



**Table 3-1  
Default Target Levels**

| Chemicals of Concern             | Soil<br>(mg/kg) |         | Groundwater<br>(mg/L) |         |
|----------------------------------|-----------------|---------|-----------------------|---------|
|                                  | Value           | Pathway | Value                 | Pathway |
| Benzene                          | 5.61E-02        | Gwp     | 5.00E-03              | Ing     |
| Toluene                          | 2.98E+01        | Gwp     | 1.00E+00              | Ing     |
| Ethyl benzene                    | 3.99E+01        | Gwp     | 7.00E-01              | Ing     |
| Xylenes (mixed)                  | 1.70E+02        | Inh     | 1.00E+01              | Ing     |
| Ethylene Dibromide (EDB)         | 4.73E-04        | Gwp     | 5.00E-05              | Ing     |
| Ethylene Dichloride (EDC)        | 6.31E-03        | Gwp     | 1.56E-03              | Ing     |
| Methyl-tert-butyl-ether (MTBE)   | 4.53E-01        | Gwp     | 1.46E-01              | Ing     |
| Acenaphthene                     | 2.09E+02        | Gwp     | 1.98E-01              | Ing     |
| Anthracene                       | 3.14E+03        | DC      | 9.89E-01              | Ing     |
| Benzo(a)anthracene               | 1.84E+00        | DC      | 9.21E-04              | Ing     |
| Benzo(a)pyrene                   | 1.90E-01        | DC      | 2.00E-04              | Ing     |
| Benzo(b)fluoranthene             | 1.84E+00        | DC      | 9.21E-04              | Ing     |
| Benzo(k)fluoranthene             | 1.84E+01        | DC      | 9.21E-03              | Ing     |
| Chrysene                         | 1.83E+02        | DC      | 9.21E-02              | Ing     |
| Dibenzo(a,h)anthracene           | 1.84E-01        | DC      | 9.21E-05              | Ing     |
| Fluoranthene                     | 1.19E+03        | DC      | 6.26E-01              | Ing     |
| Fluorene                         | 2.71E+02        | Gwp     | 1.32E-01              | Ing     |
| Naphthalene                      | 1.06E+00        | Gwp     | 3.55E-03              | Ing     |
| Pyrene                           | 7.51E+02        | DC      | 4.69E-01              | Ing     |
| TPH-GRO                          | 3.83E+02        | Inh     | 1.80E+01              | Ing     |
| TPH-DRO                          | 4.14E+03        | Inh     | 3.43E+01              | Ing     |
| TPH-ORO                          | 5.08E+04        | DC      | 3.18E+01              | Ing     |
| >C6-C8 (Aliphatics)              | 2.51E+02        | Inh     | 9.86E+00              | Inh     |
| >C8-C10 (Aliphatics)             | 5.16E+01        | Inh     | 3.35E-01              | Inh     |
| >C10-C12 (Aliphatics)            | 2.56E+02        | Inh     | 2.24E-01              | Inh     |
| >C12-C16 (Aliphatics)            | 1.17E+03        | Inh     | 5.16E-02              | Inh     |
| >C16-C21 (Aliphatics)            | 5.02E+04        | DC      | 3.13E+01              | Ing     |
| >C21-C35 (Aliphatics)            | 5.02E+04        | DC      | 3.13E+01              | Ing     |
| >C8-C10 (Aromatics)              | 4.13E+01        | Gwp     | 1.73E-01              | Ing     |
| >C10-C12 (Aromatics)             | 6.49E+01        | Gwp     | 1.73E-01              | Ing     |
| >C12-C16 (Aromatics)             | 1.29E+02        | Gwp     | 1.73E-01              | Ing     |
| >C16-C21 (Aromatics)             | 6.25E+02        | DC      | 4.69E-01              | Ing     |
| >C21-C35 (Aromatics)             | 6.25E+02        | DC      | 4.69E-01              | Ing     |
| Tertiary-amy-methyl-ether (TAME) | 5.11E+00        | Gwp     | 6.26E-01              | Ing     |
| Tertiary-butyl-alcohol (TBA)     | 5.63E-01        | Gwp     | 2.86E-01              | Ing     |
| Ethyl-tert-butyl-ether (ETBE)    | 1.10E-01        | Gwp     | 1.50E-02              | Ing     |
| Diisopropyl ether (DIPE)         | 7.96E+00        | Gwp     | 6.77E-01              | Ing     |
| Ethanol                          | 3.39E+00        | Gwp     | 2.26E+00              | Ing     |
| Methanol                         | 7.92E-01        | Gwp     | 2.97E-01              | Ing     |
| Arsenic                          | 4.35E+00        | DC      | 1.00E-02              | Ing     |
| Barium                           | 5.47E+02        | Gwp     | 2.00E+00              | Ing     |
| Cadmium                          | 1.88E+00        | Gwp     | 5.00E-03              | Ing     |
| Chromium III                     | 6.65E+04        | DC      | 2.35E+01              | Ing     |
| Chromium VI                      | 2.22E+01        | Gwp     | 4.69E-02              | Ing     |
| Lead                             | 2.60E+02        | DC      | 1.50E-02              | Ing     |
| Selenium                         | 4.37E+00        | Gwp     | 7.82E-02              | Ing     |

Notes:

DC: Direct contact pathway

Gwp: Protection of domestic groundwater use pathway (leaching)

Inh: Vapors from soil or groundwater to indoor air pathway

Derm: Dermal contact pathway

Ing: Groundwater ingestion pathway (i.e., domestic use)

3-Mar-05

**Table 4-1**  
**Soil Concentration Levels to Determine the Need for Groundwater Evaluation During Tank Closure**

| Chemicals                         | Domestic Consumption of Groundwater Pathway |            |
|-----------------------------------|---|------------|
|                                   | Complete                                    | Incomplete |
| Benzene                           | 5.61E-02                                    | 6.97E+00   |
| Toluene                           | 2.98E+01                                    | 1.23E+03 * |
| Ethylbenzene                      | 3.99E+01 *                                  | 5.81E+03 * |
| Xylenes (mixed)                   | 6.34E+02 *                                  | 5.16E+03 * |
| Ethylene Dibromide (EDB)          | 4.73E-04                                    | 5.95E+00   |
| Ethylene Dichloride (EDC)         | 6.31E-03                                    | 3.63E+00   |
| Methyl-tert-butyl-ether(MTBE)     | 4.53E-01                                    | 1.46E+03   |
| Acenaphthene                      | 2.09E+02 *                                  | 1.70E+06 * |
| Anthracene                        | 4.35E+03 *                                  | 1.00E+07 * |
| Benzo(a)anthracene                | 5.46E+01 *                                  | 8.23E+06 * |
| Benzo(a)pyrene                    | 3.04E+01 *                                  | 3.63E+06 * |
| Benzo(b)fluoranthene              | 1.69E+02 *                                  | 1.76E+06 * |
| Benzo(k)fluoranthene              | 1.69E+03 *                                  | 2.16E+09 * |
| Chrysene                          | 5.46E+03 *                                  | 6.09E+07 * |
| Dibenzo(a,h)anthracene            | 5.21E+01                                    | 7.37E+08 * |
| Fluoranthene                      | 9.97E+03 *                                  | 2.27E+08 * |
| Fluorene                          | 2.71E+02 *                                  | 6.19E+06 * |
| Napthalene                        | 1.06E+00 *                                  | 1.61E+03 * |
| Pyrene                            | 7.34E+03 *                                  | 2.70E+08 * |
| TPH-GRO                           | 1.25E+04                                    | 1.25E+04   |
| TPH-DRO                           | 1.22E+05                                    | 1.22E+05   |
| TPH-ORO                           | 2.94E+09                                    | NA         |
| >C6 - C8 (Aliphatics)             | 8.30E+03 *                                  | 8.30E+03 * |
| >C8 - C10 (Aliphatics)            | 1.71E+03 *                                  | 1.71E+03 * |
| >C10 - C12 (Aliphatics)           | 8.49E+03 *                                  | 8.49E+03 * |
| >C12 - C16 (Aliphatics)           | 3.86E+04 *                                  | 3.86E+04 * |
| >C16 - C21 (Aliphatics)           | 2.94E+09 *                                  | NA         |
| >C21 - C35 (Aliphatics)           | 2.94E+09 *                                  | NA         |
| >C8 - C10 (Aromatics)             | 4.13E+01                                    | 2.51E+03 * |
| >C10 - C12 (Aromatics)            | 6.49E+01                                    | 1.26E+04 * |
| >C12 - C16 (Aromatics)            | 1.29E+02                                    | 6.21E+04 * |
| >C16 - C21 (Aromatics)            | 1.11E+03 *                                  | NA         |
| >C21 - C35 (Aromatics)            | 8.79E+03 *                                  | NA         |
| Tertiary-amyl-methyl-ether (TAME) | 5.11E+00                                    | NA         |
| Tertiary-butyl- alcohol (TBA)     | 5.63E-01                                    | 4.73E+03   |
| Ethyl-tert-butyl-ether ( ETBE)    | 1.10E-01 *                                  | 7.28E+02   |
| Diisopropyl ether ( DIPE)         | 7.96E+00 *                                  | 2.50E+03 * |
| Ethanol                           | 3.39E+00 *                                  | 1.82E+05 * |
| Methanol                          | 7.92E-01 *                                  | 4.97E+04   |
| Arsenic                           | 6.25E+00 *                                  | NA         |
| Barium                            | 5.47E+02                                    | NA         |
| Cadmium                           | 1.88E+00                                    | NA         |
| Chromium III                      | 7.00E+05                                    | NA         |
| Chromium VI                       | 2.22E+01                                    | NA         |
| Lead                              | NA  | NA         |
| Selenium                          | 4.37E+00                                    | NA         |

Notes:

All concentrations are in mg/kg.

NA: Not Available

\*: Concentrations greater then effective soil saturation concentration.

**Table 7-1(a)**  
**Tier 1 Risk-Based Target Levels for Residential Land Use for Soil Type 1 (Sandy Soil)**

| Chemicals of Concern              | Air                      | Surficial Soil   | Subsurface Soil                      | Groundwater                          |                |              |
|-----------------------------------|--------------------------|--|--------------------------------------|--------------------------------------|----------------|--------------|
|                                   | Indoor                   | Ingestion, Inhalation (Vapor Emissions and Particulates), and Dermal Contact | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Dermal Contact | Domestic Use |
|                                   | [mg/m <sup>3</sup> -air] | [mg/kg]  | [mg/kg]                              | [mg/L]                               | [mg/L]         | [mg/L]       |
| Benzene                           | 3.09E-03                 | 8.55E+00   | 2.34E-01                             | 6.21E-01                             | 4.61E-01       | 5.00E-03 m   |
| Toluene                           | 2.39E-01                 | 1.04E+03 *   | 4.07E+01                             | 4.15E+01                             | 2.22E+01       | 1.00E+00 m   |
| Ethylbenzene                      | 5.97E-01                 | 8.48E+02 *   | 1.90E+02 *                           | 1.02E+02 #                           | 6.06E+00 #     | 7.00E-01 m   |
| Xylenes (mixed)                   | 4.18E-01                 | 2.76E+03 *   | 1.70E+02 *                           | 8.14E+01 #                           | 1.11E+02 #     | 1.00E+01 m   |
| Ethylene Dibromide (EDB)          | 1.17E-04                 | 1.92E-02   | 2.35E-01                             | 6.29E-01                             | 1.23E-04       | 5.00E-05 m   |
| Ethylene Dichloride (EDC)         | 9.86E-04                 | 7.47E+00   | 1.35E-01                             | 8.97E-01                             | 2.54E-01       | 1.56E-03     |
| Methyl-tert-butyl-ether(MTBE)     | 2.56E-01                 | 1.88E+02   | 5.61E+01                             | 4.70E+02                             | 7.46E+00       | 1.46E-01     |
| Acenaphthene                      | 1.25E-01                 | 6.27E+02 *   | 6.70E+04 *                           | 1.61E+03 #                           | 1.15E+00       | 1.98E-01     |
| Anthracene                        | 6.27E-01                 | 3.14E+03 *   | 3.90E+05 *                           | 2.29E+03 #                           | 5.83E+00 #     | 9.89E-01 #   |
| Benzo(a)anthracene                | 2.89E-04                 | 1.84E+00   | 3.27E+05 *                           | 1.39E+02 #                           | 4.70E-04       | 9.21E-04     |
| Benzo(a)pyrene                    | 1.47E-05                 | 1.90E-01   | 1.44E+05 *                           | 2.39E+01 #                           | 2.52E-05       | 2.00E-04 m   |
| Benzo(b)fluoranthene              | 2.89E-04                 | 1.84E+00   | 6.98E+04 *                           | 9.62E+00 #                           | 2.52E-04       | 9.21E-04     |
| Benzo(k)fluoranthene              | 2.89E-03                 | 1.84E+01 *   | 8.59E+07 *                           | 1.18E+04 #                           | 2.52E-03 #     | 9.21E-03 #   |
| Chrysene                          | 2.89E-02                 | 1.83E+02 *   | 2.41E+06 *                           | 1.03E+03 #                           | 4.70E-02 #     | 9.21E-02 #   |
| Dibenzo(a,h)anthracene            | 2.89E-05                 | 1.84E-01   | 2.93E+07 *                           | 1.30E+03 #                           | 1.39E-05       | 9.21E-05     |
| Fluoranthene                      | 8.36E-02                 | 1.19E+03 *   | 9.02E+06 *                           | 1.42E+04 #                           | 4.17E-01 #     | 6.26E-01 #   |
| Fluorene                          | 8.36E-02                 | 4.22E+02 *   | 2.46E+05 *                           | 3.01E+03 #                           | 1.13E+00       | 1.32E-01     |
| Naphthalene                       | 1.80E-03                 | 7.90E+01 *   | 6.23E+01 *                           | 5.40E+00 #                           | 1.32E+00 #     | 3.55E-03     |
| Pyrene                            | 6.27E-02                 | 7.51E+02 *   | 1.07E+07 *                           | 1.73E+04 #                           | 3.13E-01 #     | 4.69E-01 #   |
| TPH-GRO                           | 1.17E+01                 | 2.90E+04 *   | 3.83E+02                             | 2.07E+01                             | 1.35E+02 #     | 1.80E+01     |
| TPH-DRO                           | 1.43E+00                 | 5.60E+04 *   | 4.14E+03 *                           | 1.17E+02 #                           | 5.45E+00       | 3.43E+01 #   |
| TPH-ORO                           | NA                       | 5.08E+04 *   | NA                                   | NA                                   | 6.64E-01 #     | 3.18E+01 #   |
| >C6 - C8 (Aliphatics)             | 1.10E+01                 | 2.65E+04 *   | 2.51E+02 *                           | 9.86E+00 #                           | 1.31E+02 #     | 1.72E+01 #   |
| >C8 - C10 (Aliphatics)            | 5.97E-01                 | 1.65E+03 *   | 5.16E+01                             | 3.35E-01                             | 9.84E-01 #     | 6.77E-01 #   |
| >C10 - C12 (Aliphatics)           | 5.97E-01                 | 1.63E+03 *   | 2.56E+02 *                           | 2.24E-01 #                           | 3.69E-01 #     | 6.77E-01 #   |
| >C12 - C16 (Aliphatics)           | 5.97E-01                 | 2.00E+03 *   | 1.17E+03 *                           | 5.16E-02 #                           | 8.57E-02 #     | 1.56E+00 #   |
| >C16 - C21 (Aliphatics)           | NA                       | 5.02E+04 *   | NA                                   | NA                                   | 1.74E-01 #     | 3.13E+01 #   |
| >C21 - C35 (Aliphatics)           | NA                       | 5.02E+04 *   | NA                                   | NA                                   | 1.74E-01 #     | 3.13E+01 #   |
| >C8 - C10 (Aromatics)             | 1.19E-01                 | 8.48E+02 *   | 8.05E+01                             | 1.05E+01                             | 2.49E+00       | 1.73E-01     |
| >C10 - C12 (Aromatics)            | 1.19E-01                 | 7.32E+02 *   | 4.34E+02 *                           | 3.35E+01 #                           | 2.09E+00       | 1.73E-01     |
| >C12 - C16 (Aromatics)            | 1.19E-01                 | 8.64E+02 *   | 2.28E+03 *                           | 8.30E+01 #                           | 1.72E+00       | 1.73E-01     |
| >C16 - C21 (Aromatics)            | NA                       | 6.25E+02 *   | NA                                   | NA                                   | 1.01E+00 #     | 4.69E-01     |
| >C21 - C35 (Aromatics)            | NA                       | 6.25E+02 *   | NA                                   | NA                                   | 4.90E-01 #     | 4.69E-01 #   |
| Tertiary-amyl-methyl-ether (TAME) | NA                       | 8.34E+02   | NA                                   | NA                                   | NA             | 6.26E-01     |
| Tertiary-butyl- alcohol (TBA)     | 1.80E-01                 | 1.01E+03   | 1.87E+02                             | 2.41E+03                             | NA             | 2.86E-01     |
| Ethyl-tert-butyl-ether ( ETBE)    | 1.80E-01                 | 2.03E+01   | 2.58E+01                             | 9.90E+01                             | NA             | 1.50E-02     |
| Diisopropyl ether ( DIPE)         | 5.97E-01                 | 1.17E+03   | 8.57E+01                             | 2.13E+02                             | NA             | 6.77E-01     |
| Ethanol                           | 1.13E+00                 | 3.24E+04 *   | 7.22E+03                             | 1.21E+05                             | NA             | 2.26E+00     |
| Methanol                          | 1.55E-01                 | 4.31E+03   | 1.98E+03                             | 1.87E+04                             | NA             | 2.97E-01     |
| Arsenic                           | 5.96E-06                 | 4.35E+00   | NA                                   | NA                                   | NA             | 1.00E-02 m   |
| Barium                            | 2.92E-04                 | 4.50E+03   | NA                                   | NA                                   | NA             | 2.00E+00 m   |
| Cadmium                           | 1.42E-05                 | 3.23E+01   | NA                                   | NA                                   | NA             | 5.00E-03 m   |
| Chromium (III)                    | 5.97E-05                 | 6.65E+04   | NA                                   | NA                                   | NA             | 2.35E+01     |
| Chromium (VI)                     | 3.09E-07                 | 9.36E+02   | NA                                   | NA                                   | NA             | 4.69E-02     |
| Lead                              | NA                       | 2.60E+02   | 2.60E+02                             | NA                                   | NA             | 1.50E-02     |
| Selenium                          | NA                       | 1.34E+02   | NA                                   | NA                                   | NA             | 7.82E-02     |

Notes:

NA: Not Applicable

\*: Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is show

#: Calculated Target Level exceeded effective water solubility(if available) or solubility. Calculated value is show

m: The target level is MCL.

Soil concentrations are presented on a dry weight basis.

RBTL: Risk Based Target Level

**Table 7-1(b)**  
**Tier 1 Risk-Based Target Levels for Non-Residential Land Use for Soil Type 1 (Sandy Soil)**

| Chemicals of Concern              | Air                      | Surficial Soil  | Subsurface Soil                            | Groundwater    |  |
|-----------------------------------|--------------------------|---|--|----------------|--|
|                                   | Indoor                   | Ingestion, Inhalation<br>(Vapor Emissions and<br>Particulates), and<br>Dermal Contact | Indoor Inhalation<br>of Vapor<br>Emissions | Dermal Contact | Indoor Inhalation<br>of Vapor<br>Emissions |
|                                   | [mg/m <sup>3</sup> -air] | [mg/kg]   | [mg/kg]                                    | [mg/L]         | [mg/L]                                     |
| Benzene                           | 6.57E-03                 | 3.39E+01 *  | 1.23E+00                                   | 1.27E+00       | 3.25E+00                                   |
| Toluene                           | 7.79E-01                 | 7.64E+03 *  | 3.27E+02 *                                 | 1.31E+02 #     | 3.33E+02 #                                 |
| Ethylbenzene                      | 1.95E+00                 | 5.41E+03 *  | 1.53E+03 *                                 | 3.56E+01 #     | 8.20E+02 #                                 |
| Xylenes (mixed)                   | 1.36E+00                 | 1.83E+04 *  | 1.37E+03 *                                 | 6.49E+02 #     | 6.54E+02 #                                 |
| Ethylene Dibromide (EDB)          | 2.48E-04                 | 5.85E-02  | 1.23E+00                                   | 3.38E-04       | 3.30E+00                                   |
| Ethylene Dichloride (EDC)         | 2.10E-03                 | 1.60E+01  | 7.10E-01                                   | 6.99E-01       | 4.70E+00                                   |
| Methyl-tert-butyl-ether(MTBE)     | 5.45E-01                 | 5.24E+02  | 2.94E+02                                   | 2.05E+01       | 2.46E+03                                   |
| Acenaphthene                      | 4.09E-01                 | 3.98E+03 *  | 5.39E+05 *                                 | 6.74E+00 #     | 1.29E+04 #                                 |
| Anthracene                        | 2.04E+00                 | 1.99E+04 *  | 3.14E+06 *                                 | 3.42E+01 #     | 1.84E+04 #                                 |
| Benzo(a)anthracene                | 6.16E-04                 | 5.50E+00  | 1.72E+06 *                                 | 1.30E-03       | 7.29E+02 #                                 |
| Benzo(a)pyrene                    | 3.13E-05                 | 5.62E-01  | 7.56E+05 *                                 | 6.93E-05       | 1.25E+02 #                                 |
| Benzo(b)fluoranthene              | 6.16E-04                 | 5.50E+00  | 3.66E+05 *                                 | 6.93E-04       | 5.04E+01 #                                 |
| Benzo(k)fluoranthene              | 6.16E-03                 | 5.50E+01 *  | 4.50E+08 *                                 | 6.93E-03 #     | 6.18E+04 #                                 |
| Chrysene                          | 6.16E-02                 | 5.49E+02 *  | 1.26E+07 *                                 | 1.30E-01 #     | 5.39E+03 #                                 |
| Dibenzo(a,h)anthracene            | 6.16E-05                 | 5.50E-01  | 1.54E+08 *                                 | 3.83E-05       | 6.83E+03 #                                 |
| Fluoranthene                      | 2.73E-01                 | 7.81E+03 *  | 7.25E+07 *                                 | 2.45E+00 #     | 1.14E+05 #                                 |
| Fluorene                          | 2.73E-01                 | 2.68E+03 *  | 1.98E+06 *                                 | 6.62E+00 #     | 2.42E+04 #                                 |
| Naphthalene                       | 5.86E-03                 | 5.17E+02 *  | 5.01E+02 *                                 | 7.74E+00 #     | 4.34E+01 #                                 |
| Pyrene                            | 2.04E-01                 | 5.35E+03 *  | 8.64E+07 *                                 | 1.84E+00 #     | 1.39E+05 #                                 |
| TPH-GRO                           | 3.82E+01                 | 3.83E+05 *  | 3.08E+03 *                                 | 7.91E+02 #     | 1.67E+02 #                                 |
| TPH-DRO                           | 4.68E+00                 | 3.99E+05 *  | 3.33E+04 *                                 | 3.20E+01 #     | 9.39E+02 #                                 |
| TPH-ORO                           | NA                       | 3.62E+05 *  | NA   | 3.90E+00 #     | NA   |
| >C6 - C8 (Aliphatics)             | 3.59E+01                 | 3.59E+05 *  | 2.02E+03 *                                 | 7.70E+02 #     | 7.93E+01 #                                 |
| >C8 - C10 (Aliphatics)            | 1.95E+00                 | 1.74E+04 *  | 4.15E+02 *                                 | 5.78E+00 #     | 2.70E+00 #                                 |
| >C10 - C12 (Aliphatics)           | 1.95E+00                 | 1.13E+04 *  | 2.06E+03 *                                 | 2.17E+00 #     | 1.80E+00 #                                 |
| >C12 - C16 (Aliphatics)           | 1.95E+00                 | 1.41E+04 *  | 9.37E+03 *                                 | 5.03E-01 #     | 4.15E-01 #                                 |
| >C16 - C21 (Aliphatics)           | NA                       | 3.58E+05 *  | NA   | 1.02E+00 #     | NA   |
| >C21 - C35 (Aliphatics)           | NA                       | 3.58E+05 *  | NA   | 1.02E+00 #     | NA   |
| >C8 - C10 (Aromatics)             | 3.89E-01                 | 6.52E+03 *  | 6.47E+02 *                                 | 1.46E+01 #     | 8.46E+01 #                                 |
| >C10 - C12 (Aromatics)            | 3.89E-01                 | 5.12E+03 *  | 3.49E+03 *                                 | 1.23E+01 #     | 2.69E+02 #                                 |
| >C12 - C16 (Aromatics)            | 3.89E-01                 | 6.10E+03 *  | 1.83E+04 *                                 | 1.01E+01 #     | 6.68E+02 #                                 |
| >C16 - C21 (Aromatics)            | NA                       | 4.30E+03 *  | NA   | 5.93E+00 #     | NA   |
| >C21 - C35 (Aromatics)            | NA                       | 4.30E+03 *  | NA   | 2.88E+00 #     | NA   |
| Tertiary-amyl-methyl-ether (TAME) | NA                       | 5.73E+03 *  | NA   | NA             | NA   |
| Tertiary-butyl- alcohol (TBA)     | 5.86E-01                 | 6.83E+03  | 1.51E+03                                   | NA             | 1.94E+04                                   |
| Ethyl-tert-butyl-ether ( ETBE)    | 5.86E-01                 | 1.40E+02  | 2.07E+02                                   | NA             | 7.96E+02                                   |
| Diisopropyl ether ( DIPE)         | 1.95E+00                 | 8.52E+03 *  | 6.89E+02                                   | NA             | 1.71E+03                                   |
| Ethanol                           | 3.70E+00                 | 2.16E+05 *  | 5.80E+04 *                                 | NA             | 9.72E+05 #                                 |
| Methanol                          | 5.04E-01                 | 2.94E+04  | 1.59E+04                                   | NA             | 1.50E+05                                   |
| Arsenic                           | 1.27E-05                 | 1.91E+01  | NA   | NA             | NA   |
| Barium                            | 9.54E-04                 | 4.79E+04  | NA   | NA             | NA   |
| Cadmium                           | 3.03E-05                 | 3.47E+02  | NA   | NA             | NA   |
| Chromium (III)                    | 1.95E-04                 | 4.16E+05  | NA   | NA             | NA   |
| Chromium (VI)                     | 6.58E-07                 | 5.56E+03  | NA   | NA             | NA   |
| Lead                              | NA                       | 6.60E+02  | 6.60E+02                                   | NA             | NA   |
| Selenium                          | NA                       | 9.27E+02  | NA   | NA             | NA   |

Notes:

NA: Not Applicable

\*: Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

#: Calculated Target Level exceeded effective water solubility(if available) or solubility. Calculated value is shown.

Soil concentrations are presented on a dry weight basis.

RBTL: Risk Based Target Level

**Table 7-1(c)**  
**Tier 1 Risk-Based Target Levels for Construction Worker for Soil Type 1 (Sandy Soil)**

| Chemicals of Concern              | Air                      | Soil up to Depth of Construction   | Groundwater    |                                       |   |
|-----------------------------------|--------------------------|--|----------------|---------------------------------------|---|
|                                   | Outdoor                  | Ingestion, Inhalation (Vapor Emissions and Particulates), and Dermal Contact | Dermal Contact | Outdoor Inhalation of Vapor Emissions |   |
|                                   | [mg/m <sup>3</sup> -air] | [mg/kg]  | [mg/L]         | [mg/L]                                |   |
| Benzene                           | 4.86E-02                 | 2.08E+01 *   | 1.09E+01       | 3.73E+03                              | # |
| Toluene                           | 3.25E+00                 | 2.15E+03 *   | 3.63E+02 #     | 2.35E+05                              | # |
| Ethylbenzene                      | 8.11E+00                 | 5.32E+03 *   | 9.89E+01 #     | 5.95E+05                              | # |
| Xylenes (mixed)                   | 5.68E+00                 | 5.77E+03 *   | 1.80E+03 #     | 4.59E+05                              | # |
| Ethylene Dibromide (EDB)          | 1.62E-03                 | 3.29E+00   | 2.35E-02       | 5.08E+02                              |   |
| Ethylene Dichloride (EDC)         | 4.06E-02                 | 2.43E+01   | 4.86E+01       | 6.69E+03                              |   |
| Methyl-tert-butyl-ether(MTBE)     | 2.43E+01                 | 1.65E+04 *   | 1.43E+03       | 5.33E+06                              | # |
| Acenaphthene                      | 1.70E+00                 | 9.56E+03 *   | 1.87E+01 #     | 1.28E+06                              | # |
| Anthracene                        | 8.52E+00                 | 4.83E+04 *   | 9.51E+01 #     | 2.94E+06                              | # |
| Benzo(a)anthracene                | 6.41E-02                 | 3.81E+02 *   | 8.99E-02 #     | 1.34E+06                              | # |
| Benzo(a)pyrene                    | 3.26E-03                 | 3.89E+01 *   | 4.81E-03 #     | 2.29E+05                              | # |
| Benzo(b)fluoranthene              | 6.41E-02                 | 3.79E+02 *   | 4.81E-02 #     | 1.10E+05                              | # |
| Benzo(k)fluoranthene              | 6.41E-01                 | 3.82E+03 *   | 4.81E-01 #     | 1.13E+08                              | # |
| Chrysene                          | 6.41E+00                 | 3.77E+04 *   | 8.99E+00 #     | 1.14E+07                              | # |
| Dibenzo(a,h)anthracene            | 6.41E-03                 | 3.82E+01   | 2.66E-03 #     | 1.24E+07                              | # |
| Fluoranthene                      | 1.14E+00                 | 2.10E+04 *   | 6.80E+00 #     | 8.62E+06                              | # |
| Fluorene                          | 1.14E+00                 | 6.97E+03 *   | 1.84E+01 #     | 1.99E+06                              | # |
| Naphthalene                       | 2.44E-02                 | 2.19E+02 *   | 2.15E+01 #     | 7.81E+03                              | # |
| Pyrene                            | 8.52E-01                 | 1.45E+04 *   | 5.10E+00 #     | 1.03E+07                              | # |
| TPH-GRO                           | 1.59E+02                 | 4.23E+04 *   | 2.20E+03 #     | 1.46E+05                              | # |
| TPH-DRO                           | 1.95E+01                 | 1.04E+06 *   | 8.89E+01 #     | 3.92E+05                              | # |
| TPH-ORO                           | NA                       | 1.01E+06 *   | 1.08E+01 #     | NA                                    |   |
| >C6 - C8 (Aliphatics)             | 1.49E+02                 | 3.64E+04 *   | 2.14E+03 #     | 7.65E+04                              | # |
| >C8 - C10 (Aliphatics)            | 8.12E+00                 | 3.81E+03 *   | 1.60E+01 #     | 2.60E+03                              | # |
| >C10 - C12 (Aliphatics)           | 8.12E+00                 | 7.33E+03 *   | 6.02E+00 #     | 1.74E+03                              | # |
| >C12 - C16 (Aliphatics)           | 8.12E+00                 | 1.34E+04 *   | 1.40E+00 #     | 4.01E+02                              | # |
| >C16 - C21 (Aliphatics)           | NA                       | 9.94E+05 *   | 2.83E+00 #     | NA                                    |   |
| >C21 - C35 (Aliphatics)           | NA                       | 9.94E+05 *   | 2.83E+00 #     | NA                                    |   |
| >C8 - C10 (Aromatics)             | 1.62E+00                 | 2.11E+03 *   | 4.07E+01       | 6.72E+04                              | # |
| >C10 - C12 (Aromatics)            | 1.62E+00                 | 4.00E+03 *   | 3.41E+01 #     | 1.52E+05                              | # |
| >C12 - C16 (Aromatics)            | 1.62E+00                 | 7.27E+03 *   | 2.80E+01 #     | 2.38E+05                              | # |
| >C16 - C21 (Aromatics)            | NA                       | 1.19E+04 *   | 1.65E+01 #     | NA                                    |   |
| >C21 - C35 (Aromatics)            | NA                       | 1.19E+04 *   | 7.99E+00 #     | NA                                    |   |
| Tertiary-amyl-methyl-ether (TAME) | NA                       | 1.59E+04 *   | NA             | NA                                    |   |
| Tertiary-butyl- alcohol (TBA)     | 2.44E+00                 | 3.62E+03   | NA             | 1.83E+06                              | # |
| Ethyl-tert-butyl-ether ( ETBE)    | 2.44E+00                 | 3.15E+02   | NA             | 3.80E+05                              | # |
| Diisopropyl ether ( DIPE)         | 8.12E+00                 | 4.42E+03 *   | NA             | 1.01E+06                              | # |
| Ethanol                           | 1.54E+01                 | 6.26E+04 *   | NA             | 7.28E+07                              | # |
| Methanol                          | 2.10E+00                 | 1.16E+04   | NA             | 1.11E+07                              | # |
| Arsenic                           | 1.32E-03                 | 8.54E+02   | NA             | NA                                    |   |
| Barium                            | 3.98E-03                 | 1.31E+05   | NA             | NA                                    |   |
| Cadmium                           | 3.16E-03                 | 9.65E+02   | NA             | NA                                    |   |
| Chromium (III)                    | 8.12E-04                 | 7.22E+05   | NA             | NA                                    |   |
| Chromium (VI)                     | 6.53E-05                 | 1.40E+04   | NA             | NA                                    |   |
| Lead                              | NA                       | 6.60E+02   | NA             | NA                                    |   |
| Selenium                          | NA                       | 2.57E+03   | NA             | NA                                    |   |

Notes:

NA: Not Applicable

\*: Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration.

#: Calculated Target Level exceeded effective water solubility(if available) or solubility. Calculated value is shown.

Soil concentrations are presented on a dry weight basis.

RBTL: Risk Based Target Level

**Table 7-2(a)**  
**Tier 1 Risk-Based Target Levels for Residential Land Use for Soil Type 2 (Silty Soil)**

| Chemicals of Concern              | Air                      | Surficial Soil   | Subsurface Soil                      | Groundwater                          |                |              |
|-----------------------------------|--------------------------|--|--------------------------------------|--------------------------------------|----------------|--------------|
|                                   | Indoor                   | Ingestion, Inhalation (Vapor Emissions and Particulates), and Dermal Contact | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Dermal Contact | Domestic Use |
|                                   | [mg/m <sup>3</sup> -air] | [mg/kg]  | [mg/kg]                              | [mg/L]                               | [mg/L]         | [mg/L]       |
| Benzene                           | 3.09E-03                 | 1.11E+01   | 5.00E-01                             | 1.08E+00                             | 4.61E-01       | 5.00E-03 m   |
| Toluene                           | 2.39E-01                 | 1.41E+03 *   | 8.10E+01 *                           | 7.13E+01 #                           | 2.22E+01       | 1.00E+00 m   |
| Ethylbenzene                      | 5.97E-01                 | 9.02E+02 *   | 3.71E+02 *                           | 1.75E+02 #                           | 6.06E+00 #     | 7.00E-01 m   |
| Xylenes (mixed)                   | 4.18E-01                 | 3.67E+03 *   | 3.31E+02 *                           | 1.40E+02 #                           | 1.11E+02 #     | 1.00E+01 m   |
| Ethylene Dibromide (EDB)          | 1.17E-04                 | 1.92E-02   | 5.14E-01                             | 1.19E+00                             | 1.23E-04       | 5.00E-05 m   |
| Ethylene Dichloride (EDC)         | 9.86E-04                 | 8.37E+00   | 3.51E-01                             | 1.65E+00                             | 2.54E-01       | 1.56E-03     |
| Methyl-tert-butyl-ether(MTBE)     | 2.56E-01                 | 1.93E+02   | 1.57E+02                             | 8.76E+02                             | 7.46E+00       | 1.46E-01     |
| Acenaphthene                      | 1.25E-01                 | 6.30E+02 *   | 1.27E+05 *                           | 3.03E+03 #                           | 1.15E+00       | 1.98E-01     |
| Anthracene                        | 6.27E-01                 | 3.15E+03 *   | 7.42E+05 *                           | 4.29E+03 #                           | 5.83E+00 #     | 9.89E-01 #   |
| Benzo(a)anthracene                | 2.89E-04                 | 1.84E+00   | 4.96E+05 *                           | 2.11E+02 #                           | 4.70E-04       | 9.21E-04     |
| Benzo(a)pyrene                    | 1.47E-05                 | 1.90E-01   | 1.47E+05 *                           | 2.44E+01 #                           | 2.52E-05       | 2.00E-04 m   |
| Benzo(b)fluoranthene              | 2.89E-04                 | 1.84E+00   | 1.31E+05 *                           | 1.81E+01 #                           | 2.52E-04       | 9.21E-04     |
| Benzo(k)fluoranthene              | 2.89E-03                 | 1.84E+01 *   | 6.98E+07 *                           | 9.58E+03 #                           | 2.52E-03 #     | 9.21E-03 #   |
| Chrysene                          | 2.89E-02                 | 1.83E+02 *   | 4.54E+06 *                           | 1.93E+03 #                           | 4.70E-02 #     | 9.21E-02 #   |
| Dibenzo(a,h)anthracene            | 2.89E-05                 | 1.84E-01   | 3.77E+06 *                           | 1.67E+02 #                           | 1.39E-05       | 9.21E-05     |
| Fluoranthene                      | 8.36E-02                 | 1.19E+03 *   | 1.61E+07 *                           | 2.55E+04 #                           | 4.17E-01 #     | 6.26E-01 #   |
| Fluorene                          | 8.36E-02                 | 4.23E+02 *   | 4.60E+05 *                           | 5.63E+03 #                           | 1.13E+00       | 1.32E-01     |
| Naphthalene                       | 1.80E-03                 | 9.57E+01 *   | 1.19E+02 *                           | 1.01E+01 #                           | 1.32E+00 #     | 3.55E-03     |
| Pyrene                            | 6.27E-02                 | 7.51E+02 *   | 1.83E+07 *                           | 2.94E+04 #                           | 3.13E-01 #     | 4.69E-01 #   |
| TPH-GRO                           | 1.17E+01                 | 2.97E+04 *   | 7.16E+02                             | 3.46E+01                             | 1.35E+02 #     | 1.80E+01     |
| TPH-DRO                           | 1.43E+00                 | 5.64E+04 *   | 7.88E+03 *                           | 2.11E+02 #                           | 5.45E+00       | 3.43E+01 #   |
| TPH-ORO                           | NA                       | 5.08E+04 *   | NA                                   | NA                                   | 6.64E-01 #     | 3.18E+01 #   |
| >C6 - C8 (Aliphatics)             | 1.10E+01                 | 2.65E+04 *   | 4.64E+02 *                           | 1.62E+01 #                           | 1.31E+02 #     | 1.72E+01 #   |
| >C8 - C10 (Aliphatics)            | 5.97E-01                 | 2.10E+03 *   | 9.76E+01 *                           | 5.51E-01 #                           | 9.84E-01 #     | 6.77E-01 #   |
| >C10 - C12 (Aliphatics)           | 5.97E-01                 | 1.80E+03 *   | 4.87E+02 *                           | 3.67E-01 #                           | 3.69E-01 #     | 6.77E-01 #   |
| >C12 - C16 (Aliphatics)           | 5.97E-01                 | 2.12E+03 *   | 2.22E+03 *                           | 8.48E-02 #                           | 8.57E-02 #     | 1.56E+00 #   |
| >C16 - C21 (Aliphatics)           | NA                       | 5.02E+04 *   | NA                                   | NA                                   | 1.74E-01 #     | 3.13E+01 #   |
| >C21 - C35 (Aliphatics)           | NA                       | 5.02E+04 *   | NA                                   | NA                                   | 1.74E-01 #     | 3.13E+01 #   |
| >C8 - C10 (Aromatics)             | 1.19E-01                 | 1.06E+03 *   | 1.54E+02                             | 1.78E+01                             | 2.49E+00       | 1.73E-01     |
| >C10 - C12 (Aromatics)            | 1.19E-01                 | 7.91E+02 *   | 8.30E+02 *                           | 5.89E+01 #                           | 2.09E+00       | 1.73E-01     |
| >C12 - C16 (Aromatics)            | 1.19E-01                 | 8.98E+02 *   | 4.35E+03 *                           | 1.51E+02 #                           | 1.72E+00       | 1.73E-01     |
| >C16 - C21 (Aromatics)            | NA                       | 6.25E+02 *   | NA                                   | NA                                   | 1.01E+00 #     | 4.69E-01     |
| >C21 - C35 (Aromatics)            | NA                       | 6.25E+02 *   | NA                                   | NA                                   | 4.90E-01 #     | 4.69E-01 #   |
| Tertiary-amyl-methyl-ether (TAME) | NA                       | 8.34E+02   | NA                                   | NA                                   | NA             | 6.26E-01     |
| Tertiary-butyl- alcohol (TBA)     | 1.80E-01                 | 1.27E+03   | 6.22E+02                             | 4.54E+03                             | NA             | 2.86E-01     |
| Ethyl-tert-butyl-ether ( ETBE)    | 1.80E-01                 | 2.05E+01   | 5.87E+01                             | 1.77E+02                             | NA             | 1.50E-02     |
| Diisopropyl ether ( DIPE)         | 5.97E-01                 | 1.36E+03   | 1.83E+02                             | 3.74E+02                             | NA             | 6.77E-01     |
| Ethanol                           | 1.13E+00                 | 5.84E+04 *   | 2.54E+04                             | 2.14E+05                             | NA             | 2.26E+00     |
| Methanol                          | 1.55E-01                 | 5.78E+03   | 5.25E+03                             | 3.18E+04                             | NA             | 2.97E-01     |
| Arsenic                           | 5.96E-06                 | 4.35E+00   | NA                                   | NA                                   | NA             | 1.00E-02 m   |
| Barium                            | 2.92E-04                 | 4.50E+03   | NA                                   | NA                                   | NA             | 2.00E+00 m   |
| Cadmium                           | 1.42E-05                 | 3.23E+01   | NA                                   | NA                                   | NA             | 5.00E-03 m   |
| Chromium (III)                    | 5.97E-05                 | 6.65E+04   | NA                                   | NA                                   | NA             | 2.35E+01     |
| Chromium (VI)                     | 3.09E-07                 | 9.36E+02   | NA                                   | NA                                   | NA             | 4.69E-02     |
| Lead                              | NA                       | 2.60E+02   | 2.60E+02                             | NA                                   | NA             | 1.50E-02     |
| Selenium                          | NA                       | 1.34E+02   | NA                                   | NA                                   | NA             | 7.82E-02     |

Notes:

NA: Not Applicable

\*: Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown

#: Calculated Target Level exceeded effective water solubility(if available) or solubility. Calculated value is shown

m: The target level is MCL.

Soil concentrations are presented on a dry weight basis.

RBTL: Risk Based Target Level

**Table 7-2(b)**  
**Tier 1 Risk-Based Target Levels for Non-Residential Land Use for Soil Type 2 (Silty Soil)**

| Chemicals of Concern              | Air                                | Surficial Soil   | Subsurface Soil                                       | Groundwater              |  |
|-----------------------------------|------------------------------------|--|---|--------------------------|--|
|                                   | Indoor<br>[mg/m <sup>3</sup> -air] | Ingestion,<br>Inhalation<br>(Vapor Emissions<br>and Particulates),<br>and Dermal<br>Contact<br>[mg/kg] | Indoor Inhalation<br>of Vapor<br>Emissions<br>[mg/kg] | Dermal Contact<br>[mg/L] | Indoor Inhalation<br>of Vapor<br>Emissions<br>[mg/L] |
| Benzene                           | 6.57E-03                           | 3.39E+01 *   | 2.62E+00  | 1.27E+00                 | 5.65E+00   |
| Toluene                           | 7.79E-01                           | 9.74E+03 *   | 6.51E+02 *  | 1.31E+02 #               | 5.73E+02 #   |
| Ethylbenzene                      | 1.95E+00                           | 5.74E+03 *   | 2.98E+03 *  | 3.56E+01 #               | 1.40E+02 #   |
| Xylenes (mixed)                   | 1.36E+00                           | 2.42E+04 *   | 2.66E+03 *  | 6.49E+02 #               | 1.13E+03 #   |
| Ethylene Dibromide (EDB)          | 2.48E-04                           | 5.86E-02   | 2.69E+00  | 3.38E-04                 | 6.21E+00   |
| Ethylene Dichloride (EDC)         | 2.10E-03                           | 1.96E+01   | 1.84E+00  | 6.99E-01                 | 8.62E+00   |
| Methyl-tert-butyl-ether(MTBE)     | 5.45E-01                           | 5.43E+02   | 8.25E+02  | 2.05E+01                 | 4.59E+03   |
| Acenaphthene                      | 4.09E-01                           | 4.00E+03 *   | 1.02E+06 *  | 6.74E+00 #               | 2.44E+04 #   |
| Anthracene                        | 2.04E+00                           | 2.00E+04 *   | 5.96E+06 *  | 3.42E+01 #               | 3.45E+04 #   |
| Benzo(a)anthracene                | 6.16E-04                           | 5.50E+00   | 2.60E+06 *  | 1.30E-03                 | 1.10E+03 #   |
| Benzo(a)pyrene                    | 3.13E-05                           | 5.62E-01   | 7.72E+05 *  | 6.93E-05                 | 1.28E+02 #   |
| Benzo(b)fluoranthene              | 6.16E-04                           | 5.50E+00   | 6.89E+05 *  | 6.93E-04                 | 9.48E+01 #   |
| Benzo(k)fluoranthene              | 6.16E-03                           | 5.50E+01 *   | 3.66E+08 *  | 6.93E-03 #               | 5.02E+04 #   |
| Chrysene                          | 6.16E-02                           | 5.49E+02 *   | 2.38E+07 *  | 1.30E-01 #               | 1.01E+04 #   |
| Dibenzo(a,h)anthracene            | 6.16E-05                           | 5.50E-01   | 1.97E+07 *  | 3.83E-05                 | 8.77E+02 #   |
| Fluoranthene                      | 2.73E-01                           | 7.82E+03 *   | 1.30E+08 *  | 2.45E+00 #               | 2.05E+05 #   |
| Fluorene                          | 2.73E-01                           | 2.68E+03 *   | 3.70E+06 *  | 6.62E+00 #               | 4.53E+04 #   |
| Naphthalene                       | 5.86E-03                           | 6.23E+02 *   | 9.58E+02 *  | 7.74E+00 #               | 8.11E+01 #   |
| Pyrene                            | 2.04E-01                           | 5.36E+03 *   | 1.47E+08 *  | 1.84E+00 #               | 2.37E+05 #   |
| TPH-GRO                           | 3.82E+01                           | 3.85E+05 *   | 5.76E+03 *  | 7.91E+02 #               | 2.78E+02 #   |
| TPH-DRO                           | 4.68E+00                           | 4.01E+05 *   | 6.34E+04 *  | 3.20E+01 #               | 1.69E+03 #   |
| TPH-ORO                           | NA                                 | 3.62E+05 *   | NA  | 3.90E+00 #               | NA   |
| >C6 - C8 (Aliphatics)             | 3.59E+01                           | 3.59E+05 *   | 3.73E+03 *  | 7.70E+02 #               | 1.30E+02 #   |
| >C8 - C10 (Aliphatics)            | 1.95E+00                           | 1.74E+04 *   | 7.85E+02 *  | 5.78E+00 #               | 4.43E+00 #   |
| >C10 - C12 (Aliphatics)           | 1.95E+00                           | 1.26E+04 *   | 3.92E+03 *  | 2.17E+00 #               | 2.95E+00 #   |
| >C12 - C16 (Aliphatics)           | 1.95E+00                           | 1.50E+04 *   | 1.78E+04 *  | 5.03E-01 #               | 6.82E-01 #   |
| >C16 - C21 (Aliphatics)           | NA                                 | 3.58E+05 *   | NA  | 1.02E+00 #               | NA   |
| >C21 - C35 (Aliphatics)           | NA                                 | 3.58E+05 *   | NA  | 1.02E+00 #               | NA   |
| >C8 - C10 (Aromatics)             | 3.89E-01                           | 8.50E+03 *   | 1.24E+03 *  | 1.46E+01                 | 1.43E+02 #   |
| >C10 - C12 (Aromatics)            | 3.89E-01                           | 5.56E+03 *   | 6.67E+03 *  | 1.23E+01                 | 4.74E+02 #   |
| >C12 - C16 (Aromatics)            | 3.89E-01                           | 6.36E+03 *   | 3.50E+04 *  | 1.01E+01 #               | 1.22E+03 #   |
| >C16 - C21 (Aromatics)            | NA                                 | 4.30E+03 *   | NA  | 5.93E+00 #               | NA   |
| >C21 - C35 (Aromatics)            | NA                                 | 4.30E+03 *   | NA  | 2.88E+00 #               | NA   |
| Tertiary-amyl-methyl-ether (TAME) | NA                                 | 5.73E+03 *   | NA  | NA                       | NA   |
| Tertiary-butyl- alcohol (TBA)     | 5.86E-01                           | 8.67E+03   | 5.00E+03  | NA                       | 3.65E+04   |
| Ethyl-tert-butyl-ether ( ETBE)    | 5.86E-01                           | 1.41E+02   | 4.72E+02  | NA                       | 1.42E+03   |
| Diisopropyl ether ( DIPE)         | 1.95E+00                           | 9.26E+03 *   | 1.47E+03 *  | NA                       | 3.00E+03 #   |
| Ethanol                           | 3.70E+00                           | 3.90E+05 *   | 2.04E+05 *  | NA                       | 1.72E+06 #   |
| Methanol                          | 5.04E-01                           | 3.97E+04   | 4.22E+04  | NA                       | 2.56E+05   |
| Arsenic                           | 1.27E-05                           | 1.91E+01   | NA  | NA                       | NA   |
| Barium                            | 9.54E-04                           | 4.79E+04   | NA  | NA                       | NA   |
| Cadmium                           | 3.03E-05                           | 3.47E+02   | NA  | NA                       | NA   |
| Chromium (III)                    | 1.95E-04                           | 4.16E+05   | NA  | NA                       | NA   |
| Chromium (VI)                     | 6.58E-07                           | 5.56E+03   | NA  | NA                       | NA   |
| Lead                              | NA                                 | 6.60E+02   | 6.60E+02  | NA                       | NA   |
| Selenium                          | NA                                 | 9.27E+02   | NA  | NA                       | NA   |

Notes:

NA: Not Applicable

\*: Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

#: Calculated Target Level exceeded effective water solubility(if available) or solubility. Calculated value is shown.

Soil concentrations are presented on a dry weight basis.

RBTL: Risk Based Target Level

**Table 7-2(c)**  
**Tier 1 Risk-Based Target Levels for Construction Worker for Soil Type 2 (Silty Soil)**

| Chemicals of Concern              | Air                      | Soil up to Depth of Construction   | Groundwater    |                                       |   |
|-----------------------------------|--------------------------|--|----------------|---------------------------------------|---|
|                                   | Outdoor                  | Ingestion, Inhalation (Vapor Emissions and Particulates), and Dermal Contact | Dermal Contact | Outdoor Inhalation of Vapor Emissions |   |
|                                   | [mg/m <sup>3</sup> -air] | [mg/kg]  | [mg/L]         | [mg/L]                                |   |
| Benzene                           | 4.86E-02                 | 2.99E+01 *   | 1.09E+01       | 3.46E+03                              | # |
| Toluene                           | 3.25E+00                 | 3.02E+03 *   | 3.63E+02 #     | 2.15E+05                              | # |
| Ethylbenzene                      | 8.11E+00                 | 6.68E+03 *   | 9.89E+01 #     | 5.43E+05                              | # |
| Xylenes (mixed)                   | 5.68E+00                 | 8.01E+03 *   | 1.80E+03 #     | 4.20E+05                              | # |
| Ethylene Dibromide (EDB)          | 1.62E-03                 | 3.91E+00   | 2.35E-02       | 8.17E+02                              |   |
| Ethylene Dichloride (EDC)         | 4.06E-02                 | 3.91E+01   | 4.86E+01       | 7.12E+03                              |   |
| Methyl-tert-butyl-ether(MTBE)     | 2.43E+01                 | 2.56E+04 *   | 1.43E+03       | 6.39E+06                              | # |
| Acenaphthene                      | 1.70E+00                 | 9.97E+03 *   | 1.87E+01 #     | 2.06E+06                              | # |
| Anthracene                        | 8.52E+00                 | 5.03E+04 *   | 9.51E+01 #     | 3.83E+06                              | # |
| Benzo(a)anthracene                | 6.41E-02                 | 3.81E+02 *   | 8.99E-02 #     | 2.02E+06                              | # |
| Benzo(a)pyrene                    | 3.26E-03                 | 3.89E+01 *   | 4.81E-03 #     | 2.33E+05                              | # |
| Benzo(b)fluoranthene              | 6.41E-02                 | 3.80E+02 *   | 4.81E-02 #     | 1.87E+05                              | # |
| Benzo(k)fluoranthene              | 6.41E-01                 | 3.82E+03 *   | 4.81E-01 #     | 9.16E+07                              | # |
| Chrysene                          | 6.41E+00                 | 3.78E+04 *   | 8.99E+00 #     | 1.97E+07                              | # |
| Dibenzo(a,h)anthracene            | 6.41E-03                 | 3.82E+01   | 2.66E-03 #     | 1.60E+06                              | # |
| Fluoranthene                      | 1.14E+00                 | 2.12E+04 *   | 6.80E+00 #     | 1.51E+07                              | # |
| Fluorene                          | 1.14E+00                 | 7.11E+03 *   | 1.84E+01 #     | 3.48E+06                              | # |
| Naphthalene                       | 2.44E-02                 | 2.96E+02 *   | 2.15E+01 #     | 9.74E+03                              | # |
| Pyrene                            | 8.52E-01                 | 1.46E+04 *   | 5.10E+00 #     | 1.74E+07                              | # |
| TPH-GRO                           | 1.59E+02                 | 5.76E+04 *   | 2.20E+03 #     | 1.31E+05                              | # |
| TPH-DRO                           | 1.95E+01                 | 1.05E+06 *   | 8.89E+01 #     | 3.90E+05                              | # |
| TPH-ORO                           | NA                       | 1.01E+06 *   | 1.08E+01 #     | NA                                    |   |
| >C6 - C8 (Aliphatics)             | 1.49E+02                 | 4.95E+04 *   | 2.14E+03 #     | 6.77E+04                              | # |
| >C8 - C10 (Aliphatics)            | 8.12E+00                 | 5.21E+03 *   | 1.60E+01 #     | 2.30E+03                              | # |
| >C10 - C12 (Aliphatics)           | 8.12E+00                 | 9.57E+03 *   | 6.02E+00 #     | 1.54E+03                              | # |
| >C12 - C16 (Aliphatics)           | 8.12E+00                 | 1.68E+04 *   | 1.40E+00 #     | 3.55E+02                              | # |
| >C16 - C21 (Aliphatics)           | NA                       | 9.94E+05 *   | 2.83E+00 #     | NA                                    |   |
| >C21 - C35 (Aliphatics)           | NA                       | 9.94E+05 *   | 2.83E+00 #     | NA                                    |   |
| >C8 - C10 (Aromatics)             | 1.62E+00                 | 2.90E+03 *   | 4.07E+01 #     | 6.07E+04                              | # |
| >C10 - C12 (Aromatics)            | 1.62E+00                 | 5.13E+03 *   | 3.41E+01 #     | 1.44E+05                              | # |
| >C12 - C16 (Aromatics)            | 1.62E+00                 | 8.81E+03 *   | 2.80E+01 #     | 2.44E+05                              | # |
| >C16 - C21 (Aromatics)            | NA                       | 1.19E+04 *   | 1.65E+01 #     | NA                                    |   |
| >C21 - C35 (Aromatics)            | NA                       | 1.19E+04 *   | 7.99E+00 #     | NA                                    |   |
| Tertiary-amyl-methyl-ether (TAME) | NA                       | 1.59E+04 *   | NA             | NA                                    |   |
| Tertiary-butyl- alcohol (TBA)     | 2.44E+00                 | 6.10E+03   | NA             | 3.00E+06                              | # |
| Ethyl-tert-butyl-ether ( ETBE)    | 2.44E+00                 | 3.39E+02   | NA             | 3.69E+05                              | # |
| Diisopropyl ether ( DIPE)         | 8.12E+00                 | 6.14E+03 *   | NA             | 9.45E+05                              | # |
| Ethanol                           | 1.54E+01                 | 1.17E+05 *   | NA             | 1.27E+08                              | # |
| Methanol                          | 2.10E+00                 | 1.83E+04   | NA             | 1.88E+07                              | # |
| Arsenic                           | 1.32E-03                 | 8.54E+02   | NA             | NA                                    |   |
| Barium                            | 3.98E-03                 | 1.31E+05   | NA             | NA                                    |   |
| Cadmium                           | 3.16E-03                 | 9.65E+02   | NA             | NA                                    |   |
| Chromium (III)                    | 8.12E-04                 | 7.22E+05   | NA             | NA                                    |   |
| Chromium (VI)                     | 6.53E-05                 | 1.40E+04   | NA             | NA                                    |   |
| Lead                              | NA                       | 6.60E+02   | NA             | NA                                    |   |
| Selenium                          | NA                       | 2.57E+03   | NA             | NA                                    |   |

Notes:

NA: Not Applicable

\*: Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration.

#: Calculated Target Level exceeded effective water solubility(if available) or solubility. Calculated value is shown.

Soil concentrations are presented on a dry weight basis.

RBTL: Risk Based Target Level

**Table 7-3(a)**  
**Tier 1 Risk-Based Target Levels for Residential Land Use for Soil Type 3 (Clayey Soil)**

| Chemicals of Concern              | Air                      | Surficial Soil   | Subsurface Soil                      | Groundwater                          |                |              |
|-----------------------------------|--------------------------|--|--------------------------------------|--------------------------------------|----------------|--------------|
|                                   | Indoor                   | Ingestion, Inhalation (Vapor Emissions and Particulates), and Dermal Contact | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Dermal Contact | Domestic Use |
|                                   | [mg/m <sup>3</sup> -air] | [mg/kg]  | [mg/kg]                              | [mg/L]                               | [mg/L]         | [mg/L]       |
| Benzene                           | 3.09E-03                 | 1.33E+01   | 8.88E-01                             | 1.78E+00                             | 4.61E-01       | 5.00E-03 m   |
| Toluene                           | 2.39E-01                 | 1.77E+03 *   | 1.40E+02 *                           | 1.17E+02 #                           | 2.22E+01       | 1.00E+00 m   |
| Ethylbenzene                      | 5.97E-01                 | 9.38E+02 *   | 6.37E+02 *                           | 2.87E+02 #                           | 6.06E+00 #     | 7.00E-01 m   |
| Xylenes (mixed)                   | 4.18E-01                 | 4.57E+03 *   | 5.69E+02 *                           | 2.31E+02 #                           | 1.11E+02 #     | 1.00E+01 m   |
| Ethylene Dibromide (EDB)          | 1.17E-04                 | 1.92E-02   | 9.14E-01                             | 1.99E+00                             | 1.23E-04       | 5.00E-05 m   |
| Ethylene Dichloride (EDC)         | 9.86E-04                 | 9.81E+00   | 6.67E-01                             | 2.77E+00                             | 2.54E-01       | 1.56E-03     |
| Methyl-tert-butyl-ether(MTBE)     | 2.56E-01                 | 1.95E+02   | 3.05E+02                             | 1.48E+03                             | 7.46E+00       | 1.46E-01     |
| Acenaphthene                      | 1.25E-01                 | 6.32E+02 *   | 2.14E+05 *                           | 5.09E+03 #                           | 1.15E+00       | 1.98E-01     |
| Anthracene                        | 6.27E-01                 | 3.16E+03 *   | 1.26E+06 *                           | 7.25E+03 #                           | 5.83E+00 #     | 9.89E-01 #   |
| Benzo(a)anthracene                | 2.89E-04                 | 1.84E+00   | 5.54E+05 *                           | 2.35E+02 #                           | 4.70E-04       | 9.21E-04     |
| Benzo(a)pyrene                    | 1.47E-05                 | 1.90E-01   | 1.14E+05 *                           | 1.89E+01 #                           | 2.52E-05       | 2.00E-04 m   |
| Benzo(b)fluoranthene              | 2.89E-04                 | 1.84E+00   | 2.18E+05 *                           | 3.00E+01 #                           | 2.52E-04       | 9.21E-04     |
| Benzo(k)fluoranthene              | 2.89E-03                 | 1.84E+01 *   | 4.78E+07 *                           | 6.57E+03 #                           | 2.52E-03 #     | 9.21E-03 #   |
| Chrysene                          | 2.89E-02                 | 1.84E+02 *   | 7.49E+06 *                           | 3.18E+03 #                           | 4.70E-02 #     | 9.21E-02 #   |
| Dibenzo(a,h)anthracene            | 2.89E-05                 | 1.84E-01   | 1.88E+06 *                           | 8.35E+01 #                           | 1.39E-05       | 9.21E-05     |
| Fluoranthene                      | 8.36E-02                 | 1.19E+03 *   | 2.38E+07 *                           | 3.76E+04 #                           | 4.17E-01 #     | 6.26E-01 #   |
| Fluorene                          | 8.36E-02                 | 4.24E+02 *   | 7.53E+05 *                           | 9.21E+03 #                           | 1.13E+00       | 1.32E-01     |
| Naphthalene                       | 1.80E-03                 | 1.10E+02 *   | 2.03E+02 *                           | 1.71E+01 #                           | 1.32E+00 #     | 3.55E-03     |
| Pyrene                            | 6.27E-02                 | 7.51E+02 *   | 2.45E+07 *                           | 3.94E+04 #                           | 3.13E-01 #     | 4.69E-01 #   |
| TPH-GRO                           | 1.17E+01                 | 3.54E+04 *   | 1.19E+03 *                           | 5.64E+01                             | 1.35E+02 #     | 1.80E+01     |
| TPH-DRO                           | 1.43E+00                 | 5.67E+04 *   | 1.34E+04 *                           | 3.53E+02 #                           | 5.45E+00       | 3.43E+01 #   |
| TPH-ORO                           | NA                       | 5.08E+04 *   | NA                                   | NA                                   | 6.64E-01 #     | 3.18E+01 #   |
| >C6 - C8 (Aliphatics)             | 1.10E+01                 | 3.16E+04 *   | 7.60E+02 *                           | 2.63E+01 #                           | 1.31E+02 #     | 1.72E+01 #   |
| >C8 - C10 (Aliphatics)            | 5.97E-01                 | 2.53E+03 *   | 1.65E+02 *                           | 8.93E-01 #                           | 9.84E-01 #     | 6.77E-01 #   |
| >C10 - C12 (Aliphatics)           | 5.97E-01                 | 1.93E+03 *   | 8.29E+02 *                           | 5.95E-01 #                           | 3.69E-01 #     | 6.77E-01 #   |
| >C12 - C16 (Aliphatics)           | 5.97E-01                 | 2.20E+03 *   | 3.78E+03 *                           | 1.37E-01 #                           | 8.57E-02 #     | 1.56E+00 #   |
| >C16 - C21 (Aliphatics)           | NA                       | 5.02E+04 *   | NA                                   | NA                                   | 1.74E-01 #     | 3.13E+01 #   |
| >C21 - C35 (Aliphatics)           | NA                       | 5.02E+04 *   | NA                                   | NA                                   | 1.74E-01 #     | 3.13E+01 #   |
| >C8 - C10 (Aromatics)             | 1.19E-01                 | 1.26E+03 *   | 2.63E+02                             | 2.92E+01                             | 2.49E+00       | 1.73E-01     |
| >C10 - C12 (Aromatics)            | 1.19E-01                 | 8.32E+02 *   | 1.42E+03 *                           | 9.79E+01 #                           | 2.09E+00       | 1.73E-01     |
| >C12 - C16 (Aromatics)            | 1.19E-01                 | 9.21E+02 *   | 7.42E+03 *                           | 2.54E+02 #                           | 1.72E+00       | 1.73E-01     |
| >C16 - C21 (Aromatics)            | NA                       | 6.25E+02 *   | NA                                   | NA                                   | 1.01E+00 #     | 4.69E-01     |
| >C21 - C35 (Aromatics)            | NA                       | 6.25E+02 *   | NA                                   | NA                                   | 4.90E-01 #     | 4.69E-01 #   |
| Tertiary-amyl-methyl-ether (TAME) | NA                       | 8.34E+02   | NA                                   | NA                                   | NA             | 6.26E-01     |
| Tertiary-butyl- alcohol (TBA)     | 1.80E-01                 | 1.41E+03   | 1.24E+03                             | 7.59E+03                             | NA             | 2.86E-01     |
| Ethyl-tert-butyl-ether ( ETBE)    | 1.80E-01                 | 2.06E+01   | 1.07E+02                             | 2.95E+02                             | NA             | 1.50E-02     |
| Diisopropyl ether ( DIPE)         | 5.97E-01                 | 1.49E+03 *   | 3.25E+02                             | 6.20E+02                             | NA             | 6.77E-01     |
| Ethanol                           | 1.13E+00                 | 7.53E+04 *   | 4.46E+04 *                           | 3.07E+05 #                           | NA             | 2.26E+00     |
| Methanol                          | 1.55E-01                 | 6.47E+03   | 8.16E+03                             | 4.26E+04                             | NA             | 2.97E-01     |
| Arsenic                           | 5.96E-06                 | 4.35E+00   | NA                                   | NA                                   | NA             | 1.00E-02 m   |
| Barium                            | 2.92E-04                 | 4.50E+03   | NA                                   | NA                                   | NA             | 2.00E+00 m   |
| Cadmium                           | 1.42E-05                 | 3.23E+01   | NA                                   | NA                                   | NA             | 5.00E-03 m   |
| Chromium (III)                    | 5.97E-05                 | 6.65E+04   | NA                                   | NA                                   | NA             | 2.35E+01     |
| Chromium (VI)                     | 3.09E-07                 | 9.36E+02   | NA                                   | NA                                   | NA             | 4.69E-02     |
| Lead                              | NA                       | 2.60E+02   | 2.60E+02                             | NA                                   | NA             | 1.50E-02     |
| Selenium                          | NA                       | 1.34E+02   | NA                                   | NA                                   | NA             | 7.82E-02     |

Notes:

NA: Not Applicable

\*: Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is show

#: Calculated Target Level exceeded effective water solubility(if available) or solubility. Calculated value is show

m: The target level is MCL.

Soil concentrations are presented on a dry weight basis.

RBTL: Risk Based Target Level

**Table 7-3(b)**  
**Tier 1 Risk-Based Target Levels for Non-Residential Land Use for Soil Type 3 (Clayey Soil)**

| Chemicals of Concern              | Air                                | Surficial Soil   | Subsurface Soil                                       | Groundwater              |  |
|-----------------------------------|------------------------------------|--|---|--------------------------|--|
|                                   | Indoor<br>[mg/m <sup>3</sup> -air] | Ingestion,<br>Inhalation<br>(Vapor Emissions<br>and Particulates),<br>and Dermal<br>Contact<br>[mg/kg] | Indoor Inhalation<br>of Vapor<br>Emissions<br>[mg/kg] | Dermal Contact<br>[mg/L] | Indoor Inhalation<br>of Vapor<br>Emissions<br>[mg/L] |
| Benzene                           | 6.57E-03                           | 3.70E+01 *   | 4.65E+00  | 1.27E+00                 | 9.34E+00   |
| Toluene                           | 7.79E-01                           | 1.24E+04 *   | 1.13E+03 *  | 1.31E+02 #               | 9.44E+02 #   |
| Ethylbenzene                      | 1.95E+00                           | 5.96E+03 *   | 5.12E+03 *  | 3.56E+01 #               | 2.31E+03 #   |
| Xylenes (mixed)                   | 1.36E+00                           | 3.00E+04 *   | 4.58E+03 *  | 6.49E+02 #               | 1.86E+03 #   |
| Ethylene Dibromide (EDB)          | 2.48E-04                           | 5.87E-02   | 4.79E+00  | 3.38E-04                 | 1.04E+01   |
| Ethylene Dichloride (EDC)         | 2.10E-03                           | 2.38E+01   | 3.49E+00  | 6.99E-01                 | 1.45E+01   |
| Methyl-tert-butyl-ether(MTBE)     | 5.45E-01                           | 5.51E+02   | 1.60E+03  | 2.05E+01                 | 7.77E+03   |
| Acenaphthene                      | 4.09E-01                           | 4.01E+03 *   | 1.72E+06 *  | 6.74E+00 #               | 4.09E+04 #   |
| Anthracene                        | 2.04E+00                           | 2.01E+04 *   | 1.01E+07 *  | 3.42E+01 #               | 5.83E+04 #   |
| Benzo(a)anthracene                | 6.16E-04                           | 5.50E+00   | 2.90E+06 *  | 1.30E-03                 | 1.23E+03 #   |
| Benzo(a)pyrene                    | 3.13E-05                           | 5.62E-01   | 5.97E+05 *  | 6.93E-05                 | 9.89E+01 #   |
| Benzo(b)fluoranthene              | 6.16E-04                           | 5.50E+00   | 1.14E+06 *  | 6.93E-04                 | 1.57E+02 #   |
| Benzo(k)fluoranthene              | 6.16E-03                           | 5.50E+01 *   | 2.51E+08 *  | 6.93E-03 #               | 3.44E+04 #   |
| Chrysene                          | 6.16E-02                           | 5.50E+02 *   | 3.92E+07 *  | 1.30E-01 #               | 1.67E+04 #   |
| Dibenzo(a,h)anthracene            | 6.16E-05                           | 5.50E-01   | 9.84E+06 *  | 3.83E-05                 | 4.38E+02 #   |
| Fluoranthene                      | 2.73E-01                           | 7.82E+03 *   | 1.91E+08 *  | 2.45E+00 #               | 3.02E+05 #   |
| Fluorene                          | 2.73E-01                           | 2.69E+03 *   | 6.06E+06 *  | 6.62E+00 #               | 7.40E+04 #   |
| Naphthalene                       | 5.86E-03                           | 7.13E+02 *   | 1.63E+03 *  | 7.74E+00 #               | 1.37E+02 #   |
| Pyrene                            | 2.04E-01                           | 5.36E+03 *   | 1.97E+08 *  | 1.84E+00 #               | 3.17E+05 #   |
| TPH-GRO                           | 3.82E+01                           | 3.90E+05 *   | 9.55E+03 *  | 7.91E+02 #               | 4.53E+02 #   |
| TPH-DRO                           | 4.68E+00                           | 4.03E+05 *   | 1.08E+05 *  | 3.20E+01 #               | 2.84E+03 #   |
| TPH-ORO                           | NA                                 | 3.62E+05 *   | NA  | 3.90E+00 #               | NA   |
| >C6 - C8 (Aliphatics)             | 3.59E+01                           | 3.59E+05 *   | 6.11E+03 *  | 7.70E+02 #               | 2.11E+02 #   |
| >C8 - C10 (Aliphatics)            | 1.95E+00                           | 2.00E+04 *   | 1.32E+03 *  | 5.78E+00 #               | 7.18E+00 #   |
| >C10 - C12 (Aliphatics)           | 1.95E+00                           | 1.35E+04 *   | 6.67E+03 *  | 2.17E+00 #               | 4.79E+00 #   |
| >C12 - C16 (Aliphatics)           | 1.95E+00                           | 1.55E+04 *   | 3.04E+04 *  | 5.03E-01 #               | 1.10E+00 #   |
| >C16 - C21 (Aliphatics)           | NA                                 | 3.58E+05 *   | NA  | 1.02E+00 #               | NA   |
| >C21 - C35 (Aliphatics)           | NA                                 | 3.58E+05 *   | NA  | 1.02E+00 #               | NA   |
| >C8 - C10 (Aromatics)             | 3.89E-01                           | 1.04E+04 *   | 2.11E+03 *  | 1.46E+01                 | 2.35E+02 #   |
| >C10 - C12 (Aromatics)            | 3.89E-01                           | 5.86E+03 *   | 1.14E+04 *  | 1.23E+01                 | 7.87E+02 #   |
| >C12 - C16 (Aromatics)            | 3.89E-01                           | 6.53E+03 *   | 5.96E+04 *  | 1.01E+01 #               | 2.04E+03 #   |
| >C16 - C21 (Aromatics)            | NA                                 | 4.30E+03 *   | NA  | 5.93E+00 #               | NA   |
| >C21 - C35 (Aromatics)            | NA                                 | 4.30E+03 *   | NA  | 2.88E+00 #               | NA   |
| Tertiary-amyl-methyl-ether (TAME) | NA                                 | 5.73E+03 *   | NA  | NA                       | NA   |
| Tertiary-butyl- alcohol (TBA)     | 5.86E-01                           | 9.59E+03   | 9.97E+03  | NA                       | 6.10E+04   |
| Ethyl-tert-butyl-ether ( ETBE)    | 5.86E-01                           | 1.42E+02   | 8.59E+02  | NA                       | 2.37E+03   |
| Diisopropyl ether ( DIPE)         | 1.95E+00                           | 1.02E+04 *   | 2.61E+03 *  | NA                       | 4.98E+03 #   |
| Ethanol                           | 3.70E+00                           | 5.03E+05 *   | 3.59E+05 *  | NA                       | 2.47E+06 #   |
| Methanol                          | 5.04E-01                           | 4.46E+04   | 6.56E+04  | NA                       | 3.43E+05   |
| Arsenic                           | 1.27E-05                           | 1.91E+01   | NA  | NA                       | NA   |
| Barium                            | 9.54E-04                           | 4.79E+04   | NA  | NA                       | NA   |
| Cadmium                           | 3.03E-05                           | 3.47E+02   | NA  | NA                       | NA   |
| Chromium (III)                    | 1.95E-04                           | 4.16E+05   | NA  | NA                       | NA   |
| Chromium (VI)                     | 6.58E-07                           | 5.56E+03   | NA  | NA                       | NA   |
| Lead                              | NA                                 | 6.60E+02   | 6.60E+02  | NA                       | NA   |
| Selenium                          | NA                                 | 9.27E+02   | NA  | NA                       | NA   |

Notes:

NA: Not Applicable

\*: Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

#: Calculated Target Level exceeded effective water solubility(if available) or solubility. Calculated value is shown.

Soil concentrations are presented on a dry weight basis.

RBTL: Risk Based Target Level

**Table 7-3(c)**  
**Tier 1 Risk-Based Target Levels for Construction Worker for Soil Type 3 (Clayey Soil)**

| Chemicals of Concern              | Air                      | Soil up to Depth of Construction   | Groundwater    |                                       |   |
|-----------------------------------|--------------------------|--|----------------|---------------------------------------|---|
|                                   | Outdoor                  | Ingestion, Inhalation (Vapor Emissions and Particulates), and Dermal Contact | Dermal Contact | Outdoor Inhalation of Vapor Emissions |   |
|                                   | [mg/m <sup>3</sup> -air] | [mg/kg]  | [mg/L]         | [mg/L]                                |   |
| Benzene                           | 4.86E-02                 | 3.92E+01 *   | 1.09E+01       | 3.93E+03                              | # |
| Toluene                           | 3.25E+00                 | 3.96E+03 *   | 3.63E+02 #     | 2.42E+05                              | # |
| Ethylbenzene                      | 8.11E+00                 | 7.88E+03 *   | 9.89E+01 #     | 6.09E+05                              | # |
| Xylenes (mixed)                   | 5.68E+00                 | 1.04E+04 *   | 1.80E+03 #     | 4.73E+05                              | # |
| Ethylene Dibromide (EDB)          | 1.62E-03                 | 3.95E+00   | 2.35E-02       | 1.30E+03                              |   |
| Ethylene Dichloride (EDC)         | 4.06E-02                 | 5.38E+01   | 4.86E+01       | 9.11E+03                              | # |
| Methyl-tert-butyl-ether(MTBE)     | 2.43E+01                 | 2.85E+04 *   | 1.43E+03       | 8.86E+06                              | # |
| Acenaphthene                      | 1.70E+00                 | 1.02E+04 *   | 1.87E+01 #     | 3.26E+06                              | # |
| Anthracene                        | 8.52E+00                 | 5.16E+04 *   | 9.51E+01 #     | 5.57E+06                              | # |
| Benzo(a)anthracene                | 6.41E-02                 | 3.81E+02 *   | 8.99E-02 #     | 2.25E+06                              | # |
| Benzo(a)pyrene                    | 3.26E-03                 | 3.89E+01 *   | 4.81E-03 #     | 1.81E+05                              | # |
| Benzo(b)fluoranthene              | 6.41E-02                 | 3.80E+02 *   | 4.81E-02 #     | 3.01E+05                              | # |
| Benzo(k)fluoranthene              | 6.41E-01                 | 3.82E+03 *   | 4.81E-01 #     | 6.29E+07                              | # |
| Chrysene                          | 6.41E+00                 | 3.79E+04 *   | 8.99E+00 #     | 3.17E+07                              | # |
| Dibenzo(a,h)anthracene            | 6.41E-03                 | 3.82E+01   | 2.66E-03 #     | 7.98E+05                              | # |
| Fluoranthene                      | 1.14E+00                 | 2.13E+04 *   | 6.80E+00 #     | 2.22E+07                              | # |
| Fluorene                          | 1.14E+00                 | 7.19E+03 *   | 1.84E+01 #     | 5.58E+06                              | # |
| Naphthalene                       | 2.44E-02                 | 3.78E+02 *   | 2.15E+01 #     | 1.38E+04                              | # |
| Pyrene                            | 8.52E-01                 | 1.47E+04 *   | 5.10E+00 #     | 2.32E+07                              | # |
| TPH-GRO                           | 1.59E+02                 | 7.38E+04 *   | 2.20E+03 #     | 1.43E+05                              | # |
| TPH-DRO                           | 1.95E+01                 | 1.05E+06 *   | 8.89E+01 #     | 4.73E+05                              | # |
| TPH-ORO                           | NA                       | 1.01E+06 *   | 1.08E+01 #     | NA                                    |   |
| >C6 - C8 (Aliphatics)             | 1.49E+02                 | 6.33E+04 *   | 2.14E+03 #     | 7.36E+04                              | # |
| >C8 - C10 (Aliphatics)            | 8.12E+00                 | 6.73E+03 *   | 1.60E+01 #     | 2.50E+03                              | # |
| >C10 - C12 (Aliphatics)           | 8.12E+00                 | 1.18E+04 *   | 6.02E+00 #     | 1.67E+03                              | # |
| >C12 - C16 (Aliphatics)           | 8.12E+00                 | 1.98E+04 *   | 1.40E+00 #     | 3.86E+02                              | # |
| >C16 - C21 (Aliphatics)           | NA                       | 9.94E+05 *   | 2.83E+00 #     | NA                                    |   |
| >C21 - C35 (Aliphatics)           | NA                       | 9.94E+05 *   | 2.83E+00 #     | NA                                    |   |
| >C8 - C10 (Aromatics)             | 1.62E+00                 | 3.77E+03 *   | 4.07E+01       | 6.73E+04                              | # |
| >C10 - C12 (Aromatics)            | 1.62E+00                 | 6.21E+03 *   | 3.41E+01 #     | 1.66E+05                              | # |
| >C12 - C16 (Aromatics)            | 1.62E+00                 | 1.01E+04 *   | 2.80E+01 #     | 3.04E+05                              | # |
| >C16 - C21 (Aromatics)            | NA                       | 1.19E+04 *   | 1.65E+01 #     | NA                                    |   |
| >C21 - C35 (Aromatics)            | NA                       | 1.19E+04 *   | 7.99E+00 #     | NA                                    |   |
| Tertiary-amyl-methyl-ether (TAME) | NA                       | 1.59E+04 *   | NA             | NA                                    |   |
| Tertiary-butyl- alcohol (TBA)     | 2.44E+00                 | 8.05E+03   | NA             | 4.79E+06                              | # |
| Ethyl-tert-butyl-ether ( ETBE)    | 2.44E+00                 | 3.52E+02   | NA             | 4.38E+05                              | # |
| Diisopropyl ether ( DIPE)         | 8.12E+00                 | 7.79E+03 *   | NA             | 1.09E+06                              | # |
| Ethanol                           | 1.54E+01                 | 1.55E+05 *   | NA             | 1.82E+08                              | # |
| Methanol                          | 2.10E+00                 | 2.25E+04   | NA             | 2.51E+07                              | # |
| Arsenic                           | 1.32E-03                 | 8.54E+02   | NA             | NA                                    |   |
| Barium                            | 3.98E-03                 | 1.31E+05   | NA             | NA                                    |   |
| Cadmium                           | 3.16E-03                 | 9.65E+02   | NA             | NA                                    |   |
| Chromium (III)                    | 8.12E-04                 | 7.22E+05   | NA             | NA                                    |   |
| Chromium (VI)                     | 6.53E-05                 | 1.40E+04   | NA             | NA                                    |   |
| Lead                              | NA                       | 6.60E+02   | NA             | NA                                    |   |
| Selenium                          | NA                       | 2.57E+03   | NA             | NA                                    |   |

Notes:

NA: Not Applicable

\*: Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration.

#: Calculated Target Level exceeded effective water solubility(if available) or solubility. Calculated value is shown.

Soil concentrations are presented on a dry weight basis.

RBTL: Risk Based Target Level

**Table 7-4(a)**  
**Soil Concentration Protective of Groundwater for Different Distances to POE for Soil Type 1**  
**Distance to Groundwater <20 ft**

| Chemical                          | Distance to POE (ft) |          |          |          |          |          |          |          |          |   |   |
|-----------------------------------|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|---|---|
|                                   | 0                    | 25       | 50       | 75       | 100      | 150      | 200      | 250      | 500      |   |   |
| Benzene                           | 5.61E-02             | 5.66E-02 | 7.34E-02 | 1.14E-01 | 1.74E-01 | 3.49E-01 | 5.96E-01 | 9.13E-01 | 3.56E+00 |   |   |
| Toluene                           | 2.98E+01             | 3.00E+01 | 3.89E+01 | 6.05E+01 | 9.24E+01 | 1.85E+02 | 3.16E+02 | 4.84E+02 | 1.89E+03 | * | * |
| Ethylbenzene                      | 3.99E+01             | 4.02E+01 | 5.21E+01 | 8.10E+01 | 1.24E+02 | 2.48E+02 | 4.23E+02 | 6.49E+02 | 2.53E+03 | * | * |
| Xylenes (mixed)                   | 6.34E+02             | 6.40E+02 | 8.29E+02 | 1.29E+03 | 1.97E+03 | 3.95E+03 | 6.73E+03 | 1.03E+04 | 4.02E+04 | * | * |
| Ethylene Dibromide (EDB)          | 4.73E-04             | 4.77E-04 | 6.19E-04 | 9.61E-04 | 1.47E-03 | 2.95E-03 | 5.02E-03 | 7.70E-03 | 3.00E-02 |   |   |
| Ethylene Dichloride (EDC)         | 6.31E-03             | 6.36E-03 | 8.25E-03 | 1.28E-02 | 1.96E-02 | 3.93E-02 | 6.70E-02 | 1.03E-01 | 4.00E-01 |   |   |
| Methyl-tert-butyl-ether(MTBE)     | 4.53E-01             | 4.57E-01 | 5.93E-01 | 9.21E-01 | 1.41E+00 | 2.82E+00 | 4.81E+00 | 7.38E+00 | 2.87E+01 |   |   |
| Acenaphthene                      | 2.09E+02             | 2.11E+02 | 2.73E+02 | 4.24E+02 | 6.48E+02 | 1.30E+03 | 2.22E+03 | 3.40E+03 | 1.32E+04 | * | * |
| Anthracene                        | 4.35E+03             | 4.38E+03 | 5.68E+03 | 8.83E+03 | 1.35E+04 | 2.71E+04 | 4.61E+04 | 7.07E+04 | 2.75E+05 | * | * |
| Benzo(a)anthracene                | 5.46E+01             | 5.51E+01 | 7.14E+01 | 1.11E+02 | 1.69E+02 | 3.40E+02 | 5.79E+02 | 8.88E+02 | 3.46E+03 | * | * |
| Benzo(a)pyrene                    | 3.04E+01             | 3.06E+01 | 3.97E+01 | 6.17E+01 | 9.43E+01 | 1.89E+02 | 3.22E+02 | 4.94E+02 | 1.92E+03 | * | * |
| Benzo(b)fluoranthene              | 1.69E+02             | 1.70E+02 | 2.21E+02 | 3.43E+02 | 5.24E+02 | 1.05E+03 | 1.79E+03 | 2.74E+03 | 1.07E+04 | * | * |
| Benzo(k)fluoranthene              | 1.69E+03             | 1.70E+03 | 2.21E+03 | 3.43E+03 | 5.24E+03 | 1.05E+04 | 1.79E+04 | 2.74E+04 | 1.07E+05 | * | * |
| Chrysene                          | 5.46E+03             | 5.51E+03 | 7.14E+03 | 1.11E+04 | 1.69E+04 | 3.40E+04 | 5.79E+04 | 8.88E+04 | 3.46E+05 | * | * |
| Dibenzo(a,h)anthracene            | 5.21E+01             | 5.26E+01 | 6.81E+01 | 1.06E+02 | 1.62E+02 | 3.24E+02 | 5.53E+02 | 8.47E+02 | 3.30E+03 | * | * |
| Fluoranthene                      | 9.97E+03             | 1.01E+04 | 1.30E+04 | 2.02E+04 | 3.10E+04 | 6.21E+04 | 1.06E+05 | 1.62E+05 | 6.32E+05 | * | * |
| Fluorene                          | 2.71E+02             | 2.74E+02 | 3.55E+02 | 5.51E+02 | 8.42E+02 | 1.69E+03 | 2.88E+03 | 4.41E+03 | 1.72E+04 | * | * |
| Naphthalene                       | 1.06E+00             | 1.07E+00 | 1.39E+00 | 2.16E+00 | 3.30E+00 | 6.62E+00 | 1.13E+01 | 1.73E+01 | 6.73E+01 | * | * |
| Pyrene                            | 7.34E+03             | 7.40E+03 | 9.59E+03 | 1.49E+04 | 2.28E+04 | 4.57E+04 | 7.79E+04 | 1.19E+05 | 4.65E+05 | * | * |
| TPH-GRO                           | 1.79E+04             | 1.81E+04 | 2.35E+04 | 3.64E+04 | 5.57E+04 | 1.12E+05 | 1.90E+05 | 2.92E+05 | 1.14E+06 |   |   |
| TPH-DRO                           | 2.94E+09             | 2.97E+09 | 3.84E+09 | 5.97E+09 | 9.13E+09 | 1.83E+10 | 3.12E+10 | 4.78E+10 | 1.86E+11 |   |   |
| TPH-ORO                           | 2.94E+09             | 2.97E+09 | 3.84E+09 | 5.97E+09 | 9.13E+09 | 1.83E+10 | 3.12E+10 | 4.78E+10 | 1.86E+11 |   |   |
| >C6 - C8 (Aliphatics)             | 1.44E+04             | 1.46E+04 | 1.89E+04 | 2.93E+04 | 4.49E+04 | 8.99E+04 | 1.53E+05 | 2.35E+05 | 9.15E+05 | * | * |
| >C8 - C10 (Aliphatics)            | 3.46E+03             | 3.49E+03 | 4.52E+03 | 7.02E+03 | 1.07E+04 | 2.15E+04 | 3.67E+04 | 5.62E+04 | 2.19E+05 | * | * |
| >C10 - C12 (Aliphatics)           | 2.57E+04             | 2.60E+04 | 3.36E+04 | 5.23E+04 | 7.99E+04 | 1.60E+05 | 2.73E+05 | 4.18E+05 | 1.63E+06 | * | * |
| >C12 - C16 (Aliphatics)           | 1.17E+06             | 1.18E+06 | 1.53E+06 | 2.38E+06 | 3.64E+06 | 7.29E+06 | 1.24E+07 | 1.90E+07 | 7.42E+07 | * | * |
| >C16 - C21 (Aliphatics)           | 2.94E+09             | 2.97E+09 | 3.84E+09 | 5.97E+09 | 9.13E+09 | 1.83E+10 | 3.12E+10 | 4.78E+10 | 1.86E+11 | * | * |
| >C21 - C35 (Aliphatics)           | 2.94E+09             | 2.97E+09 | 3.84E+09 | 5.97E+09 | 9.13E+09 | 1.83E+10 | 3.12E+10 | 4.78E+10 | 1.86E+11 | * | * |
| >C8 - C10 (Aromatics)             | 4.13E+01             | 4.16E+01 | 5.40E+01 | 8.38E+01 | 1.28E+02 | 2.57E+02 | 4.38E+02 | 6.71E+02 | 2.61E+03 | * | * |
| >C10 - C12 (Aromatics)            | 6.49E+01             | 6.55E+01 | 8.49E+01 | 1.32E+02 | 2.02E+02 | 4.04E+02 | 6.89E+02 | 1.06E+03 | 4.11E+03 | * | * |
| >C12 - C16 (Aromatics)            | 1.29E+02             | 1.30E+02 | 1.69E+02 | 2.62E+02 | 4.01E+02 | 8.04E+02 | 1.37E+03 | 2.10E+03 | 8.18E+03 | * | * |
| >C16 - C21 (Aromatics)            | 1.11E+03             | 1.12E+03 | 1.45E+03 | 2.25E+03 | 3.44E+03 | 6.89E+03 | 1.18E+04 | 1.80E+04 | 7.02E+04 | * | * |
| >C21 - C35 (Aromatics)            | 8.79E+03             | 8.87E+03 | 1.15E+04 | 1.79E+04 | 2.73E+04 | 5.47E+04 | 9.33E+04 | 1.43E+05 | 5.57E+05 | * | * |
| Tertiary-aryl-methyl-ether (TAME) | 5.11E+00             | 5.16E+00 | 6.69E+00 | 1.04E+01 | 1.59E+01 | 3.18E+01 | 5.43E+01 | 8.32E+01 | 3.24E+02 |   |   |
| Tertiary-butyl- alcohol (TBA)     | 5.63E-01             | 5.68E-01 | 7.36E-01 | 1.14E+00 | 1.75E+00 | 3.50E+00 | 5.97E+00 | 9.15E+00 | 3.57E+01 |   |   |
| Ethyl-tert-butyl-ether (ETBE)     | 1.10E-01             | 1.11E-01 | 1.44E-01 | 2.24E-01 | 3.42E-01 | 6.86E-01 | 1.17E+00 | 1.79E+00 | 6.98E+00 |   |   |
| Diisopropyl ether ( DIPE)         | 7.96E+00             | 8.03E+00 | 1.04E+01 | 1.62E+01 | 2.47E+01 | 4.95E+01 | 8.45E+01 | 1.29E+02 | 5.04E+02 |   |   |
| Ethanol                           | 3.39E+00             | 3.42E+00 | 4.44E+00 | 6.89E+00 | 1.05E+01 | 2.11E+01 | 3.60E+01 | 5.52E+01 | 2.15E+02 |   |   |
| Methanol                          | 7.92E-01             | 7.99E-01 | 1.04E+00 | 1.61E+00 | 2.46E+00 | 4.93E+00 | 8.41E+00 | 1.29E+01 | 5.02E+01 |   |   |
| Arsenic                           | 6.25E+00             | 6.30E+00 | 8.17E+00 | 1.27E+01 | 1.94E+01 | 3.89E+01 | 6.63E+01 | 1.02E+02 | 3.96E+02 |   |   |
| Barium                            | 5.47E+02             | 5.52E+02 | 7.15E+02 | 1.11E+03 | 1.70E+03 | 3.41E+03 | 5.81E+03 | 8.90E+03 | 3.47E+04 |   |   |
| Cadmium                           | 1.88E+00             | 1.90E+00 | 2.46E+00 | 3.83E+00 | 5.85E+00 | 1.17E+01 | 2.00E+01 | 3.06E+01 | 1.19E+02 |   |   |
| Chromium III                      | 7.00E+05             | 7.06E+05 | 9.15E+05 | 1.42E+06 | 2.17E+06 | 4.36E+06 | 7.43E+06 | 1.14E+07 | 4.43E+07 |   |   |
| Chromium VI                       | 2.22E+01             | 2.24E+01 | 2.90E+01 | 4.51E+01 | 6.89E+01 | 1.38E+02 | 2.36E+02 | 3.61E+02 | 1.41E+03 |   |   |
| Lead                              | NA                   | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |   |
| Selenium                          | 4.37E+00             | 4.41E+00 | 5.71E+00 | 8.87E+00 | 1.36E+01 | 2.72E+01 | 4.64E+01 | 7.10E+01 | 2.77E+02 |   |   |

Notes:

NA : Not Available

Target levels are based on distance to groundwater < 20 ft for which default vadose zone DAF is 1.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-4(b)**  
**Soil Concentration Protective of Groundwater for Different Distances to POE for Soil Type 1**  
**Distance to Groundwater between 20 and 50 ft**

| Chemical                          | Distance to POE (ft) |          |          |          |          |          |          |          |          |  |  |  |
|-----------------------------------|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|--|--|--|
|                                   | 0                    | 25       | 50       | 75       | 100      | 150      | 200      | 250      | 500      |  |  |  |
| Benzene                           | 1.12E-01             | 1.13E-01 | 1.47E-01 | 2.28E-01 | 3.49E-01 | 6.99E-01 | 1.19E+00 | 1.83E+00 | 7.11E+00 |  |  |  |
| Toluene                           | 5.95E+01             | 6.01E+01 | 7.78E+01 | 1.21E+02 | 1.85E+02 | 3.71E+02 | 6.32E+02 | 9.68E+02 | 3.77E+03 |  |  |  |
| Ethylbenzene                      | 7.97E+01             | 8.05E+01 | 1.04E+02 | 1.62E+02 | 2.48E+02 | 4.97E+02 | 8.47E+02 | 1.30E+03 | 5.05E+03 |  |  |  |
| Xylenes (mixed)                   | 1.27E+03             | 1.28E+03 | 1.66E+03 | 2.58E+03 | 3.94E+03 | 7.90E+03 | 1.35E+04 | 2.06E+04 | 8.03E+04 |  |  |  |
| Ethylene Dibromide (EDB)          | 9.46E-04             | 9.55E-04 | 1.24E-03 | 1.92E-03 | 2.94E-03 | 5.89E-03 | 1.00E-02 | 1.54E-02 | 6.00E-02 |  |  |  |
| Ethylene Dichloride (EDC)         | 1.26E-02             | 1.27E-02 | 1.65E-02 | 2.56E-02 | 3.92E-02 | 7.86E-02 | 1.34E-01 | 2.05E-01 | 7.99E-01 |  |  |  |
| Methyl-tert-butyl-ether(MTBE)     | 9.07E-01             | 9.15E-01 | 1.19E+00 | 1.84E+00 | 2.82E+00 | 5.65E+00 | 9.63E+00 | 1.48E+01 | 5.75E+01 |  |  |  |
| Acenaphthene                      | 4.18E+02             | 4.21E+02 | 5.46E+02 | 8.48E+02 | 1.30E+03 | 2.60E+03 | 4.43E+03 | 6.79E+03 | 2.65E+04 |  |  |  |
| Anthracene                        | 8.69E+03             | 8.77E+03 | 1.14E+04 | 1.77E+04 | 2.70E+04 | 5.41E+04 | 9.23E+04 | 1.41E+05 | 5.51E+05 |  |  |  |
| Benzo(a)anthracene                | 1.09E+02             | 1.10E+02 | 1.43E+02 | 2.22E+02 | 3.39E+02 | 6.80E+02 | 1.16E+03 | 1.78E+03 | 6.92E+03 |  |  |  |
| Benzo(a)pyrene                    | 6.07E+01             | 6.13E+01 | 7.94E+01 | 1.23E+02 | 1.89E+02 | 3.78E+02 | 6.45E+02 | 9.88E+02 | 3.85E+03 |  |  |  |
| Benzo(b)fluoranthene              | 3.37E+02             | 3.40E+02 | 4.41E+02 | 6.85E+02 | 1.05E+03 | 2.10E+03 | 3.58E+03 | 5.49E+03 | 2.14E+04 |  |  |  |
| Benzo(k)fluoranthene              | 3.37E+03             | 3.40E+03 | 4.41E+03 | 6.85E+03 | 1.05E+04 | 2.10E+04 | 3.58E+04 | 5.49E+04 | 2.14E+05 |  |  |  |
| Chrysene                          | 1.09E+04             | 1.10E+04 | 1.43E+04 | 2.22E+04 | 3.39E+04 | 6.80E+04 | 1.16E+05 | 1.78E+05 | 6.92E+05 |  |  |  |
| Dibenz(a,h)anthracene             | 1.04E+02             | 1.05E+02 | 1.36E+02 | 2.12E+02 | 3.24E+02 | 6.49E+02 | 1.11E+03 | 1.69E+03 | 6.60E+03 |  |  |  |
| Fluoranthene                      | 1.99E+04             | 2.01E+04 | 2.61E+04 | 4.05E+04 | 6.19E+04 | 1.24E+05 | 2.12E+05 | 3.24E+05 | 1.26E+06 |  |  |  |
| Fluorene                          | 5.42E+02             | 5.47E+02 | 7.09E+02 | 1.10E+03 | 1.68E+03 | 3.38E+03 | 5.76E+03 | 8.82E+03 | 3.44E+04 |  |  |  |
| Naphthalene                       | 2.13E+00             | 2.14E+00 | 2.78E+00 | 4.32E+00 | 6.60E+00 | 1.32E+01 | 2.26E+01 | 3.46E+01 | 1.35E+02 |  |  |  |
| Pyrene                            | 1.47E+04             | 1.48E+04 | 1.92E+04 | 2.98E+04 | 4.56E+04 | 9.14E+04 | 1.56E+05 | 2.39E+05 | 9.30E+05 |  |  |  |
| TPH-GRO                           | 3.59E+04             | 3.62E+04 | 4.69E+04 | 7.29E+04 | 1.11E+05 | 2.23E+05 | 3.81E+05 | 5.84E+05 | 2.27E+06 |  |  |  |
| TPH-DRO                           | 5.88E+09             | 5.93E+09 | 7.69E+09 | 1.19E+10 | 1.83E+10 | 3.66E+10 | 6.24E+10 | 9.56E+10 | 3.73E+11 |  |  |  |
| TPH-ORO                           | 5.88E+09             | 5.93E+09 | 7.69E+09 | 1.19E+10 | 1.83E+10 | 3.66E+10 | 6.24E+10 | 9.56E+10 | 3.72E+11 |  |  |  |
| >C6 - C8 (Aliphatics)             | 2.89E+04             | 2.91E+04 | 3.78E+04 | 5.87E+04 | 8.97E+04 | 1.80E+05 | 3.07E+05 | 4.70E+05 | 1.83E+06 |  |  |  |
| >C8 - C10 (Aliphatics)            | 6.91E+03             | 6.97E+03 | 9.04E+03 | 1.40E+04 | 2.15E+04 | 4.30E+04 | 7.34E+04 | 1.12E+05 | 4.38E+05 |  |  |  |
| >C10 - C12 (Aliphatics)           | 5.15E+04             | 5.19E+04 | 6.73E+04 | 1.05E+05 | 1.60E+05 | 3.20E+05 | 5.46E+05 | 8.37E+05 | 3.26E+06 |  |  |  |
| >C12 - C16 (Aliphatics)           | 2.34E+06             | 2.36E+06 | 3.06E+06 | 4.76E+06 | 7.27E+06 | 1.46E+07 | 2.49E+07 | 3.81E+07 | 1.48E+08 |  |  |  |
| >C16 - C21 (Aliphatics)           | 5.88E+09             | 5.93E+09 | 7.69E+09 | 1.19E+10 | 1.83E+10 | 3.66E+10 | 6.24E+10 | 9.56E+10 | 3.72E+11 |  |  |  |
| >C21 - C35 (Aliphatics)           | 5.88E+09             | 5.93E+09 | 7.69E+09 | 1.19E+10 | 1.83E+10 | 3.66E+10 | 6.24E+10 | 9.56E+10 | 3.72E+11 |  |  |  |
| >C8 - C10 (Aromatics)             | 8.25E+01             | 8.33E+01 | 1.08E+02 | 1.68E+02 | 2.56E+02 | 5.14E+02 | 8.76E+02 | 1.34E+03 | 5.23E+03 |  |  |  |
| >C10 - C12 (Aromatics)            | 1.30E+02             | 1.31E+02 | 1.70E+02 | 2.64E+02 | 4.03E+02 | 8.09E+02 | 1.38E+03 | 2.11E+03 | 8.23E+03 |  |  |  |
| >C12 - C16 (Aromatics)            | 2.58E+02             | 2.61E+02 | 3.38E+02 | 5.25E+02 | 8.02E+02 | 1.61E+03 | 2.74E+03 | 4.20E+03 | 1.64E+04 |  |  |  |
| >C16 - C21 (Aromatics)            | 2.21E+03             | 2.23E+03 | 2.90E+03 | 4.50E+03 | 6.88E+03 | 1.38E+04 | 2.35E+04 | 3.60E+04 | 1.40E+05 |  |  |  |
| >C21 - C35 (Aromatics)            | 1.76E+04             | 1.77E+04 | 2.30E+04 | 3.57E+04 | 5.46E+04 | 1.09E+05 | 1.87E+05 | 2.86E+05 | 1.11E+06 |  |  |  |
| Tertiary-aryl-methyl-ether (TAME) | 1.02E+01             | 1.03E+01 | 1.34E+01 | 2.08E+01 | 3.18E+01 | 6.37E+01 | 1.09E+02 | 1.66E+02 | 6.48E+02 |  |  |  |
| Tertiary-butyl- alcohol (TBA)     | 1.13E+00             | 1.14E+00 | 1.47E+00 | 2.29E+00 | 3.50E+00 | 7.01E+00 | 1.19E+01 | 1.83E+01 | 7.13E+01 |  |  |  |
| Ethyl-tert-butyl-ether ( ETBE)    | 2.20E-01             | 2.22E-01 | 2.88E-01 | 4.48E-01 | 6.84E-01 | 1.37E+00 | 2.34E+00 | 3.58E+00 | 1.40E+01 |  |  |  |
| Diisopropyl ether ( DIPE)         | 1.59E+01             | 1.61E+01 | 2.08E+01 | 3.23E+01 | 4.94E+01 | 9.91E+01 | 1.69E+02 | 2.59E+02 | 1.01E+03 |  |  |  |
| Ethanol                           | 6.79E+00             | 6.85E+00 | 8.87E+00 | 1.38E+01 | 2.11E+01 | 4.23E+01 | 7.20E+01 | 1.10E+02 | 4.30E+02 |  |  |  |
| Methanol                          | 1.58E+00             | 1.60E+00 | 2.07E+00 | 3.22E+00 | 4.92E+00 | 9.87E+00 | 1.68E+01 | 2.58E+01 | 1.00E+02 |  |  |  |
| Arsenic                           | 1.25E+01             | 1.26E+01 | 1.63E+01 | 2.54E+01 | 3.88E+01 | 7.78E+01 | 1.33E+02 | 2.03E+02 | 7.91E+02 |  |  |  |
| Barium                            | 1.09E+03             | 1.10E+03 | 1.43E+03 | 2.22E+03 | 3.40E+03 | 6.81E+03 | 1.16E+04 | 1.78E+04 | 6.93E+04 |  |  |  |
| Cadmium                           | 3.77E+00             | 3.80E+00 | 4.93E+00 | 7.65E+00 | 1.17E+01 | 2.35E+01 | 4.00E+01 | 6.13E+01 | 2.39E+02 |  |  |  |
| Chromium III                      | 1.40E+06             | 1.41E+06 | 1.83E+06 | 2.84E+06 | 4.35E+06 | 8.72E+06 | 1.49E+07 | 2.28E+07 | 8.87E+07 |  |  |  |
| Chromium VI                       | 4.44E+01             | 4.48E+01 | 5.80E+01 | 9.01E+01 | 1.38E+02 | 2.76E+02 | 4.71E+02 | 7.22E+02 | 2.81E+03 |  |  |  |
| Lead                              | NA                   | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |  |  |  |
| Selenium                          | 8.73E+00             | 8.81E+00 | 1.14E+01 | 1.77E+01 | 2.71E+01 | 5.44E+01 | 9.27E+01 | 1.42E+02 | 5.53E+02 |  |  |  |

Notes:

NA : Not Available

Target levels are based on distance to groundwater between 20 and 50 ft for which default vadose zone DAF is 2.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-4(c)**  
**Soil Concentration Protective of Groundwater for Different Distances to POE for Soil Type 1**  
**Distance to Groundwater >50 ft**

| Chemical                          | Distance to POE (ft) |          |          |          |          |          |          |          |          |   |  |  |  |  |
|-----------------------------------|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|---|--|--|--|--|
|                                   | 0                    | 25       | 50       | 75       | 100      | 150      | 200      | 250      | 500      |   |  |  |  |  |
| Benzene                           | 2.24E-01             | 2.26E-01 | 2.94E-01 | 4.56E-01 | 6.97E-01 | 1.40E+00 | 2.38E+00 | 3.65E+00 | 1.42E+01 |   |  |  |  |  |
| Toluene                           | 1.19E+02             | 1.20E+02 | 1.56E+02 | 2.42E+02 | 3.70E+02 | 7.41E+02 | 1.26E+03 | 1.94E+03 | 7.54E+03 | * |  |  |  |  |
| Ethylbenzene                      | 1.59E+02             | 1.61E+02 | 2.09E+02 | 3.24E+02 | 4.95E+02 | 9.93E+02 | 1.69E+03 | 2.59E+03 | 1.01E+04 | * |  |  |  |  |
| Xylenes (mixed)                   | 2.54E+03             | 2.56E+03 | 3.32E+03 | 5.15E+03 | 7.88E+03 | 1.58E+04 | 2.69E+04 | 4.13E+04 | 1.61E+05 | * |  |  |  |  |
| Ethylene Dibromide (EDB)          | 1.89E-03             | 1.91E-03 | 2.47E-03 | 3.84E-03 | 5.88E-03 | 1.18E-02 | 2.01E-02 | 3.08E-02 | 1.20E-01 |   |  |  |  |  |
| Ethylene Dichloride (EDC)         | 2.52E-02             | 2.55E-02 | 3.30E-02 | 5.12E-02 | 7.84E-02 | 1.57E-01 | 2.68E-01 | 4.10E-01 | 1.60E+00 |   |  |  |  |  |
| Methyl-tert-butyl-ether(MTBE)     | 1.81E+00             | 1.83E+00 | 2.37E+00 | 3.68E+00 | 5.63E+00 | 1.13E+01 | 1.93E+01 | 2.95E+01 | 1.15E+02 |   |  |  |  |  |
| Acenaphthene                      | 8.35E+02             | 8.43E+02 | 1.09E+03 | 1.70E+03 | 2.59E+03 | 5.20E+03 | 8.87E+03 | 1.36E+04 | 5.29E+04 | * |  |  |  |  |
| Anthracene                        | 1.74E+04             | 1.75E+04 | 2.27E+04 | 3.53E+04 | 5.40E+04 | 1.08E+05 | 1.85E+05 | 2.83E+05 | 1.10E+06 | * |  |  |  |  |
| Benzo(a)anthracene                | 2.18E+02             | 2.20E+02 | 2.85E+02 | 4.43E+02 | 6.78E+02 | 1.36E+03 | 2.32E+03 | 3.55E+03 | 1.38E+04 | * |  |  |  |  |
| Benzo(a)pyrene                    | 1.21E+02             | 1.23E+02 | 1.59E+02 | 2.47E+02 | 3.77E+02 | 7.56E+02 | 1.29E+03 | 1.98E+03 | 7.70E+03 | * |  |  |  |  |
| Benzo(b)fluoranthene              | 6.75E+02             | 6.81E+02 | 8.82E+02 | 1.37E+03 | 2.10E+03 | 4.20E+03 | 7.16E+03 | 1.10E+04 | 4.27E+04 | * |  |  |  |  |
| Benzo(k)fluoranthene              | 6.75E+03             | 6.81E+03 | 8.82E+03 | 1.37E+04 | 2.10E+04 | 4.20E+04 | 7.16E+04 | 1.10E+05 | 4.27E+05 | * |  |  |  |  |
| Chrysene                          | 2.18E+04             | 2.20E+04 | 2.85E+04 | 4.43E+04 | 6.78E+04 | 1.36E+05 | 2.32E+05 | 3.55E+05 | 1.38E+06 | * |  |  |  |  |
| Dibenzo(a,h)anthracene            | 2.08E+02             | 2.10E+02 | 2.73E+02 | 4.23E+02 | 6.47E+02 | 1.30E+03 | 2.21E+03 | 3.39E+03 | 1.32E+04 | * |  |  |  |  |
| Fluoranthene                      | 3.99E+04             | 4.02E+04 | 5.21E+04 | 8.10E+04 | 1.24E+05 | 2.48E+05 | 4.23E+05 | 6.48E+05 | 2.53E+06 | * |  |  |  |  |
| Fluorene                          | 1.08E+03             | 1.09E+03 | 1.42E+03 | 2.20E+03 | 3.37E+03 | 6.75E+03 | 1.15E+04 | 1.76E+04 | 6.87E+04 | * |  |  |  |  |
| Naphthalene                       | 4.25E+00             | 4.29E+00 | 5.56E+00 | 8.63E+00 | 1.32E+01 | 2.65E+01 | 4.51E+01 | 6.91E+01 | 2.69E+02 | * |  |  |  |  |
| Pyrene                            | 2.93E+04             | 2.96E+04 | 3.84E+04 | 5.96E+04 | 9.11E+04 | 1.83E+05 | 3.12E+05 | 4.77E+05 | 1.86E+06 | * |  |  |  |  |
| TPH-GRO                           | 7.18E+04             | 7.24E+04 | 9.38E+04 | 1.46E+05 | 2.23E+05 | 4.47E+05 | 7.62E+05 | 1.17E+06 | 4.55E+06 |   |  |  |  |  |
| TPH-DRO                           | 1.18E+10             | 1.19E+10 | 1.54E+10 | 2.39E+10 | 3.65E+10 | 7.32E+10 | 1.25E+11 | 1.91E+11 | 7.45E+11 |   |  |  |  |  |
| TPH-ORO                           | 1.18E+10             | 1.19E+10 | 1.54E+10 | 2.39E+10 | 3.65E+10 | 7.32E+10 | 1.25E+11 | 1.91E+11 | 7.45E+11 |   |  |  |  |  |
| >C6 - C8 (Aliphatics)             | 5.78E+04             | 5.83E+04 | 7.56E+04 | 1.17E+05 | 1.79E+05 | 3.60E+05 | 6.13E+05 | 9.40E+05 | 3.66E+06 | * |  |  |  |  |
| >C8 - C10 (Aliphatics)            | 1.38E+04             | 1.39E+04 | 1.81E+04 | 2.81E+04 | 4.29E+04 | 8.61E+04 | 1.47E+05 | 2.25E+05 | 8.76E+05 | * |  |  |  |  |
| >C10 - C12 (Aliphatics)           | 1.03E+05             | 1.04E+05 | 1.35E+05 | 2.09E+05 | 3.20E+05 | 6.41E+05 | 1.09E+06 | 1.67E+06 | 6.52E+06 | * |  |  |  |  |
| >C12 - C16 (Aliphatics)           | 4.68E+06             | 4.73E+06 | 6.12E+06 | 9.51E+06 | 1.45E+07 | 2.92E+07 | 4.97E+07 | 7.62E+07 | 2.97E+08 | * |  |  |  |  |
| >C16 - C21 (Aliphatics)           | 1.18E+10             | 1.19E+10 | 1.54E+10 | 2.39E+10 | 3.65E+10 | 7.32E+10 | 1.25E+11 | 1.91E+11 | 7.45E+11 | * |  |  |  |  |
| >C21 - C35 (Aliphatics)           | 1.18E+10             | 1.19E+10 | 1.54E+10 | 2.39E+10 | 3.65E+10 | 7.32E+10 | 1.25E+11 | 1.91E+11 | 7.45E+11 | * |  |  |  |  |
| >C8 - C10 (Aromatics)             | 1.65E+02             | 1.67E+02 | 2.16E+02 | 3.35E+02 | 5.13E+02 | 1.03E+03 | 1.75E+03 | 2.68E+03 | 1.05E+04 | * |  |  |  |  |
| >C10 - C12 (Aromatics)            | 2.60E+02             | 2.62E+02 | 3.40E+02 | 5.28E+02 | 8.07E+02 | 1.62E+03 | 2.76E+03 | 4.22E+03 | 1.65E+04 | * |  |  |  |  |
| >C12 - C16 (Aromatics)            | 5.17E+02             | 5.21E+02 | 6.75E+02 | 1.05E+03 | 1.60E+03 | 3.22E+03 | 5.48E+03 | 8.40E+03 | 3.27E+04 | * |  |  |  |  |
| >C16 - C21 (Aromatics)            | 4.43E+03             | 4.47E+03 | 5.79E+03 | 9.00E+03 | 1.38E+04 | 2.76E+04 | 4.70E+04 | 7.20E+04 | 2.81E+05 | * |  |  |  |  |
| >C21 - C35 (Aromatics)            | 3.52E+04             | 3.55E+04 | 4.60E+04 | 7.14E+04 | 1.09E+05 | 2.19E+05 | 3.73E+05 | 5.72E+05 | 2.23E+06 | * |  |  |  |  |
| Tertiary-aryl-methyl-ether (TAME) | 2.05E+01             | 2.06E+01 | 2.68E+01 | 4.16E+01 | 6.35E+01 | 1.27E+02 | 2.17E+02 | 3.33E+02 | 1.30E+03 |   |  |  |  |  |
| Tertiary-butyl- alcohol (TBA)     | 2.25E+00             | 2.27E+00 | 2.94E+00 | 4.57E+00 | 6.99E+00 | 1.40E+01 | 2.39E+01 | 3.66E+01 | 1.43E+02 |   |  |  |  |  |
| Ethyl-tert-butyl-ether (ETBE)     | 4.41E-01             | 4.45E-01 | 5.76E-01 | 8.95E-01 | 1.37E+00 | 2.74E+00 | 4.68E+00 | 7.17E+00 | 2.79E+01 |   |  |  |  |  |
| Diisopropyl ether ( DIPE)         | 3.18E+01             | 3.21E+01 | 4.16E+01 | 6.46E+01 | 9.88E+01 | 1.98E+02 | 3.38E+02 | 5.18E+02 | 2.02E+03 | * |  |  |  |  |
| Ethanol                           | 1.36E+01             | 1.37E+01 | 1.77E+01 | 2.76E+01 | 4.22E+01 | 8.45E+01 | 1.44E+02 | 2.21E+02 | 8.60E+02 |   |  |  |  |  |
| Methanol                          | 3.17E+00             | 3.20E+00 | 4.14E+00 | 6.44E+00 | 9.84E+00 | 1.97E+01 | 3.36E+01 | 5.15E+01 | 2.01E+02 |   |  |  |  |  |
| Arsenic                           | 2.50E+01             | 2.52E+01 | 3.27E+01 | 5.07E+01 | 7.76E+01 | 1.56E+02 | 2.65E+02 | 4.06E+02 | 1.58E+03 |   |  |  |  |  |
| Barium                            | 2.19E+03             | 2.21E+03 | 2.86E+03 | 4.44E+03 | 6.80E+03 | 1.36E+04 | 2.32E+04 | 3.56E+04 | 1.39E+05 |   |  |  |  |  |
| Cadmium                           | 7.53E+00             | 7.60E+00 | 9.85E+00 | 1.53E+01 | 2.34E+01 | 4.69E+01 | 8.00E+01 | 1.23E+02 | 4.77E+02 |   |  |  |  |  |
| Chromium III                      | 2.80E+06             | 2.82E+06 | 3.66E+06 | 5.69E+06 | 8.70E+06 | 1.74E+07 | 2.97E+07 | 4.55E+07 | 1.77E+08 |   |  |  |  |  |
| Chromium VI                       | 8.87E+01             | 8.95E+01 | 1.16E+02 | 1.80E+02 | 2.76E+02 | 5.53E+02 | 9.42E+02 | 1.44E+03 | 5.62E+03 |   |  |  |  |  |
| Lead                              | NA                   | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Selenium                          | 1.75E+01             | 1.76E+01 | 2.28E+01 | 3.55E+01 | 5.42E+01 | 1.09E+02 | 1.85E+02 | 2.84E+02 | 1.11E+03 |   |  |  |  |  |

Notes:

NA : Not Available

Target levels are based on distance to groundwater >50 ft for which default vadose zone DAF is 4.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-5(a)**  
**Soil Concentration Protective of Groundwater for Different Distances to POE for Soil Type 2**  
**Distance to Groundwater <20 ft**

| Chemical                          | Distance to POE (ft) |          |          |          |          |          |          |          |          |   |   |
|-----------------------------------|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|---|---|
|                                   | 0                    | 25       | 50       | 75       | 100      | 150      | 200      | 250      | 500      |   |   |
| Benzene                           | 6.30E-02             | 6.35E-02 | 8.24E-02 | 1.28E-01 | 1.96E-01 | 3.92E-01 | 6.69E-01 | 1.02E+00 | 3.99E+00 |   |   |
| Toluene                           | 3.11E+01             | 3.14E+01 | 4.07E+01 | 6.32E+01 | 9.66E+01 | 1.94E+02 | 3.30E+02 | 5.06E+02 | 1.97E+03 | * | * |
| Ethylbenzene                      | 4.08E+01             | 4.12E+01 | 5.34E+01 | 8.29E+01 | 1.27E+02 | 2.54E+02 | 4.33E+02 | 6.64E+02 | 2.59E+03 | * | * |
| Xylenes (mixed)                   | 6.47E+02             | 6.53E+02 | 8.47E+02 | 1.32E+03 | 2.01E+03 | 4.03E+03 | 6.87E+03 | 1.05E+04 | 4.10E+04 | * | * |
| Ethylene Dibromide (EDB)          | 5.47E-04             | 5.52E-04 | 7.15E-04 | 1.11E-03 | 1.70E-03 | 3.41E-03 | 5.81E-03 | 8.89E-03 | 3.46E-02 |   |   |
| Ethylene Dichloride (EDC)         | 8.59E-03             | 8.67E-03 | 1.12E-02 | 1.75E-02 | 2.67E-02 | 5.35E-02 | 9.12E-02 | 1.40E-01 | 5.44E-01 |   |   |
| Methyl-tert-butyl-ether(MTBE)     | 6.69E-01             | 6.75E-01 | 8.75E-01 | 1.36E+00 | 2.08E+00 | 4.16E+00 | 7.10E+00 | 1.09E+01 | 4.24E+01 |   |   |
| Acenaphthene                      | 2.09E+02             | 2.11E+02 | 2.73E+02 | 4.25E+02 | 6.49E+02 | 1.30E+03 | 2.22E+03 | 3.40E+03 | 1.32E+04 | * | * |
| Anthracene                        | 4.35E+03             | 4.39E+03 | 5.68E+03 | 8.83E+03 | 1.35E+04 | 2.71E+04 | 4.61E+04 | 7.07E+04 | 2.75E+05 | * | * |
| Benzo(a)anthracene                | 5.46E+01             | 5.51E+01 | 7.14E+01 | 1.11E+02 | 1.69E+02 | 3.40E+02 | 5.79E+02 | 8.88E+02 | 3.46E+03 | * | * |
| Benzo(a)pyrene                    | 3.04E+01             | 3.06E+01 | 3.97E+01 | 6.17E+01 | 9.43E+01 | 1.89E+02 | 3.22E+02 | 4.94E+02 | 1.92E+03 | * | * |
| Benzo(b)fluoranthene              | 1.69E+02             | 1.70E+02 | 2.21E+02 | 3.43E+02 | 5.24E+02 | 1.05E+03 | 1.79E+03 | 2.74E+03 | 1.07E+04 | * | * |
| Benzo(k)fluoranthene              | 1.69E+03             | 1.70E+03 | 2.21E+03 | 3.43E+03 | 5.24E+03 | 1.05E+04 | 1.79E+04 | 2.74E+04 | 1.07E+05 | * | * |
| Chrysene                          | 5.46E+03             | 5.51E+03 | 7.14E+03 | 1.11E+04 | 1.69E+04 | 3.40E+04 | 5.79E+04 | 8.88E+04 | 3.46E+05 | * | * |
| Dibenzo(a,h)anthracene            | 5.21E+01             | 5.26E+01 | 6.81E+01 | 1.06E+02 | 1.62E+02 | 3.24E+02 | 5.53E+02 | 8.47E+02 | 3.30E+03 | * | * |
| Fluoranthene                      | 9.97E+03             | 1.01E+04 | 1.30E+04 | 2.02E+04 | 3.10E+04 | 6.21E+04 | 1.06E+05 | 1.62E+05 | 6.32E+05 | * | * |
| Fluorene                          | 2.71E+02             | 2.74E+02 | 3.55E+02 | 5.51E+02 | 8.43E+02 | 1.69E+03 | 2.88E+03 | 4.41E+03 | 1.72E+04 | * | * |
| Naphthalene                       | 1.07E+00             | 1.08E+00 | 1.40E+00 | 2.17E+00 | 3.32E+00 | 6.65E+00 | 1.13E+01 | 1.74E+01 | 6.77E+01 | * | * |
| Pyrene                            | 7.34E+03             | 7.40E+03 | 9.59E+03 | 1.49E+04 | 2.28E+04 | 4.57E+04 | 7.79E+04 | 1.19E+05 | 4.65E+05 | * | * |
| TPH-GRO                           | 1.75E+04             | 1.77E+04 | 2.29E+04 | 3.56E+04 | 5.44E+04 | 1.09E+05 | 1.86E+05 | 2.85E+05 | 1.11E+06 |   |   |
| TPH-DRO                           | 2.94E+09             | 2.97E+09 | 3.84E+09 | 5.97E+09 | 9.13E+09 | 1.83E+10 | 3.12E+10 | 4.78E+10 | 1.86E+11 |   |   |
| TPH-ORO                           | 2.94E+09             | 2.96E+09 | 3.84E+09 | 5.97E+09 | 9.13E+09 | 1.83E+10 | 3.12E+10 | 4.78E+10 | 1.86E+11 |   |   |
| >C6 - C8 (Aliphatics)             | 1.40E+04             | 1.42E+04 | 1.84E+04 | 2.85E+04 | 4.36E+04 | 8.75E+04 | 1.49E+05 | 2.28E+05 | 8.90E+05 | * | * |
| >C8 - C10 (Aliphatics)            | 3.43E+03             | 3.46E+03 | 4.49E+03 | 6.97E+03 | 1.07E+04 | 2.14E+04 | 3.64E+04 | 5.58E+04 | 2.17E+05 | * | * |
| >C10 - C12 (Aliphatics)           | 2.57E+04             | 2.59E+04 | 3.36E+04 | 5.22E+04 | 7.98E+04 | 1.60E+05 | 2.73E+05 | 4.18E+05 | 1.63E+06 | * | * |
| >C12 - C16 (Aliphatics)           | 1.17E+06             | 1.18E+06 | 1.53E+06 | 2.38E+06 | 3.64E+06 | 7.29E+06 | 1.24E+07 | 1.90E+07 | 7.42E+07 | * | * |
| >C16 - C21 (Aliphatics)           | 2.94E+09             | 2.96E+09 | 3.84E+09 | 5.97E+09 | 9.13E+09 | 1.83E+10 | 3.12E+10 | 4.78E+10 | 1.86E+11 | * | * |
| >C21 - C35 (Aliphatics)           | 2.94E+09             | 2.96E+09 | 3.84E+09 | 5.97E+09 | 9.13E+09 | 1.83E+10 | 3.12E+10 | 4.78E+10 | 1.86E+11 | * | * |
| >C8 - C10 (Aromatics)             | 4.15E+01             | 4.18E+01 | 5.42E+01 | 8.43E+01 | 1.29E+02 | 2.58E+02 | 4.40E+02 | 6.75E+02 | 2.63E+03 | * | * |
| >C10 - C12 (Aromatics)            | 6.52E+01             | 6.58E+01 | 8.52E+01 | 1.32E+02 | 2.02E+02 | 4.06E+02 | 6.92E+02 | 1.06E+03 | 4.13E+03 | * | * |
| >C12 - C16 (Aromatics)            | 1.29E+02             | 1.31E+02 | 1.69E+02 | 2.63E+02 | 4.02E+02 | 8.06E+02 | 1.37E+03 | 2.10E+03 | 8.20E+03 | * | * |
| >C16 - C21 (Aromatics)            | 1.11E+03             | 1.12E+03 | 1.45E+03 | 2.25E+03 | 3.44E+03 | 6.90E+03 | 1.18E+04 | 1.80E+04 | 7.02E+04 | * | * |
| >C21 - C35 (Aromatics)            | 8.79E+03             | 8.87E+03 | 1.15E+04 | 1.79E+04 | 2.73E+04 | 5.47E+04 | 9.33E+04 | 1.43E+05 | 5.57E+05 | * | * |
| Tertiary-aryl-methyl-ether (TAME) | 6.01E+00             | 6.06E+00 | 7.85E+00 | 1.22E+01 | 1.87E+01 | 3.74E+01 | 6.38E+01 | 9.77E+01 | 3.81E+02 |   |   |
| Tertiary-butyl- alcohol (TBA)     | 9.88E-01             | 9.97E-01 | 1.29E+00 | 2.01E+00 | 3.07E+00 | 6.16E+00 | 1.05E+01 | 1.61E+01 | 6.26E+01 |   |   |
| Ethyl-tert-butyl-ether (ETBE)     | 1.32E-01             | 1.33E-01 | 1.72E-01 | 2.68E-01 | 4.09E-01 | 8.20E-01 | 1.40E+00 | 2.14E+00 | 8.35E+00 |   |   |
| Diisopropyl ether ( DIPE)         | 8.91E+00             | 8.99E+00 | 1.17E+01 | 1.81E+01 | 2.77E+01 | 5.55E+01 | 9.46E+01 | 1.45E+02 | 5.64E+02 |   |   |
| Ethanol                           | 6.76E+00             | 6.82E+00 | 8.83E+00 | 1.37E+01 | 2.10E+01 | 4.21E+01 | 7.17E+01 | 1.10E+02 | 4.28E+02 |   |   |
| Methanol                          | 1.23E+00             | 1.25E+00 | 1.62E+00 | 2.51E+00 | 3.84E+00 | 7.69E+00 | 1.31E+01 | 2.01E+01 | 7.83E+01 |   |   |
| Arsenic                           | 6.26E+00             | 6.32E+00 | 8.19E+00 | 1.27E+01 | 1.94E+01 | 3.90E+01 | 6.65E+01 | 1.02E+02 | 3.97E+02 |   |   |
| Barium                            | 5.50E+02             | 5.55E+02 | 7.19E+02 | 1.12E+03 | 1.71E+03 | 3.42E+03 | 5.84E+03 | 8.95E+03 | 3.48E+04 |   |   |
| Cadmium                           | 1.89E+00             | 1.91E+00 | 2.47E+00 | 3.84E+00 | 5.87E+00 | 1.18E+01 | 2.01E+01 | 3.08E+01 | 1.20E+02 |   |   |
| Chromium III                      | 7.00E+05             | 7.06E+05 | 9.15E+05 | 1.42E+06 | 2.17E+06 | 4.36E+06 | 7.43E+06 | 1.14E+07 | 4.43E+07 |   |   |
| Chromium VI                       | 2.23E+01             | 2.25E+01 | 2.91E+01 | 4.52E+01 | 6.91E+01 | 1.39E+02 | 2.36E+02 | 3.62E+02 | 1.41E+03 |   |   |
| Lead                              | NA                   | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |   |
| Selenium                          | 4.48E+00             | 4.52E+00 | 5.86E+00 | 9.11E+00 | 1.39E+01 | 2.79E+01 | 4.76E+01 | 7.29E+01 | 2.84E+02 |   |   |

Notes:

NA : Not Available

Target levels are based on distance to groundwater < 20 ft for which default vadose zone DAF is 1.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-5(b)**  
**Soil Concentration Protective of Groundwater for Different Distances to POE for Soil Type 2**  
**Distance to Groundwater between 20 and 50 ft**

| Chemical                          | Distance to POE (ft) |          |          |          |          |          |          |          |          |   |   |   |
|-----------------------------------|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|---|---|---|
|                                   | 0                    | 25       | 50       | 75       | 100      | 150      | 200      | 250      | 500      |   |   |   |
| Benzene                           | 1.26E-01             | 1.27E-01 | 1.65E-01 | 2.56E-01 | 3.91E-01 | 7.85E-01 | 1.34E+00 | 2.05E+00 | 7.98E+00 |   |   |   |
| Toluene                           | 6.22E+01             | 6.28E+01 | 8.14E+01 | 1.26E+02 | 1.93E+02 | 3.88E+02 | 6.61E+02 | 1.01E+03 | 3.94E+03 | * | * | * |
| Ethylbenzene                      | 8.16E+01             | 8.23E+01 | 1.07E+02 | 1.66E+02 | 2.53E+02 | 5.08E+02 | 8.66E+02 | 1.33E+03 | 5.17E+03 | * | * | * |
| Xylenes (mixed)                   | 1.29E+03             | 1.31E+03 | 1.69E+03 | 2.63E+03 | 4.02E+03 | 8.06E+03 | 1.37E+04 | 2.11E+04 | 8.20E+04 | * | * | * |
| Ethylene Dibromide (EDB)          | 1.09E-03             | 1.10E-03 | 1.43E-03 | 2.22E-03 | 3.40E-03 | 6.81E-03 | 1.16E-02 | 1.78E-02 | 6.93E-02 |   |   |   |
| Ethylene Dichloride (EDC)         | 1.72E-02             | 1.73E-02 | 2.25E-02 | 3.49E-02 | 5.34E-02 | 1.07E-01 | 1.82E-01 | 2.80E-01 | 1.09E+00 |   |   |   |
| Methyl-tert-butyl-ether(MTBE)     | 1.34E+00             | 1.35E+00 | 1.75E+00 | 2.72E+00 | 4.15E+00 | 8.33E+00 | 1.42E+01 | 2.18E+01 | 8.47E+01 |   |   |   |
| Acenaphthene                      | 4.18E+02             | 4.22E+02 | 5.47E+02 | 8.49E+02 | 1.30E+03 | 2.60E+03 | 4.44E+03 | 6.80E+03 | 2.65E+04 | * | * | * |
| Anthracene                        | 8.69E+03             | 8.77E+03 | 1.14E+04 | 1.77E+04 | 2.70E+04 | 5.41E+04 | 9.23E+04 | 1.41E+05 | 5.51E+05 | * | * | * |
| Benzo(a)anthracene                | 1.09E+02             | 1.10E+02 | 1.43E+02 | 2.22E+02 | 3.39E+02 | 6.80E+02 | 1.16E+03 | 1.78E+03 | 6.92E+03 | * | * | * |
| Benzo(a)pyrene                    | 6.07E+01             | 6.13E+01 | 7.94E+01 | 1.23E+02 | 1.89E+02 | 3.78E+02 | 6.45E+02 | 9.88E+02 | 3.85E+03 | * | * | * |
| Benzo(b)fluoranthene              | 3.37E+02             | 3.40E+02 | 4.41E+02 | 6.85E+02 | 1.05E+03 | 2.10E+03 | 3.58E+03 | 5.49E+03 | 2.14E+04 | * | * | * |
| Benzo(k)fluoranthene              | 3.37E+03             | 3.40E+03 | 4.41E+03 | 6.85E+03 | 1.05E+04 | 2.10E+04 | 3.58E+04 | 5.49E+04 | 2.14E+05 | * | * | * |
| Chrysene                          | 1.09E+04             | 1.10E+04 | 1.43E+04 | 2.22E+04 | 3.39E+04 | 6.80E+04 | 1.16E+05 | 1.78E+05 | 6.92E+05 | * | * | * |
| Dibenz(a,h)anthracene             | 1.04E+02             | 1.05E+02 | 1.36E+02 | 2.12E+02 | 3.24E+02 | 6.49E+02 | 1.11E+03 | 1.69E+03 | 6.60E+03 | * | * | * |
| Fluoranthene                      | 1.99E+04             | 2.01E+04 | 2.61E+04 | 4.05E+04 | 6.19E+04 | 1.24E+05 | 2.12E+05 | 3.24E+05 | 1.26E+06 | * | * | * |
| Fluorene                          | 5.43E+02             | 5.47E+02 | 7.10E+02 | 1.10E+03 | 1.69E+03 | 3.38E+03 | 5.76E+03 | 8.83E+03 | 3.44E+04 | * | * | * |
| Naphthalene                       | 2.14E+00             | 2.15E+00 | 2.79E+00 | 4.34E+00 | 6.63E+00 | 1.33E+01 | 2.27E+01 | 3.47E+01 | 1.35E+02 | * | * | * |
| Pyrene                            | 1.47E+04             | 1.48E+04 | 1.92E+04 | 2.98E+04 | 4.56E+04 | 9.14E+04 | 1.56E+05 | 2.39E+05 | 9.30E+05 | * | * | * |
| TPH-GRO                           | 3.50E+04             | 3.53E+04 | 4.58E+04 | 7.12E+04 | 1.09E+05 | 2.18E+05 | 3.72E+05 | 5.70E+05 | 2.22E+06 |   |   |   |
| TPH-DRO                           | 5.88E+09             | 5.93E+09 | 7.69E+09 | 1.19E+10 | 1.83E+10 | 3.66E+10 | 6.24E+10 | 9.56E+10 | 3.73E+11 |   |   |   |
| TPH-ORO                           | 5.88E+09             | 5.93E+09 | 7.69E+09 | 1.19E+10 | 1.83E+10 | 3.66E+10 | 6.24E+10 | 9.56E+10 | 3.72E+11 |   |   |   |
| >C6 - C8 (Aliphatics)             | 2.81E+04             | 2.83E+04 | 3.67E+04 | 5.70E+04 | 8.72E+04 | 1.75E+05 | 2.98E+05 | 4.57E+05 | 1.78E+06 | * | * | * |
| >C8 - C10 (Aliphatics)            | 6.86E+03             | 6.92E+03 | 8.97E+03 | 1.39E+04 | 2.13E+04 | 4.27E+04 | 7.28E+04 | 1.12E+05 | 4.35E+05 | * | * | * |
| >C10 - C12 (Aliphatics)           | 5.14E+04             | 5.18E+04 | 6.72E+04 | 1.04E+05 | 1.60E+05 | 3.20E+05 | 5.45E+05 | 8.36E+05 | 3.26E+06 | * | * | * |
| >C12 - C16 (Aliphatics)           | 2.34E+06             | 2.36E+06 | 3.06E+06 | 4.75E+06 | 7.27E+06 | 1.46E+07 | 2.49E+07 | 3.81E+07 | 1.48E+08 | * | * | * |
| >C16 - C21 (Aliphatics)           | 5.88E+09             | 5.93E+09 | 7.69E+09 | 1.19E+10 | 1.83E+10 | 3.66E+10 | 6.24E+10 | 9.56E+10 | 3.72E+11 | * | * | * |
| >C21 - C35 (Aliphatics)           | 5.88E+09             | 5.93E+09 | 7.69E+09 | 1.19E+10 | 1.83E+10 | 3.66E+10 | 6.24E+10 | 9.56E+10 | 3.72E+11 | * | * | * |
| >C8 - C10 (Aromatics)             | 8.30E+01             | 8.37E+01 | 1.08E+02 | 1.69E+02 | 2.58E+02 | 5.17E+02 | 8.81E+02 | 1.35E+03 | 5.26E+03 | * | * | * |
| >C10 - C12 (Aromatics)            | 1.30E+02             | 1.32E+02 | 1.70E+02 | 2.65E+02 | 4.05E+02 | 8.12E+02 | 1.38E+03 | 2.12E+03 | 8.26E+03 | * | * | * |
| >C12 - C16 (Aromatics)            | 2.59E+02             | 2.61E+02 | 3.38E+02 | 5.26E+02 | 8.04E+02 | 1.61E+03 | 2.75E+03 | 4.21E+03 | 1.64E+04 | * | * | * |
| >C16 - C21 (Aromatics)            | 2.22E+03             | 2.24E+03 | 2.90E+03 | 4.50E+03 | 6.88E+03 | 1.38E+04 | 2.35E+04 | 3.60E+04 | 1.40E+05 | * | * | * |
| >C21 - C35 (Aromatics)            | 1.76E+04             | 1.77E+04 | 2.30E+04 | 3.57E+04 | 5.46E+04 | 1.09E+05 | 1.87E+05 | 2.86E+05 | 1.11E+06 | * | * | * |
| Tertiary-amyI-methyl-ether (TAME) | 1.20E+01             | 1.21E+01 | 1.57E+01 | 2.44E+01 | 3.73E+01 | 7.48E+01 | 1.28E+02 | 1.95E+02 | 7.61E+02 |   |   |   |
| Tertiary-butyl- alcohol (TBA)     | 1.98E+00             | 1.99E+00 | 2.59E+00 | 4.02E+00 | 6.14E+00 | 1.23E+01 | 2.10E+01 | 3.22E+01 | 1.25E+02 |   |   |   |
| Ethyl-tert-butyl-ether ( ETBE)    | 2.63E-01             | 2.66E-01 | 3.45E-01 | 5.35E-01 | 8.18E-01 | 1.64E+00 | 2.80E+00 | 4.29E+00 | 1.67E+01 |   |   |   |
| Diisopropyl ether ( DIPE)         | 1.78E+01             | 1.80E+01 | 2.33E+01 | 3.62E+01 | 5.53E+01 | 1.11E+02 | 1.89E+02 | 2.90E+02 | 1.13E+03 |   |   |   |
| Ethanol                           | 1.35E+01             | 1.36E+01 | 1.77E+01 | 2.74E+01 | 4.20E+01 | 8.41E+01 | 1.43E+02 | 2.20E+02 | 8.56E+02 |   |   |   |
| Methanol                          | 2.47E+00             | 2.49E+00 | 3.23E+00 | 5.02E+00 | 7.67E+00 | 1.54E+01 | 2.62E+01 | 4.02E+01 | 1.57E+02 |   |   |   |
| Arsenic                           | 1.25E+01             | 1.26E+01 | 1.64E+01 | 2.54E+01 | 3.89E+01 | 7.80E+01 | 1.33E+02 | 2.04E+02 | 7.93E+02 |   |   |   |
| Barium                            | 1.10E+03             | 1.11E+03 | 1.44E+03 | 2.23E+03 | 3.42E+03 | 6.85E+03 | 1.17E+04 | 1.79E+04 | 6.97E+04 |   |   |   |
| Cadmium                           | 3.78E+00             | 3.82E+00 | 4.95E+00 | 7.68E+00 | 1.17E+01 | 2.36E+01 | 4.02E+01 | 6.15E+01 | 2.40E+02 |   |   |   |
| Chromium III                      | 1.40E+06             | 1.41E+06 | 1.83E+06 | 2.84E+06 | 4.35E+06 | 8.72E+06 | 1.49E+07 | 2.28E+07 | 8.87E+07 |   |   |   |
| Chromium VI                       | 4.45E+01             | 4.49E+01 | 5.82E+01 | 9.04E+01 | 1.38E+02 | 2.77E+02 | 4.73E+02 | 7.24E+02 | 2.82E+03 |   |   |   |
| Lead                              | NA                   | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |   |   |
| Selenium                          | 8.97E+00             | 9.05E+00 | 1.17E+01 | 1.82E+01 | 2.78E+01 | 5.58E+01 | 9.52E+01 | 1.46E+02 | 5.68E+02 |   |   |   |

Notes:

NA : Not Available

Target levels are based on distance to groundwater between 20 and 50 ft for which default vadose zone DAF is 2.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-5(c)**  
**Soil Concentration Protective of Groundwater for Different Distances to POE for Soil Type 2**  
**Distance to Groundwater >50 ft**

| Chemical                          | Distance to POE (ft) |          |          |          |          |          |          |          |          |   |  |  |
|-----------------------------------|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|---|--|--|
|                                   | 0                    | 25       | 50       | 75       | 100      | 150      | 200      | 250      | 500      |   |  |  |
| Benzene                           | 2.52E-01             | 2.54E-01 | 3.29E-01 | 5.12E-01 | 7.83E-01 | 1.57E+00 | 2.67E+00 | 4.10E+00 | 1.60E+01 |   |  |  |
| Toluene                           | 1.24E+02             | 1.26E+02 | 1.63E+02 | 2.53E+02 | 3.87E+02 | 7.75E+02 | 1.32E+03 | 2.02E+03 | 7.89E+03 | * |  |  |
| Ethylbenzene                      | 1.63E+02             | 1.65E+02 | 2.13E+02 | 3.32E+02 | 5.07E+02 | 1.02E+03 | 1.73E+03 | 2.65E+03 | 1.03E+04 | * |  |  |
| Xylenes (mixed)                   | 2.59E+03             | 2.61E+03 | 3.39E+03 | 5.26E+03 | 8.04E+03 | 1.61E+04 | 2.75E+04 | 4.21E+04 | 1.64E+05 | * |  |  |
| Ethylene Dibromide (EDB)          | 2.19E-03             | 2.21E-03 | 2.86E-03 | 4.44E-03 | 6.79E-03 | 1.36E-02 | 2.32E-02 | 3.56E-02 | 1.39E-01 |   |  |  |
| Ethylene Dichloride (EDC)         | 3.44E-02             | 3.47E-02 | 4.50E-02 | 6.98E-02 | 1.07E-01 | 2.14E-01 | 3.65E-01 | 5.59E-01 | 2.18E+00 |   |  |  |
| Methyl-tert-butyl-ether(MTBE)     | 2.67E+00             | 2.70E+00 | 3.50E+00 | 5.43E+00 | 8.31E+00 | 1.67E+01 | 2.84E+01 | 4.35E+01 | 1.69E+02 |   |  |  |
| Acenaphthene                      | 8.36E+02             | 8.44E+02 | 1.09E+03 | 1.70E+03 | 2.60E+03 | 5.21E+03 | 8.88E+03 | 1.36E+04 | 5.30E+04 | * |  |  |
| Anthracene                        | 1.74E+04             | 1.75E+04 | 2.27E+04 | 3.53E+04 | 5.40E+04 | 1.08E+05 | 1.85E+05 | 2.83E+05 | 1.10E+06 | * |  |  |
| Benzo(a)anthracene                | 2.18E+02             | 2.20E+02 | 2.85E+02 | 4.43E+02 | 6.78E+02 | 1.36E+03 | 2.32E+03 | 3.55E+03 | 1.38E+04 | * |  |  |
| Benzo(a)pyrene                    | 1.21E+02             | 1.23E+02 | 1.59E+02 | 2.47E+02 | 3.77E+02 | 7.56E+02 | 1.29E+03 | 1.98E+03 | 7.70E+03 | * |  |  |
| Benzo(b)fluoranthene              | 6.75E+02             | 6.81E+02 | 8.82E+02 | 1.37E+03 | 2.10E+03 | 4.20E+03 | 7.16E+03 | 1.10E+04 | 4.27E+04 | * |  |  |
| Benzo(k)fluoranthene              | 6.75E+03             | 6.81E+03 | 8.82E+03 | 1.37E+04 | 2.10E+04 | 4.20E+04 | 7.16E+04 | 1.10E+05 | 4.27E+05 | * |  |  |
| Chrysene                          | 2.18E+04             | 2.20E+04 | 2.85E+04 | 4.43E+04 | 6.78E+04 | 1.36E+05 | 2.32E+05 | 3.55E+05 | 1.38E+06 | * |  |  |
| Dibenzo(a,h)anthracene            | 2.08E+02             | 2.10E+02 | 2.73E+02 | 4.23E+02 | 6.47E+02 | 1.30E+03 | 2.21E+03 | 3.39E+03 | 1.32E+04 | * |  |  |
| Fluoranthene                      | 3.99E+04             | 4.02E+04 | 5.21E+04 | 8.10E+04 | 1.24E+05 | 2.48E+05 | 4.23E+05 | 6.49E+05 | 2.53E+06 | * |  |  |
| Fluorene                          | 1.09E+03             | 1.09E+03 | 1.42E+03 | 2.20E+03 | 3.37E+03 | 6.76E+03 | 1.15E+04 | 1.77E+04 | 6.88E+04 | * |  |  |
| Naphthalene                       | 4.27E+00             | 4.31E+00 | 5.59E+00 | 8.68E+00 | 1.33E+01 | 2.66E+01 | 4.54E+01 | 6.95E+01 | 2.71E+02 | * |  |  |
| Pyrene                            | 2.93E+04             | 2.96E+04 | 3.84E+04 | 5.96E+04 | 9.11E+04 | 1.83E+05 | 3.12E+05 | 4.77E+05 | 1.86E+06 | * |  |  |
| TPH-GRO                           | 7.01E+04             | 7.07E+04 | 9.16E+04 | 1.42E+05 | 2.18E+05 | 4.36E+05 | 7.44E+05 | 1.14E+06 | 4.44E+06 |   |  |  |
| TPH-DRO                           | 1.18E+10             | 1.19E+10 | 1.54E+10 | 2.39E+10 | 3.65E+10 | 7.32E+10 | 1.25E+11 | 1.91E+11 | 7.45E+11 |   |  |  |
| TPH-ORO                           | 1.18E+10             | 1.19E+10 | 1.54E+10 | 2.39E+10 | 3.65E+10 | 7.32E+10 | 1.25E+11 | 1.91E+11 | 7.45E+11 |   |  |  |
| >C6 - C8 (Aliphatics)             | 5.62E+04             | 5.67E+04 | 7.35E+04 | 1.14E+05 | 1.74E+05 | 3.50E+05 | 5.96E+05 | 9.14E+05 | 3.56E+06 | * |  |  |
| >C8 - C10 (Aliphatics)            | 1.37E+04             | 1.38E+04 | 1.79E+04 | 2.79E+04 | 4.26E+04 | 8.55E+04 | 1.46E+05 | 2.23E+05 | 8.69E+05 | * |  |  |
| >C10 - C12 (Aliphatics)           | 1.03E+05             | 1.04E+05 | 1.34E+05 | 2.09E+05 | 3.19E+05 | 6.40E+05 | 1.09E+06 | 1.67E+06 | 6.51E+06 | * |  |  |
| >C12 - C16 (Aliphatics)           | 4.68E+06             | 4.72E+06 | 6.12E+06 | 9.51E+06 | 1.45E+07 | 2.92E+07 | 4.97E+07 | 7.62E+07 | 2.97E+08 | * |  |  |
| >C16 - C21 (Aliphatics)           | 1.18E+10             | 1.19E+10 | 1.54E+10 | 2.39E+10 | 3.65E+10 | 7.32E+10 | 1.25E+11 | 1.91E+11 | 7.45E+11 | * |  |  |
| >C21 - C35 (Aliphatics)           | 1.18E+10             | 1.19E+10 | 1.54E+10 | 2.39E+10 | 3.65E+10 | 7.32E+10 | 1.25E+11 | 1.91E+11 | 7.45E+11 | * |  |  |
| >C8 - C10 (Aromatics)             | 1.66E+02             | 1.67E+02 | 2.17E+02 | 3.37E+02 | 5.15E+02 | 1.03E+03 | 1.76E+03 | 2.70E+03 | 1.05E+04 | * |  |  |
| >C10 - C12 (Aromatics)            | 2.61E+02             | 2.63E+02 | 3.41E+02 | 5.30E+02 | 8.10E+02 | 1.62E+03 | 2.77E+03 | 4.24E+03 | 1.65E+04 | * |  |  |
| >C12 - C16 (Aromatics)            | 5.18E+02             | 5.22E+02 | 6.77E+02 | 1.05E+03 | 1.61E+03 | 3.22E+03 | 5.49E+03 | 8.42E+03 | 3.28E+04 | * |  |  |
| >C16 - C21 (Aromatics)            | 4.43E+03             | 4.47E+03 | 5.80E+03 | 9.00E+03 | 1.38E+04 | 2.76E+04 | 4.70E+04 | 7.21E+04 | 2.81E+05 | * |  |  |
| >C21 - C35 (Aromatics)            | 3.52E+04             | 3.55E+04 | 4.60E+04 | 7.14E+04 | 1.09E+05 | 2.19E+05 | 3.73E+05 | 5.72E+05 | 2.23E+06 | * |  |  |
| Tertiary-aryl-methyl-ether (TAME) | 2.40E+01             | 2.42E+01 | 3.14E+01 | 4.88E+01 | 7.46E+01 | 1.50E+02 | 2.55E+02 | 3.91E+02 | 1.52E+03 |   |  |  |
| Tertiary-butyl- alcohol (TBA)     | 3.95E+00             | 3.99E+00 | 5.17E+00 | 8.03E+00 | 1.23E+01 | 2.46E+01 | 4.20E+01 | 6.43E+01 | 2.51E+02 |   |  |  |
| Ethyl-tert-butyl-ether (ETBE)     | 5.27E-01             | 5.32E-01 | 6.89E-01 | 1.07E+00 | 1.64E+00 | 3.28E+00 | 5.59E+00 | 8.57E+00 | 3.34E+01 |   |  |  |
| Diisopropyl ether ( DIPE)         | 3.56E+01             | 3.60E+01 | 4.66E+01 | 7.24E+01 | 1.11E+02 | 2.22E+02 | 3.78E+02 | 5.80E+02 | 2.26E+03 | * |  |  |
| Ethanol                           | 2.70E+01             | 2.73E+01 | 3.53E+01 | 5.49E+01 | 8.39E+01 | 1.68E+02 | 2.87E+02 | 4.40E+02 | 1.71E+03 |   |  |  |
| Methanol                          | 4.94E+00             | 4.98E+00 | 6.46E+00 | 1.00E+01 | 1.53E+01 | 3.08E+01 | 5.24E+01 | 8.04E+01 | 3.13E+02 |   |  |  |
| Arsenic                           | 2.50E+01             | 2.53E+01 | 3.27E+01 | 5.09E+01 | 7.78E+01 | 1.56E+02 | 2.66E+02 | 4.07E+02 | 1.59E+03 |   |  |  |
| Barium                            | 2.20E+03             | 2.22E+03 | 2.88E+03 | 4.47E+03 | 6.83E+03 | 1.37E+04 | 2.34E+04 | 3.58E+04 | 1.39E+05 |   |  |  |
| Cadmium                           | 7.56E+00             | 7.63E+00 | 9.89E+00 | 1.54E+01 | 2.35E+01 | 4.71E+01 | 8.03E+01 | 1.23E+02 | 4.79E+02 |   |  |  |
| Chromium III                      | 2.80E+06             | 2.82E+06 | 3.66E+06 | 5.69E+06 | 8.70E+06 | 1.74E+07 | 2.97E+07 | 4.55E+07 | 1.77E+08 |   |  |  |
| Chromium VI                       | 8.90E+01             | 8.98E+01 | 1.16E+02 | 1.81E+02 | 2.76E+02 | 5.54E+02 | 9.45E+02 | 1.45E+03 | 5.64E+03 |   |  |  |
| Lead                              | NA                   | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |
| Selenium                          | 1.79E+01             | 1.81E+01 | 2.35E+01 | 3.64E+01 | 5.57E+01 | 1.12E+02 | 1.90E+02 | 2.92E+02 | 1.14E+03 |   |  |  |

Notes:

NA : Not Available

Target levels are based on distance to groundwater >50 ft for which default vadose zone DAF is 4.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-6(a)**  
**Soil Concentration Protective of Groundwater for Different Distances to POE for Soil Type 3**  
**Distance to Groundwater <20 ft**

| Chemical                          | Distance to POE (ft) |          |          |          |          |          |          |          |          |   |  |  |
|-----------------------------------|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|---|--|--|
|                                   | 0                    | 25       | 50       | 75       | 100      | 150      | 200      | 250      | 500      |   |  |  |
| Benzene                           | 6.55E-02             | 6.61E-02 | 8.57E-02 | 1.33E-01 | 2.04E-01 | 4.08E-01 | 6.96E-01 | 1.07E+00 | 4.15E+00 |   |  |  |
| Toluene                           | 3.16E+01             | 3.19E+01 | 4.13E+01 | 6.42E+01 | 9.81E+01 | 1.97E+02 | 3.35E+02 | 5.14E+02 | 2.00E+03 | * |  |  |
| Ethylbenzene                      | 4.11E+01             | 4.15E+01 | 5.38E+01 | 8.35E+01 | 1.28E+02 | 2.56E+02 | 4.37E+02 | 6.69E+02 | 2.61E+03 | * |  |  |
| Xylenes (mixed)                   | 6.52E+02             | 6.58E+02 | 8.53E+02 | 1.32E+03 | 2.03E+03 | 4.06E+03 | 6.92E+03 | 1.06E+04 | 4.13E+04 | * |  |  |
| Ethylene Dibromide (EDB)          | 5.79E-04             | 5.84E-04 | 7.57E-04 | 1.18E-03 | 1.80E-03 | 3.61E-03 | 6.15E-03 | 9.42E-03 | 3.67E-02 |   |  |  |
| Ethylene Dichloride (EDC)         | 9.58E-03             | 9.67E-03 | 1.25E-02 | 1.95E-02 | 2.98E-02 | 5.97E-02 | 1.02E-01 | 1.56E-01 | 6.07E-01 |   |  |  |
| Methyl-tert-butyl-ether(MTBE)     | 7.63E-01             | 7.70E-01 | 9.98E-01 | 1.55E+00 | 2.37E+00 | 4.75E+00 | 8.10E+00 | 1.24E+01 | 4.83E+01 |   |  |  |
| Acenaphthene                      | 2.09E+02             | 2.11E+02 | 2.74E+02 | 4.25E+02 | 6.50E+02 | 1.30E+03 | 2.22E+03 | 3.40E+03 | 1.33E+04 | * |  |  |
| Anthracene                        | 4.35E+03             | 4.39E+03 | 5.69E+03 | 8.83E+03 | 1.35E+04 | 2.71E+04 | 4.62E+04 | 7.07E+04 | 2.75E+05 | * |  |  |
| Benzo(a)anthracene                | 5.46E+01             | 5.51E+01 | 7.14E+01 | 1.11E+02 | 1.69E+02 | 3.40E+02 | 5.79E+02 | 8.88E+02 | 3.46E+03 | * |  |  |
| Benzo(a)pyrene                    | 3.04E+01             | 3.06E+01 | 3.97E+01 | 6.17E+01 | 9.43E+01 | 1.89E+02 | 3.22E+02 | 4.94E+02 | 1.92E+03 | * |  |  |
| Benzo(b)fluoranthene              | 1.69E+02             | 1.70E+02 | 2.21E+02 | 3.43E+02 | 5.24E+02 | 1.05E+03 | 1.79E+03 | 2.74E+03 | 1.07E+04 | * |  |  |
| Benzo(k)fluoranthene              | 1.69E+03             | 1.70E+03 | 2.21E+03 | 3.43E+03 | 5.24E+03 | 1.05E+04 | 1.79E+04 | 2.74E+04 | 1.07E+05 | * |  |  |
| Chrysene                          | 5.46E+03             | 5.51E+03 | 7.14E+03 | 1.11E+04 | 1.69E+04 | 3.40E+04 | 5.79E+04 | 8.88E+04 | 3.46E+05 | * |  |  |
| Dibenzo(a,h)anthracene            | 5.21E+01             | 5.26E+01 | 6.81E+01 | 1.06E+02 | 1.62E+02 | 3.24E+02 | 5.53E+02 | 8.47E+02 | 3.30E+03 | * |  |  |
| Fluoranthene                      | 9.97E+03             | 1.01E+04 | 1.30E+04 | 2.02E+04 | 3.10E+04 | 6.21E+04 | 1.06E+05 | 1.62E+05 | 6.32E+05 | * |  |  |
| Fluorene                          | 2.71E+02             | 2.74E+02 | 3.55E+02 | 5.51E+02 | 8.43E+02 | 1.69E+03 | 2.88E+03 | 4.41E+03 | 1.72E+04 | * |  |  |
| Naphthalene                       | 1.07E+00             | 1.08E+00 | 1.40E+00 | 2.17E+00 | 3.32E+00 | 6.66E+00 | 1.14E+01 | 1.74E+01 | 6.78E+01 | * |  |  |
| Pyrene                            | 7.34E+03             | 7.40E+03 | 9.59E+03 | 1.49E+04 | 2.28E+04 | 4.57E+04 | 7.79E+04 | 1.19E+05 | 4.65E+05 | * |  |  |
| TPH-GRO                           | 1.69E+04             | 1.71E+04 | 2.21E+04 | 3.44E+04 | 5.26E+04 | 1.05E+05 | 1.80E+05 | 2.75E+05 | 1.07E+06 |   |  |  |
| TPH-DRO                           | 2.94E+09             | 2.97E+09 | 3.84E+09 | 5.97E+09 | 9.13E+09 | 1.83E+10 | 3.12E+10 | 4.78E+10 | 1.86E+11 |   |  |  |
| TPH-ORO                           | 2.94E+09             | 2.96E+09 | 3.84E+09 | 5.97E+09 | 9.13E+09 | 1.83E+10 | 3.12E+10 | 4.78E+10 | 1.86E+11 |   |  |  |
| >C6 - C8 (Aliphatics)             | 1.35E+04             | 1.36E+04 | 1.76E+04 | 2.74E+04 | 4.19E+04 | 8.40E+04 | 1.43E+05 | 2.19E+05 | 8.55E+05 | * |  |  |
| >C8 - C10 (Aliphatics)            | 3.40E+03             | 3.43E+03 | 4.44E+03 | 6.90E+03 | 1.05E+04 | 2.11E+04 | 3.60E+04 | 5.52E+04 | 2.15E+05 | * |  |  |
| >C10 - C12 (Aliphatics)           | 2.56E+04             | 2.59E+04 | 3.35E+04 | 5.21E+04 | 7.96E+04 | 1.60E+05 | 2.72E+05 | 4.17E+05 | 1.62E+06 | * |  |  |
| >C12 - C16 (Aliphatics)           | 1.17E+06             | 1.18E+06 | 1.53E+06 | 2.38E+06 | 3.63E+06 | 7.29E+06 | 1.24E+07 | 1.90E+07 | 7.41E+07 | * |  |  |
| >C16 - C21 (Aliphatics)           | 2.94E+09             | 2.96E+09 | 3.84E+09 | 5.97E+09 | 9.13E+09 | 1.83E+10 | 3.12E+10 | 4.78E+10 | 1.86E+11 | * |  |  |
| >C21 - C35 (Aliphatics)           | 2.94E+09             | 2.96E+09 | 3.84E+09 | 5.97E+09 | 9.13E+09 | 1.83E+10 | 3.12E+10 | 4.78E+10 | 1.86E+11 | * |  |  |
| >C8 - C10 (Aromatics)             | 4.15E+01             | 4.19E+01 | 5.43E+01 | 8.44E+01 | 1.29E+02 | 2.59E+02 | 4.41E+02 | 6.76E+02 | 2.63E+03 | * |  |  |
| >C10 - C12 (Aromatics)            | 6.53E+01             | 6.59E+01 | 8.54E+01 | 1.33E+02 | 2.03E+02 | 4.07E+02 | 6.93E+02 | 1.06E+03 | 4.14E+03 | * |  |  |
| >C12 - C16 (Aromatics)            | 1.29E+02             | 1.31E+02 | 1.69E+02 | 2.63E+02 | 4.02E+02 | 8.06E+02 | 1.37E+03 | 2.11E+03 | 8.20E+03 | * |  |  |
| >C16 - C21 (Aromatics)            | 1.11E+03             | 1.12E+03 | 1.45E+03 | 2.25E+03 | 3.44E+03 | 6.90E+03 | 1.18E+04 | 1.80E+04 | 7.02E+04 | * |  |  |
| >C21 - C35 (Aromatics)            | 8.79E+03             | 8.87E+03 | 1.15E+04 | 1.79E+04 | 2.73E+04 | 5.47E+04 | 9.33E+04 | 1.43E+05 | 5.57E+05 | * |  |  |
| Tertiary-aryl-methyl-ether (TAME) | 6.37E+00             | 6.42E+00 | 8.32E+00 | 1.29E+01 | 1.98E+01 | 3.96E+01 | 6.76E+01 | 1.04E+02 | 4.03E+02 |   |  |  |
| Tertiary-butyl- alcohol (TBA)     | 1.18E+00             | 1.19E+00 | 1.54E+00 | 2.39E+00 | 3.66E+00 | 7.33E+00 | 1.25E+01 | 1.91E+01 | 7.46E+01 |   |  |  |
| Ethyl-tert-butyl-ether (ETBE)     | 1.41E-01             | 1.42E-01 | 1.84E-01 | 2.86E-01 | 4.37E-01 | 8.76E-01 | 1.49E+00 | 2.29E+00 | 8.91E+00 |   |  |  |
| Diisopropyl ether ( DIPE)         | 9.28E+00             | 9.37E+00 | 1.21E+01 | 1.89E+01 | 2.88E+01 | 5.78E+01 | 9.86E+01 | 1.51E+02 | 5.88E+02 |   |  |  |
| Ethanol                           | 8.25E+00             | 8.32E+00 | 1.08E+01 | 1.68E+01 | 2.56E+01 | 5.14E+01 | 8.76E+01 | 1.34E+02 | 5.23E+02 |   |  |  |
| Methanol                          | 1.43E+00             | 1.44E+00 | 1.87E+00 | 2.91E+00 | 4.45E+00 | 8.92E+00 | 1.52E+01 | 2.33E+01 | 9.07E+01 |   |  |  |
| Arsenic                           | 6.27E+00             | 6.32E+00 | 8.20E+00 | 1.27E+01 | 1.95E+01 | 3.90E+01 | 6.65E+01 | 1.02E+02 | 3.97E+02 |   |  |  |
| Barium                            | 5.51E+02             | 5.56E+02 | 7.21E+02 | 1.12E+03 | 1.71E+03 | 3.43E+03 | 5.85E+03 | 8.97E+03 | 3.49E+04 |   |  |  |
| Cadmium                           | 1.89E+00             | 1.91E+00 | 2.48E+00 | 3.85E+00 | 5.88E+00 | 1.18E+01 | 2.01E+01 | 3.08E+01 | 1.20E+02 |   |  |  |
| Chromium III                      | 7.00E+05             | 7.06E+05 | 9.15E+05 | 1.42E+06 | 2.17E+06 | 4.36E+06 | 7.43E+06 | 1.14E+07 | 4.44E+07 |   |  |  |
| Chromium VI                       | 2.23E+01             | 2.25E+01 | 2.91E+01 | 4.53E+01 | 6.92E+01 | 1.39E+02 | 2.37E+02 | 3.62E+02 | 1.41E+03 |   |  |  |
| Lead                              | NA                   | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |
| Selenium                          | 4.53E+00             | 4.58E+00 | 5.93E+00 | 9.21E+00 | 1.41E+01 | 2.82E+01 | 4.81E+01 | 7.38E+01 | 2.87E+02 |   |  |  |

Notes:

NA : Not Available

Target levels are based on distance to groundwater < 20 ft for which default vadose zone DAF is 1.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-6(b)**  
**Soil Concentration Protective of Groundwater for Different Distances to POE for Soil Type 3**  
**Distance to Groundwater between 20 and 50 ft**

| Chemical                          | Distance to POE (ft) |          |          |          |          |          |          |          |          |  |  |  |
|-----------------------------------|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|--|--|--|
|                                   | 0                    | 25       | 50       | 75       | 100      | 150      | 200      | 250      | 500      |  |  |  |
| Benzene                           | 1.31E-01             | 1.32E-01 | 1.71E-01 | 2.66E-01 | 4.07E-01 | 8.16E-01 | 1.39E+00 | 2.13E+00 | 8.31E+00 |  |  |  |
| Toluene                           | 6.32E+01             | 6.38E+01 | 8.26E+01 | 1.28E+02 | 1.96E+02 | 3.94E+02 | 6.71E+02 | 1.03E+03 | 4.00E+03 |  |  |  |
| Ethylbenzene                      | 8.22E+01             | 8.30E+01 | 1.08E+02 | 1.67E+02 | 2.55E+02 | 5.12E+02 | 8.73E+02 | 1.34E+03 | 5.21E+03 |  |  |  |
| Xylenes (mixed)                   | 1.30E+03             | 1.32E+03 | 1.71E+03 | 2.65E+03 | 4.05E+03 | 8.12E+03 | 1.38E+04 | 2.12E+04 | 8.26E+04 |  |  |  |
| Ethylene Dibromide (EDB)          | 1.16E-03             | 1.17E-03 | 1.51E-03 | 2.35E-03 | 3.60E-03 | 7.21E-03 | 1.23E-02 | 1.88E-02 | 7.34E-02 |  |  |  |
| Ethylene Dichloride (EDC)         | 1.92E-02             | 1.93E-02 | 2.51E-02 | 3.89E-02 | 5.95E-02 | 1.19E-01 | 2.03E-01 | 3.12E-01 | 1.21E+00 |  |  |  |
| Methyl-tert-butyl-ether(MTBE)     | 1.53E+00             | 1.54E+00 | 2.00E+00 | 3.10E+00 | 4.74E+00 | 9.50E+00 | 1.62E+01 | 2.48E+01 | 9.67E+01 |  |  |  |
| Acenaphthene                      | 4.18E+02             | 4.22E+02 | 5.47E+02 | 8.50E+02 | 1.30E+03 | 2.61E+03 | 4.44E+03 | 6.81E+03 | 2.65E+04 |  |  |  |
| Anthracene                        | 8.69E+03             | 8.77E+03 | 1.14E+04 | 1.77E+04 | 2.70E+04 | 5.41E+04 | 9.23E+04 | 1.41E+05 | 5.51E+05 |  |  |  |
| Benzo(a)anthracene                | 1.09E+02             | 1.10E+02 | 1.43E+02 | 2.22E+02 | 3.39E+02 | 6.80E+02 | 1.16E+03 | 1.78E+03 | 6.92E+03 |  |  |  |
| Benzo(a)pyrene                    | 6.07E+01             | 6.13E+01 | 7.94E+01 | 1.23E+02 | 1.89E+02 | 3.78E+02 | 6.45E+02 | 9.88E+02 | 3.85E+03 |  |  |  |
| Benzo(b)fluoranthene              | 3.37E+02             | 3.40E+02 | 4.41E+02 | 6.85E+02 | 1.05E+03 | 2.10E+03 | 3.58E+03 | 5.49E+03 | 2.14E+04 |  |  |  |
| Benzo(k)fluoranthene              | 3.37E+03             | 3.40E+03 | 4.41E+03 | 6.85E+03 | 1.05E+04 | 2.10E+04 | 3.58E+04 | 5.49E+04 | 2.14E+05 |  |  |  |
| Chrysene                          | 1.09E+04             | 1.10E+04 | 1.43E+04 | 2.22E+04 | 3.39E+04 | 6.80E+04 | 1.16E+05 | 1.78E+05 | 6.92E+05 |  |  |  |
| Dibenz(a,h)anthracene             | 1.04E+02             | 1.05E+02 | 1.36E+02 | 2.12E+02 | 3.24E+02 | 6.49E+02 | 1.11E+03 | 1.69E+03 | 6.60E+03 |  |  |  |
| Fluoranthene                      | 1.99E+04             | 2.01E+04 | 2.61E+04 | 4.05E+04 | 6.19E+04 | 1.24E+05 | 2.12E+05 | 3.24E+05 | 1.26E+06 |  |  |  |
| Fluorene                          | 5.43E+02             | 5.48E+02 | 7.10E+02 | 1.10E+03 | 1.69E+03 | 3.38E+03 | 5.76E+03 | 8.83E+03 | 3.44E+04 |  |  |  |
| Naphthalene                       | 2.14E+00             | 2.16E+00 | 2.80E+00 | 4.35E+00 | 6.65E+00 | 1.33E+01 | 2.27E+01 | 3.48E+01 | 1.36E+02 |  |  |  |
| Pyrene                            | 1.47E+04             | 1.48E+04 | 1.92E+04 | 2.98E+04 | 4.56E+04 | 9.14E+04 | 1.56E+05 | 2.39E+05 | 9.30E+05 |  |  |  |
| TPH-GRO                           | 3.38E+04             | 3.41E+04 | 4.43E+04 | 6.88E+04 | 1.05E+05 | 2.11E+05 | 3.59E+05 | 5.51E+05 | 2.14E+06 |  |  |  |
| TPH-DRO                           | 5.88E+09             | 5.93E+09 | 7.69E+09 | 1.19E+10 | 1.83E+10 | 3.66E+10 | 6.24E+10 | 9.56E+10 | 3.73E+11 |  |  |  |
| TPH-ORO                           | 5.88E+09             | 5.93E+09 | 7.69E+09 | 1.19E+10 | 1.83E+10 | 3.66E+10 | 6.24E+10 | 9.56E+10 | 3.72E+11 |  |  |  |
| >C6 - C8 (Aliphatics)             | 2.70E+04             | 2.72E+04 | 3.53E+04 | 5.48E+04 | 8.38E+04 | 1.68E+05 | 2.86E+05 | 4.39E+05 | 1.71E+06 |  |  |  |
| >C8 - C10 (Aliphatics)            | 6.79E+03             | 6.85E+03 | 8.88E+03 | 1.38E+04 | 2.11E+04 | 4.23E+04 | 7.21E+04 | 1.10E+05 | 4.30E+05 |  |  |  |
| >C10 - C12 (Aliphatics)           | 5.13E+04             | 5.17E+04 | 6.70E+04 | 1.04E+05 | 1.59E+05 | 3.19E+05 | 5.44E+05 | 8.34E+05 | 3.25E+06 |  |  |  |
| >C12 - C16 (Aliphatics)           | 2.34E+06             | 2.36E+06 | 3.06E+06 | 4.75E+06 | 7.27E+06 | 1.46E+07 | 2.48E+07 | 3.81E+07 | 1.48E+08 |  |  |  |
| >C16 - C21 (Aliphatics)           | 5.88E+09             | 5.93E+09 | 7.69E+09 | 1.19E+10 | 1.83E+10 | 3.66E+10 | 6.24E+10 | 9.56E+10 | 3.72E+11 |  |  |  |
| >C21 - C35 (Aliphatics)           | 5.88E+09             | 5.93E+09 | 7.69E+09 | 1.19E+10 | 1.83E+10 | 3.66E+10 | 6.24E+10 | 9.56E+10 | 3.72E+11 |  |  |  |
| >C8 - C10 (Aromatics)             | 8.31E+01             | 8.38E+01 | 1.09E+02 | 1.69E+02 | 2.58E+02 | 5.17E+02 | 8.82E+02 | 1.35E+03 | 5.26E+03 |  |  |  |
| >C10 - C12 (Aromatics)            | 1.31E+02             | 1.32E+02 | 1.71E+02 | 2.65E+02 | 4.05E+02 | 8.13E+02 | 1.39E+03 | 2.12E+03 | 8.27E+03 |  |  |  |
| >C12 - C16 (Aromatics)            | 2.59E+02             | 2.61E+02 | 3.39E+02 | 5.26E+02 | 8.04E+02 | 1.61E+03 | 2.75E+03 | 4.21E+03 | 1.64E+04 |  |  |  |
| >C16 - C21 (Aromatics)            | 2.22E+03             | 2.24E+03 | 2.90E+03 | 4.50E+03 | 6.88E+03 | 1.38E+04 | 2.35E+04 | 3.61E+04 | 1.40E+05 |  |  |  |
| >C21 - C35 (Aromatics)            | 1.76E+04             | 1.77E+04 | 2.30E+04 | 3.57E+04 | 5.46E+04 | 1.09E+05 | 1.87E+05 | 2.86E+05 | 1.11E+06 |  |  |  |
| Tertiary-amyI-methyl-ether (TAME) | 1.27E+01             | 1.28E+01 | 1.66E+01 | 2.59E+01 | 3.95E+01 | 7.93E+01 | 1.35E+02 | 2.07E+02 | 8.07E+02 |  |  |  |
| Tertiary-butyl- alcohol (TBA)     | 2.35E+00             | 2.38E+00 | 3.08E+00 | 4.78E+00 | 7.31E+00 | 1.47E+01 | 2.50E+01 | 3.83E+01 | 1.49E+02 |  |  |  |
| Ethyl-tert-butyl-ether ( ETBE)    | 2.81E-01             | 2.84E-01 | 3.68E-01 | 5.71E-01 | 8.74E-01 | 1.75E+00 | 2.99E+00 | 4.58E+00 | 1.78E+01 |  |  |  |
| Diisopropyl ether ( DIPE)         | 1.86E+01             | 1.87E+01 | 2.43E+01 | 3.77E+01 | 5.77E+01 | 1.16E+02 | 1.97E+02 | 3.02E+02 | 1.18E+03 |  |  |  |
| Ethanol                           | 1.65E+01             | 1.66E+01 | 2.16E+01 | 3.35E+01 | 5.12E+01 | 1.03E+02 | 1.75E+02 | 2.68E+02 | 1.05E+03 |  |  |  |
| Methanol                          | 2.86E+00             | 2.89E+00 | 3.74E+00 | 5.82E+00 | 8.89E+00 | 1.78E+01 | 3.04E+01 | 4.66E+01 | 1.81E+02 |  |  |  |
| Arsenic                           | 1.25E+01             | 1.26E+01 | 1.64E+01 | 2.55E+01 | 3.89E+01 | 7.81E+01 | 1.33E+02 | 2.04E+02 | 7.94E+02 |  |  |  |
| Barium                            | 1.10E+03             | 1.11E+03 | 1.44E+03 | 2.24E+03 | 3.42E+03 | 6.87E+03 | 1.17E+04 | 1.79E+04 | 6.99E+04 |  |  |  |
| Cadmium                           | 3.79E+00             | 3.82E+00 | 4.95E+00 | 7.70E+00 | 1.18E+01 | 2.36E+01 | 4.02E+01 | 6.16E+01 | 2.40E+02 |  |  |  |
| Chromium III                      | 1.40E+06             | 1.41E+06 | 1.83E+06 | 2.84E+06 | 4.35E+06 | 8.72E+06 | 1.49E+07 | 2.28E+07 | 8.87E+07 |  |  |  |
| Chromium VI                       | 4.46E+01             | 4.50E+01 | 5.83E+01 | 9.05E+01 | 1.38E+02 | 2.78E+02 | 4.73E+02 | 7.25E+02 | 2.82E+03 |  |  |  |
| Lead                              | NA                   | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |  |  |  |
| Selenium                          | 9.07E+00             | 9.15E+00 | 1.19E+01 | 1.84E+01 | 2.82E+01 | 5.65E+01 | 9.63E+01 | 1.48E+02 | 5.75E+02 |  |  |  |

Notes:

NA : Not Available

Target levels are based on distance to groundwater between 20 and 50 ft for which default vadose zone DAF is 2.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-6(c)**  
**Soil Concentration Protective of Groundwater for Different Distances to POE for Soil Type 3**  
**Distance to Groundwater >50 ft**

| Chemical                          | Distance to POE (ft) |          |          |          |          |          |          |          |          |   |  |  |  |  |
|-----------------------------------|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|---|--|--|--|--|
|                                   | 0                    | 25       | 50       | 75       | 100      | 150      | 200      | 250      | 500      |   |  |  |  |  |
| Benzene                           | 2.62E-01             | 2.64E-01 | 3.43E-01 | 5.33E-01 | 8.14E-01 | 1.63E+00 | 2.78E+00 | 4.26E+00 | 1.66E+01 |   |  |  |  |  |
| Toluene                           | 1.26E+02             | 1.28E+02 | 1.65E+02 | 2.57E+02 | 3.93E+02 | 7.87E+02 | 1.34E+03 | 2.06E+03 | 8.01E+03 | * |  |  |  |  |
| Ethylbenzene                      | 1.64E+02             | 1.66E+02 | 2.15E+02 | 3.34E+02 | 5.11E+02 | 1.02E+03 | 1.75E+03 | 2.68E+03 | 1.04E+04 | * |  |  |  |  |
| Xylenes (mixed)                   | 2.61E+03             | 2.63E+03 | 3.41E+03 | 5.30E+03 | 8.10E+03 | 1.62E+04 | 2.77E+04 | 4.24E+04 | 1.65E+05 | * |  |  |  |  |
| Ethylene Dibromide (EDB)          | 2.32E-03             | 2.34E-03 | 3.03E-03 | 4.70E-03 | 7.19E-03 | 1.44E-02 | 2.46E-02 | 3.77E-02 | 1.47E-01 |   |  |  |  |  |
| Ethylene Dichloride (EDC)         | 3.83E-02             | 3.87E-02 | 5.01E-02 | 7.79E-02 | 1.19E-01 | 2.39E-01 | 4.07E-01 | 6.23E-01 | 2.43E+00 |   |  |  |  |  |
| Methyl-tert-butyl-ether(MTBE)     | 3.05E+00             | 3.08E+00 | 3.99E+00 | 6.20E+00 | 9.48E+00 | 1.90E+01 | 3.24E+01 | 4.96E+01 | 1.93E+02 |   |  |  |  |  |
| Acenaphthene                      | 8.37E+02             | 8.44E+02 | 1.09E+03 | 1.70E+03 | 2.60E+03 | 5.21E+03 | 8.88E+03 | 1.36E+04 | 5.30E+04 | * |  |  |  |  |
| Anthracene                        | 1.74E+04             | 1.75E+04 | 2.27E+04 | 3.53E+04 | 5.40E+04 | 1.08E+05 | 1.85E+05 | 2.83E+05 | 1.10E+06 | * |  |  |  |  |
| Benzo(a)anthracene                | 2.18E+02             | 2.20E+02 | 2.85E+02 | 4.43E+02 | 6.78E+02 | 1.36E+03 | 2.32E+03 | 3.55E+03 | 1.38E+04 | * |  |  |  |  |
| Benzo(a)pyrene                    | 1.21E+02             | 1.23E+02 | 1.59E+02 | 2.47E+02 | 3.77E+02 | 7.56E+02 | 1.29E+03 | 1.98E+03 | 7.70E+03 | * |  |  |  |  |
| Benzo(b)fluoranthene              | 6.75E+02             | 6.81E+02 | 8.82E+02 | 1.37E+03 | 2.10E+03 | 4.20E+03 | 7.16E+03 | 1.10E+04 | 4.27E+04 | * |  |  |  |  |
| Benzo(k)fluoranthene              | 6.75E+03             | 6.81E+03 | 8.82E+03 | 1.37E+04 | 2.10E+04 | 4.20E+04 | 7.16E+04 | 1.10E+05 | 4.27E+05 | * |  |  |  |  |
| Chrysene                          | 2.18E+04             | 2.20E+04 | 2.85E+04 | 4.43E+04 | 6.78E+04 | 1.36E+05 | 2.32E+05 | 3.55E+05 | 1.38E+06 | * |  |  |  |  |
| Dibenzo(a,h)anthracene            | 2.08E+02             | 2.10E+02 | 2.73E+02 | 4.23E+02 | 6.47E+02 | 1.30E+03 | 2.21E+03 | 3.39E+03 | 1.32E+04 | * |  |  |  |  |
| Fluoranthene                      | 3.99E+04             | 4.02E+04 | 5.21E+04 | 8.10E+04 | 1.24E+05 | 2.48E+05 | 4.23E+05 | 6.49E+05 | 2.53E+06 | * |  |  |  |  |
| Fluorene                          | 1.09E+03             | 1.10E+03 | 1.42E+03 | 2.21E+03 | 3.37E+03 | 6.76E+03 | 1.15E+04 | 1.77E+04 | 6.88E+04 | * |  |  |  |  |
| Naphthalene                       | 4.28E+00             | 4.32E+00 | 5.60E+00 | 8.70E+00 | 1.33E+01 | 2.67E+01 | 4.54E+01 | 6.96E+01 | 2.71E+02 | * |  |  |  |  |
| Pyrene                            | 2.93E+04             | 2.96E+04 | 3.84E+04 | 5.96E+04 | 9.11E+04 | 1.83E+05 | 3.12E+05 | 4.77E+05 | 1.86E+06 | * |  |  |  |  |
| TPH-GRO                           | 6.77E+04             | 6.83E+04 | 8.85E+04 | 1.38E+05 | 2.10E+05 | 4.22E+05 | 7.19E+05 | 1.10E+06 | 4.29E+06 |   |  |  |  |  |
| TPH-DRO                           | 1.18E+10             | 1.19E+10 | 1.54E+10 | 2.39E+10 | 3.65E+10 | 7.32E+10 | 1.25E+11 | 1.91E+11 | 7.45E+11 |   |  |  |  |  |
| TPH-ORO                           | 1.18E+10             | 1.19E+10 | 1.54E+10 | 2.39E+10 | 3.65E+10 | 7.32E+10 | 1.25E+11 | 1.91E+11 | 7.45E+11 |   |  |  |  |  |
| >C6 - C8 (Aliphatics)             | 5.39E+04             | 5.44E+04 | 7.06E+04 | 1.10E+05 | 1.68E+05 | 3.36E+05 | 5.73E+05 | 8.78E+05 | 3.42E+06 | * |  |  |  |  |
| >C8 - C10 (Aliphatics)            | 1.36E+04             | 1.37E+04 | 1.78E+04 | 2.76E+04 | 4.22E+04 | 8.46E+04 | 1.44E+05 | 2.21E+05 | 8.60E+05 | * |  |  |  |  |
| >C10 - C12 (Aliphatics)           | 1.03E+05             | 1.03E+05 | 1.34E+05 | 2.08E+05 | 3.18E+05 | 6.39E+05 | 1.09E+06 | 1.67E+06 | 6.50E+06 | * |  |  |  |  |
| >C12 - C16 (Aliphatics)           | 4.68E+06             | 4.72E+06 | 6.12E+06 | 9.51E+06 | 1.45E+07 | 2.91E+07 | 4.97E+07 | 7.61E+07 | 2.97E+08 | * |  |  |  |  |
| >C16 - C21 (Aliphatics)           | 1.18E+10             | 1.19E+10 | 1.54E+10 | 2.39E+10 | 3.65E+10 | 7.32E+10 | 1.25E+11 | 1.91E+11 | 7.45E+11 | * |  |  |  |  |
| >C21 - C35 (Aliphatics)           | 1.18E+10             | 1.19E+10 | 1.54E+10 | 2.39E+10 | 3.65E+10 | 7.32E+10 | 1.25E+11 | 1.91E+11 | 7.45E+11 | * |  |  |  |  |
| >C8 - C10 (Aromatics)             | 1.66E+02             | 1.68E+02 | 2.17E+02 | 3.37E+02 | 5.16E+02 | 1.03E+03 | 1.76E+03 | 2.70E+03 | 1.05E+04 | * |  |  |  |  |
| >C10 - C12 (Aromatics)            | 2.61E+02             | 2.63E+02 | 3.41E+02 | 5.30E+02 | 8.11E+02 | 1.63E+03 | 2.77E+03 | 4.25E+03 | 1.65E+04 | * |  |  |  |  |
| >C12 - C16 (Aromatics)            | 5.18E+02             | 5.23E+02 | 6.77E+02 | 1.05E+03 | 1.61E+03 | 3.23E+03 | 5.50E+03 | 8.43E+03 | 3.28E+04 | * |  |  |  |  |
| >C16 - C21 (Aromatics)            | 4.43E+03             | 4.47E+03 | 5.80E+03 | 9.00E+03 | 1.38E+04 | 2.76E+04 | 4.71E+04 | 7.21E+04 | 2.81E+05 | * |  |  |  |  |
| >C21 - C35 (Aromatics)            | 3.52E+04             | 3.55E+04 | 4.60E+04 | 7.14E+04 | 1.09E+05 | 2.19E+05 | 3.73E+05 | 5.72E+05 | 2.23E+06 | * |  |  |  |  |
| Tertiary-aryl-methyl-ether (TAME) | 2.55E+01             | 2.57E+01 | 3.33E+01 | 5.17E+01 | 7.91E+01 | 1.59E+02 | 2.70E+02 | 4.14E+02 | 1.61E+03 |   |  |  |  |  |
| Tertiary-butyl- alcohol (TBA)     | 4.71E+00             | 4.75E+00 | 6.16E+00 | 9.56E+00 | 1.46E+01 | 2.93E+01 | 5.00E+01 | 7.66E+01 | 2.98E+02 |   |  |  |  |  |
| Ethyl-tert-butyl-ether (ETBE)     | 5.63E-01             | 5.68E-01 | 7.36E-01 | 1.14E+00 | 1.75E+00 | 3.50E+00 | 5.97E+00 | 9.15E+00 | 3.57E+01 |   |  |  |  |  |
| Diisopropyl ether ( DIPE)         | 3.71E+01             | 3.75E+01 | 4.86E+01 | 7.54E+01 | 1.15E+02 | 2.31E+02 | 3.94E+02 | 6.04E+02 | 2.35E+03 | * |  |  |  |  |
| Ethanol                           | 3.30E+01             | 3.33E+01 | 4.32E+01 | 6.70E+01 | 1.02E+02 | 2.05E+02 | 3.50E+02 | 5.37E+02 | 2.09E+03 |   |  |  |  |  |
| Methanol                          | 5.73E+00             | 5.78E+00 | 7.49E+00 | 1.16E+01 | 1.78E+01 | 3.57E+01 | 6.08E+01 | 9.32E+01 | 3.63E+02 |   |  |  |  |  |
| Arsenic                           | 2.51E+01             | 2.53E+01 | 3.28E+01 | 5.09E+01 | 7.79E+01 | 1.56E+02 | 2.66E+02 | 4.08E+02 | 1.59E+03 |   |  |  |  |  |
| Barium                            | 2.21E+03             | 2.22E+03 | 2.88E+03 | 4.48E+03 | 6.85E+03 | 1.37E+04 | 2.34E+04 | 3.59E+04 | 1.40E+05 |   |  |  |  |  |
| Cadmium                           | 7.58E+00             | 7.64E+00 | 9.91E+00 | 1.54E+01 | 2.35E+01 | 4.72E+01 | 8.04E+01 | 1.23E+02 | 4.80E+02 |   |  |  |  |  |
| Chromium III                      | 2.80E+06             | 2.82E+06 | 3.66E+06 | 5.69E+06 | 8.70E+06 | 1.74E+07 | 2.97E+07 | 4.55E+07 | 1.77E+08 |   |  |  |  |  |
| Chromium VI                       | 8.91E+01             | 8.99E+01 | 1.17E+02 | 1.81E+02 | 2.77E+02 | 5.55E+02 | 9.46E+02 | 1.45E+03 | 5.65E+03 |   |  |  |  |  |
| Lead                              | NA                   | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Selenium                          | 1.81E+01             | 1.83E+01 | 2.37E+01 | 3.68E+01 | 5.63E+01 | 1.13E+02 | 1.93E+02 | 2.95E+02 | 1.15E+03 |   |  |  |  |  |

Notes:

NA : Not Available

Target levels are based on distance to groundwater >50 ft for which default vadose zone DAF is 4.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-7(a)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 1 for Resident**  
**Distance to Groundwater <20 ft**

| Chemical                           | Distance to On/Off-Site Building (ft) |          |          |          |          |          |          |          |          |   |  |  |  |  |
|------------------------------------|---------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|---|--|--|--|--|
|                                    | 0                                     | 25       | 50       | 75       | 100      | 150      | 200      | 250      | 500      |   |  |  |  |  |
| Benzene                            | 6.97E+00                              | 7.03E+00 | 9.11E+00 | 1.41E+01 | 2.16E+01 | 4.34E+01 | 7.40E+01 | 1.13E+02 | 4.41E+02 | * |  |  |  |  |
| Toluene                            | 1.23E+03                              | 1.24E+03 | 1.61E+03 | 2.51E+03 | 3.83E+03 | 7.68E+03 | 1.31E+04 | 2.01E+04 | 7.82E+04 | * |  |  |  |  |
| Ethylbenzene                       | 5.81E+03                              | 5.86E+03 | 7.59E+03 | 1.18E+04 | 1.80E+04 | 3.62E+04 | 6.16E+04 | 9.44E+04 | 3.68E+05 | * |  |  |  |  |
| Xylenes (mixed)                    | 5.16E+03                              | 5.21E+03 | 6.75E+03 | 1.05E+04 | 1.60E+04 | 3.21E+04 | 5.48E+04 | 8.39E+04 | 3.27E+05 | * |  |  |  |  |
| Ethylene Dibromide (EDB)           | 5.95E+00                              | 6.00E+00 | 7.78E+00 | 1.21E+01 | 1.85E+01 | 3.70E+01 | 6.32E+01 | 9.68E+01 | 3.77E+02 |   |  |  |  |  |
| Ethylene Dichloride (EDC)          | 3.63E+00                              | 3.67E+00 | 4.75E+00 | 7.38E+00 | 1.13E+01 | 2.26E+01 | 3.86E+01 | 5.91E+01 | 2.30E+02 |   |  |  |  |  |
| Methyl-tert-butyl-ether(MTBE)      | 1.46E+03                              | 1.47E+03 | 1.91E+03 | 2.97E+03 | 4.54E+03 | 9.10E+03 | 1.55E+04 | 2.38E+04 | 9.26E+04 | * |  |  |  |  |
| Acenaphthene                       | 1.70E+06                              | 1.71E+06 | 2.22E+06 | 3.45E+06 | 5.27E+06 | 1.06E+07 | 1.80E+07 | 2.76E+07 | 1.07E+08 | * |  |  |  |  |
| Anthracene                         | 1.00E+07                              | 1.01E+07 | 1.31E+07 | 2.04E+07 | 3.12E+07 | 6.26E+07 | 1.07E+08 | 1.63E+08 | 6.36E+08 | * |  |  |  |  |
| Benzo(a)anthracene                 | 8.23E+06                              | 8.31E+06 | 1.08E+07 | 1.67E+07 | 2.56E+07 | 5.13E+07 | 8.74E+07 | 1.34E+08 | 5.22E+08 | * |  |  |  |  |
| Benzo(a)pyrene                     | 3.63E+06                              | 3.66E+06 | 4.74E+06 | 7.37E+06 | 1.13E+07 | 2.26E+07 | 3.85E+07 | 5.90E+07 | 2.30E+08 | * |  |  |  |  |
| Benzo(b)fluoranthene               | 1.76E+06                              | 1.78E+06 | 2.30E+06 | 3.58E+06 | 5.47E+06 | 1.10E+07 | 1.87E+07 | 2.87E+07 | 1.12E+08 | * |  |  |  |  |
| Benzo(k)fluoranthene               | 2.16E+09                              | 2.18E+09 | 2.82E+09 | 4.38E+09 | 6.70E+09 | 1.34E+10 | 2.29E+10 | 3.51E+10 | 1.37E+11 | * |  |  |  |  |
| Chrysene                           | 6.09E+07                              | 6.14E+07 | 7.96E+07 | 1.24E+08 | 1.89E+08 | 3.79E+08 | 6.46E+08 | 9.90E+08 | 3.86E+09 | * |  |  |  |  |
| Dibenzo(a,h)anthracene             | 7.37E+08                              | 7.44E+08 | 9.64E+08 | 1.50E+09 | 2.29E+09 | 4.59E+09 | 7.83E+09 | 1.20E+10 | 4.67E+10 | * |  |  |  |  |
| Fluoranthene                       | 2.27E+08                              | 2.29E+08 | 2.97E+08 | 4.61E+08 | 7.05E+08 | 1.41E+09 | 2.41E+09 | 3.69E+09 | 1.44E+10 | * |  |  |  |  |
| Fluorene                           | 6.19E+06                              | 6.25E+06 | 8.10E+06 | 1.26E+07 | 1.92E+07 | 3.86E+07 | 6.57E+07 | 1.01E+08 | 3.92E+08 | * |  |  |  |  |
| Naphthalene                        | 1.61E+03                              | 1.63E+03 | 2.11E+03 | 3.28E+03 | 5.01E+03 | 1.01E+04 | 1.71E+04 | 2.63E+04 | 1.02E+05 | * |  |  |  |  |
| Pyrene                             | 2.70E+08                              | 2.73E+08 | 3.53E+08 | 5.49E+08 | 8.39E+08 | 1.68E+09 | 2.87E+09 | 4.40E+09 | 1.71E+10 | * |  |  |  |  |
| TPH-GRO                            | 1.25E+04                              | 1.26E+04 | 1.64E+04 | 2.54E+04 | 3.89E+04 | 7.80E+04 | 1.33E+05 | 2.04E+05 | 7.94E+05 |   |  |  |  |  |
| TPH-DRO                            | 1.22E+05                              | 1.23E+05 | 1.59E+05 | 2.47E+05 | 3.78E+05 | 7.58E+05 | 1.29E+06 | 1.98E+06 | 7.72E+06 |   |  |  |  |  |
| TPH-ORO                            | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| >C6 - C8 (Aliphatics)              | 8.30E+03                              | 8.38E+03 | 1.09E+04 | 1.69E+04 | 2.58E+04 | 5.17E+04 | 8.82E+04 | 1.35E+05 | 5.26E+05 | * |  |  |  |  |
| >C8 - C10 (Aliphatics)             | 1.71E+03                              | 1.73E+03 | 2.24E+03 | 3.48E+03 | 5.31E+03 | 1.07E+04 | 1.82E+04 | 2.78E+04 | 1.08E+05 | * |  |  |  |  |
| >C10 - C12 (Aliphatics)            | 8.49E+03                              | 8.57E+03 | 1.11E+04 | 1.72E+04 | 2.64E+04 | 5.29E+04 | 9.01E+04 | 1.38E+05 | 5.38E+05 | * |  |  |  |  |
| >C12 - C16 (Aliphatics)            | 3.86E+04                              | 3.90E+04 | 5.05E+04 | 7.85E+04 | 1.20E+05 | 2.41E+05 | 4.10E+05 | 6.28E+05 | 2.45E+06 | * |  |  |  |  |
| >C16 - C21 (Aliphatics)            | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| >C21 - C35 (Aliphatics)            | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| >C8 - C10 (Aromatics)              | 2.51E+03                              | 2.54E+03 | 3.29E+03 | 5.10E+03 | 7.81E+03 | 1.57E+04 | 2.67E+04 | 4.09E+04 | 1.59E+05 | * |  |  |  |  |
| >C10 - C12 (Aromatics)             | 1.26E+04                              | 1.27E+04 | 1.65E+04 | 2.56E+04 | 3.91E+04 | 7.84E+04 | 1.34E+05 | 2.05E+05 | 7.98E+05 | * |  |  |  |  |
| >C12 - C16 (Aromatics)             | 6.21E+04                              | 6.26E+04 | 8.12E+04 | 1.26E+05 | 1.93E+05 | 3.87E+05 | 6.59E+05 | 1.01E+06 | 3.93E+06 | * |  |  |  |  |
| >C16 - C21 (Aromatics)             | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| >C21 - C35 (Aromatics)             | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Tertiary-amyyl-methyl-ether (TAME) | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Tertiary-butyl- alcohol (TBA)      | 4.73E+03                              | 4.78E+03 | 6.19E+03 | 9.62E+03 | 1.47E+04 | 2.95E+04 | 5.03E+04 | 7.70E+04 | 3.00E+05 | * |  |  |  |  |
| Ethyl-tert-butyl-ether (ETBE)      | 7.28E+02                              | 7.34E+02 | 9.52E+02 | 1.48E+03 | 2.26E+03 | 4.53E+03 | 7.72E+03 | 1.18E+04 | 4.61E+04 | * |  |  |  |  |
| Diisopropyl ether ( DIPE)          | 2.50E+03                              | 2.52E+03 | 3.27E+03 | 5.08E+03 | 7.77E+03 | 1.56E+04 | 2.66E+04 | 4.07E+04 | 1.59E+05 | * |  |  |  |  |
| Ethanol                            | 1.82E+05                              | 1.83E+05 | 2.37E+05 | 3.69E+05 | 5.64E+05 | 1.13E+06 | 1.93E+06 | 2.95E+06 | 1.15E+07 | * |  |  |  |  |
| Methanol                           | 4.97E+04                              | 5.01E+04 | 6.50E+04 | 1.01E+05 | 1.54E+05 | 3.09E+05 | 5.28E+05 | 8.08E+05 | 3.15E+06 | * |  |  |  |  |
| Arsenic                            | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Barium                             | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Cadmium                            | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Chromium III                       | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Chromium VI                        | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Lead                               | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Selenium                           | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |

Notes:

NA : Not Available

Target levels are based on distance to groundwater < 20 ft for which default vadose zone DAF is 1.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-7(b)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 1 for Resident**  
**Distance to Groundwater between 20 and 50 ft**

| Chemical                          | Distance to On/Off-Site Building (ft) |          |          |          |          |          |          |          |          |  |  |  |  |  |
|-----------------------------------|---------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|--|--|--|--|--|
|                                   | 0                                     | 25       | 50       | 75       | 100      | 150      | 200      | 250      | 500      |  |  |  |  |  |
| Benzene                           | 1.39E+01                              | 1.41E+01 | 1.82E+01 | 2.83E+01 | 4.33E+01 | 8.68E+01 | 1.48E+02 | 2.27E+02 | 8.83E+02 |  |  |  |  |  |
| Toluene                           | 2.47E+03                              | 2.49E+03 | 3.23E+03 | 5.01E+03 | 7.66E+03 | 1.54E+04 | 2.62E+04 | 4.01E+04 | 1.56E+05 |  |  |  |  |  |
| Ethylbenzene                      | 1.16E+04                              | 1.17E+04 | 1.52E+04 | 2.36E+04 | 3.61E+04 | 7.23E+04 | 1.23E+05 | 1.89E+05 | 7.36E+05 |  |  |  |  |  |
| Xylenes (mixed)                   | 1.03E+04                              | 1.04E+04 | 1.35E+04 | 2.10E+04 | 3.21E+04 | 6.43E+04 | 1.10E+05 | 1.68E+05 | 6.54E+05 |  |  |  |  |  |
| Ethylene Dibromide (EDB)          | 1.19E+01                              | 1.20E+01 | 1.56E+01 | 2.42E+01 | 3.69E+01 | 7.41E+01 | 1.26E+02 | 1.94E+02 | 7.54E+02 |  |  |  |  |  |
| Ethylene Dichloride (EDC)         | 7.27E+00                              | 7.33E+00 | 9.50E+00 | 1.48E+01 | 2.26E+01 | 4.52E+01 | 7.71E+01 | 1.18E+02 | 4.60E+02 |  |  |  |  |  |
| Methyl-tert-butyl-ether(MTBE)     | 2.92E+03                              | 2.95E+03 | 3.82E+03 | 5.94E+03 | 9.08E+03 | 1.82E+04 | 3.10E+04 | 4.76E+04 | 1.85E+05 |  |  |  |  |  |
| Acenaphthene                      | 3.39E+06                              | 3.42E+06 | 4.44E+06 | 6.89E+06 | 1.05E+07 | 2.11E+07 | 3.60E+07 | 5.52E+07 | 2.15E+08 |  |  |  |  |  |
| Anthracene                        | 2.01E+07                              | 2.03E+07 | 2.63E+07 | 4.08E+07 | 6.24E+07 | 1.25E+08 | 2.13E+08 | 3.27E+08 | 1.27E+09 |  |  |  |  |  |
| Benzo(a)anthracene                | 1.65E+07                              | 1.66E+07 | 2.15E+07 | 3.35E+07 | 5.12E+07 | 1.03E+08 | 1.75E+08 | 2.68E+08 | 1.04E+09 |  |  |  |  |  |
| Benzo(a)pyrene                    | 7.26E+06                              | 7.32E+06 | 9.49E+06 | 1.47E+07 | 2.25E+07 | 4.52E+07 | 7.70E+07 | 1.18E+08 | 4.60E+08 |  |  |  |  |  |
| Benzo(b)fluoranthene              | 3.52E+06                              | 3.55E+06 | 4.61E+06 | 7.16E+06 | 1.09E+07 | 2.19E+07 | 3.74E+07 | 5.73E+07 | 2.23E+08 |  |  |  |  |  |
| Benzo(k)fluoranthene              | 4.32E+09                              | 4.36E+09 | 5.65E+09 | 8.77E+09 | 1.34E+10 | 2.69E+10 | 4.58E+10 | 7.02E+10 | 2.74E+11 |  |  |  |  |  |
| Chrysene                          | 1.22E+08                              | 1.23E+08 | 1.59E+08 | 2.47E+08 | 3.78E+08 | 7.58E+08 | 1.29E+09 | 1.98E+09 | 7.71E+09 |  |  |  |  |  |
| Dibenz(a,h)anthracene             | 1.47E+09                              | 1.49E+09 | 1.93E+09 | 2.99E+09 | 4.58E+09 | 9.18E+09 | 1.57E+10 | 2.40E+10 | 9.34E+10 |  |  |  |  |  |
| Fluoranthene                      | 4.54E+08                              | 4.58E+08 | 5.93E+08 | 9.22E+08 | 1.41E+09 | 2.83E+09 | 4.82E+09 | 7.38E+09 | 2.87E+10 |  |  |  |  |  |
| Fluorene                          | 1.24E+07                              | 1.25E+07 | 1.62E+07 | 2.52E+07 | 3.85E+07 | 7.71E+07 | 1.31E+08 | 2.01E+08 | 7.85E+08 |  |  |  |  |  |
| Naphthalene                       | 3.23E+03                              | 3.26E+03 | 4.22E+03 | 6.56E+03 | 1.00E+04 | 2.01E+04 | 3.43E+04 | 5.25E+04 | 2.05E+05 |  |  |  |  |  |
| Pyrene                            | 5.41E+08                              | 5.45E+08 | 7.07E+08 | 1.10E+09 | 1.68E+09 | 3.37E+09 | 5.74E+09 | 8.79E+09 | 3.43E+10 |  |  |  |  |  |
| TPH-GRO                           | 2.51E+04                              | 2.53E+04 | 3.28E+04 | 5.09E+04 | 7.78E+04 | 1.56E+05 | 2.66E+05 | 4.08E+05 | 1.59E+06 |  |  |  |  |  |
| TPH-DRO                           | 2.44E+05                              | 2.46E+05 | 3.19E+05 | 4.95E+05 | 7.57E+05 | 1.52E+06 | 2.59E+06 | 3.96E+06 | 1.54E+07 |  |  |  |  |  |
| TPH-ORO                           | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |  |  |  |  |  |
| >C6 - C8 (Aliphatics)             | 1.66E+04                              | 1.68E+04 | 2.17E+04 | 3.37E+04 | 5.16E+04 | 1.03E+05 | 1.76E+05 | 2.70E+05 | 1.05E+06 |  |  |  |  |  |
| >C8 - C10 (Aliphatics)            | 3.42E+03                              | 3.45E+03 | 4.47E+03 | 6.95E+03 | 1.06E+04 | 2.13E+04 | 3.63E+04 | 5.57E+04 | 2.17E+05 |  |  |  |  |  |
| >C10 - C12 (Aliphatics)           | 1.70E+04                              | 1.71E+04 | 2.22E+04 | 3.45E+04 | 5.27E+04 | 1.06E+05 | 1.80E+05 | 2.76E+05 | 1.08E+06 |  |  |  |  |  |
| >C12 - C16 (Aliphatics)           | 7.73E+04                              | 7.79E+04 | 1.01E+05 | 1.57E+05 | 2.40E+05 | 4.81E+05 | 8.20E+05 | 1.26E+06 | 4.89E+06 |  |  |  |  |  |
| >C16 - C21 (Aliphatics)           | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |  |  |  |  |  |
| >C21 - C35 (Aliphatics)           | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |  |  |  |  |  |
| >C8 - C10 (Aromatics)             | 5.03E+03                              | 5.07E+03 | 6.57E+03 | 1.02E+04 | 1.56E+04 | 3.13E+04 | 5.34E+04 | 8.18E+04 | 3.18E+05 |  |  |  |  |  |
| >C10 - C12 (Aromatics)            | 2.52E+04                              | 2.54E+04 | 3.29E+04 | 5.11E+04 | 7.82E+04 | 1.57E+05 | 2.67E+05 | 4.10E+05 | 1.60E+06 |  |  |  |  |  |
| >C12 - C16 (Aromatics)            | 1.24E+05                              | 1.25E+05 | 1.62E+05 | 2.52E+05 | 3.86E+05 | 7.73E+05 | 1.32E+06 | 2.02E+06 | 7.87E+06 |  |  |  |  |  |
| >C16 - C21 (Aromatics)            | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |  |  |  |  |  |
| >C21 - C35 (Aromatics)            | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |  |  |  |  |  |
| Tertiary-aryl-methyl-ether (TAME) | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |  |  |  |  |  |
| Tertiary-butyl- alcohol (TBA)     | 9.47E+03                              | 9.55E+03 | 1.24E+04 | 1.92E+04 | 2.94E+04 | 5.90E+04 | 1.01E+05 | 1.54E+05 | 6.00E+05 |  |  |  |  |  |
| Ethyl-tert-butyl-ether ( ETBE)    | 1.46E+03                              | 1.47E+03 | 1.90E+03 | 2.96E+03 | 4.52E+03 | 9.06E+03 | 1.54E+04 | 2.37E+04 | 9.22E+04 |  |  |  |  |  |
| Diisopropyl ether ( DIPE)         | 5.00E+03                              | 5.05E+03 | 6.54E+03 | 1.02E+04 | 1.55E+04 | 3.12E+04 | 5.31E+04 | 8.14E+04 | 3.17E+05 |  |  |  |  |  |
| Ethanol                           | 3.63E+05                              | 3.66E+05 | 4.75E+05 | 7.38E+05 | 1.13E+06 | 2.26E+06 | 3.85E+06 | 5.91E+06 | 2.30E+07 |  |  |  |  |  |
| Methanol                          | 9.94E+04                              | 1.00E+05 | 1.30E+05 | 2.02E+05 | 3.09E+05 | 6.19E+05 | 1.06E+06 | 1.62E+06 | 6.30E+06 |  |  |  |  |  |
| Arsenic                           | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |  |  |  |  |  |
| Barium                            | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |  |  |  |  |  |
| Cadmium                           | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |  |  |  |  |  |
| Chromium III                      | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |  |  |  |  |  |
| Chromium VI                       | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |  |  |  |  |  |
| Lead                              | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |  |  |  |  |  |
| Selenium                          | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |  |  |  |  |  |

Notes:

NA : Not Available

Target levels are based on distance to groundwater between 20 and 50 ft for which default vadose zone DAF is 2.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-7(c)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 1 for Resident**  
**Distance to Groundwater >50 ft**

| Chemical                          | Distance to On/Off-Site Building (ft) |            |            |            |            |            |            |            |            |   |  |  |  |  |
|-----------------------------------|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|---|--|--|--|--|
|                                   | 0                                     | 25         | 50         | 75         | 100        | 150        | 200        | 250        | 500        |   |  |  |  |  |
| Benzene                           | 2.79E+01                              | * 2.81E+01 | * 3.64E+01 | * 5.66E+01 | * 8.65E+01 | * 1.74E+02 | * 2.96E+02 | * 4.53E+02 | * 1.77E+03 | * |  |  |  |  |
| Toluene                           | 4.94E+03                              | * 4.98E+03 | * 6.45E+03 | * 1.00E+04 | * 1.53E+04 | * 3.07E+04 | * 5.24E+04 | * 8.03E+04 | * 3.13E+05 | * |  |  |  |  |
| Ethylbenzene                      | 2.32E+04                              | * 2.34E+04 | * 3.04E+04 | * 4.72E+04 | * 7.21E+04 | * 1.45E+05 | * 2.47E+05 | * 3.78E+05 | * 1.47E+06 | * |  |  |  |  |
| Xylenes (mixed)                   | 2.06E+04                              | * 2.08E+04 | * 2.70E+04 | * 4.19E+04 | * 6.41E+04 | * 1.29E+05 | * 2.19E+05 | * 3.36E+05 | * 1.31E+06 | * |  |  |  |  |
| Ethylene Dibromide (EDB)          | 2.38E+01                              | 2.40E+01   | 3.11E+01   | 4.83E+01   | 7.39E+01   | 1.48E+02   | 2.53E+02   | 3.87E+02   | 1.51E+03   |   |  |  |  |  |
| Ethylene Dichloride (EDC)         | 1.45E+01                              | 1.47E+01   | 1.90E+01   | 2.95E+01   | 4.51E+01   | 9.05E+01   | 1.54E+02   | 2.36E+02   | 9.21E+02   |   |  |  |  |  |
| Methyl-tert-butyl-ether(MTBE)     | 5.85E+03                              | 5.90E+03   | 7.65E+03   | * 1.19E+04 | * 1.82E+04 | * 3.64E+04 | * 6.21E+04 | * 9.51E+04 | * 3.70E+05 | * |  |  |  |  |
| Acenaphthene                      | 6.78E+06                              | * 6.85E+06 | * 8.87E+06 | * 1.38E+07 | * 2.11E+07 | * 4.23E+07 | * 7.20E+07 | * 1.10E+08 | * 4.30E+08 | * |  |  |  |  |
| Anthracene                        | 4.02E+07                              | * 4.05E+07 | * 5.25E+07 | * 8.16E+07 | * 1.25E+08 | * 2.50E+08 | * 4.27E+08 | * 6.54E+08 | * 2.55E+09 | * |  |  |  |  |
| Benzo(a)anthracene                | 3.29E+07                              | * 3.32E+07 | * 4.31E+07 | * 6.69E+07 | * 1.02E+08 | * 2.05E+08 | * 3.50E+08 | * 5.36E+08 | * 2.09E+09 | * |  |  |  |  |
| Benzo(a)pyrene                    | 1.45E+07                              | * 1.46E+07 | * 1.90E+07 | * 2.95E+07 | * 4.51E+07 | * 9.04E+07 | * 1.54E+08 | * 2.36E+08 | * 9.20E+08 | * |  |  |  |  |
| Benzo(b)fluoranthene              | 7.05E+06                              | * 7.11E+06 | * 9.22E+06 | * 1.43E+07 | * 2.19E+07 | * 4.39E+07 | * 7.48E+07 | * 1.15E+08 | * 4.47E+08 | * |  |  |  |  |
| Benzo(k)fluoranthene              | 8.64E+09                              | * 8.71E+09 | * 1.13E+10 | * 1.75E+10 | * 2.68E+10 | * 5.38E+10 | * 9.17E+10 | * 1.40E+11 | * 5.47E+11 | * |  |  |  |  |
| Chrysene                          | 2.44E+08                              | * 2.46E+08 | * 3.18E+08 | * 4.95E+08 | * 7.56E+08 | * 1.52E+09 | * 2.59E+09 | * 3.96E+09 | * 1.54E+10 | * |  |  |  |  |
| Dibenzo(a,h)anthracene            | 2.95E+09                              | * 2.97E+09 | * 3.86E+09 | * 5.99E+09 | * 9.16E+09 | * 1.84E+10 | * 3.13E+10 | * 4.80E+10 | * 1.87E+11 | * |  |  |  |  |
| Fluoranthene                      | 9.07E+08                              | * 9.15E+08 | * 1.19E+09 | * 1.84E+09 | * 2.82E+09 | * 5.65E+09 | * 9.63E+09 | * 1.48E+10 | * 5.75E+10 | * |  |  |  |  |
| Fluorene                          | 2.48E+07                              | * 2.50E+07 | * 3.24E+07 | * 5.03E+07 | * 7.69E+07 | * 1.54E+08 | * 2.63E+08 | * 4.03E+08 | * 1.57E+09 | * |  |  |  |  |
| Naphthalene                       | 6.46E+03                              | * 6.51E+03 | * 8.44E+03 | * 1.31E+04 | * 2.01E+04 | * 4.02E+04 | * 6.85E+04 | * 1.05E+05 | * 4.09E+05 | * |  |  |  |  |
| Pyrene                            | 1.08E+09                              | * 1.09E+09 | * 1.41E+09 | * 2.20E+09 | * 3.36E+09 | * 6.73E+09 | * 1.15E+10 | * 1.76E+10 | * 6.85E+10 | * |  |  |  |  |
| TPH-GRO                           | 5.01E+04                              | 5.06E+04   | 6.55E+04   | 1.02E+05   | 1.56E+05   | 3.12E+05   | 5.32E+05   | 8.15E+05   | 3.18E+06   |   |  |  |  |  |
| TPH-DRO                           | 4.87E+05                              | 4.92E+05   | 6.37E+05   | 9.90E+05   | 1.51E+06   | 3.03E+06   | 5.17E+06   | 7.92E+06   | 3.09E+07   |   |  |  |  |  |
| TPH-ORO                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| >C6 - C8 (Aliphatics)             | 3.32E+04                              | * 3.35E+04 | * 4.34E+04 | * 6.75E+04 | * 1.03E+05 | * 2.07E+05 | * 3.53E+05 | * 5.40E+05 | * 2.10E+06 | * |  |  |  |  |
| >C8 - C10 (Aliphatics)            | 6.84E+03                              | * 6.90E+03 | * 8.95E+03 | * 1.39E+04 | * 2.13E+04 | * 4.26E+04 | * 7.27E+04 | * 1.11E+05 | * 4.34E+05 | * |  |  |  |  |
| >C10 - C12 (Aliphatics)           | 3.40E+04                              | * 3.43E+04 | * 4.44E+04 | * 6.90E+04 | * 1.05E+05 | * 2.11E+05 | * 3.61E+05 | * 5.52E+05 | * 2.15E+06 | * |  |  |  |  |
| >C12 - C16 (Aliphatics)           | 1.55E+05                              | * 1.56E+05 | * 2.02E+05 | * 3.14E+05 | * 4.80E+05 | * 9.62E+05 | * 1.64E+06 | * 2.51E+06 | * 9.79E+06 | * |  |  |  |  |
| >C16 - C21 (Aliphatics)           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| >C21 - C35 (Aliphatics)           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| >C8 - C10 (Aromatics)             | 1.01E+04                              | * 1.01E+04 | * 1.31E+04 | * 2.04E+04 | * 3.12E+04 | * 6.26E+04 | * 1.07E+05 | * 1.64E+05 | * 6.37E+05 | * |  |  |  |  |
| >C10 - C12 (Aromatics)            | 5.04E+04                              | * 5.08E+04 | * 6.59E+04 | * 1.02E+05 | * 1.56E+05 | * 3.14E+05 | * 5.35E+05 | * 8.19E+05 | * 3.19E+06 | * |  |  |  |  |
| >C12 - C16 (Aromatics)            | 2.48E+05                              | * 2.51E+05 | * 3.25E+05 | * 5.04E+05 | * 7.71E+05 | * 1.55E+06 | * 2.64E+06 | * 4.04E+06 | * 1.57E+07 | * |  |  |  |  |
| >C16 - C21 (Aromatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| >C21 - C35 (Aromatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Tertiary-amyI-methyl-ether (TAME) | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Tertiary-butyl- alcohol (TBA)     | 1.89E+04                              | * 1.91E+04 | * 2.48E+04 | * 3.85E+04 | * 5.88E+04 | * 1.18E+05 | * 2.01E+05 | * 3.08E+05 | * 1.20E+06 | * |  |  |  |  |
| Ethyl-tert-butyl-ether (ETBE)     | 2.91E+03                              | * 2.94E+03 | * 3.81E+03 | * 5.91E+03 | * 9.04E+03 | * 1.81E+04 | * 3.09E+04 | * 4.73E+04 | * 1.84E+05 | * |  |  |  |  |
| Diisopropyl ether ( DIPE)         | 1.00E+04                              | * 1.01E+04 | * 1.31E+04 | * 2.03E+04 | * 3.11E+04 | * 6.23E+04 | * 1.06E+05 | * 1.63E+05 | * 6.34E+05 | * |  |  |  |  |
| Ethanol                           | 7.26E+05                              | * 7.33E+05 | * 9.50E+05 | * 1.48E+06 | * 2.26E+06 | * 4.52E+06 | * 7.71E+06 | * 1.18E+07 | * 4.60E+07 | * |  |  |  |  |
| Methanol                          | 1.99E+05                              | * 2.01E+05 | * 2.60E+05 | * 4.04E+05 | * 6.17E+05 | * 1.24E+06 | * 2.11E+06 | * 3.23E+06 | * 1.26E+07 | * |  |  |  |  |
| Arsenic                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Barium                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Cadmium                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Chromium III                      | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Chromium VI                       | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Lead                              | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Selenium                          | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |

Notes:

NA : Not Available

Target levels are based on distance to groundwater >50 ft for which default vadose zone DAF is 4.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-8(a)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 2 for Resident**  
**Distance to Groundwater <20 ft**

| Chemical                          | Distance to On/Off-Site Building (ft) |          |          |          |          |          |          |          |          |   |  |  |  |  |
|-----------------------------------|---------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|---|--|--|--|--|
|                                   | 0                                     | 25       | 50       | 75       | 100      | 150      | 200      | 250      | 500      |   |  |  |  |  |
| Benzene                           | 1.36E+01                              | 1.37E+01 | 1.78E+01 | 2.76E+01 | 4.22E+01 | 8.46E+01 | 1.44E+02 | 2.21E+02 | 8.60E+02 | * |  |  |  |  |
| Toluene                           | 2.22E+03                              | 2.24E+03 | 2.90E+03 | 4.51E+03 | 6.89E+03 | 1.38E+04 | 2.36E+04 | 3.61E+04 | 1.41E+05 | * |  |  |  |  |
| Ethylbenzene                      | 1.02E+04                              | 1.03E+04 | 1.33E+04 | 2.07E+04 | 3.16E+04 | 6.34E+04 | 1.08E+05 | 1.66E+05 | 6.45E+05 | * |  |  |  |  |
| Xylenes (mixed)                   | 9.07E+03                              | 9.15E+03 | 1.19E+04 | 1.84E+04 | 2.82E+04 | 5.65E+04 | 9.63E+04 | 1.47E+05 | 5.74E+05 | * |  |  |  |  |
| Ethylene Dibromide (EDB)          | 1.30E+01                              | 1.31E+01 | 1.70E+01 | 2.63E+01 | 4.03E+01 | 8.07E+01 | 1.38E+02 | 2.11E+02 | 8.21E+02 |   |  |  |  |  |
| Ethylene Dichloride (EDC)         | 9.08E+00                              | 9.16E+00 | 1.19E+01 | 1.84E+01 | 2.82E+01 | 5.66E+01 | 9.64E+01 | 1.48E+02 | 5.76E+02 |   |  |  |  |  |
| Methyl-tert-butyl-ether(MTBE)     | 4.02E+03                              | 4.06E+03 | 5.26E+03 | 8.17E+03 | 1.25E+04 | 2.50E+04 | 4.27E+04 | 6.54E+04 | 2.55E+05 | * |  |  |  |  |
| Acenaphthene                      | 3.20E+06                              | 3.23E+06 | 4.19E+06 | 6.51E+06 | 9.95E+06 | 1.99E+07 | 3.40E+07 | 5.21E+07 | 2.03E+08 | * |  |  |  |  |
| Anthracene                        | 1.88E+07                              | 1.90E+07 | 2.46E+07 | 3.83E+07 | 5.85E+07 | 1.17E+08 | 2.00E+08 | 3.07E+08 | 1.19E+09 | * |  |  |  |  |
| Benzo(a)anthracene                | 1.25E+07                              | 1.26E+07 | 1.63E+07 | 2.54E+07 | 3.88E+07 | 7.77E+07 | 1.33E+08 | 2.03E+08 | 7.91E+08 | * |  |  |  |  |
| Benzo(a)pyrene                    | 3.70E+06                              | 3.74E+06 | 4.84E+06 | 7.52E+06 | 1.15E+07 | 2.31E+07 | 3.93E+07 | 6.02E+07 | 2.35E+08 | * |  |  |  |  |
| Benzo(b)fluoranthene              | 3.31E+06                              | 3.34E+06 | 4.33E+06 | 6.73E+06 | 1.03E+07 | 2.06E+07 | 3.52E+07 | 5.39E+07 | 2.10E+08 | * |  |  |  |  |
| Benzo(k)fluoranthene              | 1.75E+09                              | 1.77E+09 | 2.29E+09 | 3.56E+09 | 5.45E+09 | 1.09E+10 | 1.86E+10 | 2.85E+10 | 1.11E+11 | * |  |  |  |  |
| Chrysene                          | 1.14E+08                              | 1.15E+08 | 1.49E+08 | 2.32E+08 | 3.55E+08 | 7.11E+08 | 1.21E+09 | 1.86E+09 | 7.24E+09 | * |  |  |  |  |
| Dibenzo(a,h)anthracene            | 9.47E+07                              | 9.55E+07 | 1.24E+08 | 1.92E+08 | 2.94E+08 | 5.90E+08 | 1.01E+09 | 1.54E+09 | 6.00E+09 | * |  |  |  |  |
| Fluoranthene                      | 4.06E+08                              | 4.09E+08 | 5.31E+08 | 8.24E+08 | 1.26E+09 | 2.53E+09 | 4.31E+09 | 6.60E+09 | 2.57E+10 | * |  |  |  |  |
| Fluorene                          | 1.16E+07                              | 1.17E+07 | 1.52E+07 | 2.35E+07 | 3.60E+07 | 7.22E+07 | 1.23E+08 | 1.88E+08 | 7.34E+08 | * |  |  |  |  |
| Naphthalene                       | 3.03E+03                              | 3.06E+03 | 3.97E+03 | 6.16E+03 | 9.42E+03 | 1.89E+04 | 3.22E+04 | 4.94E+04 | 1.92E+05 | * |  |  |  |  |
| Pyrene                            | 4.60E+08                              | 4.64E+08 | 6.02E+08 | 9.35E+08 | 1.43E+09 | 2.87E+09 | 4.89E+09 | 7.48E+09 | 2.92E+10 | * |  |  |  |  |
| TPH-GRO                           | 2.03E+04                              | 2.05E+04 | 2.66E+04 | 4.13E+04 | 6.32E+04 | 1.27E+05 | 2.16E+05 | 3.31E+05 | 1.29E+06 |   |  |  |  |  |
| TPH-DRO                           | 2.13E+05                              | 2.15E+05 | 2.78E+05 | 4.32E+05 | 6.61E+05 | 1.33E+06 | 2.26E+06 | 3.46E+06 | 1.35E+07 |   |  |  |  |  |
| TPH-ORO                           | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| >C6 - C8 (Aliphatics)             | 1.33E+04                              | 1.34E+04 | 1.74E+04 | 2.70E+04 | 4.12E+04 | 8.27E+04 | 1.41E+05 | 2.16E+05 | 8.41E+05 | * |  |  |  |  |
| >C8 - C10 (Aliphatics)            | 2.79E+03                              | 2.82E+03 | 3.65E+03 | 5.67E+03 | 8.67E+03 | 1.74E+04 | 2.96E+04 | 4.54E+04 | 1.77E+05 | * |  |  |  |  |
| >C10 - C12 (Aliphatics)           | 1.39E+04                              | 1.41E+04 | 1.82E+04 | 2.83E+04 | 4.33E+04 | 8.68E+04 | 1.48E+05 | 2.27E+05 | 8.83E+05 | * |  |  |  |  |
| >C12 - C16 (Aliphatics)           | 6.35E+04                              | 6.40E+04 | 8.30E+04 | 1.29E+05 | 1.97E+05 | 3.95E+05 | 6.74E+05 | 1.03E+06 | 4.02E+06 | * |  |  |  |  |
| >C16 - C21 (Aliphatics)           | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| >C21 - C35 (Aliphatics)           | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| >C8 - C10 (Aromatics)             | 4.28E+03                              | 4.32E+03 | 5.59E+03 | 8.69E+03 | 1.33E+04 | 2.66E+04 | 4.54E+04 | 6.96E+04 | 2.71E+05 | * |  |  |  |  |
| >C10 - C12 (Aromatics)            | 2.22E+04                              | 2.24E+04 | 2.91E+04 | 4.52E+04 | 6.91E+04 | 1.39E+05 | 2.36E+05 | 3.62E+05 | 1.41E+06 | * |  |  |  |  |
| >C12 - C16 (Aromatics)            | 1.13E+05                              | 1.14E+05 | 1.48E+05 | 2.30E+05 | 3.52E+05 | 7.05E+05 | 1.20E+06 | 1.84E+06 | 7.18E+06 | * |  |  |  |  |
| >C16 - C21 (Aromatics)            | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| >C21 - C35 (Aromatics)            | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Tertiary-amy1-methyl-ether (TAME) | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Tertiary-butyl- alcohol (TBA)     | 1.57E+04                              | 1.58E+04 | 2.05E+04 | 3.18E+04 | 4.87E+04 | 9.76E+04 | 1.66E+05 | 2.55E+05 | 9.93E+05 | * |  |  |  |  |
| Ethyl-tert-butyl-ether (ETBE)     | 1.55E+03                              | 1.57E+03 | 2.03E+03 | 3.16E+03 | 4.83E+03 | 9.67E+03 | 1.65E+04 | 2.53E+04 | 9.84E+04 | * |  |  |  |  |
| Diisopropyl ether ( DIPE)         | 4.91E+03                              | 4.96E+03 | 6.42E+03 | 9.98E+03 | 1.53E+04 | 3.06E+04 | 5.22E+04 | 7.99E+04 | 3.11E+05 | * |  |  |  |  |
| Ethanol                           | 6.39E+05                              | 6.44E+05 | 8.35E+05 | 1.30E+06 | 1.98E+06 | 3.98E+06 | 6.78E+06 | 1.04E+07 | 4.05E+07 | * |  |  |  |  |
| Methanol                          | 1.32E+05                              | 1.33E+05 | 1.73E+05 | 2.68E+05 | 4.10E+05 | 8.22E+05 | 1.40E+06 | 2.15E+06 | 8.36E+06 | * |  |  |  |  |
| Arsenic                           | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Barium                            | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Cadmium                           | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Chromium III                      | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Chromium VI                       | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Lead                              | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Selenium                          | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |

Notes:

NA : Not Available

Target levels are based on distance to groundwater < 20 ft for which default vadose zone DAF is 1.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-8(b)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 2 for Resident**  
**Distance to Groundwater between 20 and 50 ft**

| Chemical                          | Distance to On/Off-Site Building (ft) |            |            |            |            |            |            |            |            |   |  |  |  |  |
|-----------------------------------|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|---|--|--|--|--|
|                                   | 0                                     | 25         | 50         | 75         | 100        | 150        | 200        | 250        | 500        |   |  |  |  |  |
| Benzene                           | 2.72E+01                              | * 2.74E+01 | * 3.55E+01 | * 5.52E+01 | * 8.43E+01 | * 1.69E+02 | * 2.88E+02 | * 4.42E+02 | * 1.72E+03 | * |  |  |  |  |
| Toluene                           | 4.44E+03                              | * 4.48E+03 | * 5.80E+03 | * 9.01E+03 | * 1.38E+04 | * 2.76E+04 | * 4.71E+04 | * 7.22E+04 | * 2.81E+05 | * |  |  |  |  |
| Ethylbenzene                      | 2.04E+04                              | * 2.05E+04 | * 2.66E+04 | * 4.14E+04 | * 6.32E+04 | * 1.27E+05 | * 2.16E+05 | * 3.31E+05 | * 1.29E+06 | * |  |  |  |  |
| Xylenes (mixed)                   | 1.81E+04                              | * 1.83E+04 | * 2.37E+04 | * 3.68E+04 | * 5.63E+04 | * 1.13E+05 | * 1.93E+05 | * 2.95E+05 | * 1.15E+06 | * |  |  |  |  |
| Ethylene Dibromide (EDB)          | 2.59E+01                              | 2.62E+01   | 3.39E+01   | 5.27E+01   | 8.05E+01   | 1.61E+02   | 2.75E+02   | 4.22E+02   | 1.64E+03   |   |  |  |  |  |
| Ethylene Dichloride (EDC)         | 1.82E+01                              | 1.83E+01   | 2.38E+01   | 3.69E+01   | 5.64E+01   | 1.13E+02   | 1.93E+02   | 2.95E+02   | 1.15E+03   |   |  |  |  |  |
| Methyl-tert-butyl-ether(MTBE)     | 8.04E+03                              | 8.11E+03   | 1.05E+04   | 1.63E+04   | 2.50E+04   | 5.01E+04   | 8.54E+04   | 1.31E+05   | 5.09E+05   | * |  |  |  |  |
| Acenaphthene                      | 6.41E+06                              | * 6.46E+06 | * 8.38E+06 | * 1.30E+07 | * 1.99E+07 | * 3.99E+07 | * 6.80E+07 | * 1.04E+08 | * 4.06E+08 | * |  |  |  |  |
| Anthracene                        | 3.77E+07                              | * 3.80E+07 | * 4.93E+07 | * 7.66E+07 | * 1.17E+08 | * 2.35E+08 | * 4.00E+08 | * 6.13E+08 | * 2.39E+09 | * |  |  |  |  |
| Benzo(a)anthracene                | 2.50E+07                              | * 2.52E+07 | * 3.26E+07 | * 5.07E+07 | * 7.75E+07 | * 1.55E+08 | * 2.65E+08 | * 4.06E+08 | * 1.58E+09 | * |  |  |  |  |
| Benzo(a)pyrene                    | 7.41E+06                              | * 7.47E+06 | * 9.69E+06 | * 1.50E+07 | * 2.30E+07 | * 4.61E+07 | * 7.86E+07 | * 1.20E+08 | * 4.69E+08 | * |  |  |  |  |
| Benzo(b)fluoranthene              | 6.62E+06                              | * 6.68E+06 | * 8.66E+06 | * 1.35E+07 | * 2.06E+07 | * 4.12E+07 | * 7.03E+07 | * 1.08E+08 | * 4.20E+08 | * |  |  |  |  |
| Benzo(k)fluoranthene              | 3.51E+09                              | * 3.54E+09 | * 4.59E+09 | * 7.13E+09 | * 1.09E+10 | * 2.19E+10 | * 3.73E+10 | * 5.71E+10 | * 2.22E+11 | * |  |  |  |  |
| Chrysene                          | 2.28E+08                              | * 2.30E+08 | * 2.99E+08 | * 4.64E+08 | * 7.10E+08 | * 1.42E+09 | * 2.43E+09 | * 3.72E+09 | * 1.45E+10 | * |  |  |  |  |
| Dibenz(a,h)anthracene             | 1.89E+08                              | * 1.91E+08 | * 2.48E+08 | * 3.85E+08 | * 5.88E+08 | * 1.18E+09 | * 2.01E+09 | * 3.08E+09 | * 1.20E+10 | * |  |  |  |  |
| Fluoranthene                      | 8.12E+08                              | * 8.19E+08 | * 1.06E+09 | * 1.65E+09 | * 2.52E+09 | * 5.05E+09 | * 8.62E+09 | * 1.32E+10 | * 5.14E+10 | * |  |  |  |  |
| Fluorene                          | 2.32E+07                              | * 2.34E+07 | * 3.03E+07 | * 4.71E+07 | * 7.20E+07 | * 1.44E+08 | * 2.46E+08 | * 3.77E+08 | * 1.47E+09 | * |  |  |  |  |
| Naphthalene                       | 6.07E+03                              | * 6.12E+03 | * 7.94E+03 | * 1.23E+04 | * 1.88E+04 | * 3.78E+04 | * 6.44E+04 | * 9.87E+04 | * 3.84E+05 | * |  |  |  |  |
| Pyrene                            | 9.20E+08                              | * 9.28E+08 | * 1.20E+09 | * 1.87E+09 | * 2.86E+09 | * 5.73E+09 | * 9.77E+09 | * 1.50E+10 | * 5.83E+10 | * |  |  |  |  |
| TPH-GRO                           | 4.07E+04                              | 4.10E+04   | 5.32E+04   | 8.26E+04   | 1.26E+05   | 2.53E+05   | 4.32E+05   | 6.62E+05   | 2.58E+06   |   |  |  |  |  |
| TPH-DRO                           | 4.26E+05                              | 4.30E+05   | 5.57E+05   | 8.65E+05   | 1.32E+06   | 2.65E+06   | 4.52E+06   | 6.93E+06   | 2.70E+07   |   |  |  |  |  |
| TPH-ORO                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| >C6 - C8 (Aliphatics)             | 2.65E+04                              | * 2.68E+04 | * 3.47E+04 | * 5.39E+04 | * 8.24E+04 | * 1.65E+05 | * 2.82E+05 | * 4.32E+05 | * 1.68E+06 | * |  |  |  |  |
| >C8 - C10 (Aliphatics)            | 5.58E+03                              | * 5.63E+03 | * 7.30E+03 | * 1.13E+04 | * 1.73E+04 | * 3.48E+04 | * 5.93E+04 | * 9.08E+04 | * 3.54E+05 | * |  |  |  |  |
| >C10 - C12 (Aliphatics)           | 2.79E+04                              | * 2.81E+04 | * 3.64E+04 | * 5.66E+04 | * 8.65E+04 | * 1.74E+05 | * 2.96E+05 | * 4.53E+05 | * 1.77E+06 | * |  |  |  |  |
| >C12 - C16 (Aliphatics)           | 1.27E+05                              | * 1.28E+05 | * 1.66E+05 | * 2.58E+05 | * 3.94E+05 | * 7.90E+05 | * 1.35E+06 | * 2.06E+06 | * 8.04E+06 | * |  |  |  |  |
| >C16 - C21 (Aliphatics)           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| >C21 - C35 (Aliphatics)           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| >C8 - C10 (Aromatics)             | 8.56E+03                              | * 8.63E+03 | * 1.12E+04 | * 1.74E+04 | * 2.66E+04 | * 5.33E+04 | * 9.08E+04 | * 1.39E+05 | * 5.42E+05 | * |  |  |  |  |
| >C10 - C12 (Aromatics)            | 4.45E+04                              | * 4.49E+04 | * 5.82E+04 | * 9.04E+04 | * 1.38E+05 | * 2.77E+05 | * 4.72E+05 | * 7.24E+05 | * 2.82E+06 | * |  |  |  |  |
| >C12 - C16 (Aromatics)            | 2.27E+05                              | * 2.29E+05 | * 2.96E+05 | * 4.60E+05 | * 7.04E+05 | * 1.41E+06 | * 2.41E+06 | * 3.69E+06 | * 1.44E+07 | * |  |  |  |  |
| >C16 - C21 (Aromatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| >C21 - C35 (Aromatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Tertiary-amyI-methyl-ether (TAME) | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Tertiary-butyl- alcohol (TBA)     | 3.13E+04                              | 3.16E+04   | 4.10E+04   | 6.37E+04   | 9.73E+04   | 1.95E+05   | 3.33E+05   | 5.10E+05   | 1.99E+06   | * |  |  |  |  |
| Ethyl-tert-butyl-ether ( ETBE)    | 3.11E+03                              | * 3.13E+03 | * 4.06E+03 | * 6.31E+03 | * 9.65E+03 | * 1.93E+04 | * 3.30E+04 | * 5.05E+04 | * 1.97E+05 | * |  |  |  |  |
| Diisopropyl ether ( DIPE)         | 9.83E+03                              | * 9.91E+03 | * 1.28E+04 | * 2.00E+04 | * 3.05E+04 | * 6.12E+04 | * 1.04E+05 | * 1.60E+05 | * 6.23E+05 | * |  |  |  |  |
| Ethanol                           | 1.28E+06                              | * 1.29E+06 | * 1.67E+06 | * 2.60E+06 | * 3.97E+06 | * 7.96E+06 | * 1.36E+07 | * 2.08E+07 | * 8.10E+07 | * |  |  |  |  |
| Methanol                          | 2.64E+05                              | * 2.66E+05 | * 3.45E+05 | * 5.36E+05 | * 8.20E+05 | * 1.64E+06 | * 2.80E+06 | * 4.29E+06 | * 1.67E+07 | * |  |  |  |  |
| Arsenic                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Barium                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Cadmium                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Chromium III                      | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Chromium VI                       | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Lead                              | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Selenium                          | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |

Notes:

NA : Not Available

Target levels are based on distance to groundwater between 20 and 50 ft for which default vadose zone DAF is 2.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-8(c)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 2 for Resident**  
**Distance to Groundwater >50 ft**

| Chemical                           | Distance to On/Off-Site Building (ft) |            |            |            |            |            |            |            |            |   |  |  |  |  |
|------------------------------------|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|---|--|--|--|--|
|                                    | 0                                     | 25         | 50         | 75         | 100        | 150        | 200        | 250        | 500        |   |  |  |  |  |
| Benzene                            | 5.43E+01                              | * 5.48E+01 | * 7.10E+01 | * 1.10E+02 | * 1.69E+02 | * 3.38E+02 | * 5.77E+02 | * 8.84E+02 | * 3.44E+03 | * |  |  |  |  |
| Toluene                            | 8.87E+03                              | * 8.95E+03 | * 1.16E+04 | * 1.80E+04 | * 2.76E+04 | * 5.53E+04 | * 9.42E+04 | * 1.44E+05 | * 5.62E+05 | * |  |  |  |  |
| Ethylbenzene                       | 4.07E+04                              | * 4.11E+04 | * 5.32E+04 | * 8.27E+04 | * 1.26E+05 | * 2.54E+05 | * 4.32E+05 | * 6.62E+05 | * 2.58E+06 | * |  |  |  |  |
| Xylenes (mixed)                    | 3.63E+04                              | * 3.66E+04 | * 4.74E+04 | * 7.37E+04 | * 1.13E+05 | * 2.26E+05 | * 3.85E+05 | * 5.90E+05 | * 2.30E+06 | * |  |  |  |  |
| Ethylene Dibromide (EDB)           | 5.18E+01                              | 5.23E+01   | 6.78E+01   | 1.05E+02   | 1.61E+02   | 3.23E+02   | 5.50E+02   | 8.43E+02   | 3.29E+03   | * |  |  |  |  |
| Ethylene Dichloride (EDC)          | 3.63E+01                              | 3.67E+01   | 4.75E+01   | 7.38E+01   | 1.13E+02   | 2.26E+02   | 3.86E+02   | 5.91E+02   | 2.30E+03   | * |  |  |  |  |
| Methyl-tert-butyl-ether(MTBE)      | 1.61E+04                              | * 1.62E+04 | * 2.10E+04 | * 3.27E+04 | * 4.99E+04 | * 1.00E+05 | * 1.71E+05 | * 2.62E+05 | * 1.02E+06 | * |  |  |  |  |
| Acenaphthene                       | 1.28E+07                              | * 1.29E+07 | * 1.68E+07 | * 2.60E+07 | * 3.98E+07 | * 7.98E+07 | * 1.36E+08 | * 2.08E+08 | * 8.12E+08 | * |  |  |  |  |
| Anthracene                         | 7.54E+07                              | * 7.61E+07 | * 9.86E+07 | * 1.53E+08 | * 2.34E+08 | * 4.69E+08 | * 8.00E+08 | * 1.23E+09 | * 4.78E+09 | * |  |  |  |  |
| Benzo(a)anthracene                 | 4.99E+07                              | * 5.04E+07 | * 6.53E+07 | * 1.01E+08 | * 1.55E+08 | * 3.11E+08 | * 5.30E+08 | * 8.12E+08 | * 3.16E+09 | * |  |  |  |  |
| Benzo(a)pyrene                     | 1.48E+07                              | * 1.49E+07 | * 1.94E+07 | * 3.01E+07 | * 4.60E+07 | * 9.23E+07 | * 1.57E+08 | * 2.41E+08 | * 9.39E+08 | * |  |  |  |  |
| Benzo(b)fluoranthene               | 1.32E+07                              | * 1.34E+07 | * 1.73E+07 | * 2.69E+07 | * 4.11E+07 | * 8.25E+07 | * 1.41E+08 | * 2.15E+08 | * 8.39E+08 | * |  |  |  |  |
| Benzo(k)fluoranthene               | 7.02E+09                              | * 7.08E+09 | * 9.18E+09 | * 1.43E+10 | * 2.18E+10 | * 4.37E+10 | * 7.45E+10 | * 1.14E+11 | * 4.45E+11 | * |  |  |  |  |
| Chrysene                           | 4.57E+08                              | * 4.61E+08 | * 5.98E+08 | * 9.28E+08 | * 1.42E+09 | * 2.85E+09 | * 4.85E+09 | * 7.43E+09 | * 2.89E+10 | * |  |  |  |  |
| Dibenzo(a,h)anthracene             | 3.79E+08                              | * 3.82E+08 | * 4.95E+08 | * 7.69E+08 | * 1.18E+09 | * 2.36E+09 | * 4.02E+09 | * 6.16E+09 | * 2.40E+10 | * |  |  |  |  |
| Fluoranthene                       | 1.62E+09                              | * 1.64E+09 | * 2.12E+09 | * 3.30E+09 | * 5.04E+09 | * 1.01E+10 | * 1.72E+10 | * 2.64E+10 | * 1.03E+11 | * |  |  |  |  |
| Fluorene                           | 4.64E+07                              | * 4.68E+07 | * 6.06E+07 | * 9.42E+07 | * 1.44E+08 | * 2.89E+08 | * 4.92E+08 | * 7.54E+08 | * 2.94E+09 | * |  |  |  |  |
| Naphthalene                        | 1.21E+04                              | * 1.22E+04 | * 1.59E+04 | * 2.47E+04 | * 3.77E+04 | * 7.56E+04 | * 1.29E+05 | * 1.97E+05 | * 7.69E+05 | * |  |  |  |  |
| Pyrene                             | 1.84E+09                              | * 1.86E+09 | * 2.41E+09 | * 3.74E+09 | * 5.72E+09 | * 1.15E+10 | * 1.95E+10 | * 2.99E+10 | * 1.17E+11 | * |  |  |  |  |
| TPH-GRO                            | 8.14E+04                              | 8.21E+04   | 1.06E+05   | 1.65E+05   | 2.53E+05   | 5.07E+05   | 8.64E+05   | 1.32E+06   | 5.16E+06   |   |  |  |  |  |
| TPH-DRO                            | 8.52E+05                              | 8.59E+05   | 1.11E+06   | 1.73E+06   | 2.64E+06   | 5.30E+06   | 9.04E+06   | 1.39E+07   | 5.40E+07   |   |  |  |  |  |
| TPH-ORO                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| >C6 - C8 (Aliphatics)              | 5.31E+04                              | * 5.36E+04 | * 6.94E+04 | * 1.08E+05 | * 1.65E+05 | * 3.31E+05 | * 5.64E+05 | * 8.64E+05 | * 3.36E+06 | * |  |  |  |  |
| >C8 - C10 (Aliphatics)             | 1.12E+04                              | * 1.13E+04 | * 1.46E+04 | * 2.27E+04 | * 3.47E+04 | * 6.95E+04 | * 1.19E+05 | * 1.82E+05 | * 7.07E+05 | * |  |  |  |  |
| >C10 - C12 (Aliphatics)            | 5.57E+04                              | * 5.62E+04 | * 7.29E+04 | * 1.13E+05 | * 1.73E+05 | * 3.47E+05 | * 5.92E+05 | * 9.06E+05 | * 3.53E+06 | * |  |  |  |  |
| >C12 - C16 (Aliphatics)            | 2.54E+05                              | * 2.56E+05 | * 3.32E+05 | * 5.16E+05 | * 7.88E+05 | * 1.58E+06 | * 2.69E+06 | * 4.13E+06 | * 1.61E+07 | * |  |  |  |  |
| >C16 - C21 (Aliphatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| >C21 - C35 (Aliphatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| >C8 - C10 (Aromatics)              | 1.71E+04                              | * 1.73E+04 | * 2.24E+04 | * 3.48E+04 | * 5.31E+04 | * 1.07E+05 | * 1.82E+05 | * 2.78E+05 | * 1.08E+06 | * |  |  |  |  |
| >C10 - C12 (Aromatics)             | 8.90E+04                              | * 8.98E+04 | * 1.16E+05 | * 1.81E+05 | * 2.76E+05 | * 5.54E+05 | * 9.45E+05 | * 1.45E+06 | * 5.64E+06 | * |  |  |  |  |
| >C12 - C16 (Aromatics)             | 4.53E+05                              | * 4.57E+05 | * 5.93E+05 | * 9.20E+05 | * 1.41E+06 | * 2.82E+06 | * 4.81E+06 | * 7.37E+06 | * 2.87E+07 | * |  |  |  |  |
| >C16 - C21 (Aromatics)             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| >C21 - C35 (Aromatics)             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Tertiary-amyyl-methyl-ether (TAME) | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Tertiary-butyl- alcohol (TBA)      | 6.27E+04                              | * 6.32E+04 | * 8.20E+04 | * 1.27E+05 | * 1.95E+05 | * 3.90E+05 | * 6.65E+05 | * 1.02E+06 | * 3.97E+06 | * |  |  |  |  |
| Ethyl-tert-butyl-ether (ETBE)      | 6.21E+03                              | * 6.27E+03 | * 8.13E+03 | * 1.26E+04 | * 1.93E+04 | * 3.87E+04 | * 6.60E+04 | * 1.01E+05 | * 3.94E+05 | * |  |  |  |  |
| Diisopropyl ether ( DIPE)          | 1.97E+04                              | * 1.98E+04 | * 2.57E+04 | * 3.99E+04 | * 6.10E+04 | * 1.22E+05 | * 2.09E+05 | * 3.20E+05 | * 1.25E+06 | * |  |  |  |  |
| Ethanol                            | 2.56E+06                              | * 2.58E+06 | * 3.34E+06 | * 5.19E+06 | * 7.94E+06 | * 1.59E+07 | * 2.71E+07 | * 4.16E+07 | * 1.62E+08 | * |  |  |  |  |
| Methanol                           | 5.28E+05                              | * 5.33E+05 | * 6.90E+05 | * 1.07E+06 | * 1.64E+06 | * 3.29E+06 | * 5.61E+06 | * 8.59E+06 | * 3.35E+07 | * |  |  |  |  |
| Arsenic                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Barium                             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Cadmium                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Chromium III                       | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Chromium VI                        | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Lead                               | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Selenium                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |

Notes:

NA : Not Available

Target levels are based on distance to groundwater >50 ft for which default vadose zone DAF is 4.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-9(a)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 3 for Resident**  
**Distance to Groundwater <20 ft**

| Chemical                           | Distance to On/Off-Site Building (ft) |          |          |          |          |          |          |          |          |   |  |  |  |  |
|------------------------------------|---------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|---|--|--|--|--|
|                                    | 0                                     | 25       | 50       | 75       | 100      | 150      | 200      | 250      | 500      |   |  |  |  |  |
| Benzene                            | 2.34E+01                              | 2.36E+01 | 3.06E+01 | 4.75E+01 | 7.26E+01 | 1.45E+02 | 2.48E+02 | 3.80E+02 | 1.48E+03 | * |  |  |  |  |
| Toluene                            | 3.71E+03                              | 3.74E+03 | 4.85E+03 | 7.54E+03 | 1.15E+04 | 2.31E+04 | 3.94E+04 | 6.04E+04 | 2.35E+05 | * |  |  |  |  |
| Ethylbenzene                       | 1.69E+04                              | 1.70E+04 | 2.21E+04 | 3.43E+04 | 5.24E+04 | 1.05E+05 | 1.79E+05 | 2.75E+05 | 1.07E+06 | * |  |  |  |  |
| Xylenes (mixed)                    | 1.50E+04                              | 1.52E+04 | 1.97E+04 | 3.06E+04 | 4.67E+04 | 9.37E+04 | 1.60E+05 | 2.45E+05 | 9.54E+05 | * |  |  |  |  |
| Ethylene Dibromide (EDB)           | 2.30E+01                              | 2.32E+01 | 3.01E+01 | 4.68E+01 | 7.15E+01 | 1.43E+02 | 2.44E+02 | 3.74E+02 | 1.46E+03 |   |  |  |  |  |
| Ethylene Dichloride (EDC)          | 1.71E+01                              | 1.72E+01 | 2.23E+01 | 3.46E+01 | 5.30E+01 | 1.06E+02 | 1.81E+02 | 2.77E+02 | 1.08E+03 |   |  |  |  |  |
| Methyl-tert-butyl-ether(MTBE)      | 7.75E+03                              | 7.82E+03 | 1.01E+04 | 1.57E+04 | 2.41E+04 | 4.83E+04 | 8.23E+04 | 1.26E+05 | 4.91E+05 | * |  |  |  |  |
| Acenaphthene                       | 5.38E+06                              | 5.43E+06 | 7.03E+06 | 1.09E+07 | 1.67E+07 | 3.35E+07 | 5.71E+07 | 8.75E+07 | 3.41E+08 | * |  |  |  |  |
| Anthracene                         | 3.19E+07                              | 3.22E+07 | 4.17E+07 | 6.48E+07 | 9.90E+07 | 1.99E+08 | 3.38E+08 | 5.19E+08 | 2.02E+09 | * |  |  |  |  |
| Benzo(a)anthracene                 | 1.39E+07                              | 1.40E+07 | 1.82E+07 | 2.83E+07 | 4.32E+07 | 8.67E+07 | 1.48E+08 | 2.26E+08 | 8.82E+08 | * |  |  |  |  |
| Benzo(a)pyrene                     | 2.87E+06                              | 2.89E+06 | 3.75E+06 | 5.82E+06 | 8.90E+06 | 1.78E+07 | 3.04E+07 | 4.66E+07 | 1.82E+08 | * |  |  |  |  |
| Benzo(b)fluoranthene               | 5.49E+06                              | 5.54E+06 | 7.18E+06 | 1.12E+07 | 1.71E+07 | 3.42E+07 | 5.83E+07 | 8.93E+07 | 3.48E+08 | * |  |  |  |  |
| Benzo(k)fluoranthene               | 1.20E+09                              | 1.21E+09 | 1.57E+09 | 2.44E+09 | 3.74E+09 | 7.49E+09 | 1.28E+10 | 1.96E+10 | 7.62E+10 | * |  |  |  |  |
| Chrysene                           | 1.88E+08                              | 1.90E+08 | 2.46E+08 | 3.83E+08 | 5.85E+08 | 1.17E+09 | 2.00E+09 | 3.06E+09 | 1.19E+10 | * |  |  |  |  |
| Dibenzo(a,h)anthracene             | 4.72E+07                              | 4.77E+07 | 6.18E+07 | 9.59E+07 | 1.47E+08 | 2.94E+08 | 5.02E+08 | 7.68E+08 | 2.99E+09 | * |  |  |  |  |
| Fluoranthene                       | 5.99E+08                              | 6.04E+08 | 7.83E+08 | 1.22E+09 | 1.86E+09 | 3.73E+09 | 6.35E+09 | 9.74E+09 | 3.79E+10 | * |  |  |  |  |
| Fluorene                           | 1.90E+07                              | 1.91E+07 | 2.48E+07 | 3.85E+07 | 5.89E+07 | 1.18E+08 | 2.01E+08 | 3.08E+08 | 1.20E+09 | * |  |  |  |  |
| Naphthalene                        | 5.14E+03                              | 5.19E+03 | 6.72E+03 | 1.04E+04 | 1.60E+04 | 3.20E+04 | 5.46E+04 | 8.36E+04 | 3.26E+05 | * |  |  |  |  |
| Pyrene                             | 6.16E+08                              | 6.21E+08 | 8.05E+08 | 1.25E+09 | 1.91E+09 | 3.83E+09 | 6.54E+09 | 1.00E+10 | 3.90E+10 | * |  |  |  |  |
| TPH-GRO                            | 3.22E+04                              | 3.24E+04 | 4.20E+04 | 6.53E+04 | 9.99E+04 | 2.00E+05 | 3.41E+05 | 5.23E+05 | 2.04E+06 |   |  |  |  |  |
| TPH-DRO                            | 3.53E+05                              | 3.56E+05 | 4.61E+05 | 7.16E+05 | 1.10E+06 | 2.20E+06 | 3.74E+06 | 5.74E+06 | 2.23E+07 |   |  |  |  |  |
| TPH-ORO                            | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| >C6 - C8 (Aliphatics)              | 2.07E+04                              | 2.08E+04 | 2.70E+04 | 4.20E+04 | 6.42E+04 | 1.29E+05 | 2.19E+05 | 3.36E+05 | 1.31E+06 | * |  |  |  |  |
| >C8 - C10 (Aliphatics)             | 4.48E+03                              | 4.52E+03 | 5.85E+03 | 9.09E+03 | 1.39E+04 | 2.79E+04 | 4.75E+04 | 7.28E+04 | 2.84E+05 | * |  |  |  |  |
| >C10 - C12 (Aliphatics)            | 2.25E+04                              | 2.27E+04 | 2.95E+04 | 4.58E+04 | 7.00E+04 | 1.40E+05 | 2.39E+05 | 3.66E+05 | 1.43E+06 | * |  |  |  |  |
| >C12 - C16 (Aliphatics)            | 1.03E+05                              | 1.04E+05 | 1.34E+05 | 2.09E+05 | 3.19E+05 | 6.40E+05 | 1.09E+06 | 1.67E+06 | 6.51E+06 | * |  |  |  |  |
| >C16 - C21 (Aliphatics)            | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| >C21 - C35 (Aliphatics)            | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| >C8 - C10 (Aromatics)              | 7.02E+03                              | 7.08E+03 | 9.18E+03 | 1.43E+04 | 2.18E+04 | 4.37E+04 | 7.45E+04 | 1.14E+05 | 4.45E+05 | * |  |  |  |  |
| >C10 - C12 (Aromatics)             | 3.70E+04                              | 3.73E+04 | 4.84E+04 | 7.52E+04 | 1.15E+05 | 2.30E+05 | 3.93E+05 | 6.02E+05 | 2.34E+06 | * |  |  |  |  |
| >C12 - C16 (Aromatics)             | 1.90E+05                              | 1.92E+05 | 2.49E+05 | 3.87E+05 | 5.91E+05 | 1.19E+06 | 2.02E+06 | 3.10E+06 | 1.21E+07 | * |  |  |  |  |
| >C16 - C21 (Aromatics)             | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| >C21 - C35 (Aromatics)             | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Tertiary-amyyl-methyl-ether (TAME) | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Tertiary-butyl- alcohol (TBA)      | 3.12E+04                              | 3.15E+04 | 4.08E+04 | 6.34E+04 | 9.70E+04 | 1.94E+05 | 3.31E+05 | 5.08E+05 | 1.98E+06 | * |  |  |  |  |
| Ethyl-tert-butyl-ether (ETBE)      | 2.77E+03                              | 2.79E+03 | 3.62E+03 | 5.62E+03 | 8.60E+03 | 1.72E+04 | 2.94E+04 | 4.50E+04 | 1.75E+05 | * |  |  |  |  |
| Diisopropyl ether ( DIPE)          | 8.49E+03                              | 8.57E+03 | 1.11E+04 | 1.73E+04 | 2.64E+04 | 5.29E+04 | 9.02E+04 | 1.38E+05 | 5.38E+05 | * |  |  |  |  |
| Ethanol                            | 1.12E+06                              | 1.13E+06 | 1.47E+06 | 2.28E+06 | 3.49E+06 | 6.99E+06 | 1.19E+07 | 1.83E+07 | 7.11E+07 | * |  |  |  |  |
| Methanol                           | 2.05E+05                              | 2.07E+05 | 2.68E+05 | 4.17E+05 | 6.37E+05 | 1.28E+06 | 2.18E+06 | 3.34E+06 | 1.30E+07 | * |  |  |  |  |
| Arsenic                            | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Barium                             | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Cadmium                            | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Chromium III                       | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Chromium VI                        | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Lead                               | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |
| Selenium                           | NA                                    | NA       | NA       | NA       | NA       | NA       | NA       | NA       | NA       |   |  |  |  |  |

Notes:

NA : Not Available

Target levels are based on distance to groundwater < 20 ft for which default vadose zone DAF is 1.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-9(b)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 3 for Resident**  
**Distance to Groundwater between 20 and 50 ft**

| Chemical                          | Distance to On/Off-Site Building (ft) |            |            |            |            |            |            |            |            |   |   |   |   |   |
|-----------------------------------|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|---|---|---|---|---|
|                                   | 0                                     | 25         | 50         | 75         | 100        | 150        | 200        | 250        | 500        |   |   |   |   |   |
| Benzene                           | 4.67E+01                              | * 4.71E+01 | * 6.11E+01 | * 9.49E+01 | * 1.45E+02 | * 2.91E+02 | * 4.96E+02 | * 7.60E+02 | * 2.96E+03 | * | * | * | * | * |
| Toluene                           | 7.42E+03                              | * 7.49E+03 | * 9.71E+03 | * 1.51E+04 | * 2.31E+04 | * 4.62E+04 | * 7.88E+04 | * 1.21E+05 | * 4.70E+05 | * | * | * | * | * |
| Ethylbenzene                      | 3.38E+04                              | * 3.41E+04 | * 4.41E+04 | * 6.86E+04 | * 1.05E+05 | * 2.10E+05 | * 3.58E+05 | * 5.49E+05 | * 2.14E+06 | * | * | * | * | * |
| Xylenes (mixed)                   | 3.01E+04                              | * 3.04E+04 | * 3.94E+04 | * 6.11E+04 | * 9.35E+04 | * 1.87E+05 | * 3.20E+05 | * 4.90E+05 | * 1.91E+06 | * | * | * | * | * |
| Ethylene Dibromide (EDB)          | 4.60E+01                              | * 4.64E+01 | * 6.02E+01 | * 9.35E+01 | * 1.43E+02 | * 2.87E+02 | * 4.89E+02 | * 7.49E+02 | * 2.92E+03 | * | * | * | * | * |
| Ethylene Dichloride (EDC)         | 3.41E+01                              | * 3.44E+01 | * 4.46E+01 | * 6.93E+01 | * 1.06E+02 | * 2.12E+02 | * 3.62E+02 | * 5.55E+02 | * 2.16E+03 | * | * | * | * | * |
| Methyl-tert-butyl-ether(MTBE)     | 1.55E+04                              | * 1.56E+04 | * 2.03E+04 | * 3.15E+04 | * 4.81E+04 | * 9.65E+04 | * 1.65E+05 | * 2.52E+05 | * 9.82E+05 | * | * | * | * | * |
| Acenaphthene                      | 1.08E+07                              | * 1.09E+07 | * 1.41E+07 | * 2.19E+07 | * 3.34E+07 | * 6.70E+07 | * 1.14E+08 | * 1.75E+08 | * 6.82E+08 | * | * | * | * | * |
| Anthracene                        | 6.38E+07                              | * 6.43E+07 | * 8.34E+07 | * 1.30E+08 | * 1.98E+08 | * 3.97E+08 | * 6.77E+08 | * 1.04E+09 | * 4.04E+09 | * | * | * | * | * |
| Benzo(a)anthracene                | 2.78E+07                              | * 2.81E+07 | * 3.64E+07 | * 5.66E+07 | * 8.65E+07 | * 1.73E+08 | * 2.96E+08 | * 4.53E+08 | * 1.76E+09 | * | * | * | * | * |
| Benzo(a)pyrene                    | 5.73E+06                              | * 5.78E+06 | * 7.50E+06 | * 1.16E+07 | * 1.78E+07 | * 3.57E+07 | * 6.09E+07 | * 9.32E+07 | * 3.63E+08 | * | * | * | * | * |
| Benzo(b)fluoranthene              | 1.10E+07                              | * 1.11E+07 | * 1.44E+07 | * 2.23E+07 | * 3.41E+07 | * 6.84E+07 | * 1.17E+08 | * 1.79E+08 | * 6.96E+08 | * | * | * | * | * |
| Benzo(k)fluoranthene              | 2.41E+09                              | * 2.43E+09 | * 3.15E+09 | * 4.89E+09 | * 7.47E+09 | * 1.50E+10 | * 2.55E+10 | * 3.91E+10 | * 1.52E+11 | * | * | * | * | * |
| Chrysene                          | 3.77E+08                              | * 3.80E+08 | * 4.93E+08 | * 7.65E+08 | * 1.17E+09 | * 2.35E+09 | * 4.00E+09 | * 6.13E+09 | * 2.39E+10 | * | * | * | * | * |
| Dibenz(a,h)anthracene             | 9.45E+07                              | * 9.53E+07 | * 1.24E+08 | * 1.92E+08 | * 2.93E+08 | * 5.88E+08 | * 1.00E+09 | * 1.54E+09 | * 5.99E+09 | * | * | * | * | * |
| Fluoranthene                      | 1.20E+09                              | * 1.21E+09 | * 1.57E+09 | * 2.43E+09 | * 3.72E+09 | * 7.45E+09 | * 1.27E+10 | * 1.95E+10 | * 7.58E+10 | * | * | * | * | * |
| Fluorene                          | 3.79E+07                              | * 3.82E+07 | * 4.96E+07 | * 7.70E+07 | * 1.18E+08 | * 2.36E+08 | * 4.02E+08 | * 6.16E+08 | * 2.40E+09 | * | * | * | * | * |
| Naphthalene                       | 1.03E+04                              | * 1.04E+04 | * 1.34E+04 | * 2.09E+04 | * 3.19E+04 | * 6.40E+04 | * 1.09E+05 | * 1.67E+05 | * 6.52E+05 | * | * | * | * | * |
| Pyrene                            | 1.23E+09                              | * 1.24E+09 | * 1.61E+09 | * 2.50E+09 | * 3.82E+09 | * 7.67E+09 | * 1.31E+10 | * 2.00E+10 | * 7.80E+10 | * | * | * | * | * |
| TPH-GRO                           | 6.43E+04                              | * 6.49E+04 | * 8.41E+04 | * 1.31E+05 | * 2.00E+05 | * 4.00E+05 | * 6.83E+05 | * 1.05E+06 | * 4.07E+06 | * | * | * | * | * |
| TPH-DRO                           | 7.05E+05                              | * 7.12E+05 | * 9.23E+05 | * 1.43E+06 | * 2.19E+06 | * 4.39E+06 | * 7.49E+06 | * 1.15E+07 | * 4.47E+07 | * | * | * | * | * |
| TPH-ORO                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C6 - C8 (Aliphatics)             | 4.13E+04                              | * 4.17E+04 | * 5.40E+04 | * 8.39E+04 | * 1.28E+05 | * 2.57E+05 | * 4.39E+05 | * 6.72E+05 | * 2.62E+06 | * | * | * | * | * |
| >C8 - C10 (Aliphatics)            | 8.95E+03                              | * 9.03E+03 | * 1.17E+04 | * 1.82E+04 | * 2.78E+04 | * 5.57E+04 | * 9.50E+04 | * 1.46E+05 | * 5.67E+05 | * | * | * | * | * |
| >C10 - C12 (Aliphatics)           | 4.51E+04                              | * 4.55E+04 | * 5.89E+04 | * 9.15E+04 | * 1.40E+05 | * 2.81E+05 | * 4.78E+05 | * 7.33E+05 | * 2.85E+06 | * | * | * | * | * |
| >C12 - C16 (Aliphatics)           | 2.06E+05                              | * 2.07E+05 | * 2.69E+05 | * 4.18E+05 | * 6.38E+05 | * 1.28E+06 | * 2.18E+06 | * 3.34E+06 | * 1.30E+07 | * | * | * | * | * |
| >C16 - C21 (Aliphatics)           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aliphatics)           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C8 - C10 (Aromatics)             | 1.40E+04                              | * 1.42E+04 | * 1.84E+04 | * 2.85E+04 | * 4.36E+04 | * 8.74E+04 | * 1.49E+05 | * 2.28E+05 | * 8.90E+05 | * | * | * | * | * |
| >C10 - C12 (Aromatics)            | 7.40E+04                              | * 7.47E+04 | * 9.68E+04 | * 1.50E+05 | * 2.30E+05 | * 4.61E+05 | * 7.86E+05 | * 1.20E+06 | * 4.69E+06 | * | * | * | * | * |
| >C12 - C16 (Aromatics)            | 3.81E+05                              | * 3.84E+05 | * 4.98E+05 | * 7.74E+05 | * 1.18E+06 | * 2.37E+06 | * 4.04E+06 | * 6.19E+06 | * 2.41E+07 | * | * | * | * | * |
| >C16 - C21 (Aromatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aromatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-amyl-methyl-ether (TAME) | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-butyl- alcohol (TBA)     | 6.24E+04                              | * 6.30E+04 | * 8.17E+04 | * 1.27E+05 | * 1.94E+05 | * 3.89E+05 | * 6.63E+05 | * 1.02E+06 | * 3.96E+06 | * | * | * | * | * |
| Ethyl-tert-butyl-ether ( ETBE)    | 5.54E+03                              | * 5.59E+03 | * 7.24E+03 | * 1.12E+04 | * 1.72E+04 | * 3.45E+04 | * 5.88E+04 | * 9.01E+04 | * 3.51E+05 | * | * | * | * | * |
| Diisopropyl ether ( DIPE)         | 1.70E+04                              | * 1.71E+04 | * 2.22E+04 | * 3.45E+04 | * 5.28E+04 | * 1.06E+05 | * 1.80E+05 | * 2.76E+05 | * 1.08E+06 | * | * | * | * | * |
| Ethanol                           | 2.24E+06                              | * 2.26E+06 | * 2.94E+06 | * 4.56E+06 | * 6.97E+06 | * 1.40E+07 | * 2.38E+07 | * 3.65E+07 | * 1.42E+08 | * | * | * | * | * |
| Methanol                          | 4.10E+05                              | * 4.14E+05 | * 5.36E+05 | * 8.33E+05 | * 1.27E+06 | * 2.55E+06 | * 4.35E+06 | * 6.67E+06 | * 2.60E+07 | * | * | * | * | * |
| Arsenic                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Barium                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Cadmium                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium III                      | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium VI                       | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Lead                              | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Selenium                          | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |

Notes:

NA : Not Available

Target levels are based on distance to groundwater between 20 and 50 ft for which default vadose zone DAF is 2.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-9(c)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 3 for Resident**  
**Distance to Groundwater >50 ft**

| Chemical                           | Distance to On/Off-Site Building (ft) |            |            |            |            |            |            |            |            |   |   |   |   |   |
|------------------------------------|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|---|---|---|---|---|
|                                    | 0                                     | 25         | 50         | 75         | 100        | 150        | 200        | 250        | 500        |   |   |   |   |   |
| Benzene                            | 9.35E+01                              | * 9.43E+01 | * 1.22E+02 | * 1.90E+02 | * 2.90E+02 | * 5.82E+02 | * 9.92E+02 | * 1.52E+03 | * 5.92E+03 | * | * | * | * | * |
| Toluene                            | 1.48E+04                              | * 1.50E+04 | * 1.94E+04 | * 3.02E+04 | * 4.61E+04 | * 9.25E+04 | * 1.58E+05 | * 2.41E+05 | * 9.41E+05 | * | * | * | * | * |
| Ethylbenzene                       | 6.75E+04                              | * 6.81E+04 | * 8.83E+04 | * 1.37E+05 | * 2.10E+05 | * 4.20E+05 | * 7.17E+05 | * 1.10E+06 | * 4.28E+06 | * | * | * | * | * |
| Xylenes (mixed)                    | 6.02E+04                              | * 6.07E+04 | * 7.87E+04 | * 1.22E+05 | * 1.87E+05 | * 3.75E+05 | * 6.39E+05 | * 9.79E+05 | * 3.81E+06 | * | * | * | * | * |
| Ethylene Dibromide (EDB)           | 9.21E+01                              | 9.29E+01   | 1.20E+02   | 1.87E+02   | 2.86E+02   | 5.73E+02   | 9.78E+02   | 1.50E+03   | 5.83E+03   | * | * | * | * | * |
| Ethylene Dichloride (EDC)          | 6.82E+01                              | 6.88E+01   | 8.92E+01   | 1.39E+02   | 2.12E+02   | 4.25E+02   | 7.24E+02   | 1.11E+03   | 4.32E+03   | * | * | * | * | * |
| Methyl-tert-butyl-ether(MTBE)      | 3.10E+04                              | * 3.13E+04 | * 4.05E+04 | * 6.30E+04 | * 9.63E+04 | * 1.93E+05 | * 3.29E+05 | * 5.04E+05 | * 1.96E+06 | * | * | * | * | * |
| Acenaphthene                       | 2.15E+07                              | * 2.17E+07 | * 2.81E+07 | * 4.37E+07 | * 6.68E+07 | * 1.34E+08 | * 2.28E+08 | * 3.50E+08 | * 1.36E+09 | * | * | * | * | * |
| Anthracene                         | 1.28E+08                              | * 1.29E+08 | * 1.67E+08 | * 2.59E+08 | * 3.96E+08 | * 7.94E+08 | * 1.35E+09 | * 2.07E+09 | * 8.08E+09 | * | * | * | * | * |
| Benzo(a)anthracene                 | 5.57E+07                              | * 5.62E+07 | * 7.28E+07 | * 1.13E+08 | * 1.73E+08 | * 3.47E+08 | * 5.91E+08 | * 9.06E+08 | * 3.53E+09 | * | * | * | * | * |
| Benzo(a)pyrene                     | 1.15E+07                              | * 1.16E+07 | * 1.50E+07 | * 2.33E+07 | * 3.56E+07 | * 7.14E+07 | * 1.22E+08 | * 1.86E+08 | * 7.26E+08 | * | * | * | * | * |
| Benzo(b)fluoranthene               | 2.20E+07                              | * 2.22E+07 | * 2.87E+07 | * 4.46E+07 | * 6.82E+07 | * 1.37E+08 | * 2.33E+08 | * 3.57E+08 | * 1.39E+09 | * | * | * | * | * |
| Benzo(k)fluoranthene               | 4.81E+09                              | * 4.86E+09 | * 6.29E+09 | * 9.78E+09 | * 1.49E+10 | * 3.00E+10 | * 5.11E+10 | * 7.83E+10 | * 3.05E+11 | * | * | * | * | * |
| Chrysene                           | 7.54E+08                              | * 7.60E+08 | * 9.86E+08 | * 1.53E+09 | * 2.34E+09 | * 4.69E+09 | * 8.00E+09 | * 1.23E+10 | * 4.78E+10 | * | * | * | * | * |
| Dibenzo(a,h)anthracene             | 1.89E+08                              | * 1.91E+08 | * 2.47E+08 | * 3.84E+08 | * 5.87E+08 | * 1.18E+09 | * 2.01E+09 | * 3.07E+09 | * 1.20E+10 | * | * | * | * | * |
| Fluoranthene                       | 2.39E+09                              | * 2.42E+09 | * 3.13E+09 | * 4.86E+09 | * 7.44E+09 | * 1.49E+10 | * 2.54E+10 | * 3.89E+10 | * 1.52E+11 | * | * | * | * | * |
| Fluorene                           | 7.58E+07                              | * 7.65E+07 | * 9.91E+07 | * 1.54E+08 | * 2.35E+08 | * 4.72E+08 | * 8.05E+08 | * 1.23E+09 | * 4.80E+09 | * | * | * | * | * |
| Naphthalene                        | 2.06E+04                              | * 2.07E+04 | * 2.69E+04 | * 4.18E+04 | * 6.39E+04 | * 1.28E+05 | * 2.18E+05 | * 3.35E+05 | * 1.30E+06 | * | * | * | * | * |
| Pyrene                             | 2.46E+09                              | * 2.48E+09 | * 3.22E+09 | * 5.00E+09 | * 7.65E+09 | * 1.53E+10 | * 2.61E+10 | * 4.01E+10 | * 1.56E+11 | * | * | * | * | * |
| TPH-GRO                            | 1.29E+05                              | 1.30E+05   | 1.68E+05   | 2.61E+05   | 3.99E+05   | 8.01E+05   | 1.37E+06   | 2.09E+06   | 8.15E+06   |   |   |   |   |   |
| TPH-DRO                            | 1.41E+06                              | 1.42E+06   | 1.85E+06   | 2.87E+06   | 4.38E+06   | 8.79E+06   | 1.50E+07   | 2.29E+07   | 8.94E+07   |   |   |   |   |   |
| TPH-ORO                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C6 - C8 (Aliphatics)              | 8.26E+04                              | * 8.34E+04 | * 1.08E+05 | * 1.68E+05 | * 2.57E+05 | * 5.15E+05 | * 8.77E+05 | * 1.34E+06 | * 5.24E+06 | * | * | * | * | * |
| >C8 - C10 (Aliphatics)             | 1.79E+04                              | * 1.81E+04 | * 2.34E+04 | * 3.64E+04 | * 5.56E+04 | * 1.11E+05 | * 1.90E+05 | * 2.91E+05 | * 1.13E+06 | * | * | * | * | * |
| >C10 - C12 (Aliphatics)            | 9.01E+04                              | * 9.09E+04 | * 1.18E+05 | * 1.83E+05 | * 2.80E+05 | * 5.61E+05 | * 9.57E+05 | * 1.47E+06 | * 5.71E+06 | * | * | * | * | * |
| >C12 - C16 (Aliphatics)            | 4.11E+05                              | * 4.15E+05 | * 5.38E+05 | * 8.35E+05 | * 1.28E+06 | * 2.56E+06 | * 4.36E+06 | * 6.69E+06 | * 2.60E+07 | * | * | * | * | * |
| >C16 - C21 (Aliphatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aliphatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C8 - C10 (Aromatics)              | 2.81E+04                              | * 2.83E+04 | * 3.67E+04 | * 5.70E+04 | * 8.72E+04 | * 1.75E+05 | * 2.98E+05 | * 4.57E+05 | * 1.78E+06 | * | * | * | * | * |
| >C10 - C12 (Aromatics)             | 1.48E+05                              | * 1.49E+05 | * 1.94E+05 | * 3.01E+05 | * 4.60E+05 | * 9.22E+05 | * 1.57E+06 | * 2.41E+06 | * 9.38E+06 | * | * | * | * | * |
| >C12 - C16 (Aromatics)             | 7.62E+05                              | * 7.68E+05 | * 9.96E+05 | * 1.55E+06 | * 2.37E+06 | * 4.74E+06 | * 8.09E+06 | * 1.24E+07 | * 4.83E+07 | * | * | * | * | * |
| >C16 - C21 (Aromatics)             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aromatics)             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-amyyl-methyl-ether (TAME) | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-butyl- alcohol (TBA)      | 1.25E+05                              | * 1.26E+05 | * 1.63E+05 | * 2.54E+05 | * 3.88E+05 | * 7.78E+05 | * 1.33E+06 | * 2.03E+06 | * 7.91E+06 | * | * | * | * | * |
| Ethyl-tert-butyl-ether (ETBE)      | 1.11E+04                              | * 1.12E+04 | * 1.45E+04 | * 2.25E+04 | * 3.44E+04 | * 6.90E+04 | * 1.18E+05 | * 1.80E+05 | * 7.02E+05 | * | * | * | * | * |
| Diisopropyl ether ( DIPE)          | 3.40E+04                              | * 3.43E+04 | * 4.44E+04 | * 6.90E+04 | * 1.06E+05 | * 2.12E+05 | * 3.61E+05 | * 5.53E+05 | * 2.15E+06 | * | * | * | * | * |
| Ethanol                            | 4.49E+06                              | * 4.53E+06 | * 5.87E+06 | * 9.12E+06 | * 1.39E+07 | * 2.80E+07 | * 4.77E+07 | * 7.30E+07 | * 2.84E+08 | * | * | * | * | * |
| Methanol                           | 8.20E+05                              | * 8.28E+05 | * 1.07E+06 | * 1.67E+06 | * 2.55E+06 | * 5.11E+06 | * 8.71E+06 | * 1.33E+07 | * 5.20E+07 | * | * | * | * | * |
| Arsenic                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Barium                             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Cadmium                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium III                       | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium VI                        | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Lead                               | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Selenium                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |

Notes:

NA : Not Available

Target levels are based on distance to groundwater >50 ft for which default vadose zone DAF is 4.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-10(a)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 1 for Non-Resident**  
**Distance to Groundwater <20 ft**

| Chemical                           | Distance to On/Off-Site Building (ft) |            |            |            |            |            |            |            |            |   |  |  |  |  |
|------------------------------------|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|---|--|--|--|--|
|                                    | 0                                     | 25         | 50         | 75         | 100        | 150        | 200        | 250        | 500        |   |  |  |  |  |
| Benzene                            | 3.65E+01                              | * 3.68E+01 | * 4.78E+01 | * 7.42E+01 | * 1.13E+02 | * 2.27E+02 | * 3.88E+02 | * 5.94E+02 | * 2.31E+03 | * |  |  |  |  |
| Toluene                            | 9.92E+03                              | * 1.00E+04 | * 1.30E+04 | * 2.02E+04 | * 3.08E+04 | * 6.18E+04 | * 1.05E+05 | * 1.61E+05 | * 6.29E+05 | * |  |  |  |  |
| Ethylbenzene                       | 4.67E+04                              | * 4.71E+04 | * 6.10E+04 | * 9.48E+04 | * 1.45E+05 | * 2.91E+05 | * 4.96E+05 | * 7.59E+05 | * 2.96E+06 | * |  |  |  |  |
| Xylenes (mixed)                    | 4.15E+04                              | * 4.19E+04 | * 5.43E+04 | * 8.43E+04 | * 1.29E+05 | * 2.58E+05 | * 4.41E+05 | * 6.75E+05 | * 2.63E+06 | * |  |  |  |  |
| Ethylene Dibromide (EDB)           | 3.12E+01                              | 3.15E+01   | 4.08E+01   | 6.33E+01   | 9.68E+01   | 1.94E+02   | 3.31E+02   | 5.07E+02   | 1.98E+03   | * |  |  |  |  |
| Ethylene Dichloride (EDC)          | 1.90E+01                              | 1.92E+01   | 2.49E+01   | 3.87E+01   | 5.91E+01   | 1.19E+02   | 2.02E+02   | 3.10E+02   | 1.21E+03   | * |  |  |  |  |
| Methyl-tert-butyl-ether(MTBE)      | 7.66E+03                              | * 7.73E+03 | * 1.00E+04 | * 1.56E+04 | * 2.38E+04 | * 4.77E+04 | * 8.14E+04 | * 1.25E+05 | * 4.85E+05 | * |  |  |  |  |
| Acenaphthene                       | 1.36E+07                              | * 1.38E+07 | * 1.78E+07 | * 2.77E+07 | * 4.24E+07 | * 8.49E+07 | * 1.45E+08 | * 2.22E+08 | * 8.64E+08 | * |  |  |  |  |
| Anthracene                         | 8.08E+07                              | * 8.15E+07 | * 1.06E+08 | * 1.64E+08 | * 2.51E+08 | * 5.03E+08 | * 8.57E+08 | * 1.31E+09 | * 5.12E+09 | * |  |  |  |  |
| Benzo(a)anthracene                 | 4.32E+07                              | * 4.35E+07 | * 5.64E+07 | * 8.77E+07 | * 1.34E+08 | * 2.69E+08 | * 4.58E+08 | * 7.02E+08 | * 2.73E+09 | * |  |  |  |  |
| Benzo(a)pyrene                     | 1.90E+07                              | * 1.92E+07 | * 2.49E+07 | * 3.86E+07 | * 5.91E+07 | * 1.18E+08 | * 2.02E+08 | * 3.09E+08 | * 1.20E+09 | * |  |  |  |  |
| Benzo(b)fluoranthene               | 9.23E+06                              | * 9.32E+06 | * 1.21E+07 | * 1.88E+07 | * 2.87E+07 | * 5.75E+07 | * 9.80E+07 | * 1.50E+08 | * 5.85E+08 | * |  |  |  |  |
| Benzo(k)fluoranthene               | 1.13E+10                              | * 1.14E+10 | * 1.48E+10 | * 2.30E+10 | * 3.51E+10 | * 7.05E+10 | * 1.20E+11 | * 1.84E+11 | * 7.17E+11 | * |  |  |  |  |
| Chrysene                           | 3.19E+08                              | * 3.22E+08 | * 4.17E+08 | * 6.48E+08 | * 9.91E+08 | * 1.99E+09 | * 3.39E+09 | * 5.19E+09 | * 2.02E+10 | * |  |  |  |  |
| Dibenzo(a,h)anthracene             | 3.86E+09                              | * 3.90E+09 | * 5.05E+09 | * 7.85E+09 | * 1.20E+10 | * 2.41E+10 | * 4.10E+10 | * 6.29E+10 | * 2.45E+11 | * |  |  |  |  |
| Fluoranthene                       | 1.82E+09                              | * 1.84E+09 | * 2.39E+09 | * 3.70E+09 | * 5.66E+09 | * 1.14E+10 | * 1.94E+10 | * 2.97E+10 | * 1.16E+11 | * |  |  |  |  |
| Fluorene                           | 4.98E+07                              | * 5.02E+07 | * 6.51E+07 | * 1.01E+08 | * 1.55E+08 | * 3.10E+08 | * 5.29E+08 | * 8.10E+08 | * 3.15E+09 | * |  |  |  |  |
| Naphthalene                        | 1.30E+04                              | * 1.31E+04 | * 1.70E+04 | * 2.64E+04 | * 4.03E+04 | * 8.08E+04 | * 1.38E+05 | * 2.11E+05 | * 8.22E+05 | * |  |  |  |  |
| Pyrene                             | 2.17E+09                              | * 2.19E+09 | * 2.84E+09 | * 4.41E+09 | * 6.75E+09 | * 1.35E+10 | * 2.31E+10 | * 3.53E+10 | * 1.38E+11 | * |  |  |  |  |
| TPH-GRO                            | 1.01E+05                              | 1.02E+05   | 1.32E+05   | 2.05E+05   | 3.13E+05   | 6.27E+05   | 1.07E+06   | 1.64E+06   | 6.38E+06   |   |  |  |  |  |
| TPH-DRO                            | 9.79E+05                              | 9.88E+05   | 1.28E+06   | 1.99E+06   | 3.04E+06   | 6.10E+06   | 1.04E+07   | 1.59E+07   | 6.20E+07   |   |  |  |  |  |
| TPH-ORO                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| >C6 - C8 (Aliphatics)              | 6.68E+04                              | * 6.74E+04 | * 8.73E+04 | * 1.36E+05 | * 2.07E+05 | * 4.16E+05 | * 7.09E+05 | * 1.09E+06 | * 4.23E+06 | * |  |  |  |  |
| >C8 - C10 (Aliphatics)             | 1.38E+04                              | * 1.39E+04 | * 1.80E+04 | * 2.79E+04 | * 4.27E+04 | * 8.57E+04 | * 1.46E+05 | * 2.24E+05 | * 8.72E+05 | * |  |  |  |  |
| >C10 - C12 (Aliphatics)            | 6.83E+04                              | * 6.89E+04 | * 8.93E+04 | * 1.39E+05 | * 2.12E+05 | * 4.25E+05 | * 7.25E+05 | * 1.11E+06 | * 4.33E+06 | * |  |  |  |  |
| >C12 - C16 (Aliphatics)            | 3.11E+05                              | * 3.13E+05 | * 4.06E+05 | * 6.31E+05 | * 9.65E+05 | * 1.93E+06 | * 3.30E+06 | * 5.05E+06 | * 1.97E+07 | * |  |  |  |  |
| >C16 - C21 (Aliphatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| >C21 - C35 (Aliphatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| >C8 - C10 (Aromatics)              | 2.02E+04                              | * 2.04E+04 | * 2.64E+04 | * 4.10E+04 | * 6.28E+04 | * 1.26E+05 | * 2.15E+05 | * 3.29E+05 | * 1.28E+06 | * |  |  |  |  |
| >C10 - C12 (Aromatics)             | 1.01E+05                              | * 1.02E+05 | * 1.32E+05 | * 2.06E+05 | * 3.14E+05 | * 6.30E+05 | * 1.07E+06 | * 1.65E+06 | * 6.41E+06 | * |  |  |  |  |
| >C12 - C16 (Aromatics)             | 4.99E+05                              | * 5.04E+05 | * 6.53E+05 | * 1.01E+06 | * 1.55E+06 | * 3.11E+06 | * 5.30E+06 | * 8.12E+06 | * 3.16E+07 | * |  |  |  |  |
| >C16 - C21 (Aromatics)             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| >C21 - C35 (Aromatics)             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Tertiary-amyyl-methyl-ether (TAME) | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Tertiary-butyl- alcohol (TBA)      | 3.81E+04                              | * 3.84E+04 | * 4.98E+04 | * 7.73E+04 | * 1.18E+05 | * 2.37E+05 | * 4.04E+05 | * 6.19E+05 | * 2.41E+06 | * |  |  |  |  |
| Ethyl-tert-butyl-ether (ETBE)      | 5.85E+03                              | * 5.90E+03 | * 7.65E+03 | * 1.19E+04 | * 1.82E+04 | * 3.64E+04 | * 6.21E+04 | * 9.52E+04 | * 3.71E+05 | * |  |  |  |  |
| Diisopropyl ether ( DIPE)          | 2.01E+04                              | * 2.03E+04 | * 2.63E+04 | * 4.09E+04 | * 6.25E+04 | * 1.25E+05 | * 2.14E+05 | * 3.27E+05 | * 1.27E+06 | * |  |  |  |  |
| Ethanol                            | 1.46E+06                              | * 1.47E+06 | * 1.91E+06 | * 2.96E+06 | * 4.53E+06 | * 9.09E+06 | * 1.55E+07 | * 2.37E+07 | * 9.25E+07 | * |  |  |  |  |
| Methanol                           | 4.00E+05                              | * 4.03E+05 | * 5.22E+05 | * 8.12E+05 | * 1.24E+06 | * 2.49E+06 | * 4.24E+06 | * 6.50E+06 | * 2.53E+07 | * |  |  |  |  |
| Arsenic                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Barium                             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Cadmium                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Chromium III                       | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Chromium VI                        | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Lead                               | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |
| Selenium                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |  |  |  |  |

Notes:

NA : Not Available

Target levels are based on distance to groundwater < 20 ft for which default vadose zone DAF is 1.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-10(b)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 1 for Non-Residen**  
**Distance to Groundwater between 20 and 50 ft**

| Chemical                           | Distance to On/Off-Site Building (ft) |            |            |            |            |            |            |            |            |   |   |   |   |   |
|------------------------------------|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|---|---|---|---|---|
|                                    | 0                                     | 25         | 50         | 75         | 100        | 150        | 200        | 250        | 500        |   |   |   |   |   |
| Benzene                            | 7.30E+01                              | * 7.37E+01 | * 9.55E+01 | * 1.48E+02 | * 2.27E+02 | * 4.55E+02 | * 7.75E+02 | * 1.19E+03 | * 4.63E+03 | * | * | * | * | * |
| Toluene                            | 1.98E+04                              | * 2.00E+04 | * 2.59E+04 | * 4.03E+04 | * 6.16E+04 | * 1.24E+05 | * 2.11E+05 | * 3.23E+05 | * 1.26E+06 | * | * | * | * | * |
| Ethylbenzene                       | 9.34E+04                              | * 9.42E+04 | * 1.22E+05 | * 1.90E+05 | * 2.90E+05 | * 5.81E+05 | * 9.91E+05 | * 1.52E+06 | * 5.92E+06 | * | * | * | * | * |
| Xylenes (mixed)                    | 8.30E+04                              | * 8.37E+04 | * 1.09E+05 | * 1.69E+05 | * 2.58E+05 | * 5.17E+05 | * 8.81E+05 | * 1.35E+06 | * 5.26E+06 | * | * | * | * | * |
| Ethylene Dibromide (EDB)           | 6.24E+01                              | 6.29E+01   | 8.15E+01   | 1.27E+02   | 1.94E+02   | 3.88E+02   | 6.62E+02   | 1.01E+03   | 3.95E+03   | * | * | * | * | * |
| Ethylene Dichloride (EDC)          | 3.81E+01                              | 3.84E+01   | 4.98E+01   | 7.74E+01   | 1.18E+02   | 2.37E+02   | 4.04E+02   | 6.19E+02   | 2.41E+03   | * | * | * | * | * |
| Methyl-tert-butyl-ether(MTBE)      | 1.53E+04                              | * 1.55E+04 | * 2.00E+04 | * 3.11E+04 | * 4.76E+04 | * 9.54E+04 | * 1.63E+05 | * 2.49E+05 | * 9.71E+05 | * | * | * | * | * |
| Acenaphthene                       | 2.73E+07                              | * 2.75E+07 | * 3.57E+07 | * 5.54E+07 | * 8.47E+07 | * 1.70E+08 | * 2.90E+08 | * 4.44E+08 | * 1.73E+09 | * | * | * | * | * |
| Anthracene                         | 1.62E+08                              | * 1.63E+08 | * 2.11E+08 | * 3.28E+08 | * 5.02E+08 | * 1.01E+09 | * 1.71E+09 | * 2.63E+09 | * 1.02E+10 | * | * | * | * | * |
| Benzo(a)anthracene                 | 8.63E+07                              | * 8.71E+07 | * 1.13E+08 | * 1.75E+08 | * 2.68E+08 | * 5.38E+08 | * 9.17E+08 | * 1.40E+09 | * 5.47E+09 | * | * | * | * | * |
| Benzo(a)pyrene                     | 3.80E+07                              | * 3.84E+07 | * 4.97E+07 | * 7.73E+07 | * 1.18E+08 | * 2.37E+08 | * 4.04E+08 | * 6.19E+08 | * 2.41E+09 | * | * | * | * | * |
| Benzo(b)fluoranthene               | 1.85E+07                              | * 1.86E+07 | * 2.42E+07 | * 3.75E+07 | * 5.74E+07 | * 1.15E+08 | * 1.96E+08 | * 3.00E+08 | * 1.17E+09 | * | * | * | * | * |
| Benzo(k)fluoranthene               | 2.26E+10                              | * 2.28E+10 | * 2.96E+10 | * 4.60E+10 | * 7.03E+10 | * 1.41E+11 | * 2.40E+11 | * 3.68E+11 | * 1.43E+12 | * | * | * | * | * |
| Chrysene                           | 6.38E+08                              | * 6.44E+08 | * 8.35E+08 | * 1.30E+09 | * 1.98E+09 | * 3.97E+09 | * 6.78E+09 | * 1.04E+10 | * 4.04E+10 | * | * | * | * | * |
| Dibenzo(a,h)anthracene             | 7.73E+09                              | * 7.80E+09 | * 1.01E+10 | * 1.57E+10 | * 2.40E+10 | * 4.81E+10 | * 8.20E+10 | * 1.26E+11 | * 4.90E+11 | * | * | * | * | * |
| Fluoranthene                       | 3.65E+09                              | * 3.68E+09 | * 4.77E+09 | * 7.41E+09 | * 1.13E+10 | * 2.27E+10 | * 3.87E+10 | * 5.93E+10 | * 2.31E+11 | * | * | * | * | * |
| Fluorene                           | 9.96E+07                              | * 1.00E+08 | * 1.30E+08 | * 2.02E+08 | * 3.09E+08 | * 6.20E+08 | * 1.06E+09 | * 1.62E+09 | * 6.31E+09 | * | * | * | * | * |
| Naphthalene                        | 2.60E+04                              | * 2.62E+04 | * 3.39E+04 | * 5.27E+04 | * 8.06E+04 | * 1.62E+05 | * 2.76E+05 | * 4.22E+05 | * 1.64E+06 | * | * | * | * | * |
| Pyrene                             | 4.35E+09                              | * 4.38E+09 | * 5.68E+09 | * 8.83E+09 | * 1.35E+10 | * 2.71E+10 | * 4.61E+10 | * 7.07E+10 | * 2.75E+11 | * | * | * | * | * |
| TPH-GRO                            | 2.01E+05                              | 2.03E+05   | 2.63E+05   | 4.09E+05   | 6.26E+05   | 1.25E+06   | 2.14E+06   | 3.28E+06   | 1.28E+07   |   |   |   |   |   |
| TPH-DRO                            | 1.96E+06                              | 1.98E+06   | 2.56E+06   | 3.98E+06   | 6.08E+06   | 1.22E+07   | 2.08E+07   | 3.19E+07   | 1.24E+08   |   |   |   |   |   |
| TPH-ORO                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C6 - C8 (Aliphatics)              | 1.34E+05                              | * 1.35E+05 | * 1.75E+05 | * 2.71E+05 | * 4.15E+05 | * 8.32E+05 | * 1.42E+06 | * 2.17E+06 | * 8.46E+06 | * | * | * | * | * |
| >C8 - C10 (Aliphatics)             | 2.75E+04                              | * 2.78E+04 | * 3.60E+04 | * 5.59E+04 | * 8.54E+04 | * 1.71E+05 | * 2.92E+05 | * 4.47E+05 | * 1.74E+06 | * | * | * | * | * |
| >C10 - C12 (Aliphatics)            | 1.37E+05                              | * 1.38E+05 | * 1.79E+05 | * 2.77E+05 | * 4.24E+05 | * 8.50E+05 | * 1.45E+06 | * 2.22E+06 | * 8.65E+06 | * | * | * | * | * |
| >C12 - C16 (Aliphatics)            | 6.21E+05                              | * 6.27E+05 | * 8.12E+05 | * 1.26E+06 | * 1.93E+06 | * 3.87E+06 | * 6.59E+06 | * 1.01E+07 | * 3.94E+07 | * | * | * | * | * |
| >C16 - C21 (Aliphatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aliphatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C8 - C10 (Aromatics)              | 4.04E+04                              | * 4.08E+04 | * 5.28E+04 | * 8.21E+04 | * 1.26E+05 | * 2.52E+05 | * 4.29E+05 | * 6.57E+05 | * 2.56E+06 | * | * | * | * | * |
| >C10 - C12 (Aromatics)             | 2.02E+05                              | * 2.04E+05 | * 2.65E+05 | * 4.11E+05 | * 6.29E+05 | * 1.26E+06 | * 2.15E+06 | * 3.29E+06 | * 1.28E+07 | * | * | * | * | * |
| >C12 - C16 (Aromatics)             | 9.98E+05                              | * 1.01E+06 | * 1.31E+06 | * 2.03E+06 | * 3.10E+06 | * 6.22E+06 | * 1.06E+07 | * 1.62E+07 | * 6.33E+07 | * | * | * | * | * |
| >C16 - C21 (Aromatics)             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aromatics)             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-amy-l-methyl-ether (TAME) | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-butyl- alcohol (TBA)      | 7.61E+04                              | * 7.68E+04 | * 9.96E+04 | * 1.55E+05 | * 2.36E+05 | * 4.74E+05 | * 8.08E+05 | * 1.24E+06 | * 4.82E+06 | * | * | * | * | * |
| Ethyl-tert-butyl-ether ( ETBE)     | 1.17E+04                              | * 1.18E+04 | * 1.53E+04 | * 2.38E+04 | * 3.63E+04 | * 7.29E+04 | * 1.24E+05 | * 1.90E+05 | * 7.41E+05 | * | * | * | * | * |
| Diisopropyl ether ( DIPE)          | 4.02E+04                              | * 4.06E+04 | * 5.26E+04 | * 8.17E+04 | * 1.25E+05 | * 2.51E+05 | * 4.27E+05 | * 6.54E+05 | * 2.55E+06 | * | * | * | * | * |
| Ethanol                            | 2.92E+06                              | * 2.95E+06 | * 3.82E+06 | * 5.93E+06 | * 9.07E+06 | * 1.82E+07 | * 3.10E+07 | * 4.75E+07 | * 1.85E+08 | * | * | * | * | * |
| Methanol                           | 7.99E+05                              | * 8.06E+05 | * 1.04E+06 | * 1.62E+06 | * 2.48E+06 | * 4.98E+06 | * 8.48E+06 | * 1.30E+07 | * 5.06E+07 | * | * | * | * | * |
| Arsenic                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Barium                             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Cadmium                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium III                       | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium VI                        | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Lead                               | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Selenium                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |

Notes:

NA : Not Available

Target levels are based on distance to groundwater between 20 and 50 ft for which default vadose zone DAF is 2.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-10(c)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 1 for Non-Resident**  
**Distance to Groundwater >50 ft**

| Chemical                          | Distance to On/Off-Site Building (ft) |    |          |    |          |     |          |     |          |   |          |   |          |   |          |   |          |   |
|-----------------------------------|---------------------------------------|----|----------|----|----------|-----|----------|-----|----------|---|----------|---|----------|---|----------|---|----------|---|
|                                   | 0                                     | 25 | 50       | 75 | 100      | 150 | 200      | 250 | 500      |   |          |   |          |   |          |   |          |   |
| Benzene                           | 1.46E+02                              | *  | 1.47E+02 | *  | 1.91E+02 | *   | 2.97E+02 | *   | 4.54E+02 | * | 9.10E+02 | * | 1.55E+03 | * | 2.38E+03 | * | 9.25E+03 | * |
| Toluene                           | 3.97E+04                              | *  | 4.00E+04 | *  | 5.19E+04 | *   | 8.06E+04 | *   | 1.23E+05 | * | 2.47E+05 | * | 4.21E+05 | * | 6.45E+05 | * | 2.51E+06 | * |
| Ethylbenzene                      | 1.87E+05                              | *  | 1.88E+05 | *  | 2.44E+05 | *   | 3.79E+05 | *   | 5.80E+05 | * | 1.16E+06 | * | 1.98E+06 | * | 3.04E+06 | * | 1.18E+07 | * |
| Xylenes (mixed)                   | 1.66E+05                              | *  | 1.67E+05 | *  | 2.17E+05 | *   | 3.37E+05 | *   | 5.15E+05 | * | 1.03E+06 | * | 1.76E+06 | * | 2.70E+06 | * | 1.05E+07 | * |
| Ethylene Dibromide (EDB)          | 1.25E+02                              |    | 1.26E+02 |    | 1.63E+02 |     | 2.53E+02 |     | 3.87E+02 |   | 7.77E+02 |   | 1.32E+03 |   | 2.03E+03 | * | 7.90E+03 | * |
| Ethylene Dichloride (EDC)         | 7.62E+01                              |    | 7.68E+01 |    | 9.96E+01 |     | 1.55E+02 |     | 2.37E+02 |   | 4.74E+02 |   | 8.09E+02 |   | 1.24E+03 | * | 4.83E+03 | * |
| Methyl-tert-butyl-ether(MTBE)     | 3.06E+04                              | *  | 3.09E+04 | *  | 4.01E+04 | *   | 6.23E+04 | *   | 9.52E+04 | * | 1.91E+05 | * | 3.25E+05 | * | 4.99E+05 | * | 1.94E+06 | * |
| Acenaphthene                      | 5.46E+07                              | *  | 5.50E+07 | *  | 7.13E+07 | *   | 1.11E+08 | *   | 1.69E+08 | * | 3.40E+08 | * | 5.79E+08 | * | 8.87E+08 | * | 3.46E+09 | * |
| Anthracene                        | 3.23E+08                              | *  | 3.26E+08 | *  | 4.22E+08 | *   | 6.56E+08 | *   | 1.00E+09 | * | 2.01E+09 | * | 3.43E+09 | * | 5.25E+09 | * | 2.05E+10 | * |
| Benzo(a)anthracene                | 1.73E+08                              | *  | 1.74E+08 | *  | 2.26E+08 | *   | 3.51E+08 | *   | 5.36E+08 | * | 1.08E+09 | * | 1.83E+09 | * | 2.81E+09 | * | 1.09E+10 | * |
| Benzo(a)pyrene                    | 7.61E+07                              | *  | 7.67E+07 | *  | 9.95E+07 | *   | 1.55E+08 | *   | 2.36E+08 | * | 4.74E+08 | * | 8.08E+08 | * | 1.24E+09 | * | 4.82E+09 | * |
| Benzo(b)fluoranthene              | 3.69E+07                              | *  | 3.73E+07 | *  | 4.83E+07 | *   | 7.50E+07 | *   | 1.15E+08 | * | 2.30E+08 | * | 3.92E+08 | * | 6.01E+08 | * | 2.34E+09 | * |
| Benzo(k)fluoranthene              | 4.53E+10                              | *  | 4.57E+10 | *  | 5.92E+10 | *   | 9.19E+10 | *   | 1.41E+11 | * | 2.82E+11 | * | 4.81E+11 | * | 7.36E+11 | * | 2.87E+12 | * |
| Chrysene                          | 1.28E+09                              | *  | 1.29E+09 | *  | 1.67E+09 | *   | 2.59E+09 | *   | 3.96E+09 | * | 7.95E+09 | * | 1.36E+10 | * | 2.08E+10 | * | 8.09E+10 | * |
| Dibenzo(a,h)anthracene            | 1.55E+10                              | *  | 1.56E+10 | *  | 2.02E+10 | *   | 3.14E+10 | *   | 4.80E+10 | * | 9.63E+10 | * | 1.64E+11 | * | 2.51E+11 | * | 9.79E+11 | * |
| Fluoranthene                      | 7.30E+09                              | *  | 7.36E+09 | *  | 9.54E+09 | *   | 1.48E+10 | *   | 2.27E+10 | * | 4.54E+10 | * | 7.75E+10 | * | 1.19E+11 | * | 4.62E+11 | * |
| Fluorene                          | 1.99E+08                              | *  | 2.01E+08 | *  | 2.60E+08 | *   | 4.05E+08 | *   | 6.19E+08 | * | 1.24E+09 | * | 2.11E+09 | * | 3.24E+09 | * | 1.26E+10 | * |
| Naphthalene                       | 5.19E+04                              | *  | 5.24E+04 | *  | 6.79E+04 | *   | 1.05E+05 | *   | 1.61E+05 | * | 3.23E+05 | * | 5.51E+05 | * | 8.44E+05 | * | 3.29E+06 | * |
| Pyrene                            | 8.69E+09                              | *  | 8.77E+09 | *  | 1.14E+10 | *   | 1.77E+10 | *   | 2.70E+10 | * | 5.41E+10 | * | 9.23E+10 | * | 1.41E+11 | * | 5.51E+11 | * |
| TPH-GRO                           | 4.03E+05                              |    | 4.07E+05 |    | 5.27E+05 |     | 8.18E+05 |     | 1.25E+06 |   | 2.51E+06 |   | 4.28E+06 |   | 6.55E+06 |   | 2.55E+07 |   |
| TPH-DRO                           | 3.92E+06                              |    | 3.95E+06 |    | 5.12E+06 |     | 7.96E+06 |     | 1.22E+07 |   | 2.44E+07 |   | 4.16E+07 |   | 6.37E+07 |   | 2.48E+08 |   |
| TPH-ORO                           | NA                                    |    | NA       |    | NA       |     | NA       |     | NA       |   | NA       |   | NA       |   | NA       |   | NA       |   |
| >C6 - C8 (Aliphatics)             | 2.67E+05                              | *  | 2.69E+05 | *  | 3.49E+05 | *   | 5.42E+05 | *   | 8.29E+05 | * | 1.66E+06 | * | 2.84E+06 | * | 4.34E+06 | * | 1.69E+07 | * |
| >C8 - C10 (Aliphatics)            | 5.50E+04                              | *  | 5.55E+04 | *  | 7.20E+04 | *   | 1.12E+05 | *   | 1.71E+05 | * | 3.43E+05 | * | 5.84E+05 | * | 8.95E+05 | * | 3.49E+06 | * |
| >C10 - C12 (Aliphatics)           | 2.73E+05                              | *  | 2.75E+05 | *  | 3.57E+05 | *   | 5.55E+05 | *   | 8.48E+05 | * | 1.70E+06 | * | 2.90E+06 | * | 4.44E+06 | * | 1.73E+07 | * |
| >C12 - C16 (Aliphatics)           | 1.24E+06                              | *  | 1.25E+06 | *  | 1.62E+06 | *   | 2.52E+06 | *   | 3.86E+06 | * | 7.74E+06 | * | 1.32E+07 | * | 2.02E+07 | * | 7.87E+07 | * |
| >C16 - C21 (Aliphatics)           | NA                                    |    | NA       |    | NA       |     | NA       |     | NA       |   | NA       |   | NA       |   | NA       |   | NA       |   |
| >C21 - C35 (Aliphatics)           | NA                                    |    | NA       |    | NA       |     | NA       |     | NA       |   | NA       |   | NA       |   | NA       |   | NA       |   |
| >C8 - C10 (Aromatics)             | 8.08E+04                              | *  | 8.15E+04 | *  | 1.06E+05 | *   | 1.64E+05 | *   | 2.51E+05 | * | 5.03E+05 | * | 8.58E+05 | * | 1.31E+06 | * | 5.12E+06 | * |
| >C10 - C12 (Aromatics)            | 4.05E+05                              | *  | 4.08E+05 | *  | 5.29E+05 | *   | 8.22E+05 | *   | 1.26E+06 | * | 2.52E+06 | * | 4.30E+06 | * | 6.59E+06 | * | 2.57E+07 | * |
| >C12 - C16 (Aromatics)            | 2.00E+06                              | *  | 2.01E+06 | *  | 2.61E+06 | *   | 4.06E+06 | *   | 6.20E+06 | * | 1.24E+07 | * | 2.12E+07 | * | 3.25E+07 | * | 1.27E+08 | * |
| >C16 - C21 (Aromatics)            | NA                                    |    | NA       |    | NA       |     | NA       |     | NA       |   | NA       |   | NA       |   | NA       |   | NA       |   |
| >C21 - C35 (Aromatics)            | NA                                    |    | NA       |    | NA       |     | NA       |     | NA       |   | NA       |   | NA       |   | NA       |   | NA       |   |
| Tertiary-amyl-methyl-ether (TAME) | NA                                    |    | NA       |    | NA       |     | NA       |     | NA       |   | NA       |   | NA       |   | NA       |   | NA       |   |
| Tertiary-butyl- alcohol (TBA)     | 1.52E+05                              | *  | 1.54E+05 | *  | 1.99E+05 | *   | 3.09E+05 | *   | 4.73E+05 | * | 9.48E+05 | * | 1.62E+06 | * | 2.48E+06 | * | 9.65E+06 | * |
| Ethyl-tert-butyl-ether (ETBE)     | 2.34E+04                              | *  | 2.36E+04 | *  | 3.06E+04 | *   | 4.75E+04 | *   | 7.27E+04 | * | 1.46E+05 | * | 2.48E+05 | * | 3.81E+05 | * | 1.48E+06 | * |
| Diisopropyl ether ( DIPE)         | 8.05E+04                              | *  | 8.12E+04 | *  | 1.05E+05 | *   | 1.63E+05 | *   | 2.50E+05 | * | 5.01E+05 | * | 8.54E+05 | * | 1.31E+06 | * | 5.10E+06 | * |
| Ethanol                           | 5.84E+06                              | *  | 5.89E+06 | *  | 7.64E+06 | *   | 1.19E+07 | *   | 1.81E+07 | * | 3.64E+07 | * | 6.20E+07 | * | 9.50E+07 | * | 3.70E+08 | * |
| Methanol                          | 1.60E+06                              | *  | 1.61E+06 | *  | 2.09E+06 | *   | 3.25E+06 | *   | 4.96E+06 | * | 9.95E+06 | * | 1.70E+07 | * | 2.60E+07 | * | 1.01E+08 | * |
| Arsenic                           | NA                                    |    | NA       |    | NA       |     | NA       |     | NA       |   | NA       |   | NA       |   | NA       |   | NA       |   |
| Barium                            | NA                                    |    | NA       |    | NA       |     | NA       |     | NA       |   | NA       |   | NA       |   | NA       |   | NA       |   |
| Cadmium                           | NA                                    |    | NA       |    | NA       |     | NA       |     | NA       |   | NA       |   | NA       |   | NA       |   | NA       |   |
| Chromium III                      | NA                                    |    | NA       |    | NA       |     | NA       |     | NA       |   | NA       |   | NA       |   | NA       |   | NA       |   |
| Chromium VI                       | NA                                    |    | NA       |    | NA       |     | NA       |     | NA       |   | NA       |   | NA       |   | NA       |   | NA       |   |
| Lead                              | NA                                    |    | NA       |    | NA       |     | NA       |     | NA       |   | NA       |   | NA       |   | NA       |   | NA       |   |
| Selenium                          | NA                                    |    | NA       |    | NA       |     | NA       |     | NA       |   | NA       |   | NA       |   | NA       |   | NA       |   |

Notes:

NA : Not Available

Target levels are based on distance to groundwater >50 ft for which default vadose zone DAF is 4.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-11(a)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 2 for Non-Resident**  
**Distance to Groundwater <20 ft**

| Chemical                           | Distance to On/Off-Site Building (ft) |            |            |            |            |            |            |            |            |   |   |   |   |   |
|------------------------------------|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|---|---|---|---|---|
|                                    | 0                                     | 25         | 50         | 75         | 100        | 150        | 200        | 250        | 500        |   |   |   |   |   |
| Benzene                            | 7.12E+01                              | * 7.18E+01 | * 9.31E+01 | * 1.45E+02 | * 2.21E+02 | * 4.43E+02 | * 7.56E+02 | * 1.16E+03 | * 4.51E+03 | * | * | * | * | * |
| Toluene                            | 1.78E+04                              | * 1.80E+04 | * 2.33E+04 | * 3.62E+04 | * 5.54E+04 | * 1.11E+05 | * 1.89E+05 | * 2.90E+05 | * 1.13E+06 | * | * | * | * | * |
| Ethylbenzene                       | 8.18E+04                              | * 8.26E+04 | * 1.07E+05 | * 1.66E+05 | * 2.54E+05 | * 5.10E+05 | * 8.69E+05 | * 1.33E+06 | * 5.19E+06 | * | * | * | * | * |
| Xylenes (mixed)                    | 7.29E+04                              | * 7.35E+04 | * 9.53E+04 | * 1.48E+05 | * 2.26E+05 | * 4.54E+05 | * 7.74E+05 | * 1.19E+06 | * 4.62E+06 | * | * | * | * | * |
| Ethylene Dibromide (EDB)           | 6.79E+01                              | 6.85E+01   | 8.89E+01   | 1.38E+02   | 2.11E+02   | 4.23E+02   | 7.21E+02   | 1.11E+03   | 4.30E+03   | * | * | * | * | * |
| Ethylene Dichloride (EDC)          | 4.76E+01                              | 4.80E+01   | 6.23E+01   | 9.67E+01   | 1.48E+02   | 2.96E+02   | 5.05E+02   | 7.74E+02   | 3.02E+03   | * | * | * | * | * |
| Methyl-tert-butyl-ether(MTBE)      | 2.11E+04                              | * 2.13E+04 | * 2.76E+04 | * 4.28E+04 | * 6.54E+04 | * 1.31E+05 | * 2.24E+05 | * 3.43E+05 | * 1.34E+06 | * | * | * | * | * |
| Acenaphthene                       | 2.58E+07                              | * 2.60E+07 | * 3.37E+07 | * 5.23E+07 | * 8.00E+07 | * 1.60E+08 | * 2.73E+08 | * 4.19E+08 | * 1.63E+09 | * | * | * | * | * |
| Anthracene                         | 1.52E+08                              | * 1.53E+08 | * 1.98E+08 | * 3.08E+08 | * 4.71E+08 | * 9.44E+08 | * 1.61E+09 | * 2.46E+09 | * 9.60E+09 | * | * | * | * | * |
| Benzo(a)anthracene                 | 6.54E+07                              | * 6.60E+07 | * 8.56E+07 | * 1.33E+08 | * 2.03E+08 | * 4.07E+08 | * 6.95E+08 | * 1.06E+09 | * 4.15E+09 | * | * | * | * | * |
| Benzo(a)pyrene                     | 1.94E+07                              | * 1.96E+07 | * 2.54E+07 | * 3.94E+07 | * 6.03E+07 | * 1.21E+08 | * 2.06E+08 | * 3.16E+08 | * 1.23E+09 | * | * | * | * | * |
| Benzo(b)fluoranthene               | 1.74E+07                              | * 1.75E+07 | * 2.27E+07 | * 3.53E+07 | * 5.39E+07 | * 1.08E+08 | * 1.84E+08 | * 2.82E+08 | * 1.10E+09 | * | * | * | * | * |
| Benzo(k)fluoranthene               | 9.20E+09                              | * 9.28E+09 | * 1.20E+10 | * 1.87E+10 | * 2.86E+10 | * 5.73E+10 | * 9.77E+10 | * 1.50E+11 | * 5.83E+11 | * | * | * | * | * |
| Chrysene                           | 5.99E+08                              | * 6.04E+08 | * 7.83E+08 | * 1.22E+09 | * 1.86E+09 | * 3.73E+09 | * 6.36E+09 | * 9.74E+09 | * 3.79E+10 | * | * | * | * | * |
| Dibenzo(a,h)anthracene             | 4.96E+08                              | * 5.01E+08 | * 6.49E+08 | * 1.01E+09 | * 1.54E+09 | * 3.09E+09 | * 5.27E+09 | * 8.07E+09 | * 3.14E+10 | * | * | * | * | * |
| Fluoranthene                       | 3.26E+09                              | * 3.29E+09 | * 4.27E+09 | * 6.63E+09 | * 1.01E+10 | * 2.03E+10 | * 3.46E+10 | * 5.31E+10 | * 2.07E+11 | * | * | * | * | * |
| Fluorene                           | 9.32E+07                              | * 9.40E+07 | * 1.22E+08 | * 1.89E+08 | * 2.89E+08 | * 5.80E+08 | * 9.89E+08 | * 1.52E+09 | * 5.90E+09 | * | * | * | * | * |
| Naphthalene                        | 2.44E+04                              | * 2.46E+04 | * 3.19E+04 | * 4.96E+04 | * 7.58E+04 | * 1.52E+05 | * 2.59E+05 | * 3.97E+05 | * 1.55E+06 | * | * | * | * | * |
| Pyrene                             | 3.70E+09                              | * 3.73E+09 | * 4.84E+09 | * 7.51E+09 | * 1.15E+10 | * 2.30E+10 | * 3.93E+10 | * 6.02E+10 | * 2.34E+11 | * | * | * | * | * |
| TPH-GRO                            | 1.64E+05                              | 1.65E+05   | 2.14E+05   | 3.32E+05   | 5.08E+05   | 1.02E+06   | 1.74E+06   | 2.66E+06   | 1.04E+07   |   |   |   |   |   |
| TPH-DRO                            | 1.71E+06                              | 1.73E+06   | 2.24E+06   | 3.48E+06   | 5.32E+06   | 1.07E+07   | 1.82E+07   | 2.78E+07   | 1.08E+08   |   |   |   |   |   |
| TPH-ORO                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C6 - C8 (Aliphatics)              | 1.07E+05                              | * 1.08E+05 | * 1.40E+05 | * 2.17E+05 | * 3.31E+05 | * 6.65E+05 | * 1.13E+06 | * 1.74E+06 | * 6.76E+06 | * | * | * | * | * |
| >C8 - C10 (Aliphatics)             | 2.24E+04                              | * 2.26E+04 | * 2.93E+04 | * 4.56E+04 | * 6.97E+04 | * 1.40E+05 | * 2.38E+05 | * 3.65E+05 | * 1.42E+06 | * | * | * | * | * |
| >C10 - C12 (Aliphatics)            | 1.12E+05                              | * 1.13E+05 | * 1.46E+05 | * 2.28E+05 | * 3.48E+05 | * 6.98E+05 | * 1.19E+06 | * 1.82E+06 | * 7.10E+06 | * | * | * | * | * |
| >C12 - C16 (Aliphatics)            | 5.10E+05                              | * 5.15E+05 | * 6.67E+05 | * 1.04E+06 | * 1.58E+06 | * 3.18E+06 | * 5.42E+06 | * 8.30E+06 | * 3.23E+07 | * | * | * | * | * |
| >C16 - C21 (Aliphatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aliphatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C8 - C10 (Aromatics)              | 3.44E+04                              | * 3.47E+04 | * 4.50E+04 | * 6.99E+04 | * 1.07E+05 | * 2.14E+05 | * 3.65E+05 | * 5.59E+05 | * 2.18E+06 | * | * | * | * | * |
| >C10 - C12 (Aromatics)             | 1.79E+05                              | * 1.80E+05 | * 2.34E+05 | * 3.63E+05 | * 5.55E+05 | * 1.11E+06 | * 1.90E+06 | * 2.91E+06 | * 1.13E+07 | * | * | * | * | * |
| >C12 - C16 (Aromatics)             | 9.11E+05                              | * 9.19E+05 | * 1.19E+06 | * 1.85E+06 | * 2.83E+06 | * 5.67E+06 | * 9.67E+06 | * 1.48E+07 | * 5.77E+07 | * | * | * | * | * |
| >C16 - C21 (Aromatics)             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aromatics)             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-amyyl-methyl-ether (TAME) | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-butyl- alcohol (TBA)      | 1.26E+05                              | * 1.27E+05 | * 1.65E+05 | * 2.56E+05 | * 3.91E+05 | * 7.85E+05 | * 1.34E+06 | * 2.05E+06 | * 7.98E+06 | * | * | * | * | * |
| Ethyl-tert-butyl-ether (ETBE)      | 1.25E+04                              | * 1.26E+04 | * 1.63E+04 | * 2.54E+04 | * 3.88E+04 | * 7.78E+04 | * 1.33E+05 | * 2.03E+05 | * 7.91E+05 | * | * | * | * | * |
| Diisopropyl ether ( DIPE)          | 3.95E+04                              | * 3.99E+04 | * 5.17E+04 | * 8.02E+04 | * 1.23E+05 | * 2.46E+05 | * 4.19E+05 | * 6.43E+05 | * 2.50E+06 | * | * | * | * | * |
| Ethanol                            | 5.14E+06                              | * 5.18E+06 | * 6.72E+06 | * 1.04E+07 | * 1.60E+07 | * 3.20E+07 | * 5.45E+07 | * 8.35E+07 | * 3.25E+08 | * | * | * | * | * |
| Methanol                           | 1.06E+06                              | * 1.07E+06 | * 1.39E+06 | * 2.16E+06 | * 3.30E+06 | * 6.61E+06 | * 1.13E+07 | * 1.73E+07 | * 6.72E+07 | * | * | * | * | * |
| Arsenic                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Barium                             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Cadmium                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium III                       | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium VI                        | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Lead                               | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Selenium                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |

Notes:

NA : Not Available

Target levels are based on distance to groundwater < 20 ft for which default vadose zone DAF is 1.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-11(b)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 2 for Non-Residen**  
**Distance to Groundwater between 20 and 50 ft**

| Chemical                          | Distance to On/Off-Site Building (ft) |            |            |            |            |            |            |            |            |   |   |   |   |   |
|-----------------------------------|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|---|---|---|---|---|
|                                   | 0                                     | 25         | 50         | 75         | 100        | 150        | 200        | 250        | 500        |   |   |   |   |   |
| Benzene                           | 1.42E+02                              | * 1.44E+02 | * 1.86E+02 | * 2.89E+02 | * 4.42E+02 | * 8.87E+02 | * 1.51E+03 | * 2.32E+03 | * 9.02E+03 | * | * | * | * | * |
| Toluene                           | 3.57E+04                              | * 3.60E+04 | * 4.66E+04 | * 7.25E+04 | * 1.11E+05 | * 2.22E+05 | * 3.79E+05 | * 5.80E+05 | * 2.26E+06 | * | * | * | * | * |
| Ethylbenzene                      | 1.64E+05                              | * 1.65E+05 | * 2.14E+05 | * 3.32E+05 | * 5.08E+05 | * 1.02E+06 | * 1.74E+06 | * 2.66E+06 | * 1.04E+07 | * | * | * | * | * |
| Xylenes (mixed)                   | 1.46E+05                              | * 1.47E+05 | * 1.91E+05 | * 2.96E+05 | * 4.53E+05 | * 9.08E+05 | * 1.55E+06 | * 2.37E+06 | * 9.24E+06 | * | * | * | * | * |
| Ethylene Dibromide (EDB)          | 1.36E+02                              | 1.37E+02   | 1.78E+02   | 2.76E+02   | 4.22E+02   | 8.46E+02   | 1.44E+03   | 2.21E+03   | * 8.61E+03 | * | * | * | * | * |
| Ethylene Dichloride (EDC)         | 9.52E+01                              | 9.61E+01   | 1.25E+02   | 1.93E+02   | 2.96E+02   | 5.93E+02   | 1.01E+03   | 1.55E+03   | * 6.03E+03 | * | * | * | * | * |
| Methyl-tert-butyl-ether(MTBE)     | 4.21E+04                              | * 4.25E+04 | * 5.51E+04 | * 8.56E+04 | * 1.31E+05 | * 2.62E+05 | * 4.47E+05 | * 6.85E+05 | * 2.67E+06 | * | * | * | * | * |
| Acenaphthene                      | 5.15E+07                              | * 5.20E+07 | * 6.74E+07 | * 1.05E+08 | * 1.60E+08 | * 3.21E+08 | * 5.47E+08 | * 8.38E+08 | * 3.26E+09 | * | * | * | * | * |
| Anthracene                        | 3.03E+08                              | * 3.06E+08 | * 3.96E+08 | * 6.16E+08 | * 9.41E+08 | * 1.89E+09 | * 3.22E+09 | * 4.93E+09 | * 1.92E+10 | * | * | * | * | * |
| Benzo(a)anthracene                | 1.31E+08                              | * 1.32E+08 | * 1.71E+08 | * 2.66E+08 | * 4.06E+08 | * 8.15E+08 | * 1.39E+09 | * 2.13E+09 | * 8.29E+09 | * | * | * | * | * |
| Benzo(a)pyrene                    | 3.88E+07                              | * 3.92E+07 | * 5.08E+07 | * 7.89E+07 | * 1.21E+08 | * 2.42E+08 | * 4.12E+08 | * 6.32E+08 | * 2.46E+09 | * | * | * | * | * |
| Benzo(b)fluoranthene              | 3.47E+07                              | * 3.50E+07 | * 4.54E+07 | * 7.05E+07 | * 1.08E+08 | * 2.16E+08 | * 3.69E+08 | * 5.65E+08 | * 2.20E+09 | * | * | * | * | * |
| Benzo(k)fluoranthene              | 1.84E+10                              | * 1.86E+10 | * 2.41E+10 | * 3.74E+10 | * 5.71E+10 | * 1.15E+11 | * 1.95E+11 | * 2.99E+11 | * 1.17E+12 | * | * | * | * | * |
| Chrysene                          | 1.20E+09                              | * 1.21E+09 | * 1.57E+09 | * 2.43E+09 | * 3.72E+09 | * 7.46E+09 | * 1.27E+10 | * 1.95E+10 | * 7.59E+10 | * | * | * | * | * |
| Dibenzo(a,h)anthracene            | 9.93E+08                              | * 1.00E+09 | * 1.30E+09 | * 2.02E+09 | * 3.08E+09 | * 6.18E+09 | * 1.05E+10 | * 1.61E+10 | * 6.29E+10 | * | * | * | * | * |
| Fluoranthene                      | 6.53E+09                              | * 6.58E+09 | * 8.53E+09 | * 1.33E+10 | * 2.03E+10 | * 4.06E+10 | * 6.93E+10 | * 1.06E+11 | * 4.13E+11 | * | * | * | * | * |
| Fluorene                          | 1.86E+08                              | * 1.88E+08 | * 2.44E+08 | * 3.79E+08 | * 5.79E+08 | * 1.16E+09 | * 1.98E+09 | * 3.03E+09 | * 1.18E+10 | * | * | * | * | * |
| Naphthalene                       | 4.88E+04                              | * 4.92E+04 | * 6.38E+04 | * 9.91E+04 | * 1.52E+05 | * 3.04E+05 | * 5.18E+05 | * 7.94E+05 | * 3.09E+06 | * | * | * | * | * |
| Pyrene                            | 7.40E+09                              | * 7.47E+09 | * 9.68E+09 | * 1.50E+10 | * 2.30E+10 | * 4.61E+10 | * 7.86E+10 | * 1.20E+11 | * 4.69E+11 | * | * | * | * | * |
| TPH-GRO                           | 3.27E+05                              | 3.30E+05   | 4.28E+05   | 6.64E+05   | 1.02E+06   | 2.04E+06   | 3.47E+06   | 5.32E+06   | 2.07E+07   |   |   |   |   |   |
| TPH-DRO                           | 3.42E+06                              | 3.45E+06   | 4.48E+06   | 6.95E+06   | 1.06E+07   | 2.13E+07   | 3.63E+07   | 5.57E+07   | 2.17E+08   |   |   |   |   |   |
| TPH-ORO                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C6 - C8 (Aliphatics)             | 2.13E+05                              | * 2.15E+05 | * 2.79E+05 | * 4.34E+05 | * 6.63E+05 | * 1.33E+06 | * 2.27E+06 | * 3.47E+06 | * 1.35E+07 | * | * | * | * | * |
| >C8 - C10 (Aliphatics)            | 4.49E+04                              | * 4.53E+04 | * 5.87E+04 | * 9.12E+04 | * 1.39E+05 | * 2.79E+05 | * 4.76E+05 | * 7.30E+05 | * 2.84E+06 | * | * | * | * | * |
| >C10 - C12 (Aliphatics)           | 2.24E+05                              | * 2.26E+05 | * 2.93E+05 | * 4.55E+05 | * 6.96E+05 | * 1.40E+06 | * 2.38E+06 | * 3.64E+06 | * 1.42E+07 | * | * | * | * | * |
| >C12 - C16 (Aliphatics)           | 1.02E+06                              | * 1.03E+06 | * 1.33E+06 | * 2.07E+06 | * 3.17E+06 | * 6.35E+06 | * 1.08E+07 | * 1.66E+07 | * 6.47E+07 | * | * | * | * | * |
| >C16 - C21 (Aliphatics)           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aliphatics)           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C8 - C10 (Aromatics)             | 6.88E+04                              | * 6.94E+04 | * 9.00E+04 | * 1.40E+05 | * 2.14E+05 | * 4.28E+05 | * 7.30E+05 | * 1.12E+06 | * 4.36E+06 | * | * | * | * | * |
| >C10 - C12 (Aromatics)            | 3.58E+05                              | * 3.61E+05 | * 4.68E+05 | * 7.27E+05 | * 1.11E+06 | * 2.23E+06 | * 3.80E+06 | * 5.82E+06 | * 2.27E+07 | * | * | * | * | * |
| >C12 - C16 (Aromatics)            | 1.82E+06                              | * 1.84E+06 | * 2.38E+06 | * 3.70E+06 | * 5.66E+06 | * 1.13E+07 | * 1.93E+07 | * 2.96E+07 | * 1.15E+08 | * | * | * | * | * |
| >C16 - C21 (Aromatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aromatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-amyI-methyl-ether (TAME) | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-butyl- alcohol (TBA)     | 2.52E+05                              | * 2.54E+05 | * 3.30E+05 | * 5.12E+05 | * 7.83E+05 | * 1.57E+06 | * 2.68E+06 | * 4.10E+06 | * 1.60E+07 | * | * | * | * | * |
| Ethyl-tert-butyl-ether ( ETBE)    | 2.50E+04                              | * 2.52E+04 | * 3.27E+04 | * 5.07E+04 | * 7.76E+04 | * 1.56E+05 | * 2.65E+05 | * 4.06E+05 | * 1.58E+06 | * | * | * | * | * |
| Diisopropyl ether ( DIPE)         | 7.90E+04                              | * 7.97E+04 | * 1.03E+05 | * 1.60E+05 | * 2.45E+05 | * 4.92E+05 | * 8.39E+05 | * 1.29E+06 | * 5.01E+06 | * | * | * | * | * |
| Ethanol                           | 1.03E+07                              | * 1.04E+07 | * 1.34E+07 | * 2.09E+07 | * 3.19E+07 | * 6.40E+07 | * 1.09E+08 | * 1.67E+08 | * 6.51E+08 | * | * | * | * | * |
| Methanol                          | 2.12E+06                              | * 2.14E+06 | * 2.78E+06 | * 4.31E+06 | * 6.59E+06 | * 1.32E+07 | * 2.25E+07 | * 3.45E+07 | * 1.34E+08 | * | * | * | * | * |
| Arsenic                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Barium                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Cadmium                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium III                      | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium VI                       | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Lead                              | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Selenium                          | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |

Notes:

NA : Not Available

Target levels are based on distance to groundwater between 20 and 50 ft for which default vadose zone DAF is 2.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-11(c)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 2 for Non-Resident**  
**Distance to Groundwater >50 ft**

| Chemical                            | Distance to On/Off-Site Building (ft) |            |            |            |            |            |            |            |            |   |   |   |   |   |
|-------------------------------------|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|---|---|---|---|---|
|                                     | 0                                     | 25         | 50         | 75         | 100        | 150        | 200        | 250        | 500        |   |   |   |   |   |
| Benzene                             | 2.85E+02                              | * 2.87E+02 | * 3.72E+02 | * 5.78E+02 | * 8.84E+02 | * 1.77E+03 | * 3.02E+03 | * 4.63E+03 | * 1.80E+04 | * | * | * | * | * |
| Toluene                             | 7.13E+04                              | * 7.20E+04 | * 9.33E+04 | * 1.45E+05 | * 2.22E+05 | * 4.44E+05 | * 7.57E+05 | * 1.16E+06 | * 4.52E+06 | * | * | * | * | * |
| Ethylbenzene                        | 3.27E+05                              | * 3.30E+05 | * 4.28E+05 | * 6.65E+05 | * 1.02E+06 | * 2.04E+06 | * 3.48E+06 | * 5.32E+06 | * 2.07E+07 | * | * | * | * | * |
| Xylenes (mixed)                     | 2.92E+05                              | * 2.94E+05 | * 3.81E+05 | * 5.92E+05 | * 9.06E+05 | * 1.82E+06 | * 3.10E+06 | * 4.74E+06 | * 1.85E+07 | * | * | * | * | * |
| Ethylene Dibromide (EDB)            | 2.72E+02                              | 2.74E+02   | 3.55E+02   | 5.52E+02   | 8.44E+02   | 1.69E+03   | 2.89E+03   | * 4.42E+03 | * 1.72E+04 | * | * | * | * | * |
| Ethylene Dichloride (EDC)           | 1.90E+02                              | 1.92E+02   | 2.49E+02   | 3.87E+02   | 5.91E+02   | 1.19E+03   | 2.02E+03   | * 3.10E+03 | * 1.21E+04 | * | * | * | * | * |
| Methyl-tert-butyl-ether(MTBE)       | 8.43E+04                              | * 8.50E+04 | * 1.10E+05 | * 1.71E+05 | * 2.62E+05 | * 5.25E+05 | * 8.95E+05 | * 1.37E+06 | * 5.34E+06 | * | * | * | * | * |
| Acenaphthene                        | 1.03E+08                              | * 1.04E+08 | * 1.35E+08 | * 2.09E+08 | * 3.20E+08 | * 6.41E+08 | * 1.09E+09 | * 1.68E+09 | * 6.53E+09 | * | * | * | * | * |
| Anthracene                          | 6.06E+08                              | * 6.12E+08 | * 7.93E+08 | * 1.23E+09 | * 1.88E+09 | * 3.77E+09 | * 6.44E+09 | * 9.86E+09 | * 3.84E+10 | * | * | * | * | * |
| Benzo(a)anthracene                  | 2.62E+08                              | * 2.64E+08 | * 3.42E+08 | * 5.32E+08 | * 8.13E+08 | * 1.63E+09 | * 2.78E+09 | * 4.26E+09 | * 1.66E+10 | * | * | * | * | * |
| Benzo(a)pyrene                      | 7.77E+07                              | * 7.83E+07 | * 1.02E+08 | * 1.58E+08 | * 2.41E+08 | * 4.84E+08 | * 8.24E+08 | * 1.26E+09 | * 4.92E+09 | * | * | * | * | * |
| Benzo(b)fluoranthene                | 6.94E+07                              | * 7.00E+07 | * 9.08E+07 | * 1.41E+08 | * 2.16E+08 | * 4.32E+08 | * 7.37E+08 | * 1.13E+09 | * 4.40E+09 | * | * | * | * | * |
| Benzo(k)fluoranthene                | 3.68E+10                              | * 3.71E+10 | * 4.81E+10 | * 7.47E+10 | * 1.14E+11 | * 2.29E+11 | * 3.91E+11 | * 5.98E+11 | * 2.33E+12 | * | * | * | * | * |
| Chrysene                            | 2.39E+09                              | * 2.42E+09 | * 3.13E+09 | * 4.86E+09 | * 7.44E+09 | * 1.49E+10 | * 2.54E+10 | * 3.90E+10 | * 1.52E+11 | * | * | * | * | * |
| Dibenzo(a,h)anthracene              | 1.99E+09                              | * 2.00E+09 | * 2.60E+09 | * 4.03E+09 | * 6.17E+09 | * 1.24E+10 | * 2.11E+10 | * 3.23E+10 | * 1.26E+11 | * | * | * | * | * |
| Fluoranthene                        | 1.31E+10                              | * 1.32E+10 | * 1.71E+10 | * 2.65E+10 | * 4.05E+10 | * 8.13E+10 | * 1.39E+11 | * 2.12E+11 | * 8.27E+11 | * | * | * | * | * |
| Fluorene                            | 3.73E+08                              | * 3.76E+08 | * 4.87E+08 | * 7.57E+08 | * 1.16E+09 | * 2.32E+09 | * 3.96E+09 | * 6.06E+09 | * 2.36E+10 | * | * | * | * | * |
| Naphthalene                         | 9.76E+04                              | * 9.84E+04 | * 1.28E+05 | * 1.98E+05 | * 3.03E+05 | * 6.08E+05 | * 1.04E+06 | * 1.59E+06 | * 6.18E+06 | * | * | * | * | * |
| Pyrene                              | 1.48E+10                              | * 1.49E+10 | * 1.94E+10 | * 3.01E+10 | * 4.60E+10 | * 9.22E+10 | * 1.57E+11 | * 2.41E+11 | * 9.38E+11 | * | * | * | * | * |
| TPH-GRO                             | 6.54E+05                              | 6.60E+05   | 8.56E+05   | 1.33E+06   | 2.03E+06   | 4.07E+06   | 6.95E+06   | 1.06E+07   | 4.15E+07   |   |   |   |   |   |
| TPH-DRO                             | 6.85E+06                              | 6.91E+06   | 8.95E+06   | 1.39E+07   | 2.13E+07   | 4.26E+07   | 7.27E+07   | 1.11E+08   | 4.34E+08   |   |   |   |   |   |
| TPH-ORO                             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C6 - C8 (Aliphatics)               | 4.27E+05                              | * 4.31E+05 | * 5.58E+05 | * 8.67E+05 | * 1.33E+06 | * 2.66E+06 | * 4.53E+06 | * 6.94E+06 | * 2.70E+07 | * | * | * | * | * |
| >C8 - C10 (Aliphatics)              | 8.98E+04                              | * 9.06E+04 | * 1.17E+05 | * 1.82E+05 | * 2.79E+05 | * 5.59E+05 | * 9.53E+05 | * 1.46E+06 | * 5.69E+06 | * | * | * | * | * |
| >C10 - C12 (Aliphatics)             | 4.48E+05                              | * 4.52E+05 | * 5.86E+05 | * 9.10E+05 | * 1.39E+06 | * 2.79E+06 | * 4.76E+06 | * 7.29E+06 | * 2.84E+07 | * | * | * | * | * |
| >C12 - C16 (Aliphatics)             | 2.04E+06                              | * 2.06E+06 | * 2.67E+06 | * 4.15E+06 | * 6.34E+06 | * 1.27E+07 | * 2.17E+07 | * 3.32E+07 | * 1.29E+08 | * | * | * | * | * |
| >C16 - C21 (Aliphatics)             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aliphatics)             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C8 - C10 (Aromatics)               | 1.38E+05                              | * 1.39E+05 | * 1.80E+05 | * 2.79E+05 | * 4.27E+05 | * 8.57E+05 | * 1.46E+06 | * 2.24E+06 | * 8.72E+06 | * | * | * | * | * |
| >C10 - C12 (Aromatics)              | 7.15E+05                              | * 7.22E+05 | * 9.36E+05 | * 1.45E+06 | * 2.22E+06 | * 4.45E+06 | * 7.59E+06 | * 1.16E+07 | * 4.53E+07 | * | * | * | * | * |
| >C12 - C16 (Aromatics)              | 3.64E+06                              | * 3.68E+06 | * 4.76E+06 | * 7.40E+06 | * 1.13E+07 | * 2.27E+07 | * 3.87E+07 | * 5.93E+07 | * 2.31E+08 | * | * | * | * | * |
| >C16 - C21 (Aromatics)              | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aromatics)              | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-amylyl-methyl-ether (TAME) | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-butyl- alcohol (TBA)       | 5.04E+05                              | * 5.08E+05 | * 6.59E+05 | * 1.02E+06 | * 1.57E+06 | * 3.14E+06 | * 5.35E+06 | * 8.20E+06 | * 3.19E+07 | * | * | * | * | * |
| Ethyl-tert-butyl-ether (ETBE)       | 5.00E+04                              | * 5.04E+04 | * 6.53E+04 | * 1.01E+05 | * 1.55E+05 | * 3.11E+05 | * 5.30E+05 | * 8.13E+05 | * 3.17E+06 | * | * | * | * | * |
| Diisopropyl ether ( DIPE)           | 1.58E+05                              | * 1.59E+05 | * 2.07E+05 | * 3.21E+05 | * 4.91E+05 | * 9.84E+05 | * 1.68E+06 | * 2.57E+06 | * 1.00E+07 | * | * | * | * | * |
| Ethanol                             | 2.05E+07                              | * 2.07E+07 | * 2.69E+07 | * 4.17E+07 | * 6.38E+07 | * 1.28E+08 | * 2.18E+08 | * 3.34E+08 | * 1.30E+09 | * | * | * | * | * |
| Methanol                            | 4.24E+06                              | * 4.28E+06 | * 5.55E+06 | * 8.62E+06 | * 1.32E+07 | * 2.64E+07 | * 4.51E+07 | * 6.90E+07 | * 2.69E+08 | * | * | * | * | * |
| Arsenic                             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Barium                              | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Cadmium                             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium III                        | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium VI                         | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Lead                                | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Selenium                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |

Notes:

NA : Not Available

Target levels are based on distance to groundwater >50 ft for which default vadose zone DAF is 4.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-12(a)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 3 for Non-Resident**  
**Distance to Groundwater <20 ft**

| Chemical                           | Distance to On/Off-Site Building (ft) |            |            |            |            |            |            |            |            |   |   |   |   |   |
|------------------------------------|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|---|---|---|---|---|
|                                    | 0                                     | 25         | 50         | 75         | 100        | 150        | 200        | 250        | 500        |   |   |   |   |   |
| Benzene                            | 1.22E+02                              | * 1.24E+02 | * 1.60E+02 | * 2.49E+02 | * 3.80E+02 | * 7.63E+02 | * 1.30E+03 | * 1.99E+03 | * 7.76E+03 | * | * | * | * | * |
| Toluene                            | 2.98E+04                              | * 3.01E+04 | * 3.90E+04 | * 6.06E+04 | * 9.27E+04 | * 1.86E+05 | * 3.17E+05 | * 4.85E+05 | * 1.89E+06 | * | * | * | * | * |
| Ethylbenzene                       | 1.36E+05                              | * 1.37E+05 | * 1.77E+05 | * 2.76E+05 | * 4.21E+05 | * 8.45E+05 | * 1.44E+06 | * 2.21E+06 | * 8.60E+06 | * | * | * | * | * |
| Xylenes (mixed)                    | 1.21E+05                              | * 1.22E+05 | * 1.58E+05 | * 2.46E+05 | * 3.76E+05 | * 7.54E+05 | * 1.28E+06 | * 1.97E+06 | * 7.67E+06 | * | * | * | * | * |
| Ethylene Dibromide (EDB)           | 1.21E+02                              | 1.22E+02   | 1.58E+02   | 2.45E+02   | 3.75E+02   | 7.51E+02   | 1.28E+03   | 1.96E+03   | 7.65E+03   | * | * | * | * | * |
| Ethylene Dichloride (EDC)          | 8.94E+01                              | 9.02E+01   | 1.17E+02   | 1.82E+02   | 2.78E+02   | 5.57E+02   | 9.49E+02   | 1.45E+03   | 5.66E+03   | * | * | * | * | * |
| Methyl-tert-butyl-ether(MTBE)      | 4.06E+04                              | * 4.10E+04 | * 5.31E+04 | * 8.25E+04 | * 1.26E+05 | * 2.53E+05 | * 4.31E+05 | * 6.61E+05 | * 2.57E+06 | * | * | * | * | * |
| Acenaphthene                       | 4.32E+07                              | * 4.36E+07 | * 5.66E+07 | * 8.78E+07 | * 1.34E+08 | * 2.69E+08 | * 4.59E+08 | * 7.03E+08 | * 2.74E+09 | * | * | * | * | * |
| Anthracene                         | 2.56E+08                              | * 2.59E+08 | * 3.35E+08 | * 5.21E+08 | * 7.96E+08 | * 1.60E+09 | * 2.72E+09 | * 4.17E+09 | * 1.62E+10 | * | * | * | * | * |
| Benzo(a)anthracene                 | 7.30E+07                              | * 7.36E+07 | * 9.54E+07 | * 1.48E+08 | * 2.27E+08 | * 4.54E+08 | * 7.75E+08 | * 1.19E+09 | * 4.62E+09 | * | * | * | * | * |
| Benzo(a)pyrene                     | 1.50E+07                              | * 1.52E+07 | * 1.96E+07 | * 3.05E+07 | * 4.67E+07 | * 9.36E+07 | * 1.60E+08 | * 2.44E+08 | * 9.52E+08 | * | * | * | * | * |
| Benzo(b)fluoranthene               | 2.88E+07                              | * 2.90E+07 | * 3.76E+07 | * 5.85E+07 | * 8.94E+07 | * 1.79E+08 | * 3.06E+08 | * 4.68E+08 | * 1.82E+09 | * | * | * | * | * |
| Benzo(k)fluoranthene               | 6.31E+09                              | * 6.36E+09 | * 8.25E+09 | * 1.28E+10 | * 1.96E+10 | * 3.93E+10 | * 6.70E+10 | * 1.03E+11 | * 4.00E+11 | * | * | * | * | * |
| Chrysene                           | 9.88E+08                              | * 9.96E+08 | * 1.29E+09 | * 2.01E+09 | * 3.07E+09 | * 6.15E+09 | * 1.05E+10 | * 1.61E+10 | * 6.26E+10 | * | * | * | * | * |
| Dibenzo(a,h)anthracene             | 2.48E+08                              | * 2.50E+08 | * 3.24E+08 | * 5.03E+08 | * 7.69E+08 | * 1.54E+09 | * 2.63E+09 | * 4.03E+09 | * 1.57E+10 | * | * | * | * | * |
| Fluoranthene                       | 4.81E+09                              | * 4.86E+09 | * 6.29E+09 | * 9.77E+09 | * 1.49E+10 | * 3.00E+10 | * 5.11E+10 | * 7.83E+10 | * 3.05E+11 | * | * | * | * | * |
| Fluorene                           | 1.52E+08                              | * 1.54E+08 | * 1.99E+08 | * 3.09E+08 | * 4.73E+08 | * 9.49E+08 | * 1.62E+09 | * 2.48E+09 | * 9.65E+09 | * | * | * | * | * |
| Naphthalene                        | 4.13E+04                              | * 4.17E+04 | * 5.41E+04 | * 8.40E+04 | * 1.28E+05 | * 2.57E+05 | * 4.39E+05 | * 6.72E+05 | * 2.62E+06 | * | * | * | * | * |
| Pyrene                             | 4.95E+09                              | * 4.99E+09 | * 6.47E+09 | * 1.01E+10 | * 1.54E+10 | * 3.08E+10 | * 5.26E+10 | * 8.05E+10 | * 3.14E+11 | * | * | * | * | * |
| TPH-GRO                            | 2.59E+05                              | 2.61E+05   | 3.38E+05   | 5.25E+05   | 8.03E+05   | 1.61E+06   | 2.74E+06   | 4.21E+06   | 1.64E+07   |   |   |   |   |   |
| TPH-DRO                            | 2.84E+06                              | 2.86E+06   | 3.71E+06   | 5.76E+06   | 8.81E+06   | 1.77E+07   | 3.01E+07   | 4.61E+07   | 1.80E+08   |   |   |   |   |   |
| TPH-ORO                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C6 - C8 (Aliphatics)              | 1.66E+05                              | * 1.68E+05 | * 2.17E+05 | * 3.37E+05 | * 5.16E+05 | * 1.03E+06 | * 1.76E+06 | * 2.70E+06 | * 1.05E+07 | * | * | * | * | * |
| >C8 - C10 (Aliphatics)             | 3.60E+04                              | * 3.63E+04 | * 4.71E+04 | * 7.31E+04 | * 1.12E+05 | * 2.24E+05 | * 3.82E+05 | * 5.85E+05 | * 2.28E+06 | * | * | * | * | * |
| >C10 - C12 (Aliphatics)            | 1.81E+05                              | * 1.83E+05 | * 2.37E+05 | * 3.68E+05 | * 5.63E+05 | * 1.13E+06 | * 1.92E+06 | * 2.95E+06 | * 1.15E+07 | * | * | * | * | * |
| >C12 - C16 (Aliphatics)            | 8.26E+05                              | * 8.34E+05 | * 1.08E+06 | * 1.68E+06 | * 2.57E+06 | * 5.15E+06 | * 8.77E+06 | * 1.34E+07 | * 5.24E+07 | * | * | * | * | * |
| >C16 - C21 (Aliphatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aliphatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C8 - C10 (Aromatics)              | 5.64E+04                              | * 5.69E+04 | * 7.38E+04 | * 1.15E+05 | * 1.75E+05 | * 3.51E+05 | * 5.99E+05 | * 9.18E+05 | * 3.58E+06 | * | * | * | * | * |
| >C10 - C12 (Aromatics)             | 2.98E+05                              | * 3.00E+05 | * 3.89E+05 | * 6.04E+05 | * 9.24E+05 | * 1.85E+06 | * 3.16E+06 | * 4.84E+06 | * 1.89E+07 | * | * | * | * | * |
| >C12 - C16 (Aromatics)             | 1.53E+06                              | * 1.54E+06 | * 2.00E+06 | * 3.11E+06 | * 4.76E+06 | * 9.53E+06 | * 1.63E+07 | * 2.49E+07 | * 9.70E+07 | * | * | * | * | * |
| >C16 - C21 (Aromatics)             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aromatics)             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-amyyl-methyl-ether (TAME) | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-butyl- alcohol (TBA)      | 2.51E+05                              | * 2.53E+05 | * 3.28E+05 | * 5.10E+05 | * 7.80E+05 | * 1.56E+06 | * 2.66E+06 | * 4.08E+06 | * 1.59E+07 | * | * | * | * | * |
| Ethyl-tert-butyl-ether (ETBE)      | 2.23E+04                              | * 2.25E+04 | * 2.91E+04 | * 4.52E+04 | * 6.91E+04 | * 1.39E+05 | * 2.36E+05 | * 3.62E+05 | * 1.41E+06 | * | * | * | * | * |
| Diisopropyl ether ( DIPE)          | 6.83E+04                              | * 6.89E+04 | * 8.93E+04 | * 1.39E+05 | * 2.12E+05 | * 4.25E+05 | * 7.25E+05 | * 1.11E+06 | * 4.33E+06 | * | * | * | * | * |
| Ethanol                            | 9.02E+06                              | * 9.10E+06 | * 1.18E+07 | * 1.83E+07 | * 2.80E+07 | * 5.62E+07 | * 9.58E+07 | * 1.47E+08 | * 5.72E+08 | * | * | * | * | * |
| Methanol                           | 1.65E+06                              | * 1.66E+06 | * 2.16E+06 | * 3.35E+06 | * 5.12E+06 | * 1.03E+07 | * 1.75E+07 | * 2.68E+07 | * 1.04E+08 | * | * | * | * | * |
| Arsenic                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Barium                             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Cadmium                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium III                       | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium VI                        | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Lead                               | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Selenium                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |

Notes:

NA : Not Available

Target levels are based on distance to groundwater < 20 ft for which default vadose zone DAF is 1.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-12(b)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 3 for Non-Residen**  
**Distance to Groundwater between 20 and 50 ft**

| Chemical                          | Distance to On/Off-Site Building (ft) |            |            |            |            |            |            |            |            |   |   |   |   |   |
|-----------------------------------|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|---|---|---|---|---|
|                                   | 0                                     | 25         | 50         | 75         | 100        | 150        | 200        | 250        | 500        |   |   |   |   |   |
| Benzene                           | 2.45E+02                              | * 2.47E+02 | * 3.20E+02 | * 4.97E+02 | * 7.61E+02 | * 1.53E+03 | * 2.60E+03 | * 3.98E+03 | * 1.55E+04 | * | * | * | * | * |
| Toluene                           | 5.97E+04                              | * 6.02E+04 | * 7.81E+04 | * 1.21E+05 | * 1.85E+05 | * 3.72E+05 | * 6.34E+05 | * 9.71E+05 | * 3.78E+06 | * | * | * | * | * |
| Ethylbenzene                      | 2.71E+05                              | * 2.74E+05 | * 3.55E+05 | * 5.51E+05 | * 8.43E+05 | * 1.69E+06 | * 2.88E+06 | * 4.41E+06 | * 1.72E+07 | * | * | * | * | * |
| Xylenes (mixed)                   | 2.42E+05                              | * 2.44E+05 | * 3.16E+05 | * 4.92E+05 | * 7.52E+05 | * 1.51E+06 | * 2.57E+06 | * 3.94E+06 | * 1.53E+07 | * | * | * | * | * |
| Ethylene Dibromide (EDB)          | 2.41E+02                              | 2.43E+02   | 3.16E+02   | 4.90E+02   | 7.49E+02   | 1.50E+03   | 2.56E+03   | 3.93E+03   | 1.53E+04   | * | * | * | * | * |
| Ethylene Dichloride (EDC)         | 1.79E+02                              | 1.80E+02   | 2.34E+02   | 3.63E+02   | 5.55E+02   | 1.11E+03   | 1.90E+03   | 2.91E+03   | 1.13E+04   | * | * | * | * | * |
| Methyl-tert-butyl-ether(MTBE)     | 8.13E+04                              | * 8.20E+04 | * 1.06E+05 | * 1.65E+05 | * 2.52E+05 | * 5.06E+05 | * 8.63E+05 | * 1.32E+06 | * 5.15E+06 | * | * | * | * | * |
| Acenaphthene                      | 8.65E+07                              | * 8.73E+07 | * 1.13E+08 | * 1.76E+08 | * 2.69E+08 | * 5.39E+08 | * 9.18E+08 | * 1.41E+09 | * 5.48E+09 | * | * | * | * | * |
| Anthracene                        | 5.13E+08                              | * 5.17E+08 | * 6.70E+08 | * 1.04E+09 | * 1.59E+09 | * 3.19E+09 | * 5.44E+09 | * 8.34E+09 | * 3.25E+10 | * | * | * | * | * |
| Benzo(a)anthracene                | 1.46E+08                              | * 1.47E+08 | * 1.91E+08 | * 2.96E+08 | * 4.53E+08 | * 9.09E+08 | * 1.55E+09 | * 2.37E+09 | * 9.25E+09 | * | * | * | * | * |
| Benzo(a)pyrene                    | 3.00E+07                              | * 3.03E+07 | * 3.93E+07 | * 6.10E+07 | * 9.33E+07 | * 1.87E+08 | * 3.19E+08 | * 4.89E+08 | * 1.90E+09 | * | * | * | * | * |
| Benzo(b)fluoranthene              | 5.76E+07                              | * 5.81E+07 | * 7.53E+07 | * 1.17E+08 | * 1.79E+08 | * 3.58E+08 | * 6.11E+08 | * 9.36E+08 | * 3.65E+09 | * | * | * | * | * |
| Benzo(k)fluoranthene              | 1.26E+10                              | * 1.27E+10 | * 1.65E+10 | * 2.56E+10 | * 3.92E+10 | * 7.85E+10 | * 1.34E+11 | * 2.05E+11 | * 7.99E+11 | * | * | * | * | * |
| Chrysene                          | 1.98E+09                              | * 1.99E+09 | * 2.58E+09 | * 4.01E+09 | * 6.14E+09 | * 1.23E+10 | * 2.10E+10 | * 3.21E+10 | * 1.25E+11 | * | * | * | * | * |
| Dibenz(a,h)anthracene             | 4.95E+08                              | * 4.99E+08 | * 6.47E+08 | * 1.01E+09 | * 1.54E+09 | * 3.08E+09 | * 5.26E+09 | * 8.05E+09 | * 3.14E+10 | * | * | * | * | * |
| Fluoranthene                      | 9.62E+09                              | * 9.71E+09 | * 1.26E+10 | * 1.95E+10 | * 2.99E+10 | * 5.99E+10 | * 1.02E+11 | * 1.57E+11 | * 6.10E+11 | * | * | * | * | * |
| Fluorene                          | 3.05E+08                              | * 3.07E+08 | * 3.99E+08 | * 6.19E+08 | * 9.46E+08 | * 1.90E+09 | * 3.24E+09 | * 4.96E+09 | * 1.93E+10 | * | * | * | * | * |
| Naphthalene                       | 8.27E+04                              | * 8.34E+04 | * 1.08E+05 | * 1.68E+05 | * 2.57E+05 | * 5.15E+05 | * 8.78E+05 | * 1.34E+06 | * 5.24E+06 | * | * | * | * | * |
| Pyrene                            | 9.90E+09                              | * 9.99E+09 | * 1.29E+10 | * 2.01E+10 | * 3.07E+10 | * 6.17E+10 | * 1.05E+11 | * 1.61E+11 | * 6.27E+11 | * | * | * | * | * |
| TPH-GRO                           | 5.17E+05                              | 5.22E+05   | 6.76E+05   | 1.05E+06   | 1.61E+06   | 3.22E+06   | 5.49E+06   | 8.41E+06   | 3.28E+07   |   |   |   |   |   |
| TPH-DRO                           | 5.67E+06                              | 5.72E+06   | 7.42E+06   | 1.15E+07   | 1.76E+07   | 3.53E+07   | 6.02E+07   | 9.23E+07   | 3.59E+08   |   |   |   |   |   |
| TPH-ORO                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C6 - C8 (Aliphatics)             | 3.32E+05                              | * 3.35E+05 | * 4.34E+05 | * 6.75E+05 | * 1.03E+06 | * 2.07E+06 | * 3.53E+06 | * 5.40E+06 | * 2.10E+07 | * | * | * | * | * |
| >C8 - C10 (Aliphatics)            | 7.20E+04                              | * 7.26E+04 | * 9.41E+04 | * 1.46E+05 | * 2.24E+05 | * 4.48E+05 | * 7.64E+05 | * 1.17E+06 | * 4.56E+06 | * | * | * | * | * |
| >C10 - C12 (Aliphatics)           | 3.62E+05                              | * 3.66E+05 | * 4.74E+05 | * 7.36E+05 | * 1.13E+06 | * 2.26E+06 | * 3.85E+06 | * 5.89E+06 | * 2.30E+07 | * | * | * | * | * |
| >C12 - C16 (Aliphatics)           | 1.65E+06                              | * 1.67E+06 | * 2.16E+06 | * 3.36E+06 | * 5.13E+06 | * 1.03E+07 | * 1.75E+07 | * 2.69E+07 | * 1.05E+08 | * | * | * | * | * |
| >C16 - C21 (Aliphatics)           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aliphatics)           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C8 - C10 (Aromatics)             | 1.13E+05                              | * 1.14E+05 | * 1.48E+05 | * 2.29E+05 | * 3.51E+05 | * 7.03E+05 | * 1.20E+06 | * 1.84E+06 | * 7.15E+06 | * | * | * | * | * |
| >C10 - C12 (Aromatics)            | 5.95E+05                              | * 6.00E+05 | * 7.78E+05 | * 1.21E+06 | * 1.85E+06 | * 3.71E+06 | * 6.32E+06 | * 9.68E+06 | * 3.77E+07 | * | * | * | * | * |
| >C12 - C16 (Aromatics)            | 3.06E+06                              | * 3.09E+06 | * 4.00E+06 | * 6.22E+06 | * 9.51E+06 | * 1.91E+07 | * 3.25E+07 | * 4.98E+07 | * 1.94E+08 | * | * | * | * | * |
| >C16 - C21 (Aromatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aromatics)            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-aryl-methyl-ether (TAME) | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-butyl- alcohol (TBA)     | 5.02E+05                              | * 5.06E+05 | * 6.57E+05 | * 1.02E+06 | * 1.56E+06 | * 3.13E+06 | * 5.33E+06 | * 8.17E+06 | * 3.18E+07 | * | * | * | * | * |
| Ethyl-tert-butyl-ether ( ETBE)    | 4.45E+04                              | * 4.49E+04 | * 5.82E+04 | * 9.04E+04 | * 1.38E+05 | * 2.77E+05 | * 4.73E+05 | * 7.24E+05 | * 2.82E+06 | * | * | * | * | * |
| Diisopropyl ether ( DIPE)         | 1.37E+05                              | * 1.38E+05 | * 1.79E+05 | * 2.77E+05 | * 4.24E+05 | * 8.51E+05 | * 1.45E+06 | * 2.22E+06 | * 8.65E+06 | * | * | * | * | * |
| Ethanol                           | 1.80E+07                              | * 1.82E+07 | * 2.36E+07 | * 3.67E+07 | * 5.60E+07 | * 1.12E+08 | * 1.92E+08 | * 2.94E+08 | * 1.14E+09 | * | * | * | * | * |
| Methanol                          | 3.30E+06                              | * 3.33E+06 | * 4.31E+06 | * 6.70E+06 | * 1.02E+07 | * 2.05E+07 | * 3.50E+07 | * 5.36E+07 | * 2.09E+08 | * | * | * | * | * |
| Arsenic                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Barium                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Cadmium                           | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium III                      | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium VI                       | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Lead                              | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Selenium                          | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |

Notes:

NA : Not Available

Target levels are based on distance to groundwater between 20 and 50 ft for which default vadose zone DAF is 2.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.

**Table 7-12(c)**  
**Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Soil Type 3 for Non-Resident**  
**Distance to Groundwater >50 ft**

| Chemical                            | Distance to On/Off-Site Building (ft) |            |            |            |            |            |            |            |            |   |   |   |   |   |
|-------------------------------------|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|---|---|---|---|---|
|                                     | 0                                     | 25         | 50         | 75         | 100        | 150        | 200        | 250        | 500        |   |   |   |   |   |
| Benzene                             | 4.90E+02                              | * 4.94E+02 | * 6.41E+02 | * 9.95E+02 | * 1.52E+03 | * 3.05E+03 | * 5.20E+03 | * 7.97E+03 | * 3.10E+04 | * | * | * | * | * |
| Toluene                             | 1.19E+05                              | * 1.20E+05 | * 1.56E+05 | * 2.42E+05 | * 3.71E+05 | * 7.43E+05 | * 1.27E+06 | * 1.94E+06 | * 7.56E+06 | * | * | * | * | * |
| Ethylbenzene                        | 5.43E+05                              | * 5.48E+05 | * 7.10E+05 | * 1.10E+06 | * 1.69E+06 | * 3.38E+06 | * 5.76E+06 | * 8.83E+06 | * 3.44E+07 | * | * | * | * | * |
| Xylenes (mixed)                     | 4.84E+05                              | * 4.88E+05 | * 6.33E+05 | * 9.83E+05 | * 1.50E+06 | * 3.01E+06 | * 5.14E+06 | * 7.87E+06 | * 3.07E+07 | * | * | * | * | * |
| Ethylene Dibromide (EDB)            | 4.83E+02                              | 4.87E+02   | 6.31E+02   | 9.80E+02   | 1.50E+03   | 3.01E+03   | 5.12E+03   | 7.85E+03   | 3.06E+04   | * | * | * | * | * |
| Ethylene Dichloride (EDC)           | 3.57E+02                              | 3.61E+02   | 4.68E+02   | 7.26E+02   | 1.11E+03   | 2.23E+03   | 3.80E+03   | 5.81E+03   | 2.27E+04   | * | * | * | * | * |
| Methyl-tert-butyl-ether(MTBE)       | 1.63E+05                              | * 1.64E+05 | * 2.13E+05 | * 3.30E+05 | * 5.05E+05 | * 1.01E+06 | * 1.73E+06 | * 2.64E+06 | * 1.03E+07 | * | * | * | * | * |
| Acenaphthene                        | 1.73E+08                              | * 1.75E+08 | * 2.26E+08 | * 3.51E+08 | * 5.37E+08 | * 1.08E+09 | * 1.84E+09 | * 2.81E+09 | * 1.10E+10 | * | * | * | * | * |
| Anthracene                          | 1.03E+09                              | * 1.03E+09 | * 1.34E+09 | * 2.08E+09 | * 3.18E+09 | * 6.38E+09 | * 1.09E+10 | * 1.67E+10 | * 6.50E+10 | * | * | * | * | * |
| Benzo(a)anthracene                  | 2.92E+08                              | * 2.94E+08 | * 3.82E+08 | * 5.93E+08 | * 9.07E+08 | * 1.82E+09 | * 3.10E+09 | * 4.75E+09 | * 1.85E+10 | * | * | * | * | * |
| Benzo(a)pyrene                      | 6.01E+07                              | * 6.06E+07 | * 7.86E+07 | * 1.22E+08 | * 1.87E+08 | * 3.74E+08 | * 6.38E+08 | * 9.77E+08 | * 3.81E+09 | * | * | * | * | * |
| Benzo(b)fluoranthene                | 1.15E+08                              | * 1.16E+08 | * 1.51E+08 | * 2.34E+08 | * 3.58E+08 | * 7.17E+08 | * 1.22E+09 | * 1.87E+09 | * 7.29E+09 | * | * | * | * | * |
| Benzo(k)fluoranthene                | 2.52E+10                              | * 2.55E+10 | * 3.30E+10 | * 5.12E+10 | * 7.83E+10 | * 1.57E+11 | * 2.68E+11 | * 4.10E+11 | * 1.60E+12 | * | * | * | * | * |
| Chrysene                            | 3.95E+09                              | * 3.99E+09 | * 5.17E+09 | * 8.02E+09 | * 1.23E+10 | * 2.46E+10 | * 4.19E+10 | * 6.43E+10 | * 2.50E+11 | * | * | * | * | * |
| Dibenzo(a,h)anthracene              | 9.90E+08                              | * 9.99E+08 | * 1.29E+09 | * 2.01E+09 | * 3.07E+09 | * 6.14E+09 | * 1.05E+10 | * 1.61E+10 | * 6.27E+10 | * | * | * | * | * |
| Fluoranthene                        | 1.92E+10                              | * 1.94E+10 | * 2.52E+10 | * 3.91E+10 | * 5.98E+10 | * 1.20E+11 | * 2.04E+11 | * 3.13E+11 | * 1.22E+12 | * | * | * | * | * |
| Fluorene                            | 6.09E+08                              | * 6.15E+08 | * 7.97E+08 | * 1.24E+09 | * 1.89E+09 | * 3.80E+09 | * 6.47E+09 | * 9.91E+09 | * 3.86E+10 | * | * | * | * | * |
| Naphthalene                         | 1.65E+05                              | * 1.67E+05 | * 2.16E+05 | * 3.36E+05 | * 5.14E+05 | * 1.03E+06 | * 1.76E+06 | * 2.69E+06 | * 1.05E+07 | * | * | * | * | * |
| Pyrene                              | 1.98E+10                              | * 2.00E+10 | * 2.59E+10 | * 4.02E+10 | * 6.15E+10 | * 1.23E+11 | * 2.10E+11 | * 3.22E+11 | * 1.25E+12 | * | * | * | * | * |
| TPH-GRO                             | 1.03E+06                              | 1.04E+06   | 1.35E+06   | 2.10E+06   | 3.21E+06   | 6.44E+06   | 1.10E+07   | 1.68E+07   | 6.55E+07   |   |   |   |   |   |
| TPH-DRO                             | 1.13E+07                              | 1.14E+07   | 1.48E+07   | 2.30E+07   | 3.52E+07   | 7.06E+07   | 1.20E+08   | 1.85E+08   | 7.19E+08   |   |   |   |   |   |
| TPH-ORO                             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C6 - C8 (Aliphatics)               | 6.64E+05                              | * 6.70E+05 | * 8.69E+05 | * 1.35E+06 | * 2.06E+06 | * 4.14E+06 | * 7.05E+06 | * 1.08E+07 | * 4.21E+07 | * | * | * | * | * |
| >C8 - C10 (Aliphatics)              | 1.44E+05                              | * 1.45E+05 | * 1.88E+05 | * 2.92E+05 | * 4.47E+05 | * 8.96E+05 | * 1.53E+06 | * 2.34E+06 | * 9.12E+06 | * | * | * | * | * |
| >C10 - C12 (Aliphatics)             | 7.25E+05                              | * 7.31E+05 | * 9.48E+05 | * 1.47E+06 | * 2.25E+06 | * 4.51E+06 | * 7.69E+06 | * 1.18E+07 | * 4.59E+07 | * | * | * | * | * |
| >C12 - C16 (Aliphatics)             | 3.31E+06                              | * 3.33E+06 | * 4.32E+06 | * 6.71E+06 | * 1.03E+07 | * 2.06E+07 | * 3.51E+07 | * 5.38E+07 | * 2.09E+08 | * | * | * | * | * |
| >C16 - C21 (Aliphatics)             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aliphatics)             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C8 - C10 (Aromatics)               | 2.26E+05                              | * 2.28E+05 | * 2.95E+05 | * 4.59E+05 | * 7.01E+05 | * 1.41E+06 | * 2.40E+06 | * 3.67E+06 | * 1.43E+07 | * | * | * | * | * |
| >C10 - C12 (Aromatics)              | 1.19E+06                              | * 1.20E+06 | * 1.56E+06 | * 2.42E+06 | * 3.70E+06 | * 7.41E+06 | * 1.26E+07 | * 1.94E+07 | * 7.54E+07 | * | * | * | * | * |
| >C12 - C16 (Aromatics)              | 6.12E+06                              | * 6.18E+06 | * 8.01E+06 | * 1.24E+07 | * 1.90E+07 | * 3.81E+07 | * 6.50E+07 | * 9.96E+07 | * 3.88E+08 | * | * | * | * | * |
| >C16 - C21 (Aromatics)              | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| >C21 - C35 (Aromatics)              | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-amylyl-methyl-ether (TAME) | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Tertiary-butyl- alcohol (TBA)       | 1.00E+06                              | * 1.01E+06 | * 1.31E+06 | * 2.04E+06 | * 3.12E+06 | * 6.25E+06 | * 1.07E+07 | * 1.63E+07 | * 6.36E+07 | * | * | * | * | * |
| Ethyl-tert-butyl-ether (ETBE)       | 8.91E+04                              | * 8.98E+04 | * 1.16E+05 | * 1.81E+05 | * 2.77E+05 | * 5.55E+05 | * 9.45E+05 | * 1.45E+06 | * 5.64E+06 | * | * | * | * | * |
| Diisopropyl ether ( DIPE)           | 2.73E+05                              | * 2.76E+05 | * 3.57E+05 | * 5.55E+05 | * 8.48E+05 | * 1.70E+06 | * 2.90E+06 | * 4.44E+06 | * 1.73E+07 | * | * | * | * | * |
| Ethanol                             | 3.61E+07                              | * 3.64E+07 | * 4.72E+07 | * 7.33E+07 | * 1.12E+08 | * 2.25E+08 | * 3.83E+08 | * 5.87E+08 | * 2.29E+09 | * | * | * | * | * |
| Methanol                            | 6.60E+06                              | * 6.65E+06 | * 8.63E+06 | * 1.34E+07 | * 2.05E+07 | * 4.11E+07 | * 7.00E+07 | * 1.07E+08 | * 4.18E+08 | * | * | * | * | * |
| Arsenic                             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Barium                              | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Cadmium                             | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium III                        | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Chromium VI                         | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Lead                                | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |
| Selenium                            | NA                                    | NA         | NA         | NA         | NA         | NA         | NA         | NA         | NA         |   |   |   |   |   |

Notes:

NA : Not Available

Target levels are based on distance to groundwater >50 ft for which default vadose zone DAF is 4.

All concentrations in mg/kg.

\* : Calculated Target Level exceeded effective saturated soil concentration (if available) or saturated soil concentration. Calculated value is shown.