Emission Sources - Maximum Allowable Emission Rates

Permit Number 20485

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 | Emission Rates | | |
|-------------------------------|------------------------------|---------------------|----------------|---------|--|
| | | Name (3) | lbs/hour | TPY (4) | |
| UWN6R1 and UWS6R1 | North Flare and South Flare | VOC (7) | 135.54 | 45.90 | |
| | (5) | VOC (8) | 253.97 | 56.92 | |
| | | 1,3 butadiene | 31.13 | 10.54 | |
| | | 1,3 butadiene (8) | 100.16 | 31.83 | |
| | | NO _x | 16.30 | 5.66 | |
| | | NO _x (8) | 23.47 | 7.63 | |
| | | СО | 83.95 | 29.16 | |
| | | CO(8) | 120.93 | 39.31 | |
| | | SO ₂ | 0.01 | 0.03 | |
| RSWLDFLR | Dock Flare | VOC (7) | 40.40 | 27.66 | |
| | | 1,3 butadiene | 40.40 | 9.51 | |
| | | NO _x | 11.67 | 13.29 | |
| | | СО | 46.34 | 48.15 | |
| | | SO ₂ | 0.01 | 0.29 | |
| UW6BB8 | Boiler No. 8 285 MMBtu/hr | VOC | 1.14 | 4.98 | |
| | | NO _x | 8.54 | 37.38 | |
| | | СО | 11.81 | 51.72 | |
| | | SO ₂ | 4.04 | 17.71 | |
| | | PM | 2.15 | 9.42 | |
| | | PM ₁₀ | 2.15 | 9.42 | |
| | | PM _{2.5} | 2.15 | 9.42 | |

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

| UW6BB9 | Boiler No. 9 | VOC | 1.14 | 4.36 |
|------------|---------------------|-------------------|-------|-------|
| | 285 MMBtu/hr | NO _x | 5.43 | 23.79 |
| | | СО | 23.61 | 51.72 |
| | | SO ₂ | 4.04 | 17.71 |
| | | PM | 2.15 | 9.42 |
| | | PM ₁₀ | 2.15 | 9.42 |
| | | PM _{2.5} | 2.15 | 9.42 |
| | | NH₃ | 1.44 | 6.29 |
| BDMTS3BA | Air Heater | VOC | 0.04 | 0.06 |
| | | NO _x | 0.70 | 1.06 |
| | | СО | 0.59 | 0.89 |
| | | SO ₂ | 0.01 | 0.01 |
| | | PM | 0.05 | 0.08 |
| | | PM ₁₀ | 0.05 | 0.08 |
| | | PM _{2.5} | 0.05 | 0.08 |
| BMDTS3F105 | Regeneration Stack | VOC | 5.03 | 2.50 |
| WWCT1-6 | Cooling Tower (4) | VOC (7) | 33.55 | 18.37 |
| | | 1,3 butadiene | 15.03 | 8.23 |
| | | PM | 4.82 | 3.67 |
| | ¥ | PM ₁₀ | 0.23 | 2.33 |
| | | PM _{2.5} | 0.01 | 0.01 |
| 6-TK-48 | Storage Tank No. 48 | VOC | 0.08 | 0.01 |
| 6-TK-72 | Storage Tank No. 72 | VOC | 0.08 | 0.01 |
| 6-TK-73 | Storage Tank No. 73 | VOC | 0.08 | 0.01 |

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

| Г | | | | |
|---------------|---|-------------------|-------|-------|
| C4BUND | Bundle Furnaces | VOC | 0.02 | 0.10 |
| | | NO _x | 0.21 | 0.93 |
| | | СО | 3.42 | 14.99 |
| | | SO ₂ | 0.01 | 0.01 |
| | | PM | 1.00 | 4.38 |
| | | PM ₁₀ | 1.00 | 4.38 |
| | | PM _{2.5} | 1.00 | 4.38 |
| C4FUG | Fugitives (4) | VOC | 15.64 | 68.50 |
| C4ICE | Internal Combustion Engines (6) | VOC | 5.41 | 0.07 |
| | (0) | NO _x | 67.92 | 0.88 |
| | 1 | СО | 14.64 | 0.19 |
| | | SO ₂ | 4.49 | 0.06 |
| | | PM | 4.82 | 0.06 |
| | | PM ₁₀ | 4.82 | 0.06 |
| | | PM _{2.5} | 4.82 | 0.06 |
| C4ICEDFT | Diesel Fuel Tanks (6) | VOC | 0.52 | 0.01 |
| C4MCST | Miscellaneous Chemical Storage Tanks (6) | VOC | 3.09 | 0.05 |
| C4WW | C4 Wastewater | VOC | 0.01 | 0.01 |
| TK55 | Tank No. 55 | VOC | 0.33 | 0.86 |
| TK56 | Tank No. 56 | VOC | 0.33 | 0.86 |
| TK55 and TK56 | Tank Nos. 55 and Tank 56 Annual Cap | VOC | | 0.86 |
| MAINT-ALL | C4 Maintenance | VOC | 27.57 | 4.29 |

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

| MAINT - TO | MAINT - TO Thermal Control Device | VOC | 0.80 | 0.10 |
|------------|-----------------------------------|-------------------|------|------|
| | | NO _x | 1.20 | 0.27 |
| | | СО | 2.00 | 0.45 |
| | | SO ₂ | 0.01 | 0.01 |
| | | РМ | 0.04 | 0.01 |
| | | PM ₁₀ | 0.04 | 0.01 |
| | | PM _{2.5} | 0.04 | 0.01 |

- (1) Emission point identification either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an 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 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
 - SO₂ sulfur dioxide
 - VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- (4) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (5) The north and south flares are connected to a header system that allows either flare to combust the waste streams.
- (6) Emissions from several small internal combustion engines and storage tanks.
- (7) The VOC emissions rates include the 1,3-butadiene emissions listed under them.
- (8) These emission rates only apply when MSS activities are being controlled by the flare.

| * | Emission rates are b | pased on and | the facilities are | e limited b | y the following | ı maximum c | perating | schedule: |
|---|----------------------|--------------|--------------------|-------------|-----------------|-------------|----------|-----------|
|---|----------------------|--------------|--------------------|-------------|-----------------|-------------|----------|-----------|

| 24_Hrs/day _ | <u>7</u> Days/week _ | 52 | _Weeks/year or _ | <u>8,760</u> Hrs/year |
|--------------|----------------------|----|------------------|-----------------------|
| | | | / | |

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

| Date: | {TBD} | |
|-------|-------|--|