Emission Sources - Maximum Allowable Emission Rates

Permit Number 3275A

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 I | Rates * |
|------------------------|----------------------|--------------------------|------------|-----------|
| (1) | | | lbs/hour | TPY (***) |
| RD-250 | Plant flare | VOC | 16.84 | 11.08 |
| | | NO _x | 2.21 | 6.79 |
| | | SO ₂ | 5.02 | 0.21 |
| | | со | 11.04 | 48.34 |
| FA-013 | Scrubber, A-Plant(5) | VOC | 19.69** | 1.37** |
| | | Acids/Bases | 0.20 | 0.10 |
| | Total Storage Tank | VOC | 20.45 | 1.97 |
| | | Acid/Alkali | 0.53 | 0.01 |
| TB-994 | Storage Tank (7) | VOC | | |
| TB-995 | Storage Tank (7) | VOC | | |
| TB-996 | Storage Tank (7) | VOC | | |
| TB-997 | Storage Tank (7) | VOC | | |
| TB-998 | Storage Tank (7) | VOC | | |
| TC-988 | Storage Tank (7) | VOC | | |
| TC-989 | Storage Tank (7) | VOC | | |
| TD-950 | Storage Tank (7) | VOC | | |
| TD-951 | Storage Tank (7) | VOC | | |

| TD-953 | Storage Tank (7) | VOC | |
|--------|------------------|-----|--|
| TD-978 | Storage Tank (7) | VOC | |
| TD-990 | Storage Tank (7) | voc | |
| TD-991 | Storage Tank (7) | voc | |
| TD-992 | Storage Tank (7) | voc | |
| TD-993 | Storage Tank (7) | VOC | |
| TE-800 | Storage Tank (7) | voc | |
| TE-803 | Storage Tank (7) | voc | |
| TE-804 | Storage Tank (7) | VOC | |
| TE-906 | Storage Tank (7) | voc | |
| TE-907 | Storage Tank (7) | voc | |
| TE-909 | Storage Tank (7) | voc | |
| TE-911 | Storage Tank (7) | voc | |
| TE-912 | Storage Tank (7) | voc | |
| TE-913 | Storage Tank (7) | voc | |
| TE-918 | Storage Tank (7) | voc | |
| TE-919 | Storage Tank (7) | voc | |
| TE-920 | Storage Tank (7) | voc | |
| TE-921 | Storage Tank (7) | voc | |
| TE-922 | Storage Tank (7) | voc | |
| TE-923 | Storage Tank (7) | voc | |
| TE-924 | Storage Tank (7) | voc | |
| TE-925 | Storage Tank (7) | voc | |
| TE-926 | Storage Tank (7) | voc | |
| TE-928 | Storage Tank (7) | voc | |

| Г | | | ٦ |
|--------|------------------|-----|---|
| TE-929 | Storage Tank (7) | VOC | |
| TE-931 | Storage Tank (7) | VOC | |
| TE-932 | Storage Tank (7) | VOC | |
| TE-933 | Storage Tank (7) | VOC | |
| TE-934 | Storage Tank (7) | VOC | |
| TE-035 | Storage Tank (7) | VOC | |
| TE-936 | Storage Tank (7) | VOC | |
| TE-937 | Storage Tank (7) | voc | |
| TE-938 | Storage Tank (7) | voc | |
| TE-939 | Storage Tank (7) | voc | |
| TE-940 | Storage Tank (7) | voc | |
| TE-941 | Storage Tank (7) | voc | |
| TE-945 | Storage Tank (7) | voc | |
| TE-946 | Storage Tank (7) | VOC | |
| TE-947 | Storage Tank (7) | VOC | |
| TE-948 | Storage Tank (7) | VOC | |
| TE-949 | Storage Tank (7) | VOC | |
| TE-960 | Storage Tank (7) | VOC | |
| TE-961 | Storage Tank (7) | voc | |
| TE-962 | Storage Tank (7) | VOC | 1 |
| TE-963 | Storage Tank (7) | VOC | |
| TE-964 | Storage Tank (7) | voc | 1 |
| TE-965 | Storage Tank (7) | voc | 1 |
| TE-966 | Storage Tank (7) | voc | 1 |
| TE-967 | Storage Tank (7) | voc | |

| TE-968 | Storage Tank (7) | VOC | | |
|--------|-----------------------------------|------|-------|-------|
| TE-970 | Storage Tank (7) | VOC | | |
| TE-971 | Storage Tank (7) | VOC | | |
| TE-972 | Storage Tank (7) | VOC | | |
| TE-973 | Storage Tank (7) | voc | | |
| TE-974 | Storage Tank (7) | voc | | |
| TE-975 | Storage Tank (7) | voc | | |
| TE-980 | Storage Tank (7) | voc | | |
| TE-981 | Storage Tank (7) | VOC | | |
| TE-982 | Storage Tank (7) | VOC | | |
| TE-983 | Storage Tank (7) | VOC | | |
| TE-984 | Storage Tank (7) | VOC | | |
| TE-985 | Storage Tank (7) | VOC | | |
| TE-986 | Storage Tank (7) | VOC | | |
| TE-987 | Storage Tank (7) | VOC | | |
| TD-001 | Diesel tank (fire water) | VOC | 0.03 | <0.01 |
| TD-004 | Diesel Storage Tank | VOC | 0.11 | <0.01 |
| TD-005 | Gasoline Storage Tank | VOC | 3.50 | 0.05 |
| TD-953 | Caustic Storage Tank | NaOH | <0.01 | <0.01 |
| TE-805 | A4G200 Storage Tank | voc | <0.01 | <0.01 |
| | Total Loading Emissions (5)(8) | VOC | 11.84 | 4.99 |
| LD-A | Plant-A Drum/Tote Loading (8) | VOC | | |
| LD-B | Plant B Drum/Tote Loading(8) | VOC | | |
| LD-C | Plant C Drum/Tote | VOC | | |

| | Loading (8) | | | |
|---------|-------------------------|-----------------|------|------|
| RAIL | Rail Loading (8) | voc | | |
| STRUCK | South Truck Loading (8) | VOC | | |
| WTRUCK | West Truck Loading (8) | VOC | | |
| PLNTFUG | Plant Fugitives | voc | 1.11 | 4.85 |
| | | РМ | 0.02 | 0.02 |
| | | Acids/Bases | 0.04 | 0.17 |
| HTR-A | A-Hot Oil Header | VOC | 0.03 | 0.12 |
| | | NO _x | 0.50 | 2.19 |
| | | SO ₂ | 0.01 | 0.01 |
| | | PM | 0.04 | 0.17 |
| | | СО | 0.42 | 1.84 |
| HTR-B | B-Hot Oil Heater | voc | 0.01 | 0.05 |
| | | NO _x | 0.20 | 0.88 |
| | | SO ₂ | 0.01 | 0.01 |
| | | PM | 0.02 | 0.07 |
| | | СО | 0.17 | 0.74 |
| BLR-A | A-Plant Boiler | VOC | 0.05 | 0.20 |
| | | NO _x | 0.84 | 3.67 |
| | | SO ₂ | 0.01 | 0.02 |
| | | PM | 0.06 | 0.28 |
| | | со | 0.70 | 3.08 |
| BLR-B | B-Plant Boiler | VOC | 0.08 | 0.35 |
| | | NO _x | 1.47 | 6.42 |

| | | | | 0.04 |
|---------------------------|---------------------------------|-----------------|------|-------|
| | | SO ₂ | 0.01 | 0.04 |
| | | PM | 0.11 | 0.49 |
| | | СО | 1.23 | 5.39 |
| UD-556 | A-Plant Cooling Tower | VOC | 0.04 | 0.18 |
| | | PM | 0.10 | 0.27 |
| UB-551 | B-Plant Cooling Tower | voc | 0.04 | 0.18 |
| | | PM | 0.10 | 0.27 |
| TD-3100 | Wastewater Storage Tank | VOC | | |
| MAINSUMP | Wastewater Sump | VOC | | |
| TD-954A | Wastewater Effluent Mod Tank | VOC | | |
| TD-954B | Wastewater Effluent Mod Tank | VOC | | |
| TD-3200A | Contingency WW Tank | VOC | | |
| TD-3200B | Contingency WW Tank | VOC | | |
| TD-3300 | Contingency WW Tank | VOC | | |
| TD-3400 | Contingency WW Tank | VOC | | |
| TD-3500 | Contingency WW Tank | VOC | | |
| TD-3600 | Contingency WW Tank | VOC | | |
| TD-3700 | Contingency WW Tank | VOC | | |
| ALL WASTEWATER SOURCES | | VOC | 1.21 | 0.31 |
| PROPANETK1 | Propane Tank | voc | 0.01 | 0.01 |
| DEGSR-01 | Solvent Degreaser | VOC | 1.34 | 0.06 |
| | Sitewide VOCs | Total VOCs | | 20.00 |

| | Sidewide HAPS | Total HAPs | | 20.00 |
|----------------------|----------------------------------|-----------------|-------|-------|
| | Individual HAPs | | | 9.9 |
| Routine Maintenance, | Startup, and Shutdown (| (MSS) Emissions | l | |
| FUGMSS | Sitewide MSS Emission | VOC | 37.47 | 1.21 |
| | Line Breaks | voc | 0.56 | 0.02 |
| | Washouts and Water Draws | VOC | 1.13 | 0.17 |
| | Pan Emissions | voc | 0.47 | 0.02 |
| | Tank Truck Loading (vacuum) | VOC | 15.89 | 0.19 |
| | Frac Tanks | voc | 0.23 | 0.01 |
| | Priming Pumps | voc | 4.00 | 0.05 |
| | Aerosol Degreasing/Lubricants | VOC | 15.19 | 0.76 |
| RD-250 | Flare | voc | 3.36 | 1.18 |
| | | NO _x | 0.26 | 1.09 |
| | | со | 2.22 | 0.78 |

- (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) Exempt Solvent Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.

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

HRVOC - highly reactive volatile organic compounds as defined in 30 TAC § 115.10

IOC-U - inorganic compounds (unspeciated)

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM₁₀ 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} - particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide

HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40

Code of Federal Regulations Part 63, Subpart C

Permit Number 3275A Page 8

- (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) WWS Carbon Absorbers WWC-1 through WWC-10 emissions is accounted for under the total WWS carbon adsorber emissions.
- (7) Storage Tanks TB-004 through TE-987 emissions is accounted for under the total storage tank emissions.
- (8) Loading Spots LD-A, LD-B, LD-C, RAIL, STRUCK, WTRUCK emissions are accounted for under the total loading emissions.
- (9) The emission rates associated with source names Sitewide VOCs, Sitewide HAPs, and Sitewide Individual HAPs include VOC and HAP emissions associated with MSS emissions.
 - Emission rates are based on and the facilities are limited by the following maximum operating schedule: Hrs/day Days/week Weeks/year or 8,760 hrs/year
 - ** These scrubber emissions do not include potential emissions from tanks and loading that are vented through the scrubber. Controlled storage tank and loading emissions are accounted for under the annual total storage tank emissions and the annual total loading emissions.
 - *** Compliance with annual emission limits is based on a rolling 12-month period.

| Date: 11/14/2011 |
|------------------|
|------------------|