EP-31                     | QAS Production Tank No. 3     | VOC                         | 0.01                    | 0.01  |
| EP-32                     | QAS Production Tank No. 1     | VOC                         | 0.01                    | 0.01  |
| EP-33                     | QAS Production Tank No. 2     | VOC                         | 0.01                    | 0.01  |
| EP-34                     | QAS Production Tank No. 4     | VOC                         | 0.01                    | 0.01  |
| EP-35                     | Conversion Storage Tank No. 1 | VOC                         | 0.01                    | 0.01  |
| EP-35A                    | Conversion Storage Tank No. 1 | VOC                         | 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

CO - carbon monoxide

NO<sub>x</sub> - total oxides of nitrogen

PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>

PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.

SO<sub>2</sub> - sulfur dioxide

Exempt VOC - chemical compounds that are non-photochemically reactive

Inorganics include:

HBr - hydrogen bromide

HCl - hydrogen chloride

HF - hydrogen fluoride

HI - hydrogen iodine

H<sub>2</sub>O<sub>2</sub> - hydrogen peroxide

Cl<sub>2</sub> - chlorine

NH<sub>2</sub>OH - hydroxylamine

H<sub>2</sub>SO<sub>4</sub> - sulfuric acid

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- (4) Fugitive emissions are an estimate based on component count.
- (5) CAS is backup for RTO - CAS outlet routed into same stack as RTO outlet.

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

8,760 hrs/year

\*\* Compliance with annual emission limits is based on a rolling 12-month period.

Dated June 3, 2005