

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 93546

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.<br>(1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates |         |
|---------------------------|-----------------|--------------------------|----------------|---------|
|                           |                 |                          | lbs/hour       | TPY (4) |
| T-69                      | TK-069 (6)      | VOC                      | 0.73           | 1.88    |
|                           |                 | Benzene                  | 0.01           | 0.02    |
| T-76                      | TK-076 (6)      | VOC                      | 0.81           | 1.98    |
|                           |                 | Benzene                  | 0.02           | 0.03    |
| T-90                      | TK-090 (6)      | VOC                      | 0.76           | 1.50    |
|                           |                 | Benzene                  | 0.01           | 0.02    |
| T-95                      | TK-095 (6)      | VOC                      | 1.55           | 2.43    |
|                           |                 | Benzene                  | 0.05           | 0.04    |
| T-96                      | TK-096 (6)      | VOC                      | 1.50           | 2.75    |
|                           |                 | Benzene                  | 0.04           | 0.04    |
| T-97                      | TK-097 (6)      | VOC                      | 1.99           | 2.70    |
|                           |                 | Benzene                  | 0.01           | 0.02    |
| T-98                      | TK-098 (6)      | VOC                      | 0.82           | 0.08    |
| T-99                      | TK-099 (6)      | VOC                      | 0.82           | 0.08    |
| T-100                     | TK-100 (6)      | VOC                      | 2.13           | 0.92    |
| T-101                     | TK-101 (6)      | VOC                      | 0.05           | 0.05    |
| T-106                     | TK-106 (6)      | VOC                      | 1.74           | 1.48    |
| T-107                     | TK-107 (6)      | VOC                      | 5.99           | 8.42    |
|                           |                 | Benzene                  | 0.02           | 0.04    |
| T-113                     | TK-113 (6)      | VOC                      | 0.15           | 0.06    |
|                           |                 | Benzene                  | <0.01          | <0.01   |

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|       |            |         |      |      |
|-------|------------|---------|------|------|
| T-114 | TK-114 (6) | VOC     | 0.98 | 2.36 |
|       |            | Benzene | 0.02 | 0.03 |
| T-115 | TK-115 (6) | VOC     | 1.54 | 2.21 |
|       |            | Benzene | 0.01 | 0.01 |
| T-116 | TK-116 (6) | VOC     | 2.16 | 3.02 |
|       |            | Benzene | 0.01 | 0.02 |
| T-117 | TK-117 (6) | VOC     | 1.98 | 2.46 |
|       |            | Benzene | 0.01 | 0.01 |
|       |            | Toluene | 0.30 | 0.15 |
|       |            | Xylene  | 0.28 | 0.07 |
| T-118 | TK-118 (6) | VOC     | 2.50 | 3.63 |
|       |            | Benzene | 0.01 | 0.02 |
| T-119 | TK-119 (6) | VOC     | 1.00 | 2.72 |
| T-123 | TK-123 (6) | VOC     | 0.98 | 2.90 |
|       |            | Benzene | 0.02 | 0.04 |
| T-124 | TK-124 (6) | VOC     | 0.95 | 2.81 |
|       |            | Benzene | 0.02 | 0.04 |
| T-125 | TK-125 (6) | VOC     | 1.82 | 2.65 |
|       |            | Benzene | 0.03 | 0.04 |
| T-126 | TK-126 (6) | VOC     | 0.94 | 2.99 |
|       |            | Benzene | 0.01 | 0.02 |
| T-127 | TK-127 (6) | VOC     | 2.32 | 3.19 |
|       |            | Benzene | 0.04 | 0.05 |
| T-129 | TK-129 (6) | VOC     | 2.12 | 7.08 |
|       |            | Benzene | 0.03 | 0.09 |
| T-130 | TK-130 (6) | VOC     | 2.19 | 2.99 |
|       |            | Benzene | 0.04 | 0.05 |
| T-131 | TK-131 (6) | VOC     | 2.53 | 6.31 |
|       |            | Benzene | 0.01 | 0.03 |

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|       |            |         |      |       |
|-------|------------|---------|------|-------|
| T-132 | TK-132 (6) | VOC     | 2.97 | 3.92  |
| T-133 | TK-133 (6) | VOC     | 9.18 | 13.43 |
|       |            | Benzene | 0.03 | 0.05  |
| T-137 | TK-137 (6) | VOC     | 1.72 | 6.53  |
|       |            | Benzene | 0.09 | 0.33  |
| T-139 | TK-139 (6) | VOC     | 0.56 | 0.28  |
| T-140 | TK-140 (6) | VOC     | 6.91 | 8.95  |
|       |            | Benzene | 0.02 | 0.04  |
| T-141 | TK-141 (6) | VOC     | 3.68 | 4.93  |
|       |            | Benzene | 0.01 | 0.03  |
| T-142 | TK-142 (6) | VOC     | 2.36 | 3.46  |
|       |            | Benzene | 0.04 | 0.05  |
| T-143 | TK-143 (6) | VOC     | 2.79 | 3.99  |
|       |            | Benzene | 0.01 | 0.02  |
| T-144 | TK-144 (6) | VOC     | 2.73 | 3.63  |
|       |            | Benzene | 0.01 | 0.02  |
| T-145 | TK-145 (6) | VOC     | 2.95 | 3.96  |
|       |            | Benzene | 0.01 | 0.02  |
| T-146 | TK-146 (6) | VOC     | 3.25 | 4.34  |
|       |            | Benzene | 0.01 | 0.02  |
| T-164 | TK-164 (6) | VOC     | 2.20 | 2.67  |
|       |            | Benzene | 0.01 | 0.02  |
| T-165 | TK-165 (6) | VOC     | 3.10 | 3.97  |
|       |            | Benzene | 0.01 | 0.02  |
| T-166 | TK-166 (6) | VOC     | 2.51 | 2.78  |
|       |            | Benzene | 0.01 | 0.02  |

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|       |             |         |       |       |
|-------|-------------|---------|-------|-------|
| T-167 | TK-167 (6)  | VOC     | 3.04  | 3.91  |
|       |             | Benzene | 0.01  | 0.02  |
| T-181 | TK-181 (6)  | VOC     | 3.87  | 5.50  |
|       |             | Benzene | 0.01  | 0.02  |
| T-182 | TK-182 (6)  | VOC     | 10.50 | 14.78 |
|       |             | Benzene | 0.03  | 0.06  |
| T-183 | TK-183 (6)  | VOC     | 20.69 | 27.98 |
|       |             | Benzene | 0.05  | 0.11  |
| T-190 | TK-190 (6)  | VOC     | 8.83  | 29.66 |
|       |             | Benzene | 0.12  | 0.37  |
| T-191 | TK-191 (6)  | VOC     | 2.49  | 7.77  |
|       |             | Benzene | 0.04  | 0.10  |
| T-192 | TK-192 (6)  | VOC     | 21.26 | 29.30 |
|       |             | Benzene | 0.05  | 0.11  |
| T-202 | TK-202 (6)  | VOC     | 2.15  | 2.36  |
|       |             | Benzene | 0.01  | 0.01  |
| T-210 | TK-210 (6)  | VOC     | 1.80  | 6.82  |
|       |             | Benzene | 0.01  | 0.02  |
| T-211 | TK-211 (6)  | VOC     | 2.09  | 6.89  |
|       |             | Benzene | 0.03  | 0.09  |
| 70    | TK-4007 (6) | VOC     | 1.99  | 0.44  |
| 71    | TK-4008 (6) | VOC     | 0.38  | 0.26  |
| 66    | TK-4012 (6) | VOC     | 0.76  | 0.26  |
| 52    | TK-4013 (6) | VOC     | 1.36  | 0.35  |
| 79    | TK-4035 (6) | VOC     | 0.58  | 1.16  |
|       |             | Benzene | 0.01  | 0.01  |
| 54    | TK-4041 (6) | VOC     | 0.85  | 0.06  |
| 53    | TK-4046 (6) | VOC     | 1.70  | 0.44  |

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|       |             |         |       |       |
|-------|-------------|---------|-------|-------|
| 28    | TK-4050 (6) | VOC     | 29.24 | 39.37 |
|       |             | Benzene | 0.07  | 0.18  |
| 67    | TK-4051 (6) | VOC     | 1.83  | 0.41  |
| 29    | TK-4057 (6) | VOC     | 0.50  | 0.12  |
| T4064 | TK-4064 (6) | VOC     | 0.81  | 0.04  |
|       |             | Benzene | 0.01  | 0.01  |
| 45    | TK-4065 (6) | VOC     | 0.76  | 1.35  |
|       |             | Benzene | 0.01  | 0.01  |
| 46    | TK-4113 (6) | VOC     | 1.83  | 0.44  |
| 48    | TK-4115 (6) | VOC     | 1.71  | 0.76  |
| 49    | TK-4116 (6) | VOC     | 1.71  | 0.87  |
| 38    | TK-4118 (6) | VOC     | 2.86  | 3.84  |
|       |             | Benzene | 0.01  | 0.02  |
| 39    | TK-4119 (6) | VOC     | 2.62  | 3.67  |
|       |             | Benzene | 0.05  | 0.05  |
| 40    | TK-4120 (6) | VOC     | 2.67  | 3.80  |
|       |             | Benzene | 0.05  | 0.06  |
| 42    | TK-4121 (6) | VOC     | 0.91  | 1.83  |
|       |             | Benzene | 0.01  | 0.01  |
| 43    | TK-4122 (6) | VOC     | 0.89  | 1.81  |
|       |             | Benzene | 0.01  | 0.01  |
| 47    | TK-4123 (6) | VOC     | 0.82  | 0.88  |
|       |             | Benzene | 0.01  | 0.01  |
| 44    | TK-4124 (6) | VOC     | 1.56  | 4.45  |
|       |             | Benzene | 0.03  | 0.06  |
| 116   | TK-4285 (6) | VOC     | 4.64  | 6.76  |
|       |             | Benzene | 0.02  | 0.03  |
| 118   | TK-4601 (6) | VOC     | 0.75  | 1.35  |
|       |             | Benzene | 0.01  | 0.01  |

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|         |             |         |       |       |
|---------|-------------|---------|-------|-------|
| 119     | TK-4602 (6) | VOC     | 3.01  | 1.40  |
| 120     | TK-4603 (6) | VOC     | 3.01  | 1.41  |
| 124     | TK-4605 (6) | VOC     | 4.28  | 13.91 |
|         |             | Benzene | 0.06  | 0.18  |
| TANK504 | TK-504 (6)  | VOC     | 2.54  | 0.04  |
|         |             | Benzene | 0.03  | 0.01  |
| TANK506 | TK-506 (6)  | VOC     | 0.33  | 0.01  |
| VENT507 | TK-507 (6)  | VOC     | 0.33  | 0.01  |
| TANK508 | TK-508 (6)  | VOC     | 0.83  | 1.35  |
|         |             | Benzene | 0.01  | 0.01  |
| TANK509 | TK-509 (6)  | VOC     | 12.18 | 6.68  |
| PRV512  | TK-512 (6)  | VOC     | 0.13  | 0.01  |
|         |             | Benzene | 0.01  | 0.01  |
| TANK513 | TK-513 (6)  | VOC     | 0.89  | 1.44  |
|         |             | Benzene | 0.01  | 0.01  |
|         |             | Toluene | 1.28  | 0.12  |
|         |             | Xylene  | 1.26  | 0.08  |
| TANK514 | TK-514 (6)  | VOC     | 0.72  | 1.16  |
|         |             | Benzene | 0.01  | 0.01  |
|         |             | Toluene | 0.79  | 0.13  |
|         |             | Xylene  | 0.78  | 0.09  |
| TANK515 | TK-515 (6)  | VOC     | 0.70  | 1.08  |
|         |             | Benzene | 0.01  | 0.01  |
| TANK516 | TK-516 (6)  | VOC     | 0.70  | 1.11  |
|         |             | Benzene | 0.01  | 0.01  |
| TK-517  | TK-517 (6)  | VOC     | 1.85  | 0.15  |
| VENT518 | TK-518 (6)  | VOC     | 1.85  | 0.11  |
| VENT519 | TK-519 (6)  | VOC     | 1.85  | 0.07  |

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|           |  |                  |       |       |
|-----------|--|------------------|-------|-------|
| TANK520   | TK-520 (6)   | VOC              | 0.59  | 1.14  |
|           |  | Benzene          | 0.01  | 0.01  |
| TANK521   | TK-521 (6)   | VOC              | 1.06  | 1.62  |
|           |  | Benzene          | 0.01  | 0.01  |
| TANK522   | TK-522 (6)   | VOC              | 1.13  | 1.79  |
|           |  | Benzene          | 0.01  | 0.01  |
| T-524     | TK-524 (6)   | VOC              | 0.09  | 0.05  |
| F-10N-T   | North Plant Utilities Fugitives (5) (6)            | VOC              | 0.28  | 1.23  |
|           |  | H <sub>2</sub> S | <0.01 | <0.01 |
| WWCTS-T   | North API Separator Fugitives (5) (6)              | VOC              | <0.01 | <0.01 |
|           |  | Benzene          | <0.01 | <0.01 |
|           |  | H <sub>2</sub> S | <0.01 | <0.01 |
|           |  | NH <sub>3</sub>  | <0.01 | <0.01 |
| TNK-FUG-T | Tank Field Piping Fugitives (5) (6)                | VOC              | 16.75 | 73.35 |
|           |  | Benzene          | 0.20  | 0.86  |
|           |  | H <sub>2</sub> S | <0.01 | <0.01 |
| F-16S-T   | Receiving, Pumping, and Shipping Fugitives (5) (6) | VOC              | 11.05 | 48.41 |
|           |  | Benzene          | 0.10  | 0.44  |
|           |  | H <sub>2</sub> S | <0.01 | <0.01 |
| FUG-T     | Terminal Fugitives (5) (6)                         | VOC              | 4.72  | 20.65 |
|           |  | Benzene          | 0.05  | 0.18  |
|           |  | H <sub>2</sub> S | <0.01 | <0.01 |
| SLR1      | South Railcar Loading Rack (6)                     | VOC              | 3.89  | 0.31  |
|           |  | H <sub>2</sub> S | <0.01 | <0.01 |
| SLR2      | South LPG Tanktruck Loading Rack (6)               | VOC              | 0.10  | 0.01  |
| SLR4      | South Acid/Caustic Tanktruck Loading Rack (6)      | VOC              | 10.53 | 1.05  |
|           |  | H <sub>2</sub> S | <0.01 | <0.01 |
| NLR2-5    | North Railcar and                                  | VOC              | 2.16  | 4.76  |

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|           |  |                   |       |       |
|-----------|--|-------------------|-------|-------|
|           | Tanktruck Loading Rack (6)                       |                   |       |       |
| NLR 2-5   | North Loading Rack NLR3 (6)                      | VOC               | 8.27  | 0.81  |
|           |  | Toluene           | 1.18  | 0.11  |
|           |  | Xylene            | 0.61  | 0.06  |
| NLR2-5    | North Caustic Loading Rack (6)                   | VOC               | 5.28  | 0.09  |
|           |  | H <sub>2</sub> S  | <0.01 | <0.01 |
| NLR-6     | Solid Waste Gondola Loading Rack (6)             | PM                | 3.24  | 0.19  |
|           |  | PM <sub>10</sub>  | 1.62  | 0.10  |
|           |  | PM <sub>2.5</sub> | 1.62  | 0.10  |
| NLR-7     | North Asphalt Feed Loading Rack (6)              | VOC               | 0.04  | <0.01 |
| LLPG-TC   | North LPG Railcar and Tanktruck Loading Rack (6) | VOC               | 0.40  | 0.09  |
| CA-SK     | Terminal Tank Truck Loading Rack VRU (6)         | VOC               | 0.79  | 1.52  |
| LRACK-FUG | Terminal Loading Rack Hose Fugitives (6)         | VOC               | 0.16  | 0.20  |
| VACLR     | Vacuum Residue Loading (6)                       | VOC               | 0.01  | 0.01  |
| CA-SK     | Marketing Terminal Sump-1 (6)                    | VOC               | 0.14  | 0.60  |
| CA-SK     | Marketing Terminal Sump-2 (6)                    | VOC               | 0.14  | 0.60  |



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|                                |   |                   |        |        |
|--------------------------------|---|-------------------|--------|--------|
| Compliance Caps - Final (5)(6) |   | PM                | 3.24   | 0.19   |
|                                |   | PM <sub>10</sub>  | 1.62   | 0.10   |
|                                |   | PM <sub>2.5</sub> | 1.62   | 0.10   |
|                                |   | VOC               | 243.00 | 282.00 |
|                                |   | Benzene           | 0.55   | 1.20   |
| MSS CAP                        | Sitewide MSS<br>Sources Excluding<br>Flares | VOC               | 348.76 | 66.92  |
|                                |   | NO <sub>x</sub>   | 1.49   | 9.94   |
|                                |   | CO                | 0.44   | 2.19   |
|                                |   | SO <sub>2</sub>   | 0.19   | 0.75   |
|                                |   | PM                | 8.86   | 1.72   |
|                                |   | PM <sub>10</sub>  | 8.86   | 1.72   |
|                                |   | PM <sub>2.5</sub> | 8.86   | 1.72   |
|                                |   | H <sub>2</sub> S  | 0.01   | 0.01   |
| TK-4042                        | TK-4042                                     | VOC               | 3.54   | 1.23   |
| T-812                          | TK-812                                      | VOC               | 0.99   | 1.41   |
|                                |   | Benzene           | 0.01   | 0.01   |
| TK-4610                        | TK-4610                                     | VOC               | 0.78   | 1.33   |
|                                |   | Benzene           | 0.01   | 0.01   |
| TK-4611                        | TK-4611                                     | VOC               | 2.52   | 4.20   |
|                                |   | Benzene           | 0.01   | 0.02   |
| TK-4042 MSS                    | TK-4042 MSS                                 | VOC               | 23.48  | 0.28   |
| TK-812 MSS                     | TK-812 MSS                                  | VOC               | 90.30  | 0.42   |
|                                |   | Benzene           | 0.91   | <0.01  |
| TK-4610 MSS                    | TK-4610 MSS                                 | VOC               | 115.23 | 0.52   |
|                                |   | Benzene           | 1.47   | 0.01   |
| TK-4611 MSS                    | TK-4611 MSS                                 | VOC               | 96.74  | 0.38   |
|                                |   | H <sub>2</sub> S  | 0.46   | <0.01  |
| XF 3601                        | Asphalt Plant –<br>Furnace F-3601           | VOC               | 0.72   | 3.15   |
|                                |   | NO <sub>x</sub>   | 1.99   | 8.72   |

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|        |                     |                  |                   |       |
|--------|---------------------|------------------|-------------------|-------|
|        |                     |                  | CO                | 14.16 |
| 62.01  |                     |                  | SO <sub>2</sub>   | 1.98  |
| 0.67   |                     |                  | PM                | 0.63  |
| 0.76   |                     |                  | PM <sub>10</sub>  | 0.63  |
| 0.76   |                     |                  | PM <sub>2.5</sub> | 0.63  |
| 0.76   |                     |                  |                   |       |
|        |                     | H <sub>2</sub> S | 0.06              | 0.26  |
|        | Asphalt Plant –     | VOC              | 0.12              | 0.11  |
|        |                     | H <sub>2</sub> S | <0.01             | <0.01 |
|        | Asphalt Tank D-3601 | VOC              | 0.29              | 0.81  |
|        |                     | H <sub>2</sub> S | <0.01             | <0.01 |
|        | Asphalt Tank D-3602 | VOC              | 0.29              | 0.81  |
|        |                     | H <sub>2</sub> S | <0.01             | <0.01 |
| D-3605 | Asphalt Tank D-3605 | VOC              | 0.74              | 0.63  |
|        |                     | H <sub>2</sub> S | <0.01             | <0.01 |
| D-3606 | Asphalt Tank D-3606 | VOC              | 0.26              | 0.63  |
|        |                     | H <sub>2</sub> S | <0.01             | <0.01 |
| D-3607 | Asphalt Tank D-3607 | VOC              | 0.15              | 0.04  |
|        |                     | H <sub>2</sub> S | <0.01             | <0.01 |
| D-3608 | Asphalt Tank D-3608 | VOC              | 0.15              | 0.04  |
|        |                     | H <sub>2</sub> S | <0.01             | <0.01 |
| D-3609 | Asphalt Tank D-3609 | VOC              | 0.15              | 0.04  |
|        |                     | H <sub>2</sub> S | <0.01             | <0.01 |
| D-3610 | Asphalt Tank D-3610 | VOC              | 0.15              | 0.04  |
|        |                     | H <sub>2</sub> S | <0.01             | <0.01 |
| D-3611 | Asphalt Tank D-3611 | VOC              | 0.15              | 0.04  |
|        |                     | H <sub>2</sub> S | <0.01             | <0.01 |
| D-3612 | Asphalt Tank D-3612 | VOC              | 0.15              | 0.04  |
|        |                     | H <sub>2</sub> S | <0.01             | <0.01 |
| D-3623 | Asphalt Tank D-3623 | VOC              | 0.15              | 0.04  |

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|   |         |                     |                  |       |
|---|---------|---------------------|------------------|-------|
| (1) Emission point identification - either specific equipment designation or emission point number from plot plan.                                      | D-3624  | Asphalt Tank D-3624 | H <sub>2</sub> S | <0.01 |
| (2) Specific point source name. For fugitive sources, use area name or fugitive source name.  |         |                     | VOC              | 0.15  |
| (3) VOC   | <0.01   |                     | H <sub>2</sub> S | <0.01 |
| NO <sub>x</sub>   | D-3625  | Asphalt Tank D-3625 | VOC              | 0.15  |
| SO <sub>2</sub>   | <0.01   |                     | H <sub>2</sub> S | <0.01 |
| PM  | <0.01   |                     | H <sub>2</sub> S | <0.01 |
| PM <sub>10</sub>  | D-3627  | Asphalt Tank D-3627 | VOC              | 0.15  |
| PM <sub>2.5</sub>   |         |                     | H <sub>2</sub> S | <0.01 |
| CO  |         |                     | VOC              | 0.14  |
| H <sub>2</sub> S  |         |                     |                  | 0.02  |
| (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.   |         |                     |                  | <0.01 |
| (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations. |         |                     |                  | 0.02  |
| (6) Total emission rates from these emission points shall comply with compliance caps contained in this MAERT.  |         |                     |                  | <0.01 |
|   | D-3630  | Asphalt Tank D-3630 | VOC              | 0.15  |
|   |         |                     | H <sub>2</sub> S | <0.01 |
|   | D-3670  | Asphalt Tank D-3670 | VOC              | 0.14  |
|   |         |                     | H <sub>2</sub> S | <0.01 |
|   | D-3671  | Asphalt Tank D-3671 | VOC              | 0.14  |
|   |         |                     | H <sub>2</sub> S | <0.01 |
|   | D-3672  | Asphalt Tank D-3672 | VOC              | 0.14  |
|   |         |                     | H <sub>2</sub> S | <0.01 |
|   | FUELFUG | Asphalt Plant       | VOC              | 1.73  |
|   |         |                     | H <sub>2</sub> S | 0.01  |
|   | T-136   | TK-136              | VOC              | 2.45  |