Emission Sources - Maximum Allowable Emission Rates Permit Number 32770

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) | | Air Contaminant Name (3) | Emission Rates | |
|---------------------------------|-----------------------------|--------------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| HEATER | Process Heater | VOC | 0.08 | 0.02 |
| | | NOx | 0.90 | 0.27 |
| | | СО | 1.37 | 0.41 |
| | | РМ | 0.11 | 0.03 |
| | | PM ₁₀ | 0.11 | 0.03 |
| | | PM _{2.5} | 0.11 | 0.03 |
| | | SO ₂ | 0.01 | <0.01 |
| HEATER2 | Process Heater | VOC | 0.08 | 0.02 |
| | | NO _x | 0.90 | 0.27 |
| | | СО | 1.37 | 0.41 |
| | | РМ | 0.11 | 0.03 |
| | | PM ₁₀ | 0.11 | 0.03 |
| | | PM _{2.5} | 0.11 | 0.03 |
| | | SO ₂ | 0.01 | <0.01 |
| FUG | Aniline Plant Fugitives (5) | VOC | 0.57 | 2.48 |
| | | H ₂ SO ₄ | 0.03 | 0.12 |
| | | Nitric Acid | <0.01 | <0.01 |
| | | NH ₃ | 0.02 | 0.10 |
| | | CL ₂ | <0.10 | 0.01 |
| | | NO _x | 0.08 | 0.36 |
| TK-2002 | Aniline WIP Tank | VOC | 0.55 | |
| TK-2003A | Aniline Product Tank | VOC | 0.96 | |
| TK-2003B | Aniline Product Tank | voc | 0.96 | |
| TK-2002, TK-2003A, TK- 2003B | Aniline Tanks Group | VOC | | 0.43 |

| TK-2004 | Weak Effluent Tank | voc | <0.01 | <0.01 |
|------------------------|---|--------------------------------|-------|-------|
| TK-2007A | Water Stripper Product Tank | VOC | <0.01 | |
| TK-2007B | Water Stripper Product Tank | VOC | <0.01 | |
| TK-2007A, TK-2007B | Wastewater Tank Group | VOC | | <0.01 |
| TK-2008 | Water Stripper Feed Tank | VOC | <0.01 | <0.01 |
| | | NH ₃ | 0.11 | 0.05 |
| TK-2101 | Benzene Tank | VOC | 0.34 | 0.52 |
| TK-2102 | Crude Nitrobenzene Tank | VOC | 0.18 | 0.33 |
| TK-2103 | Nitrobenzene Tank | voc | 0.78 | 0.26 |
| TK-2104 | Sulfuric Acid Tank | H ₂ SO ₄ | <0.01 | <0.01 |
| TK-2106 | Purified Nitrobenzene Tank | VOC | 0.83 | 0.29 |
| FC612C2001 | Cooling Tower | voc | 0.84 | 3.68 |
| | | РМ | 0.25 | 1.09 |
| | | PM ₁₀ | 0.16 | 0.68 |
| | | PM _{2.5} | <0.01 | <0.01 |
| FL612L2006 | Loading Emissions | voc | 0.34 | 0.01 |
| FL612L2105 | Loading Emissions | VOC | <0.01 | <0.01 |
| FL612L2110 | Loading Emissions | VOC | 0.01 | <0.01 |
| | | MSS Emissions | | |
| ANI-MSSATM ANI-TKTR | MSS Tank Truck Loading/Unloading | Aniline | 0.01 | 0.01 |
| ANI-TKTR | | Benzene | 0.05 | 0.01 |
| | | Nitrobenzene | 0.01 | 0.01 |
| | | Toluene | 0.02 | 0.01 |
| | | Total VOC | 0.09 | 0.04 |
| ANI-MSSATM ANI-FLT | Floating Roof Storage Tank Emissions | Aliphatics | 0.11 | 0.01 |
| | | Benzene | 3.51 | 0.01 |
| | | Dinitrobenzene | 0.01 | 0.01 |

| | | Dinitrophenol | 0.01 | 0.01 |
|-------------------------|--------------------|-------------------|------|------|
| | | Mononitrophenol | 0.01 | 0.01 |
| | | Nitrobenzene | 0.06 | 0.01 |
| | | Picric Acid | 0.01 | 0.01 |
| | | Total VOC | 3.72 | 0.07 |
| ANI-MSSATM ANI-INT | Instrumentation | Total VOC | 0.02 | 0.01 |
| ANI-MSSATM ANI-SOL | Solids Handling | PM _{2.5} | 0.06 | 0.06 |
| ANI-SOL | | PM ₁₀ | 0.42 | 0.38 |
| | | Total PM | 0.88 | 0.80 |
| ANI-MSSATM ANI-VACTR | Vacuum Trucks | Aniline | 0.01 | 0.01 |
| ANI-VACTR | | Benzene | 0.99 | 0.01 |
| | | Nitrobenzene | 0.01 | 0.01 |
| | | Toluene | 0.16 | 0.01 |
| | | Residue | 0.01 | 0.01 |
| | | Total VOC | 1.18 | 0.05 |
| ANI-MSSATM | Uncontrolled | 4-Aminodiphenyl | 0.01 | 0.01 |
| ANI-UNCONT | Equipment Clearing | Aliphatics | 0.05 | 0.01 |
| | | Aniline | 0.52 | 0.11 |
| | | Benzene | 1.43 | 0.02 |
| | | Cyclohexanone | 0.01 | 0.01 |
| | | Cyclohexylamine | 0.03 | 0.01 |
| | | Cyclohexanol | 0.01 | 0.01 |
| | | Dinitrobenzene | 0.01 | 0.01 |
| | | Dinitrophenol | 0.01 | 0.01 |
| | | Diphenylamine | 0.01 | 0.01 |
| | | m-diaminobenzene | 0.01 | 0.01 |
| | | Mononitrophenol | 0.01 | 0.01 |
| | | Nitrobenzene | 2.66 | 0.05 |
| | | o-Aminophenol | 0.01 | 0.01 |

| | | Oxalic Acid | 0.01 | 0.01 |
|------------|----------------------|---|------|-------|
| | | Phenol | 0.01 | 0.01 |
| | | Picric Acid | 0.01 | 0.01 |
| | | Schiff Base (N- Cyclohexylidenaniline) | 0.01 | 0.01 |
| | | Total VOC | 4.83 | 0.33 |
| | | Ammonia | 0.12 | 0.01 |
| | | Nitrogen Dioxide | 0.01 | 0.01 |
| ANI-MSSCNT | Controlled Equipment | 4-Aminodiphenyl | 0.01 | 0.01 |
| ANI-CONT | Clearing | Aliphatics | 0.01 | <0.01 |
| | | Aniline | 0.17 | <0.01 |
| | | Benzene | 0.08 | <0.01 |
| | | Cyclohexanone | 0.01 | <0.01 |
| | | Cyclohexylamine | 0.01 | <0.01 |
| | | Cyclohexanol | 0.01 | <0.01 |
| | | Dinitrobenzene | 0.01 | <0.01 |
| | | Dinitrophenol | 0.01 | 0.01 |
| | | Diphenylamine | 0.01 | 0.01 |
| | | m-diaminobenzene | 0.01 | 0.01 |
| | | Mononitrophenol | 0.01 | 0.01 |
| | | Nitrobenzene | 0.10 | 0.01 |
| | | o-Aminophenol | 0.01 | 0.01 |
| | | Oxalic Acid | 0.01 | 0.01 |
| | | Phenol | 0.01 | 0.01 |
| | | Picric Acid | 0.01 | 0.01 |
| | | Schiff Base (N- Cyclohexylidenaniline) | 0.01 | 0.01 |
| | | Total VOC | 0.50 | 0.01 |
| | | Ammonia | 0.01 | 0.01 |
| | | Nitrogen Dioxide | 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) CO - carbon monoxide

NO_x - total oxides of nitrogen

PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented

PM₁₀ - particulate matter (PM) 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

SO₂ - sulfur dioxide

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

 $\begin{array}{cccc} CL_2 & - & Chlorine \\ H_2SO_4 & - & Sulfuric \ Acid \\ NH_3 & - & Ammonia \end{array}$

MSS - maintenance, startup and shutdown

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

(5) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.

| Date: | October 10, 2016 |
|-------|------------------|
| Date. | October 10, 2010 |