

Emission Sources - Maximum Allowable Emission Rates

Permit Number 19718

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 | |
|---------------------------|---|--------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| 62-16-38 | Compressor Engine (6) | CO | 3.97 | |
| | | NO _x | 2.65 | |
| | | PM ₁₀ | 0.09 | |
| | | PM _{2.5} | 0.09 | |
| | | SO ₂ | 0.01 | |
| | | VOC | 0.14 | |
| 62-16-38A | Compressor Engine (6) | CO | 3.97 | |
| | | NO _x | 2.65 | |
| | | PM ₁₀ | 0.14 | |
| | | SO ₂ | 0.01 | |
| | | VOC | 0.29 | |
| 62-16-38B | Compressor Engine (6) | CO | 3.97 | |
| | | NO _x | 2.65 | |
| | | PM ₁₀ | 0.18 | |
| | | SO ₂ | 0.01 | |
| | | VOC | 0.29 | |
| | Annual Emissions for EPNs 62-16-38, 62- 16-38A, and 62-16- 38B | CO | | 16.84 |
| | | NO _x | | 11.23 |
| | | PM ₁₀ | | 0.76 |
| | | SO ₂ | | 0.02 |

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| | | VOC | | 0.97 |
| 62-16-39 | Compressor Engine | CO | 7.28 | 12.72 |
| | | NO _x | 4.85 | 8.48 |
| | | PM ₁₀ | 0.16 | 0.28 |
| | | SO ₂ | 0.01 | 0.02 |
| | | VOC | 1.82 | 3.22 |
| 62-32-11 | Diesel Engine (6) | CO | 3.61 | 0.18 |
| | | NO _x | 16.74 | 0.84 |
| | | PM ₁₀ | 1.19 | 0.06 |
| | | SO ₂ | 1.11 | 0.06 |
| | | VOC | 1.36 | 0.07 |
| 62-32-56 | Fire Pump Engine (6) | CO | 2.67 | 0.13 |
| | | NO _x | 12.40 | 0.62 |
| | | PM ₁₀ | 0.88 | 0.04 |
| | | SO ₂ | 0.82 | 0.04 |
| | | VOC | 1.01 | 0.05 |
| 62-32-56A | Fire Pump Engine (6) | CO | 2.67 | 0.13 |
| | | NO _x | 12.40 | 0.62 |
| | | PM ₁₀ | 0.88 | 0.04 |
| | | SO ₂ | 0.82 | 0.04 |
| | | VOC | 1.01 | 0.05 |
| 62-36-3 | Heater F-3 (1,092 hours per year) | CO | 0.90 | 0.33 |
| | | NO _x | 0.62 | 0.22 |
| | | PM ₁₀ | 0.04 | 0.02 |
| | | SO ₂ | 0.01 | 0.01 |

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| | | VOC | 0.03 | 0.01 |
| 62-36-4 | Heater F-4 (5,388 hours per year) | CO | 1.05 | 2.26 |
| | | NO _x | 1.15 | 2.47 |
| | | PM ₁₀ | 0.09 | 0.22 |
| | | SO ₂ | 0.01 | 0.02 |
| | | VOC | 0.06 | 0.16 |
| 62-36-8 | Heater F-8 (1,500 hours per year) | CO | 1.32 | 0.58 |
| | | NO _x | 1.72 | 0.76 |
| | | PM ₁₀ | 0.22 | 0.12 |
| | | SO ₂ | 0.02 | 0.01 |
| | | VOC | 0.16 | 0.08 |
| 62-61-3 | Sour Brine Degassing Flare | VOC | 7.10 | 4.23 |
| | | NO _x | 2.95 | 2.97 |
| | | CO | 9.34 | 15.79 |
| | | SO ₂ | 0.01 | 0.01 |
| | | H ₂ S | 0.01 | 0.01 |
| 62-61-4 | Sweet Brine Degassing Flare | VOC | 1.54 | 3.11 |
| | | NO _x | 0.84 | 2.21 |
| | | CO | 3.33 | 13.63 |
| 62-61-CT11 | Brine Degassing Pit Flame System | VOC | 0.18 | 0.19 |
| | | NO _x | 0.38 | 0.42 |
| | | CO | 2.86 | 3.14 |
| 62-61-5 | Main Flare (8) | VOC | 205.63 | 12.31 |
| | | NO _x | 32.87 | 3.23 |
| | | CO | 66.54 | 6.89 |

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| | | SO ₂ | 0.01 | 0.01 |
| 62-61-5 | Main Flare (9) | VOC | 300.00 | 2.80 |
| | | NO _x | 61.55 | 0.66 |
| | | CO | 122.89 | 1.33 |
| | | SO ₂ | 0.01 | 0.01 |
| 62-0-0 | Process Fugitives (5) | VOC | 5.92 | 26.00 |
| 62-95-118 | Ethylene Glycol Tank (7) | EG | 0.01 | 0.01 |
| 62-95-119 | North Lube Oil Tank (7) | Lube Oil | 0.04 | 0.01 |
| 62-95-121 | Methanol Storage Tank (7) | Methanol | 8.27 | 0.09 |
| 62-95-138 | South Lube Oil Tank (7) | Lube Oil | 0.01 | 0.01 |
| 62-95-140 | Ethylene Glycol Tank(7) | EG | 0.01 | 0.01 |
| 62-95-CDSL | Contractor Diesel Tank (7) | Diesel | 0.02 | 0.01 |
| 62-95-FHE | Firehouse Diesel Tank East (7) | Diesel | 0.02 | 0.01 |
| 62-95-FHW | Firehouse Diesel Tank East (7) | Diesel | 0.02 | 0.01 |
| 62-95-GEN | Generator Tank (7) | Diesel | 0.03 | 0.01 |
| 62-95-CGAS | Contractor Gasoline Tank (7) | Gasoline | 6.88 | |
| 62-95-PGAS | Process Area Gasoline Tank (7) | Gasoline | 6.88 | |
| | Combined Gasoline Tanks (7) | Gasoline | | 0.34 |
| 62-95-CT07 | Sour Brine Pond | VOC | 0.13 | 0.10 |
| 62-95-CT08 | Sour Brine Pond | VOC | 0.13 | 0.10 |
| 62-95-CT09 | Sweet Brine Pond (7) | VOC | 8.38 | 20.09 |
| 62-95-CT10 | Sweet Brine Pond (7) | VOC | 8.38 | 20.09 |
| 62-95-CT12 and 62-95-201 | Combined Storage Pond and Brine | VOC | 3.43 | 4.89 |

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|-----------|--|-----|--------|-------|
| | Degassing Pit Emissions | | | |
| 62-95-207 | Sour Brine Pond Vent | VOC | 0.06 | 0.05 |
| 62-95-208 | Sour Brine Pond Vent | VOC | 0.06 | 0.05 |
| 62-95-209 | Sweet Brine Pond Vent (7) | VOC | 1.75 | 4.18 |
| 62-95-210 | Sweet Brine Pond Vent | VOC | 1.75 | 4.18 |
| MSS-ATM | MSS Emissions for line and equipment degassing | VOC | 700.00 | 6.29 |
| PAINT | Painting (10) | VOC | 8.00 | 4.71 |
| | | PM | 16.64 | 12.21 |
| SDBLAST | Abrasive Blasting (10) | PM | 2.86 | 1.29 |

- (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}
PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}
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
H₂S - hydrogen sulfide
EG - ethylene glycol
- (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) EPNs 62-16-38, 62-16-38A, and 62-16-38B combined are limited to 8,496 operating hours per year. EPN 62-32-11 is limited to 100 operating hours per year. EPN 62-32-56 is limited to 100 operating hours per year. EPN 62-36-56A is limited to 100 operating hours per year.
- (7) These facilities are authorized by Standard Exemption/Permit by Rule and are included here for reference.
- (8) These emissions include those related to maintenance activities associated with cavern inspections.
- (9) These emissions include those related to maintenance activities associated with line and equipment degassing/clearing.
- (10) These emission limits cover painting and abrasive blasting activities in designated areas of the facility site. The operator intends to authorize painting and abrasive blasting activities in other areas of the facility site through permit by rule.

Date: November 1, 2013