TABLE G-7
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS - FUTURE
CONSTRUCTION WORKER - RME - SOUTHERN
PARCEL
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Liver Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Respiratory Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | 3.83E-02 | | 3.83E-02 | | | | | | | | | | 3.83E-02 | | 3.83E-02 | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | 1.19E-02 | | 1.19E-02 |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | 1.34E-04 | 3.80E-07 | 1.34E-04 | | | | | | | | | | | | |
| Aluminum | | | | 3.30E-02 | | 3.30E-02 | | | | | | | | | | | 8.11E-02 | 8.11E-02 | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | 4.90E-01 | | 4.90E-01 | | | | | | | | | | | | | | | |
| Arsenic | | | | | 6.88E-03 | 6.88E-03 | | | | | | | | | | | 6.55E-03 | 6.55E-03 | | | | | | |
| Barium | | | | | 8.75E-04 | 8.75E-04 | | | | | | | 1.79E-03 | | 1.79E-03 | | | 3.51E-03 | | | | | | |
| Benzene | | | | | | | 4.35E-06 | 3.79E-04 | 3.83E-04 | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | 2.77E-04 | 7.27E-07 | 2.78E-04 | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | 2.17E-04 | 5.68E-07 | 2.17E-04 | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | 1.77E-04 | 4.65E-07 | 1.78E-04 | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | 1.08E-04 | 2.84E-07 | 1.08E-04 | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | 2.08E-04 | 5.45E-07 | 2.08E-04 | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | 2.81E-03 | 5.35E-04 | 3.35E-03 | | | | | | | | 5.35E-04 | 5.35E-04 |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | 2.54E-04 | 6.66E-07 | 2.55E-04 | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | 2.64E-03 | | 2.64E-03 | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | 2.62E-05 | 6.87E-08 | 2.63E-05 | | | | | | | | | |
| Dibenzofuran | 9.26E-03 | 3.27E-05 | 9.29E-03 | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | 5.42E-04 | 1.42E-06 | 5.44E-04 | 5.42E-04 | 1.42E-06 | 5.44E-04 | 5.42E-04 | 1.42E-06 | 5.44E-04 | | | | | | | | | |
| Fluorene | | | | | | | 2.19E-04 | 5.64E-07 | 2.19E-04 | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | 1.02E-04 | 2.68E-07 | 1.02E-04 | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | 1.25E-01 | | 1.25E-01 | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | 4.34E-02 | 4.88E-01 | 5.10E-01 | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | 2.71E-05 | 2.71E-05 | | | | | | |
| Naphthalene | 1.23E-03 | | 1.23E-03 | | | | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | 5.97E-04 | 1.56E-06 | 5.98E-04 | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | 2.14E-03 | | 2.14E-03 | | | | | | | | | | | | | | | |
| Total | 1.08E-02 | 3.27E-05 | 1.08E-02 | 7.02E-02 | 7.54E-03 | 7.78E-02 | 4.53E-01 | 3.81E-04 | 4.53E-01 | 6.76E-04 | 1.77E-06 | 6.78E-04 | 7.09E-03 | 5.41E-04 | 7.63E-03 | 8.67E-02 | 5.55E-01 | 6.40E-01 | 1.27E-01 | | 1.27E-01 | 1.19E-02 | 5.35E-04 | 1.24E-02 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.

TABLE G-7
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS - FUTURE
CONSTRUCTION WORKER - RIME - SOUTHERN
PARCEL
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Vascular Effects | | | Dec. Longevity | | | Nasal Effects | | | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | 4.83E-05 | 4.83E-05 | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | 4.50E-01 | | 4.50E-01 | | | | | | | | | | | | | | | | | | |
| Arsenic | 5.70E-02 | 6.66E-03 | 6.37E-02 | | | | | | | | | | | | | 5.70E-02 | | 5.70E-02 | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | 1.98E-04 | | 1.98E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | | | | | | |
| Mercury | | | | | | | | | | 2.22E-04 | | 2.22E-04 | | | | | | | | | | | | |
| Naphthalene | | | | | | | | 7.04E-01 | 7.04E-01 | | | | | | | | | | | | | | | |
| o-Cresol (3-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | 1.02E-04 | 2.68E-07 | 1.03E-04 |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | 1.84E-02 | 4.71E-05 | 1.84E-02 | 1.84E-02 | 4.71E-05 | 1.84E-02 | | | | 1.84E-02 | 4.71E-05 | 1.84E-02 | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | 8.87E-03 | | 8.87E-03 | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 5.70E-02 | 6.66E-03 | 6.37E-02 | 4.50E-01 | | 4.50E-01 | | 7.04E-01 | 7.04E-01 | 1.86E-02 | 4.71E-05 | 1.86E-02 | 2.70E-02 | 4.71E-05 | 2.71E-02 | 5.70E-02 | | 5.70E-02 | 1.84E-02 | 4.71E-05 | 1.84E-02 | 2.80E-04 | 2.68E-07 | 2.80E-04 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neurol. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.

TABLE G-6
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS - FUTURE
CONSTRUCTION WORKER - RME - AOC 13
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Liver Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Respiratory Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing. | Inh | Total | Ing | Inh. | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | 4.16E-02 | 1.47E-04 | 4.16E-02 | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | 4.74E-03 | | 4.74E-03 | | | | | | | | | | 4.74E-03 | | 4.74E-03 | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | 2.98E-01 | | 2.98E-01 |
| Acenaphthene | | | | | | | | | | 1.88E-04 | 4.31E-07 | 1.88E-04 | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | 2.01E-03 | 5.27E-06 | 2.01E-03 | | | | | | | | | | | | |
| Aluminum | | | | 2.49E-02 | | 2.49E-02 | | | | | | | | | | | 6.33E-02 | 6.33E-02 | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | 6.13E-03 | 6.13E-03 | | | | | | | | | | | 6.13E-03 | 6.13E-03 | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 2.27E-03 | 1.86E-01 | 2.00E-01 | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | 2.60E-03 | 6.82E-08 | 2.61E-03 | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | 2.10E-03 | 5.50E-08 | 2.11E-03 | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | 1.67E-03 | 4.36E-08 | 1.67E-03 | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | 1.02E-03 | 2.67E-08 | 1.02E-03 | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | 1.74E-03 | 4.56E-08 | 1.74E-03 | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | 1.51E-03 | 2.86E-04 | 1.79E-03 | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | 2.36E-03 | 6.25E-08 | 2.36E-03 | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | 3.71E-04 | 9.72E-07 | 3.72E-04 | | | | | | | | | |
| Dibenzofuran | 1.61E-01 | 5.68E-04 | 1.62E-01 | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | 5.30E-03 | 1.38E-05 | 5.32E-03 | 5.30E-03 | 1.38E-05 | 5.32E-03 | 5.30E-03 | 1.38E-05 | 5.32E-03 | | | | | | | | | |
| Fluorene | | | | | | | 3.51E-03 | 9.21E-06 | 3.52E-03 | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | 1.02E-03 | 2.66E-08 | 1.02E-03 | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | 9.34E-02 | | 9.34E-02 | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | 2.16E-02 | 2.36E-01 | 2.58E-01 | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | 1.54E-04 | 1.54E-04 | | | | | | |
| Naphthalene | 3.33E-02 | | 3.33E-02 | | | | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | 6.98E-03 | 1.95E-06 | 7.00E-03 | | | | | | | | | | | | | 6.98E-03 | 1.95E-05 | 7.00E-03 | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | 1.80E-02 | | 1.80E-02 | | | | | | | | 7.80E-04 | 7.80E-04 | | 7.80E-04 | 7.80E-04 | | 7.80E-04 | 7.80E-04 | | | |
| Pyrene | | | | | | | | | | | | | 5.41E-03 | 1.42E-05 | 5.43E-03 | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | 1.51E-02 | | 1.51E-02 | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | 4.16E-05 | | 4.16E-05 | | 3.04E-03 | 3.04E-03 | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | 3.04E-04 | | 3.04E-04 | | | | | | | | | | | | | | 6.54E-02 | 6.54E-02 | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 2.02E-01 | 6.68E-04 | 2.02E-01 | 4.56E-02 | 6.13E-03 | 5.18E-02 | 2.62E-02 | 1.86E-01 | 2.24E-01 | 7.46E-03 | 1.86E-05 | 7.50E-03 | 6.67E-02 | 1.29E-03 | 6.80E-02 | 3.33E-02 | 3.79E-01 | 4.10E-01 | 9.34E-02 | 7.80E-04 | 9.42E-02 | 2.98E-01 | | 2.98E-01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
D/R - Dose-Response.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-6
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS - FUTURE
CONSTRUCTION WORKER - RME - AOC 13
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Vascular Effects | | | Dec. Longevity | | | Nasal Effects | | | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | 1.21E-03 | 1.21E-03 | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | 3.39E-04 | 6.87E-07 | 3.39E-04 |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | 5.24E-02 | 6.13E-03 | 5.86E-02 | | | | | | | | | | | | | 5.24E-02 | | 5.24E-02 | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | 2.83E-05 | | 2.83E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | | | | | | |
| Mercury | | | | | | | | | | 1.26E-03 | | 1.26E-03 | | | | | | | | | | | | |
| Naphthalene | | | | | | | | 1.77E+01 (a) | 1.77E+01 | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | 1.08E-03 | 2.83E-06 | 1.08E-03 |
| Phenol | | 7.90E-04 | 7.90E-04 | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | 1.38E-01 | 3.54E-04 | 1.38E-01 | 1.38E-01 | 3.54E-04 | 1.38E-01 | | | | 1.38E-01 | 3.54E-04 | 1.38E-01 | | | |
| Total Xylenes | | | | 3.04E-04 | | 3.04E-04 | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | 6.28E-03 | | 6.28E-03 | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 5.24E-02 | 6.92E-03 | 5.94E-02 | 3.04E-04 | | 3.04E-04 | | 1.77E+01 | 1.77E+01 | 1.38E-01 | 3.54E-04 | 1.40E-01 | 1.44E-01 | 3.54E-04 | 1.48E-01 | 5.24E-02 | | 5.24E-02 | 1.38E-01 | 3.54E-04 | 1.38E-01 | 1.45E-03 | 3.71E-06 | 1.45E-03 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
D/R - Dose-Response.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-9
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - AOC 1 (MW-12S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Nasal Effects | | | Immune Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | 2.62E-03 | | 2.62E-03 | | | | | | | 2.62E-03 | | 2.62E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 1.43E-01 | | 1.43E-01 | | | | | | | | 3.42E-03 | 3.42E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | 3.15E-04 | 3.15E-04 | | | | | | | | 3.15E-04 | 3.15E-04 | | | | 2.46E-02 | 3.15E-04 | 2.46E-02 | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | 1.46E-01 | 1.46E-01 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | 3.09E-05 | 5.62E-09 | 3.09E-05 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | 3.13E-05 | 5.91E-09 | 3.13E-05 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | 3.05E-05 | 5.74E-09 | 3.05E-05 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | 3.00E-03 | 1.76E-04 | 3.18E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | 8.41E-06 | 1.59E-09 | 8.42E-06 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | 1.68E-05 | 3.72E-09 | 1.68E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | 3.48E-01 | | 3.48E-01 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | 4.18E-01 | 6.16E-02 | 4.80E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | 2.03E+00 (a) | 2.03E+00 | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | 4.93E+00 (a) | 8.85E-04 | 4.93E+00 |
| Total Xylenes | | | | | | | | | | | 5.15E-02 | 5.15E-02 | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | 2.15E-03 | | 2.15E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.45E-01 | 3.15E-04 | 1.46E-01 | 2.15E-03 | 1.46E-01 | 1.50E-01 | 3.12E-03 | 1.76E-04 | 3.30E-03 | 4.21E-01 | 1.17E-01 | 5.38E-01 | 3.48E-01 | | 3.48E-01 | 2.46E-02 | 3.15E-04 | 2.46E-02 | | 2.03E+00 | 2.03E+00 | 4.93E+00 | 8.85E-04 | 4.93E+00 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
D/R - Dose-Response.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-9
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - AOC 1 (MW-12S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | |
| Arsenic | | | | 2.46E-02 | | 2.46E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | 1.76E-04 | 1.76E-04 | | | |
| Carbazole | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | 1.80E-04 | | 1.80E-04 |
| Chrysene | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | |
| Total PCBs | **4.93E+00** (a) | 8.85E-04 | **4.93E+00** | | | | **4.93E+00** (a) | 8.85E-04 | **4.93E+00** | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | |
| Vanadium | 5.84E-02 | | 5.84E-02 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | |
| Total | **4.99E+00** | 8.85E-04 | **4.99E+00** | 2.46E-02 | | 2.46E-02 | **4.93E+00** | 8.85E-04 | **4.93E+00** | | 1.76E-04 | 1.76E-04 | 1.80E-04 | | 1.80E-04 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
DR - Dose-Response.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-10
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - AOC 1 (MW-17M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Develop. Effects | | | Blood Effects | | | Liver Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Nasal Effects | | | Immune Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | 2.62E-03 | | 2.62E-03 | | | | | | | | | | 2.62E-03 | | 2.62E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 9.71E-03 | | 9.71E-03 | | | | | | | | | | | 3.42E-03 | 3.42E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | 3.15E-04 | 3.15E-04 | | | | | | | | | | | 3.15E-04 | 3.15E-04 | | | | 2.46E-02 | 3.15E-04 | 2.49E-02 | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | 1.48E-01 | 1.48E-01 | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 3.09E-05 | 5.82E-09 | 3.09E-05 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 3.13E-05 | 5.91E-09 | 3.13E-05 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 3.05E-05 | 5.74E-09 | 3.05E-05 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 3.00E-03 | 1.76E-04 | 3.18E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 8.41E-06 | 1.59E-09 | 8.42E-06 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 1.98E-05 | 3.72E-09 | 1.98E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 8.13E-02 | | 8.13E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 9.55E-02 | 6.16E-02 | 1.57E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | 2.03E+00 (a) | 2.03E+00 | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | 4.93E+00 (a) | 8.85E-04 | 4.93E+00 |
| Total Xylenes | | | | | | | | | | | | | | 5.15E-02 | 5.15E-02 | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | 2.15E-03 | | 2.15E-03 | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | 4.72E-03 | | 4.72E-03 | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.23E-02 | 3.15E-04 | 1.26E-02 | 2.15E-03 | 1.48E-01 | 1.50E-01 | 4.72E-03 | | 4.72E-03 | 3.12E-03 | 1.76E-04 | 3.30E-03 | 9.81E-02 | 1.17E-01 | 2.15E-01 | 8.13E-02 | | 8.13E-02 | 2.46E-02 | 3.15E-04 | 2.49E-02 | | 2.03E+00 | 2.03E+00 | 4.93E+00 | 8.85E-04 | 4.93E+00 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
DR - Dose-Response.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-18
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - AOC 1 (MW-17M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Hair and Skin Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | |
| 2,4-Dinitrophenol | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | |
| Arsenic | | | | 2.46E-02 | | 2.46E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | 1.76E-04 | 1.76E-04 | | | |
| Carbazole | | | | | | | | | | | | | | | |
| Cerium (ceric) | | | | | | | | | | | | | 3.21E-05 | | 3.21E-05 |
| Chrysene | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | |
| Diphenylamine | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | |
| Molybdenum | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | |
| Silver | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | |
| Tellurium | | | | | | | | | | | | | | | |
| Total PCBs | 4.93E+00 (a) | 8.85E-04 | 4.93E+00 | | | | 4.93E+00 (a) | 8.85E-04 | 4.93E+00 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | |
| Vanadium | 5.01E-03 | | 5.01E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | |
| 1,3,5-Trichlorobenzene | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | |
| Total | 4.93E+00 | 8.85E-04 | 4.93E+00 | 2.46E-02 | | 2.46E-02 | 4.93E+00 | 8.85E-04 | 4.93E+00 | | 1.76E-04 | 1.76E-04 | 3.21E-05 | | 3.21E-05 |

Notes:
COPC - Component of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
D/R - Dose-Response.
Ill - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE 6-11
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - ADC 1 (MW-17R)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Repro. Effects | | | GI Effects | | | Vascular Effects | | | Blood Effects | | | Immune Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing. | Inh. | Total | Ing. | Inh. | Total | Ing. | Inh. | Total | Ing. | Inh. | Total | Ing. | Inh. | Total | Ing. | Inh. | Total | Ing. | Inh. | Total | Ing. | Inh. | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | 2.62E-03 | | 2.62E-03 | | | | | | | 2.62E-03 | | 2.62E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 6.71E-03 | | 6.71E-03 | | | | | | | | 3.43E-03 | 3.43E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | 3.10E-04 | 3.10E-04 | | | | | | | | 3.10E-04 | 3.10E-04 | | | | 3.07E-02 | 3.10E-04 | 4.88E-02 | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | 1.44E-01 | 1.44E-01 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | 3.00E-03 | 5.23E-03 | 3.00E-03 | | | | | | | | | | | | | | | |
| Benzo(b)pyrene | | | | | | | 3.13E-03 | 5.01E-03 | 3.13E-03 | | | | | | | | | | | | | | | |
| Benzo(ghi)perylene | | | | | | | 3.00E-03 | 5.74E-03 | 3.00E-03 | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzoic Acid | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | 3.00E-03 | 1.71E-04 | 3.18E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chloride (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenzo(a,h)anthracene | | | | | | | 6.41E-04 | 1.09E-03 | 6.42E-04 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Di-n-butylphthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | 1.00E-03 | 3.72E-03 | 1.00E-03 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | 6.13E-02 | | 6.13E-02 | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Magnesium | | | | | | | | | | 3.71E-01 | 6.16E-02 | 4.33E-01 | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | 0.00E+00 (H) | 0.00E+00 | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Silver | | | | | | | | | | | | | | | | | | | | | | | | |
| Sulfate | | | | | | | | | | | | | | | | | | | | | | | | |
| Sulfide | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | 4.00E-03 (H) | 8.03E-04 | 4.80E-03 |
| Total Xylenes | | | | | | | | | | | 5.16E-02 | 5.16E-02 | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | 3.18E-02 | | 3.18E-02 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Dichlorodifluoromethane | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.20E-02 | 3.10E-04 | 1.24E-02 | 3.18E-02 | 1.44E-01 | 1.76E-01 | 3.13E-03 | 1.74E-04 | 3.30E-03 | 3.71E-01 | 1.17E-01 | 4.88E-01 | 6.13E-02 | | 6.13E-02 | 3.07E-02 | 3.10E-04 | 4.88E-02 | | 0.00E+00 | 0.00E+00 | 4.00E-03 | 8.03E-04 | 4.80E-03 |

Notes:
COPC - Compound of Potential Concern.
Dev. - Developmental.
Develop. - Developmental.
DR - Dose-Response.
H - Hydrolysis.
HQ - Hazard Quotient.
ing - Ingestion.
inh - Inhalation.
Neurol. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(H) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-11
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - AOC 1 (MW-175)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMEN

| | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | |
| Arsenic | | | | 3.97E-02 | | 3.97E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | 1.76E-04 | 1.76E-04 | | | |
| Carbazole | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | 3.21E-05 | | 3.21E-05 |
| Chrysene | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | |
| Total PCBs | 4.93E+00 (a) | 8.85E-04 | 4.93E+00 | | | | 4.93E+00 (a) | 8.85E-04 | 4.93E+00 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | |
| Vanadium | 5.01E-03 | | 5.01E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | |
| Total | 4.93E+00 | 8.85E-04 | 4.93E+00 | 3.97E-02 | | 3.97E-02 | 4.93E+00 | 8.85E-04 | 4.93E+00 | | 1.76E-04 | 1.76E-04 | 3.21E-05 | | 3.21E-05 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
D/R - Dose-Response.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-12
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-1D)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Dec. Longevity | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | 6.78E-03 | | 6.78E-03 | | | | | | | 6.78E-03 | | 6.78E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 1.04E-02 | | 1.04E-02 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | |
| Arsenic | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 2.20E-02 | 2.82E-04 | 2.23E-02 | | | | | | |
| Barium | | 4.06E-04 | 4.06E-04 | | | | 6.62E-04 | | 6.62E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | 3.53E-04 | 3.53E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | 1.95E-04 | 3.68E-08 | 1.95E-04 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | 1.44E-04 | 2.72E-08 | 1.44E-04 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | 1.33E-04 | 2.51E-08 | 1.33E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | 1.35E-04 | 2.54E-08 | 1.35E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | 1.44E-03 | 8.45E-05 | 1.53E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | 1.69E-03 | | 1.69E-03 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | 3.05E-05 | 5.76E-09 | 3.06E-05 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | 9.15E-05 | 1.72E-08 | 9.15E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | 6.18E-02 | | 6.18E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | 2.33E-01 | 7.36E-02 | 3.07E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | 2.42E-06 | 2.42E-06 | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | 6.49E-01 | 6.49E-01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | 1.04E-03 | | 1.04E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.71E-02 | 6.89E-04 | 1.78E-02 | 1.41E-01 | 3.53E-04 | 1.41E-01 | 2.83E-03 | 8.46E-05 | 2.92E-03 | 2.40E-01 | 7.75E-02 | 3.17E-01 | 6.35E-02 | | 6.35E-02 | 2.20E-02 | 2.82E-04 | 2.23E-02 | 1.40E-01 | | 1.40E-01 | | 6.49E-01 | 6.49E-01 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE 6-13
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
(EXCLUDING AOC 13 (MW-13))
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 3.30E-03 | | 3.30E-03 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(b)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(g)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(k,l,m)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | 8.49E-08 | 8.49E-08 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.38E-04 | | 1.38E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 1.61E-03 | | 1.61E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Silver | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 5.39E-02 | 9.61E-06 | 5.39E-02 | 5.39E-02 | 9.61E-06 | 5.39E-02 | | | | 5.39E-02 | 9.61E-06 | 5.39E-02 | | | | | | |
| Total Pyrene | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 4.87E-03 | 4.87E-03 | 9.68E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 5.51E-02 | 9.61E-06 | 5.51E-02 | 5.84E-02 | 4.88E-03 | 6.14E-02 | 2.30E-02 | | 2.30E-02 | 5.39E-02 | 9.61E-06 | 5.39E-02 | | 8.49E-08 | 8.49E-08 | 1.38E-04 | | 1.38E-04 |

Notes
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-13
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-19)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Dec. Longevity | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | 6.78E-03 | | 6.78E-03 | | | | | | | 6.78E-03 | | 6.78E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | 1.04E-02 | | 1.04E-02 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | |
| Arsenic | | | | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 2.08E-01 | 2.82E-04 | 2.08E-01 | | | | | | |
| Barium | | | | | 4.06E-04 | 4.06E-04 | | | | 6.62E-04 | | 6.62E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 2.27E-03 | 3.53E-04 | 2.63E-03 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 2.34E-04 | 3.68E-08 | 2.34E-04 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 2.00E-04 | 2.72E-08 | 2.00E-04 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 1.33E-04 | 2.51E-08 | 1.33E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 1.35E-04 | 2.54E-08 | 1.35E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 1.44E-03 | 8.45E-05 | 1.53E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | 1.68E-03 | | 1.68E-03 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 3.05E-05 | 5.76E-09 | 3.06E-05 | | | | | | | | | | | | | | | |
| Dibenzofuran | 5.68E-02 | | 5.68E-02 | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 9.15E-05 | 1.72E-08 | 9.15E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 4.35E-02 | | 4.35E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 8.10E-01 | 7.36E-02 | 8.93E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 2.42E-06 | 2.42E-06 | | | | | | | | | | | | |
| Naphthalene | 5.87E-02 | | 5.87E-02 | | | | | | | | | | | | | | | | | | | | | | | 6.49E-01 | 6.49E-01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | 1.04E-03 | | 1.04E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.15E-01 | | 1.15E-01 | 1.71E-02 | 6.89E-04 | 1.78E-02 | 1.43E-01 | 3.53E-04 | 1.43E-01 | 2.93E-03 | 8.46E-05 | 3.01E-03 | 8.26E-01 | 7.75E-02 | 9.04E-01 | 4.52E-02 | | 4.52E-02 | 2.08E-01 | 2.82E-04 | 2.08E-01 | 1.40E-01 | | 1.40E-01 | | 6.49E-01 | 6.49E-01 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-13
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-1S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | 1.79E-02 | | 1.79E-02 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 2.08E-01 | | 2.08E-01 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.35E-04 | | 1.35E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | 4.57E-02 | | 4.57E-02 |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 1.61E-03 | | 1.61E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 5.35E-02 | 9.61E-06 | 5.35E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 4.97E-03 | 4.97E-03 | 9.95E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 5.51E-02 | 9.61E-06 | 5.51E-02 | 5.84E-02 | 4.96E-03 | 6.34E-02 | 2.08E-01 | | 2.08E-01 | 5.35E-02 | 9.61E-06 | 5.35E-02 | 1.79E-02 | 8.45E-05 | 1.79E-02 | 4.58E-02 | | 4.58E-02 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-14
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-2D)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Dec. Longevity | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | 6.78E-03 | | 6.78E-03 | | | | | | | 6.78E-03 | | 6.78E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 1.04E-02 | | 1.04E-02 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | |
| Arsenic | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 2.20E-02 | 2.82E-04 | 2.23E-02 | | | | | | |
| Barium | | 4.06E-04 | 4.06E-04 | | | | 6.62E-04 | | 6.62E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | 3.53E-04 | 3.53E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | 1.95E-04 | 3.68E-08 | 1.95E-04 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | 1.44E-04 | 2.72E-08 | 1.44E-04 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | 1.33E-04 | 2.51E-08 | 1.33E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | 1.35E-04 | 2.54E-08 | 1.35E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | 1.44E-03 | 8.45E-05 | 1.53E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | 1.69E-03 | | 1.69E-03 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | 3.05E-05 | 5.76E-09 | 3.06E-05 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | 9.15E-05 | 1.72E-08 | 9.15E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | 4.35E-02 | | 4.35E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | 2.36E-01 | 7.36E-02 | 3.09E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | 2.42E-06 | 2.42E-06 | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | 6.49E-01 | 6.49E-01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | 1.04E-03 | | 1.04E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.71E-02 | 6.89E-04 | 1.78E-02 | 1.41E-01 | 3.53E-04 | 1.41E-01 | 2.83E-03 | 6.46E-05 | 2.92E-03 | 2.43E-01 | 7.75E-02 | 3.20E-01 | 4.52E-02 | | 4.52E-02 | 2.20E-02 | 2.82E-04 | 2.23E-02 | 1.40E-01 | | 1.40E-01 | | 6.49E-01 | 6.49E-01 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence. Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE 6-14
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-32)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 3.20E-02 | | 3.20E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.30E-04 | | 1.30E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | |
| Dibenzo(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 1.61E-03 | | 1.61E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Silver | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Tolluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 5.30E-02 | 8.61E-06 | 5.30E-02 | 5.30E-02 | 8.61E-06 | 5.30E-02 | | | | 5.30E-02 | 8.61E-06 | 5.30E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 4.97E-03 | 4.97E-03 | 9.95E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 5.51E-02 | 8.61E-06 | 5.51E-02 | 5.04E-02 | 4.98E-03 | 5.54E-02 | 3.20E-02 | | 3.20E-02 | 5.30E-02 | 8.61E-06 | 5.30E-02 | | 8.45E-05 | 8.45E-05 | 1.30E-04 | | 1.30E-04 |

Notes
Dec. - Decreased.
Develop. - Development.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-15
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-2S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Clinical Effects | | | Dec. Longevity | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | 6.78E-03 | | 6.78E-03 | | | | | | | 6.78E-03 | | 6.78E-03 | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 1.04E-02 | | 1.04E-02 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | |
| Arsenic | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 5.20E-02 | 2.82E-04 | 5.23E-02 | | | | | | | | | |
| Barium | | 4.06E-04 | 4.06E-04 | | | | 6.62E-04 | | 6.62E-04 | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | 3.53E-04 | 3.53E-04 | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | 1.95E-04 | 3.68E-08 | 1.95E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | 1.44E-04 | 2.72E-08 | 1.44E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | 1.33E-04 | 2.51E-08 | 1.33E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | 1.35E-04 | 2.54E-08 | 1.35E-04 | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | 1.44E-03 | 8.45E-05 | 1.53E-03 | | | | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | 1.69E-03 | | 1.69E-03 | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | 3.05E-05 | 5.76E-09 | 3.06E-05 | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | 9.15E-05 | 1.72E-08 | 9.15E-05 | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | 4.35E-02 | | 4.35E-02 | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | 1.14E-01 | 7.36E-02 | 1.88E-01 | | | | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | 2.42E-06 | 2.42E-06 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | 6.49E-01 | 6.49E-01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | 4.15E-02 | | 4.15E-02 | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | 2.45E-01 | | 2.45E-01 | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | 1.04E-03 | | 1.04E-03 | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.71E-02 | 8.49E-04 | 1.76E-02 | 3.86E-01 | 3.53E-04 | 3.86E-01 | 2.83E-03 | 8.46E-05 | 2.92E-03 | 1.21E-01 | 7.75E-02 | 1.99E-01 | 4.52E-02 | | 4.52E-02 | 5.20E-02 | 2.82E-04 | 5.23E-02 | 4.15E-02 | | 4.15E-02 | 1.40E-01 | | 1.40E-01 | | 6.49E-01 | 6.49E-01 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-15
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-2S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 5.20E-02 | | 5.20E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.35E-04 | | 1.35E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 1.61E-03 | | 1.61E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | 4.15E-02 | | 4.15E-02 | 4.15E-02 | | 4.15E-02 | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 5.35E-02 | 9.61E-06 | 5.35E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 4.97E-03 | 4.97E-03 | 9.95E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 5.51E-02 | 9.61E-06 | 5.51E-02 | 9.99E-02 | 4.98E-03 | 1.05E-01 | 9.35E-02 | | 9.35E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | 8.45E-05 | 8.45E-05 | 1.35E-04 | | 1.35E-04 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-16
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-3S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Dec. Longevity | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | 6.78E-03 | | 6.78E-03 | | | | | | | 6.78E-03 | | 6.78E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 1.04E-02 | | 1.04E-02 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | 1.78E-01 | | 1.78E-01 | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | |
| Arsenic | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 1.92E-01 | 2.82E-04 | 1.92E-01 | | | | | | |
| Barium | | 4.06E-04 | 4.06E-04 | | | | 6.62E-04 | | 6.62E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | 3.53E-04 | 3.53E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | 1.95E-04 | 3.58E-08 | 1.95E-04 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | 1.44E-04 | 2.72E-08 | 1.44E-04 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | 1.33E-04 | 2.51E-08 | 1.33E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | 1.35E-04 | 2.54E-08 | 1.35E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | 1.44E-03 | 8.45E-05 | 1.53E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | 1.69E-03 | | 1.69E-03 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | 3.05E-05 | 5.76E-09 | 3.06E-05 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | 9.15E-05 | 1.72E-08 | 9.15E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | 8.92E-02 | | 8.92E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | 4.78E-01 | 7.36E-02 | 5.50E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | 2.42E-06 | 2.42E-06 | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | 6.49E-01 | 6.49E-01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | 7.25E-01 | | 7.25E-01 | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | 1.04E-03 | | 1.04E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.71E-02 | 8.69E-04 | 1.78E-02 | 9.03E-01 | 3.53E-04 | 9.04E-01 | 2.83E-03 | 8.46E-05 | 2.92E-03 | 4.83E-01 | 7.75E-02 | 5.60E-01 | 9.09E-02 | | 9.09E-02 | 1.92E-01 | 2.82E-04 | 1.92E-01 | 1.40E-01 | | 1.40E-01 | | 6.49E-01 | 6.49E-01 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-16
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-35)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 3.19E-02 | | 3.19E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.35E-04 | | 1.35E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | 5.28E-02 | | 5.28E-02 |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 1.61E-03 | | 1.61E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 5.35E-02 | 9.61E-06 | 5.35E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 4.97E-03 | 4.97E-03 | 9.95E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 5.51E-02 | 9.61E-06 | 5.51E-02 | 5.84E-02 | 4.96E-03 | 6.34E-02 | 3.19E-02 | | 3.19E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | 8.45E-05 | 8.45E-05 | 5.30E-02 | | 5.30E-02 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-17
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-3D)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Dec. Longevity | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | 6.78E-03 | | 6.78E-03 | | | | | | | 6.78E-03 | | 6.78E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 1.04E-02 | | 1.04E-02 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | |
| Arsenic | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 3.16E-02 | 2.82E-04 | 3.22E-02 | | | | | | |
| Barium | | 4.06E-04 | 4.06E-04 | | | | 6.62E-04 | | 6.62E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | 3.53E-04 | 3.53E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | 1.95E-04 | 3.68E-08 | 1.95E-04 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | 1.44E-04 | 2.72E-08 | 1.44E-04 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | 1.33E-04 | 2.51E-08 | 1.33E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | 1.35E-04 | 2.54E-08 | 1.35E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | 1.44E-03 | 8.45E-05 | 1.53E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | 1.69E-03 | | 1.69E-03 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | 3.05E-05 | 5.76E-09 | 3.06E-05 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | 9.15E-05 | 1.72E-08 | 9.15E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | 4.35E-02 | | 4.35E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | 1.75E-01 | 7.36E-02 | 2.49E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | 2.42E-08 | 2.42E-08 | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | 6.49E-01 | 6.49E-01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethane | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | 1.04E-03 | | 1.04E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.71E-02 | 8.69E-04 | 1.78E-02 | 1.41E-01 | 3.53E-04 | 1.41E-01 | 2.83E-03 | 8.46E-05 | 2.92E-03 | 1.82E-01 | 7.75E-02 | 2.59E-01 | 4.52E-02 | | 4.52E-02 | 3.16E-02 | 2.82E-04 | 3.22E-02 | 1.40E-01 | | 1.40E-01 | | 6.49E-01 | 6.49E-01 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-17
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-3D)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 3.19E-02 | | 3.19E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.35E-04 | | 1.35E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 1.61E-03 | | 1.61E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 5.35E-02 | 9.61E-06 | 5.35E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 4.97E-03 | 4.97E-03 | 9.95E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 5.51E-02 | 9.61E-06 | 5.51E-02 | 5.84E-02 | 4.98E-03 | 6.34E-02 | 3.19E-02 | | 3.19E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | 8.45E-05 | 8.45E-05 | 1.35E-04 | | 1.35E-04 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-18
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-4M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Dec. Longevity | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | 6.78E-03 | | 6.78E-03 | | | | | | | 6.78E-03 | | 6.78E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 1.04E-02 | | 1.04E-02 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | |
| Arsenic | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 7.03E-02 | 2.82E-04 | 7.06E-02 | | | | | | |
| Barium | | 4.06E-04 | 4.06E-04 | | | | 6.62E-04 | | 6.62E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | 3.53E-04 | 3.53E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | 1.95E-04 | 3.68E-08 | 1.95E-04 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | 1.44E-04 | 2.72E-08 | 1.44E-04 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | 1.33E-04 | 2.51E-08 | 1.33E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | 1.35E-04 | 2.54E-08 | 1.35E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | 1.44E-03 | 8.45E-05 | 1.53E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | 1.69E-03 | | 1.69E-03 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | 3.05E-05 | 5.76E-09 | 3.06E-05 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | 9.15E-05 | 1.72E-08 | 9.15E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | 1.04E-01 | | 1.04E-01 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | 1.60E-01 | 7.36E-02 | 2.42E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | 2.42E-06 | 2.42E-06 | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | 6.49E-01 | 6.49E-01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | 1.04E-03 | | 1.04E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.71E-02 | 8.89E-04 | 1.78E-02 | 1.41E-01 | 3.53E-04 | 1.41E-01 | 2.83E-03 | 8.46E-05 | 2.92E-03 | 1.75E-01 | 7.75E-02 | 2.53E-01 | 1.06E-01 | | 1.06E-01 | 7.03E-02 | 2.82E-04 | 7.06E-02 | 1.40E-01 | | 1.40E-01 | | 6.49E-01 | 6.49E-01 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-15
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-4M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 7.03E-02 | | 7.03E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.35E-04 | | 1.35E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 1.61E-03 | | 1.61E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 5.35E-02 | 9.61E-06 | 5.35E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 4.97E-03 | 4.97E-03 | 9.95E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 5.51E-02 | 9.61E-06 | 5.51E-02 | 5.84E-02 | 4.99E-03 | 6.34E-02 | 7.03E-02 | | 7.03E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | 8.45E-05 | 8.45E-05 | 1.35E-04 | | 1.35E-04 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-19
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-4S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Dec. Longevity | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | 6.78E-03 | | 6.78E-03 | | | | | | | 6.78E-03 | | 6.78E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | 8.00E-02 | | 8.00E-02 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | |
| Arsenic | | | | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 2.44E-01 | 2.82E-04 | 2.44E-01 | | | | | | |
| Barium | | | | | 4.06E-04 | 4.06E-04 | | | | 6.62E-04 | | 6.62E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | 3.53E-04 | 3.53E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.95E-04 | 3.68E-08 | 1.95E-04 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 1.44E-04 | 2.72E-08 | 1.44E-04 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 1.33E-04 | 2.51E-08 | 1.33E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 1.35E-04 | 2.54E-08 | 1.35E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 1.44E-03 | 8.45E-05 | 1.53E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | 1.69E-03 | | 1.69E-03 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 3.05E-05 | 5.76E-09 | 3.06E-05 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 9.15E-05 | 1.72E-08 | 9.15E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 1.42E-01 | | 1.42E-01 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 2.61E-01 | 7.36E-02 | 3.35E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 2.42E-06 | 2.42E-06 | | | | | | | | | | | | |
| Naphthalene | 5.87E-04 | | 5.87E-04 | | | | | | | | | | | | | | | | | | | | | | | 6.49E-01 | 6.49E-01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | 1.04E-03 | | 1.04E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 5.87E-04 | | 5.87E-04 | 8.68E-02 | 6.86E-04 | 8.75E-02 | 1.41E-01 | 3.53E-04 | 1.41E-01 | 2.83E-03 | 8.46E-05 | 2.92E-03 | 2.68E-01 | 7.75E-02 | 3.46E-01 | 1.44E-01 | | 1.44E-01 | 2.44E-01 | 2.82E-04 | 2.44E-01 | 1.40E-01 | | 1.40E-01 | | 6.49E-01 | 6.49E-01 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-19
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-4S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 2.44E-01 | | 2.44E-01 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 2.44E-04 | | 2.44E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 1.61E-03 | | 1.61E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 5.35E-02 | 9.61E-06 | 5.35E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 4.03E-02 | 4.03E-02 | 8.06E-02 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 5.51E-02 | 9.61E-06 | 5.51E-02 | 9.38E-02 | 4.03E-02 | 1.34E-01 | 2.44E-01 | | 2.44E-01 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | 8.45E-05 | 8.45E-05 | 2.44E-04 | | 2.44E-04 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
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TABLE G-20
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-7M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Dec. Longevity | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | 6.78E-03 | | 6.78E-03 | | | | | | | 6.78E-03 | | 6.78E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 1.04E-02 | | 1.04E-02 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | |
| Arsenic | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 1.36E-01 | 2.82E-04 | 1.36E-01 | | | | | | |
| Barium | | 4.06E-04 | 4.06E-04 | | | | 6.62E-04 | | 6.62E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | 3.53E-04 | 3.53E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | 1.95E-04 | 3.88E-08 | 1.95E-04 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | 1.44E-04 | 2.72E-08 | 1.44E-04 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | 1.33E-04 | 2.51E-08 | 1.33E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | 1.35E-04 | 2.54E-08 | 1.35E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | 1.44E-03 | 8.45E-05 | 1.53E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | 1.69E-03 | | 1.69E-03 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | 3.05E-05 | 5.76E-09 | 3.06E-05 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | 9.15E-05 | 1.72E-08 | 9.15E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | 9.03E-02 | | 9.03E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | 1.80E-01 | 7.36E-02 | 2.53E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | 2.42E-06 | 2.42E-06 | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | 6.49E-01 | 6.49E-01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | 1.04E-03 | | 1.04E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.71E-02 | 6.69E-04 | 1.78E-02 | 1.41E-01 | 3.53E-04 | 1.41E-01 | 2.83E-03 | 8.46E-05 | 2.92E-03 | 1.86E-01 | 7.75E-02 | 2.64E-01 | 9.20E-02 | | 9.20E-02 | 1.36E-01 | 2.82E-04 | 1.36E-01 | 1.40E-01 | | 1.40E-01 | | 6.49E-01 | 6.49E-01 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-20
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NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-7M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 1.36E-01 | | 1.36E-01 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.35E-04 | | 1.35E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 1.61E-03 | | 1.61E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 5.35E-02 | 9.61E-06 | 5.35E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 4.97E-03 | 4.97E-03 | 9.95E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 5.51E-02 | 9.61E-06 | 5.51E-02 | 5.84E-02 | 4.98E-03 | 6.34E-02 | 1.36E-01 | | 1.36E-01 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | 8.45E-05 | 8.45E-05 | 1.35E-04 | | 1.35E-04 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-21
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-7S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Dec. Longevity | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | 6.78E-03 | | 6.78E-03 | | | | | | | 6.78E-03 | | 6.78E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 1.04E-02 | | 1.04E-02 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | |
| Arsenic | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 2.20E-02 | 2.82E-04 | 2.23E-02 | | | | | | |
| Barium | | 4.06E-04 | 4.06E-04 | | | | 6.62E-04 | | 6.62E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | 3.53E-04 | 3.53E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | 1.95E-04 | 3.68E-08 | 1.95E-04 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | 1.44E-04 | 2.72E-08 | 1.44E-04 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | 1.33E-04 | 2.51E-08 | 1.33E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | 1.35E-04 | 2.54E-08 | 1.35E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | 1.44E-03 | 8.45E-05 | 1.53E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | 1.69E-03 | | 1.69E-03 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | 3.05E-05 | 5.76E-09 | 3.06E-05 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | 9.15E-05 | 1.72E-08 | 9.15E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | 4.35E-02 | | 4.35E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | 2.04E-01 | 7.36E-02 | 2.78E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | 3.42E-06 | 3.42E-06 | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | 6.49E-01 | 6.49E-01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | 1.04E-03 | | 1.04E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.71E-02 | 8.69E-04 | 1.76E-02 | 1.41E-01 | 3.53E-04 | 1.41E-01 | 2.83E-03 | 8.46E-05 | 2.92E-03 | 2.11E-01 | 7.75E-02 | 2.88E-01 | 4.52E-02 | | 4.52E-02 | 2.20E-02 | 2.82E-04 | 2.23E-02 | 1.40E-01 | | 1.40E-01 | | 6.49E-01 | 6.49E-01 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-21
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
(EXCLUDING AOC 13 (MW-70))
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 3-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 2.20E-02 | | 2.20E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | 8.40E-05 | 8.40E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.20E-04 | | 1.20E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | 8.22E-02 | | 8.22E-02 |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 1.61E-03 | | 1.61E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Silicone | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 5.20E-02 | 0.01E-00 | 5.20E-02 | 5.20E-02 | 0.01E-00 | 5.20E-02 | | | | 5.20E-02 | 0.01E-00 | 5.20E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 4.97E-03 | 4.97E-03 | 0.00E-00 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 5.31E-02 | 0.01E-00 | 5.31E-02 | 5.04E-02 | 4.98E-03 | 5.34E-02 | 2.20E-02 | | 2.20E-02 | 5.20E-02 | 0.01E-00 | 5.20E-02 | | 8.40E-05 | 8.40E-05 | 8.20E-02 | | 8.20E-02 |

Notes:
Des. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-22
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-19S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Dec. Longevity | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | 6.78E-03 | | 6.78E-03 | | | | | | | 6.78E-03 | | 6.78E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 1.04E-02 | | 1.04E-02 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | |
| Arsenic | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 2.34E-01 | 2.82E-04 | 2.34E-01 | | | | | | |
| Barium | | 4.06E-04 | 4.06E-04 | | | | 6.62E-04 | | 6.62E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | 3.53E-04 | 3.53E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | 1.95E-04 | 3.68E-08 | 1.95E-04 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | 1.44E-04 | 2.72E-08 | 1.44E-04 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | 1.33E-04 | 2.51E-08 | 1.33E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | 1.35E-04 | 2.54E-08 | 1.35E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | 1.44E-03 | 8.45E-05 | 1.53E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | 1.69E-03 | | 1.69E-03 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | 3.05E-05 | 5.76E-09 | 3.06E-05 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | 9.15E-05 | 1.72E-08 | 9.15E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | 4.35E-02 | | 4.35E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | 1.75E-01 | 7.36E-02 | 2.49E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | 2.42E-08 | 2.42E-08 | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | 6.49E-01 | 6.49E-01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | 1.04E-03 | | 1.04E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.71E-02 | 8.89E-04 | 1.78E-02 | 1.41E-01 | 3.53E-04 | 1.41E-01 | 2.83E-03 | 8.46E-05 | 2.92E-03 | 1.82E-01 | 7.75E-02 | 2.59E-01 | 4.52E-02 | | 4.52E-02 | 2.34E-01 | 2.82E-04 | 2.34E-01 | 1.40E-01 | | 1.40E-01 | | 6.49E-01 | 6.49E-01 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-22
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-19S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 2.34E-01 | | 2.34E-01 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.35E-04 | | 1.35E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 1.61E-03 | | 1.61E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 5.35E-02 | 9.61E-06 | 5.35E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 4.97E-03 | 4.97E-03 | 9.95E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 5.51E-02 | 9.61E-06 | 5.51E-02 | 5.84E-02 | 4.98E-03 | 6.34E-02 | 2.34E-01 | | 2.34E-01 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | 8.45E-05 | 8.45E-05 | 1.35E-04 | | 1.35E-04 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-23
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-22S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Dec. Longevity | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | 6.78E-03 | | 6.78E-03 | | | | | | | 6.78E-03 | | 6.78E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 1.04E-02 | | 1.04E-02 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | |
| Arsenic | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 2.20E-02 | 2.82E-04 | 2.23E-02 | | | | | | |
| Barium | | 4.06E-04 | 4.06E-04 | | | | 6.62E-04 | | 6.62E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | 3.53E-04 | 3.53E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | 1.95E-04 | 3.68E-08 | 1.95E-04 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | 1.44E-04 | 2.72E-08 | 1.44E-04 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | 1.33E-04 | 2.51E-08 | 1.33E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | 1.35E-04 | 2.54E-08 | 1.35E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | 1.44E-03 | 8.45E-05 | 1.53E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | 1.68E-03 | | 1.68E-03 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | 3.05E-05 | 5.76E-09 | 3.06E-05 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | 9.15E-05 | 1.72E-08 | 9.15E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | 4.35E-02 | | 4.35E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | 1.51E-01 | 7.36E-02 | 2.25E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | 2.42E-06 | 2.42E-06 | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | 6.49E-01 | 6.49E-01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | 1.04E-03 | | 1.04E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.71E-02 | 8.89E-04 | 1.78E-02 | 1.41E-01 | 3.53E-04 | 1.41E-01 | 2.83E-03 | 8.46E-05 | 2.92E-03 | 1.58E-01 | 7.75E-02 | 2.35E-01 | 4.52E-02 | | 4.52E-02 | 2.20E-02 | 2.82E-04 | 2.23E-02 | 1.40E-01 | | 1.40E-01 | | 6.49E-01 | 6.49E-01 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-23
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-22S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 2.20E-02 | | 2.20E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.35E-04 | | 1.35E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 1.61E-03 | | 1.61E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 5.35E-02 | 9.61E-06 | 5.35E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 2.57E-02 | | 2.57E-02 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 5.51E-02 | 9.61E-06 | 5.51E-02 | 7.92E-02 | 9.61E-06 | 7.92E-02 | 2.20E-02 | | 2.20E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | 8.45E-05 | 8.45E-05 | 1.35E-04 | | 1.35E-04 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-24
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-23S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Dec. Longevity | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-d TCDD TEQ | 6.78E-03 | | 6.78E-03 | | | | | | | 6.78E-03 | | 6.78E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 3-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 1.04E-02 | | 1.04E-02 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | |
| Arsenic | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 2.20E-02 | 2.82E-04 | 2.23E-02 | | | | | | |
| Barium | | 4.06E-04 | 4.06E-04 | | | | 6.62E-04 | | 6.62E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | 3.53E-04 | 3.53E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | 1.95E-04 | 3.58E-08 | 1.95E-04 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | 1.79E-04 | 2.72E-08 | 1.79E-04 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | 1.33E-04 | 2.51E-08 | 1.33E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | 1.35E-04 | 2.54E-08 | 1.35E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | 1.44E-03 | 9.45E-05 | 1.53E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | 1.69E-03 | | 1.69E-03 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | 3.05E-05 | 5.76E-09 | 3.06E-05 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | 9.15E-05 | 1.72E-08 | 9.15E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | 4.35E-02 | | 4.35E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | 1.14E-01 | 7.36E-02 | 1.88E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | 2.42E-06 | 2.42E-06 | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | 6.49E-01 | 6.49E-01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | 1.04E-03 | | 1.04E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.71E-02 | 8.89E-04 | 1.78E-02 | 1.41E-01 | 3.53E-04 | 1.41E-01 | 2.87E-03 | 8.46E-05 | 2.95E-03 | 1.21E-01 | 7.75E-02 | 1.98E-01 | 4.52E-02 | | 4.52E-02 | 2.20E-02 | 2.82E-04 | 2.23E-02 | 1.40E-01 | | 1.40E-01 | | 6.49E-01 | 6.49E-01 |

Notes:
Dec. = Decreased.
Develop. = Developmental.
GI = Gastrointestinal.
Ing = Ingestion.
Inh = Inhalation.
Neuro. = Neurological.
PCBs = Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-24
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
(INCLUDING AOC 13 (SWI-238)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7,8-TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 3.36E-03 | | 3.36E-03 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(b)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(k,j,k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | 8.49E-05 | 8.49E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.36E-04 | | 1.36E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | |
| Dibenzo(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Diphenanthrene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 1.61E-03 | | 1.61E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 5.36E-02 | 8.61E-08 | 5.36E-02 | 5.36E-02 | 8.61E-08 | 5.36E-02 | | | | 5.36E-02 | 8.61E-08 | 5.36E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 4.07E-03 | 4.07E-03 | 8.05E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 5.51E-02 | 8.61E-08 | 5.51E-02 | 5.54E-02 | 4.68E-03 | 5.94E-02 | 3.36E-03 | | 3.36E-03 | 5.36E-02 | 8.61E-08 | 5.36E-02 | | 8.49E-05 | 8.49E-05 | 1.36E-04 | | 1.36E-04 |

Notes
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-25
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-26S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Dec. Longevity | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | 6.78E-03 | | 6.78E-03 | | | | | | | 6.78E-03 | | 6.78E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | 1.04E-02 | | 1.04E-02 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | |
| Arsenic | | | | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 2.20E-02 | 2.82E-04 | 2.23E-02 | | | | | | |
| Barium | | | | | 4.06E-04 | 4.06E-04 | | | | 6.62E-04 | | 6.62E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 1.25E-03 | 3.53E-04 | 1.61E-03 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.95E-04 | 3.68E-08 | 1.95E-04 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 1.44E-04 | 2.72E-08 | 1.44E-04 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 1.33E-04 | 2.51E-08 | 1.33E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 1.35E-04 | 2.54E-08 | 1.35E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 1.44E-03 | 8.45E-05 | 1.53E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | 1.68E-03 | | 1.68E-03 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 3.05E-05 | 5.76E-09 | 3.06E-05 | | | | | | | | | | | | | | | |
| Dibenzofuran | 6.27E-02 | | 6.27E-02 | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 9.15E-05 | 1.72E-08 | 9.15E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 4.35E-02 | | 4.35E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 1.14E-01 | 7.36E-02 | 1.88E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 2.42E-06 | 2.42E-06 | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | 6.49E-01 | 6.49E-01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | 1.04E-03 | | 1.04E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 6.27E-02 | | 6.27E-02 | 1.71E-02 | 6.89E-04 | 1.78E-02 | 1.42E-01 | 3.53E-04 | 1.42E-01 | 2.83E-03 | 6.46E-05 | 2.92E-03 | 1.21E-01 | 7.75E-02 | 1.99E-01 | 4.52E-02 | | 4.52E-02 | 2.20E-02 | 2.82E-04 | 2.23E-02 | 1.40E-01 | | 1.40E-01 | | 6.49E-01 | 6.49E-01 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-25
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-26S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 2.20E-02 | | 2.20E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.35E-04 | | 1.35E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 1.61E-03 | | 1.61E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 5.35E-02 | 9.61E-06 | 5.35E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 4.97E-03 | 4.97E-03 | 9.95E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | 1.73E-03 | | 1.73E-03 | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 5.51E-02 | 9.61E-06 | 5.51E-02 | 5.64E-02 | 4.98E-03 | 6.14E-02 | 2.20E-02 | | 2.20E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | 1.73E-03 | 8.45E-05 | 1.82E-03 | 1.35E-04 | | 1.35E-04 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-39
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (999-309)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

CHECK

| Chemical | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Dec. Longevity | | | Vessel. Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | 6.76E-03 | | 6.76E-03 | | | | | | | 6.76E-03 | | 6.76E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 1.04E-02 | | 1.04E-02 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | |
| Arsenic | | 3.63E-04 | 3.63E-04 | | | | | | | | 3.63E-04 | 3.63E-04 | | | | 2.32E-02 | 3.63E-04 | 2.33E-02 | | | | | | |
| Barium | | 4.09E-04 | 4.09E-04 | | | | 6.63E-04 | | 6.63E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | 3.53E-04 | 3.53E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | 1.85E-04 | 3.61E-09 | 1.85E-04 | | | | | | | | | | | | | | | |
| Benzo(b)pyrene | | | | | | | 1.44E-04 | 2.77E-09 | 1.44E-04 | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | 1.34E-04 | 2.51E-09 | 1.34E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | 1.35E-04 | 2.54E-09 | 1.35E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | 1.44E-03 | 8.40E-08 | 1.53E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | 1.68E-05 | | 1.68E-05 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | 3.95E-05 | 5.76E-09 | 3.95E-05 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | 9.18E-05 | 1.73E-09 | 9.18E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | 4.35E-03 | | 4.35E-03 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | 1.14E-01 | 7.34E-03 | 1.24E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | 2.43E-09 | 2.43E-09 | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | 6.49E-01 | 6.49E-01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | 1.84E-03 | | 1.84E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.71E-02 | 8.68E-04 | 1.76E-02 | 1.41E-01 | 3.53E-04 | 1.41E-01 | 7.53E-03 | 8.40E-08 | 7.62E-03 | 1.21E-01 | 7.76E-03 | 1.99E-01 | 4.35E-03 | | 4.35E-03 | 2.32E-02 | 3.63E-04 | 2.33E-02 | 1.40E-01 | | 1.40E-01 | | 6.49E-01 | 6.49E-01 |

Notes
Dec. - Decrement.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-35
TOXIC EXPOSURE FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING ACC 10 (SWMUS)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Skin Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | Sin Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Ethenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7,8-TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 2.30E-02 | | 2.30E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(b)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | 8.40E-03 | 8.40E-03 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.30E-04 | | 1.30E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | 3.70E-02 | | 3.70E-02 |
| Dibenzo(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Diethylphthalate | | | | | | | | | | | | | | | | | | |
| Dimethylphthalate | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isophoronene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 1.01E-03 | | 1.01E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| n-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| n-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Silver | | | | | | | | | | | | | | | | | | |
| Sulfide | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 5.30E-02 | 9.01E-03 | 6.19E-02 | 5.30E-02 | 9.01E-03 | 6.30E-02 | | | | 5.30E-02 | 9.01E-03 | 6.30E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 4.07E-03 | 4.07E-03 | 8.00E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1,4-Dichlorobenzene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Hexachlorobenzene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 5.31E-02 | 9.01E-03 | 6.21E-02 | 5.34E-02 | 4.08E-03 | 5.74E-02 | 2.30E-02 | | 2.30E-02 | 5.30E-02 | 9.01E-03 | 6.30E-02 | | 8.40E-03 | 8.40E-03 | 3.70E-02 | | 3.70E-02 |

Notes:
Dev. - Development.
Develop. - Development.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-27
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-306)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Dec. Longevity | | | Renal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | 5.76E-03 | | 5.76E-03 | | | | | | | 5.76E-03 | | 5.76E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 1.04E-02 | | 1.04E-02 | | | | | | | | 3.43E-03 | 3.43E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | |
| Arsenic | | 2.83E-04 | 2.83E-04 | | | | | | | | 2.83E-04 | 2.83E-04 | | | | 2.39E-03 | 2.62E-04 | 2.23E-03 | | | | | | |
| Barium | | 4.04E-04 | 4.04E-04 | | | | 6.63E-04 | | 6.63E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | 3.53E-04 | 3.53E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | 1.65E-04 | 3.49E-09 | 1.65E-04 | | | | | | | | | | | | | | | |
| Benzo(b)pyrene | | | | | | | 1.44E-04 | 3.73E-09 | 1.44E-04 | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | 1.38E-04 | 2.51E-09 | 1.38E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-ethylhexyl)phthalate | | | | | | | 1.39E-04 | 2.54E-09 | 1.39E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | 1.44E-03 | 6.46E-08 | 1.53E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | 1.68E-03 | | 1.68E-03 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | 3.05E-05 | 5.76E-09 | 3.05E-05 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | 9.19E-05 | 1.73E-09 | 9.19E-05 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | 4.85E-03 | | 4.85E-03 | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | 1.14E-01 | 7.39E-02 | 1.88E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | 2.43E-09 | 2.43E-09 | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | 6.49E-01 | 6.49E-01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Silver | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | 1.04E-03 | | 1.04E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.71E-02 | 6.69E-04 | 1.78E-02 | 1.41E-01 | 3.53E-04 | 1.41E-01 | 2.93E-03 | 9.46E-08 | 2.93E-03 | 1.21E-01 | 7.76E-02 | 1.99E-01 | 4.53E-03 | | 4.53E-03 | 2.39E-03 | 2.62E-04 | 2.23E-03 | 1.40E-01 | | 1.40E-01 | | 6.49E-01 | 6.49E-01 |

Notes
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-27
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS -
FUTURE ON-SITE WORKER - SOUTHERN PARCEL
EXCLUDING AOC 13 (MW-30S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | 1.29E-02 | | 1.29E-02 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 2.20E-02 | | 2.20E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.35E-04 | | 1.35E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | 3.76E-02 | | 3.76E-02 |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 1.61E-03 | | 1.61E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 5.35E-02 | 9.61E-06 | 5.35E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | 5.35E-02 | 9.61E-06 | 5.35E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 4.97E-03 | 4.97E-03 | 9.95E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | 2.79E-01 | | 2.79E-01 | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 5.51E-02 | 9.61E-06 | 5.51E-02 | 5.84E-02 | 4.98E-03 | 6.34E-02 | 2.20E-02 | | 2.20E-02 | 5.35E-02 | 9.61E-06 | 5.35E-02 | 2.92E-01 | 8.45E-05 | 2.92E-01 | 3.76E-02 | | 3.76E-02 |

Notes:
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.

TABLE G-28
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-8M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | 2.33E-07 | 2.33E-07 |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | 7.22E-03 | | 7.22E-03 | | | | | | | | 2.54E-03 | 2.54E-03 | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | 2.39E-04 | 2.39E-04 | | | | | | | | 2.39E-04 | 2.39E-04 | | | | 1.87E-02 | 2.39E-04 | 1.89E-02 | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | 1.84E-01 | 1.84E-01 | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.09E-03 | 2.05E-07 | 1.09E-03 | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 1.04E-03 | 1.85E-07 | 1.04E-03 | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 8.56E-04 | 1.61E-07 | 8.56E-04 | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 9.26E-04 | 1.75E-07 | 9.26E-04 | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 6.13E-04 | 3.59E-05 | 6.49E-04 | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 1.89E-04 | 3.56E-08 | 1.89E-04 | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 6.24E-04 | 1.18E-07 | 6.24E-04 | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 6.48E-02 | | 6.48E-02 | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 4.67E-02 | 3.01E-02 | 7.67E-02 | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 4.72E-06 | 4.72E-06 | | | | | | | | | |
| Naphthalene | 5.04E-03 | | 5.04E-03 | | | | | | | | | | | | | | | | | | | | 1.64E+01 (a) | 1.64E+01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | 9.34E-04 | 9.34E-04 | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | 6.04E-02 | 6.04E-02 | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 5.04E-03 | | 5.04E-03 | 7.22E-03 | 2.39E-04 | 7.45E-03 | | 1.84E-01 | 1.84E-01 | 5.33E-03 | 3.68E-05 | 5.37E-03 | 4.67E-02 | 9.42E-02 | 1.41E-01 | 6.48E-02 | | 6.48E-02 | 1.87E-02 | 2.39E-04 | 1.89E-02 | | 1.64E+01 | 1.64E+01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE 6-20
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-20)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Ethanol | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | 3.03E-03 | | 3.03E-03 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Acetone | | | | | | | | | | | | | | | | | | |
| Acetophenone | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 1.07E-03 | | 1.07E-03 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Beryllium | | | | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.28E-02 | | 1.28E-02 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | |
| Dibenzo(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isophorone | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Magnesium | | | | | | | | | | | | | | | | | | |
| Mercury | 3.14E-03 | | 3.14E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| n-Cresol (3-Methylphenol) | | | | | | | | | | | | | | | | | | |
| o-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Silver | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Tolueno | | | | | | | | | | | | | | | | | | |
| Total PCBs | 3.03E-01 | 6.03E-05 | 3.03E-01 | 3.03E-01 | 6.03E-05 | 3.03E-01 | | | | 3.03E-01 | 6.03E-05 | 3.03E-01 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 3.76E-03 | | 3.76E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,3,5-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 3.14E-01 | 6.03E-05 | 3.14E-01 | 3.14E-01 | 6.03E-05 | 3.14E-01 | 1.07E-03 | | 1.07E-03 | 3.03E-01 | 6.03E-05 | 3.03E-01 | 3.03E-03 | | 3.03E-03 | 1.28E-02 | | 1.28E-02 |

Notes:
COPC - Compound of Potential Concern.
Ing. - Ingestion.
Inh. - Inhalation.
Total - Hazard Index.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
[a] Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-28
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-65)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Decreased Longevity | | | Develop. Effects | | | Liver Effects | | | Blood Effects | | | Clinical Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | 2.84E-02 | | 2.84E-02 | | | | | | | | | | | | |
| 2,3,7,8-TCDD TEQ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | 1.47E+00 | | 1.47E+00 | 1.47E+00 | | 1.47E+00 | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.33E-07 | 2.33E-07 |
| Acenaphthene | | | | | | | | | | 1.59E-01 | | 1.59E-01 | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | 3.95E-02 | | 3.95E-02 | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | 7.22E-03 | | 7.22E-03 | | | | | | | | | | | | | | 3.54E-03 | 3.54E-03 | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | 2.39E-04 | 2.39E-04 | | | | | | | | | | | | | | 2.39E-04 | 2.39E-04 | | | | 1.67E-02 | 2.39E-04 | 1.69E-02 | | | |
| Barium | | | | | | | | | | | | | | | | | | | 2.17E-02 | | 2.17E-02 | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | 8.85E+00 | 1.54E-01 | 7.03E+00 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | | 1.64E-01 | 2.05E-07 | 1.64E-01 | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | | 1.03E-01 | 1.85E-07 | 1.03E-01 | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | | 8.34E-02 | 1.81E-07 | 8.34E-02 | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | 3.81E-02 | | 3.81E-02 | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | 6.20E-02 | 1.70E-07 | 6.20E-02 | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | | | 6.13E-04 | 2.59E-05 | 6.40E-04 | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | | 1.83E-02 | 2.54E-08 | 1.83E-02 | | | | | | | | | | | | |
| Dibenzofuran | 4.61E+00 | | 4.61E+00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | 6.16E-02 | | 6.16E-02 | | | | | | | 6.16E-02 | | 6.16E-02 | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | 4.31E-01 | | 4.31E-01 | 4.31E-01 | | 4.31E-01 | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | 2.81E-01 | | 2.81E-01 | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | | 3.81E-02 | 1.16E-07 | 3.81E-02 | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | | | | | 8.00E-02 | | 8.00E-02 | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | | | | 1.06E-01 | 3.81E-02 | 1.39E-01 | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | | | | | | | 4.72E-06 | 4.72E-06 | | | | | | | | | |
| Naphthalene | 6.30E+00 | | 6.30E+00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1.64E+01 | (a) | 1.64E+01 |
| o-Cresol (2-Methylphenol) | 8.20E-02 | | 8.20E-02 | | | | | | | | | | | | | | | | | | | 8.20E-02 | | 8.20E-02 | | | | | | | | | |
| p-Cresol (4-Methylphenol) | 2.35E-02 | | 2.35E-02 | | | | | | | | | | | | | | | | | | | 2.35E-02 | | 2.35E-02 | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | 4.17E-01 | | 4.17E-01 | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | 1.20E-01 | | 1.20E-01 | | 9.34E-04 | 9.34E-04 | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | 8.41E-02 | | 8.41E-02 | 8.41E-02 | | 8.41E-02 | | | | | | | | | | | | | | | | | 6.04E-02 | 6.04E-02 | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 5.12E+01 | | 5.12E+01 | 8.41E-02 | | 8.41E-02 | 7.22E-03 | 2.39E-04 | 7.46E-03 | 8.01E-01 | | 8.01E-01 | 9.04E+00 | 1.54E-01 | 9.20E+00 | 1.47E+00 | | 1.47E+00 | 1.35E+00 | 3.66E-05 | 1.35E+00 | 2.24E-01 | 9.42E-02 | 3.18E-01 | 8.00E-02 | | 8.00E-02 | 1.67E-02 | 2.39E-04 | 1.69E-02 | | 1.64E+01 | 1.64E+01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Indicated COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-28
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-6S)
NEW MAHIL BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7,8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | 5.68E+00 | | 5.68E+00 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | 2.46E-02 | | 2.46E-02 |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 1.87E-02 | | 1.87E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.25E-05 | | 1.25E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | 3.57E-01 | | 3.57E-01 |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 3.14E-03 | | 3.14E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | 1.08E-01 | | 1.08E-01 |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 3.80E-01 | 6.83E-05 | 3.80E-01 | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 3.76E-03 | | 3.76E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | 1.03E+00 | | 1.03E+00 | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 3.83E-01 | 6.83E-05 | 3.83E-01 | 3.84E-01 | 6.83E-05 | 3.84E-01 | 1.87E-02 | | 1.87E-02 | 3.80E-01 | 6.83E-05 | 3.80E-01 | 3.09E+00 | | 3.09E+00 | 3.80E-01 | | 3.80E-01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is indicated in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-30
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-9M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | 2.33E-07 | 2.33E-07 |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | 7.22E-03 | | 7.22E-03 | | | | | | | | 3.54E-03 | 3.54E-03 | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | 2.39E-04 | 2.39E-04 | | | | | | | | 2.39E-04 | 2.39E-04 | | | | 1.87E-02 | 2.39E-04 | 1.89E-02 | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 1.64E-02 | 1.84E-01 | 2.01E-01 | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.09E-03 | 2.05E-07 | 1.09E-03 | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 9.83E-04 | 1.85E-07 | 9.83E-04 | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 8.56E-04 | 1.61E-07 | 8.56E-04 | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 9.26E-04 | 1.75E-07 | 9.26E-04 | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 6.13E-04 | 3.59E-05 | 6.49E-04 | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 1.89E-04 | 3.58E-08 | 1.89E-04 | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 6.24E-04 | 1.18E-07 | 6.24E-04 | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 7.00E-02 | | 7.00E-02 | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 4.67E-02 | 3.01E-02 | 7.67E-02 | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 4.72E-06 | 4.72E-06 | | | | | | | | | |
| Naphthalene | 1.48E-04 | | 1.48E-04 | | | | | | | | | | | | | | | | | | | | 1.64E+01 (a) | 1.64E+01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | 9.34E-04 | 9.34E-04 | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | 6.04E-02 | 6.04E-02 | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.48E-04 | | 1.48E-04 | 7.22E-03 | 2.39E-04 | 7.45E-03 | 1.64E-02 | 1.84E-01 | 2.01E-01 | 5.28E-03 | 3.68E-05 | 5.32E-03 | 4.67E-02 | 9.42E-02 | 1.41E-01 | 7.00E-02 | | 7.00E-02 | 1.87E-02 | 2.39E-04 | 1.89E-02 | | 1.64E+01 | 1.64E+01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE 6-20
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-9B)
NEW MIAMI BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | 2.65E-04 | | 2.65E-04 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Acetone | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 1.87E-02 | | 1.87E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(b)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.25E-05 | | 1.25E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isophoronene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 3.14E-03 | | 3.14E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Silver | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 3.80E-01 | 6.93E-05 | 3.80E-01 | 3.80E-01 | 6.93E-05 | 3.80E-01 | | | | 3.80E-01 | 6.93E-05 | 3.80E-01 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 3.76E-03 | | 3.76E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 3.81E-01 | 6.93E-05 | 3.80E-01 | 3.84E-01 | 6.93E-05 | 3.84E-01 | 1.87E-02 | | 1.87E-02 | 3.80E-01 | 6.93E-05 | 3.80E-01 | 2.65E-04 | | 2.65E-04 | 1.25E-05 | | 1.25E-05 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-31
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-9S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Decreased Longevity | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Liver Effects | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.33E-07 | 2.33E-07 |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | 7.22E-03 | | 7.22E-03 | | | | | | | | 2.54E-03 | 2.54E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | 2.39E-04 | 2.39E-04 | | | | | | | | 2.39E-04 | 2.39E-04 | | | | 2.37E-01 | 2.39E-04 | 2.37E-01 | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | 2.69E+01 | 1.84E-01 | 2.71E+01 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | 1.29E-03 | 2.05E-07 | 1.29E-03 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | 1.12E-03 | 1.85E-07 | 1.12E-03 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | 9.55E-04 | 1.61E-07 | 9.56E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | 9.26E-04 | 1.75E-07 | 9.26E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | 6.13E-04 | 3.59E-05 | 6.49E-04 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | 1.69E-04 | 3.56E-08 | 1.69E-04 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | 4.60E-02 | | 4.60E-02 | | | | | | | | | | 4.60E-02 | | 4.60E-02 | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | 6.24E-04 | 1.18E-07 | 6.24E-04 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | 1.98E-01 | | 1.98E-01 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | 9.20E-03 | | 9.20E-03 | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | 1.45E-01 | 3.01E-02 | 1.75E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | 4.72E-06 | 4.72E-06 | | | | | | | | | | | | |
| Naphthalene | 1.37E+00 | | 1.37E+00 | | | | | | | | | | | | | | | | | | | | | | | | | | 1.64E+01 (a) | 1.64E+01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | 5.09E-03 | | 5.09E-03 | | | | | | | | | | | | | 5.09E-03 | | 5.09E-03 | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | 1.37E-02 | | 1.37E-02 | | | | | | | | | | | | | 1.37E-02 | | 1.37E-02 | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | 2.87E+00 | | 2.87E+00 | | 9.34E-04 | 9.34E-04 | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | 3.77E-01 | | 3.77E-01 | 3.77E-01 | | 3.77E-01 | | | | | | | | | | | 6.04E-02 | 6.04E-02 | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.75E+00 | | 1.75E+00 | 3.77E-01 | | 3.77E-01 | 7.22E-03 | 2.39E-04 | 7.45E-03 | 2.69E+01 | 1.84E-01 | 2.71E+01 | 2.63E+00 | 3.58E-05 | 2.63E+00 | 1.50E-01 | 6.42E-02 | 2.44E-01 | 1.98E-01 | | 1.98E-01 | 2.37E-01 | 2.39E-04 | 2.37E-01 | 5.97E-02 | | 5.97E-02 | | 1.64E+01 | 1.64E+01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-31
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-9S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | 9.81E-02 | | 9.81E-02 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 2.37E-01 | | 2.37E-01 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.25E-05 | | 1.25E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | 1.11E+01 | | 1.11E+01 |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 3.14E-03 | | 3.14E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 3.80E-01 | 6.83E-05 | 3.80E-01 | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 3.76E-03 | | 3.76E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | 4.73E-02 | | 4.73E-02 | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 3.83E-01 | 6.83E-05 | 3.83E-01 | 3.84E-01 | 6.83E-05 | 3.84E-01 | 2.37E-01 | | 2.37E-01 | 3.80E-01 | 6.83E-05 | 3.80E-01 | 1.45E-01 | | 1.45E-01 | 1.11E+01 | | 1.11E+01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-32
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-20M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | 2.33E-07 | 2.33E-07 |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | 7.22E-03 | | 7.22E-03 | | | | | | | | 2.54E-03 | 2.54E-03 | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | 2.39E-04 | 2.39E-04 | | | | | | | | 2.39E-04 | 2.39E-04 | | | | 1.04E-01 | 2.39E-04 | 1.04E-01 | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | 1.84E-01 | 1.84E-01 | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.09E-03 | 2.05E-07 | 1.09E-03 | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 9.83E-04 | 1.85E-07 | 9.83E-04 | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 8.56E-04 | 1.61E-07 | 8.56E-04 | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 9.26E-04 | 1.75E-07 | 9.26E-04 | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 6.13E-04 | 3.59E-05 | 6.49E-04 | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 1.89E-04 | 3.56E-08 | 1.89E-04 | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 6.24E-04 | 1.18E-07 | 6.24E-04 | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 6.09E-02 | | 6.09E-02 | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 8.52E-02 | 3.01E-02 | 1.25E-01 | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 4.72E-06 | 4.72E-06 | | | | | | | | | |
| Naphthalene | 1.48E-04 | | 1.48E-04 | | | | | | | | | | | | | | | | | | | | 1.64E+01 (a) | 1.64E+01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | 9.34E-04 | 9.34E-04 | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | 6.04E-02 | 6.04E-02 | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.48E-04 | | 1.48E-04 | 7.22E-03 | 2.39E-04 | 7.45E-03 | | 1.84E-01 | 1.84E-01 | 5.28E-03 | 3.68E-05 | 5.32E-03 | 8.52E-02 | 9.42E-02 | 1.89E-01 | 6.09E-02 | | 6.09E-02 | 1.04E-01 | 2.39E-04 | 1.04E-01 | | 1.64E+01 | 1.64E+01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-32
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-20M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | 2.65E-04 | | 2.65E-04 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 1.04E-01 | | 1.04E-01 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.25E-05 | | 1.25E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 3.14E-03 | | 3.14E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 3.80E-01 | 6.83E-05 | 3.80E-01 | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 3.76E-03 | | 3.76E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 3.83E-01 | 6.83E-05 | 3.83E-01 | 3.84E-01 | 6.83E-05 | 3.84E-01 | 1.04E-01 | | 1.04E-01 | 3.80E-01 | 6.83E-05 | 3.80E-01 | 2.65E-04 | | 2.65E-04 | 1.25E-05 | | 1.25E-05 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-33
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-20S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | 2.33E-07 | 2.33E-07 |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | 7.22E-03 | | 7.22E-03 | | | | | | | | 2.54E-03 | 2.54E-03 | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | 2.30E-04 | 2.30E-04 | | | | | | | | 2.30E-04 | 2.30E-04 | | | | 1.87E-02 | 2.30E-04 | 1.89E-02 | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 2.37E-02 | 1.84E-01 | 2.08E-01 | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.13E-03 | 2.05E-07 | 1.13E-03 | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 1.04E-03 | 1.85E-07 | 1.04E-03 | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 8.56E-04 | 1.61E-07 | 8.56E-04 | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 9.26E-04 | 1.75E-07 | 9.26E-04 | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 6.13E-04 | 3.59E-05 | 6.49E-04 | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 1.89E-04 | 3.56E-08 | 1.89E-04 | | | | | | | | | | | | |
| Dibenzofuran | 2.54E-02 | | 2.54E-02 | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 6.24E-04 | 1.18E-07 | 6.24E-04 | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 3.56E-02 | | 3.56E-02 | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 2.13E-01 | 3.01E-02 | 2.43E-01 | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 4.72E-06 | 4.72E-06 | | | | | | | | | |
| Naphthalene | 8.33E-04 | | 8.33E-04 | | | | | | | | | | | | | | | | | | | | 1.64E+01 (a) | 1.64E+01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | 9.34E-04 | 9.34E-04 | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | 6.04E-02 | 6.04E-02 | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 2.63E-02 | | 2.63E-02 | 7.22E-03 | 2.30E-04 | 7.45E-03 | 2.37E-02 | 1.84E-01 | 2.08E-01 | 5.38E-03 | 3.68E-05 | 5.42E-03 | 2.13E-01 | 9.43E-02 | 3.07E-01 | 3.56E-02 | | 3.56E-02 | 1.87E-02 | 2.30E-04 | 1.89E-02 | | 1.64E+01 | 1.64E+01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
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Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
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TABLE G-33
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-20S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | 2.71E-03 | | 2.71E-03 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 1.87E-02 | | 1.87E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.25E-05 | | 1.25E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | 5.92E-02 | | 5.92E-02 |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 3.14E-03 | | 3.14E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 3.80E-01 | 6.83E-05 | 3.80E-01 | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 3.76E-03 | | 3.76E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 3.83E-01 | 6.83E-05 | 3.83E-01 | 3.84E-01 | 6.83E-05 | 3.84E-01 | 1.87E-02 | | 1.87E-02 | 3.80E-01 | 6.83E-05 | 3.80E-01 | 2.71E-03 | | 2.71E-03 | 5.92E-02 | | 5.92E-02 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-34
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-21M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | 2.33E-07 | 2.33E-07 |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | 7.22E-03 | | 7.22E-03 | | | | | | | | 2.54E-03 | 2.54E-03 | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | 2.39E-04 | 2.39E-04 | | | | | | | | 2.39E-04 | 2.39E-04 | | | | 6.63E-02 | 2.39E-04 | 6.65E-02 | | | |
| Barium | | | | | | | | | | 1.46E-02 | | 1.46E-02 | | | | | | | | | | | | |
| Benzene | | | | | | | 1.14E-02 | 1.84E-01 | 1.96E-01 | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.09E-03 | 2.05E-07 | 1.09E-03 | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 9.83E-04 | 1.65E-07 | 9.83E-04 | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 8.56E-04 | 1.61E-07 | 8.56E-04 | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 9.26E-04 | 1.75E-07 | 9.26E-04 | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 6.11E-04 | 3.59E-05 | 6.49E-04 | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 1.89E-04 | 3.56E-06 | 1.89E-04 | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 6.24E-04 | 1.18E-07 | 6.24E-04 | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 8.30E-02 | | 8.30E-02 | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 2.36E-01 | 3.01E-02 | 2.66E-01 | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 4.72E-06 | 4.72E-06 | | | | | | | | | |
| Naphthalene | 1.48E-04 | | 1.48E-04 | | | | | | | | | | | | | | | | | | | | 1.64E+01 (a) | 1.64E+01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | 9.34E-04 | 9.34E-04 | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | 6.04E-02 | 6.04E-02 | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.48E-04 | | 1.48E-04 | 7.22E-03 | 2.39E-04 | 7.45E-03 | 1.14E-02 | 1.84E-01 | 1.96E-01 | 1.99E-02 | 3.68E-05 | 1.99E-02 | 2.36E-01 | 9.43E-02 | 3.30E-01 | 8.30E-02 | | 8.30E-02 | 6.63E-02 | 2.39E-04 | 6.65E-02 | | 1.64E+01 | 1.64E+01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-34
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-21M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | 2.65E-04 | | 2.65E-04 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 6.63E-02 | | 6.63E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.25E-05 | | 1.25E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | 4.85E+00 | | 4.85E+00 |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 3.14E-03 | | 3.14E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 3.80E-01 | 6.83E-05 | 3.80E-01 | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 3.76E-03 | | 3.76E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 3.83E-01 | 6.83E-05 | 3.83E-01 | 3.84E-01 | 6.83E-05 | 3.84E-01 | 6.63E-02 | | 6.63E-02 | 3.80E-01 | 6.83E-05 | 3.80E-01 | 2.65E-04 | | 2.65E-04 | 4.85E+00 | | 4.85E+00 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-35
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-21S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Liver Effects | | | Develop. Effects | | | Blood Effects | | | Decreased Longevity Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.33E-07 | 2.33E-07 |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | 6.92E-02 | | 6.92E-02 | | | | | | | | | | | 2.54E-03 | 2.54E-03 | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | 7.80E-02 | | 7.80E-02 | 7.80E-02 | | 7.80E-02 | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | 2.30E-04 | 2.30E-04 | | | | | | | | | | | 2.30E-04 | 2.30E-04 | | | | 2.80E+00 | 2.30E-04 | 2.80E+00 | | | |
| Barium | | | | | | | | | | | | | | | | 1.79E-02 | | 1.79E-02 | | | | | | | | | | | | |
| Benzene | | | | | | | | | | 3.87E-01 | 1.84E-01 | 5.51E-01 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | 1.09E-03 | 2.05E-07 | 1.09E-03 | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | 9.63E-04 | 1.85E-07 | 9.63E-04 | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | 8.56E-04 | 1.61E-07 | 8.56E-04 | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | 9.26E-04 | 1.75E-07 | 9.26E-04 | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | 6.13E-04 | 3.59E-05 | 6.49E-04 | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | 1.89E-04 | 3.56E-08 | 1.89E-04 | | | | | | | | | | | | |
| Dibenzofuran | 2.35E-02 | | 2.35E-02 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | 6.24E-04 | 1.18E-07 | 6.24E-04 | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | | 1.80E-01 | | 1.80E-01 | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | 1.46E-01 | 3.01E-02 | 1.76E-01 | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | | | | 4.72E-06 | 4.72E-06 | | | | | | | | | |
| Naphthalene | 1.03E-01 | | 1.03E-01 | | | | | | | | | | | | | | | | | | | | | | | | | 1.64E+01 (a) | | 1.64E+01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | 1.05E-02 | | 1.05E-02 | | 9.34E-04 | 9.34E-04 | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | 1.16E-02 | | 1.16E-02 | | | | | | | | | | 1.05E-02 | | 1.05E-02 | | | | | 6.04E-02 | 6.04E-02 | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | 2.74E-03 | | 2.74E-03 | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.38E-01 | | 1.38E-01 | 2.74E-03 | | 2.74E-03 | 6.92E-02 | 2.30E-04 | 6.94E-02 | 4.45E-01 | 1.84E-01 | 6.29E-01 | 8.86E-02 | | 8.86E-02 | 3.37E-02 | 2.68E-05 | 3.37E-02 | 1.46E-01 | 9.42E-02 | 2.42E-01 | 1.80E-01 | | 1.80E-01 | 2.80E+00 | 2.30E-04 | 2.80E+00 | | 1.64E+01 | 1.64E+01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-35
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-21S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | 3.70E-02 | | 3.70E-02 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 2.80E+00 | | 2.80E+00 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.12E-04 | | 1.12E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | 3.98E+00 | | 3.98E+00 |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 3.14E-03 | | 3.14E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 3.80E-01 | 6.63E-05 | 3.80E-01 | 3.80E-01 | 6.63E-05 | 3.80E-01 | | | | 3.80E-01 | 6.63E-05 | 3.80E-01 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 3.76E-03 | | 3.76E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 3.83E-01 | 6.63E-05 | 3.83E-01 | 3.84E-01 | 6.63E-05 | 3.84E-01 | 2.80E+00 | | 2.80E+00 | 3.80E-01 | 6.63E-05 | 3.80E-01 | 3.70E-02 | | 3.70E-02 | 3.98E+00 | | 3.98E+00 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Coefient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-36
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-27M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Liver Effects | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | 6.89E-03 | | 6.89E-03 | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | 2.33E-07 | 2.33E-07 |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | 8.21E-03 | | 8.21E-03 | | | |
| Aluminum | | | | 7.22E-03 | | 7.22E-03 | | | | | | | | 2.54E-03 | 2.54E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | 2.39E-04 | 2.39E-04 | | | | | | | | 2.39E-04 | 2.39E-04 | | | | 1.87E-02 | 2.39E-04 | 1.89E-02 | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 3.00E-02 | 1.84E-01 | 2.14E-01 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.59E-03 | 2.05E-07 | 1.59E-03 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 1.31E-03 | 1.85E-07 | 1.31E-03 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 1.95E-03 | 1.61E-07 | 1.95E-03 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 1.25E-03 | 1.75E-07 | 1.25E-03 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 6.13E-04 | 3.59E-05 | 6.49E-04 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 2.59E-04 | 3.56E-08 | 2.59E-04 | | | | | | | | | | | | | | | |
| Dibenzofuran | 5.16E-01 | | 5.16E-01 | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | 1.41E-02 | | 1.41E-02 | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 7.86E-04 | 1.18E-07 | 7.96E-04 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 3.56E-02 | | 3.56E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 4.67E-02 | 3.01E-02 | 7.67E-02 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 4.72E-06 | 4.72E-06 | | | | | | | | | | | | |
| Naphthalene | 4.81E-01 | | 4.81E-01 | | | | | | | | | | | | | | | | | | | | | | | 1.64E+01 (a) | 1.64E+01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | 9.34E-04 | 9.34E-04 | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | 6.04E-02 | 6.04E-02 | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | 2.42E-03 | | 2.42E-03 | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 9.99E-01 | | 9.99E-01 | 7.22E-03 | 2.39E-04 | 7.45E-03 | 4.40E-02 | 1.84E-01 | 2.28E-01 | 1.47E-02 | 3.68E-05 | 1.47E-02 | 4.67E-02 | 9.42E-02 | 1.41E-01 | 3.56E-02 | | 3.56E-02 | 1.87E-02 | 2.39E-04 | 1.89E-02 | 1.06E-02 | | 1.06E-02 | | 1.64E+01 | 1.64E+01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-36
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-27M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | **8.37E-01** | | 8.37E-01 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 1.87E-02 | | 1.87E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.25E-05 | | 1.25E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | **1.87E+00** | | **1.87E+00** |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 3.14E-03 | | 3.14E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 3.80E-01 | 6.83E-05 | 3.80E-01 | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 3.76E-03 | | 3.76E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | **3.88E-01** | | 3.88E-01 | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 3.83E-01 | 6.83E-05 | 3.83E-01 | 3.84E-01 | 6.83E-05 | 3.84E-01 | 1.87E-02 | | 1.87E-02 | 3.80E-01 | 6.83E-05 | 3.80E-01 | 1.22E+00 | | 1.22E+00 | 1.87E+00 | | 1.87E+00 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-37
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-27S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Decrease Longevity | | | Develop. Effects | | | Blood Effects | | | Liver Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | 3.15E-02 | | 3.15E-02 | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.33E-07 | 2.33E-07 |
| Acenaphthene | | | | | | | | | | | | | 6.57E-03 | | 6.57E-03 | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | 3.51E-02 | | 3.51E-02 | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | 7.22E-03 | | 7.22E-03 | | | | | | | | | | | 2.54E-03 | 2.54E-03 | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | 2.39E-04 | 2.39E-04 | | | | | | | | | | | 2.39E-04 | 2.39E-04 | | | | 1.87E-02 | 2.39E-04 | 1.89E-02 | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | 1.49E+00 | 1.64E-01 | 1.68E+00 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | 1.20E-03 | 2.05E-07 | 1.20E-03 | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | 1.06E-03 | 1.85E-07 | 1.06E-03 | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | 9.17E-04 | 1.61E-07 | 9.17E-04 | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | 9.26E-04 | 1.75E-07 | 9.26E-04 | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | 6.13E-04 | 3.59E-05 | 6.49E-04 | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | 1.89E-04 | 3.56E-08 | 1.89E-04 | | | | | | | | | | | | |
| Dibenzofuran | 1.65E+00 | | 1.65E+00 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | 2.12E-02 | | 2.12E-02 | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | 6.24E-04 | 1.18E-07 | 6.24E-04 | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | | 3.56E-02 | | 3.56E-02 | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | 4.67E-02 | 3.01E-02 | 7.67E-02 | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | | | | 4.72E-06 | 4.72E-06 | | | | | | | | | |
| Naphthalene | 6.16E+00 | | 6.16E+00 | | | | | | | | | | | | | | | | | | | | | | | | | 1.64E+01 (a) | | 1.64E+01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | 6.95E-03 | | 6.95E-03 | | | | | | | | | | | | | | | | 6.95E-03 | | 6.95E-03 | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | 4.11E-02 | | 4.11E-02 | | 9.34E-04 | 9.34E-04 | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | 2.15E-02 | | 2.15E-02 | 2.15E-02 | | 2.15E-02 | | | | | | | | | | | | | | 6.04E-02 | 6.04E-02 | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 7.85E+00 | | 7.85E+00 | 2.15E-02 | | 2.15E-02 | 7.22E-03 | 2.39E-04 | 7.45E-03 | 1.51E+00 | 1.64E-01 | 1.70E+00 | 4.16E-02 | | 4.16E-02 | 7.81E-02 | 3.68E-05 | 7.82E-02 | 5.36E-02 | 9.42E-02 | 1.46E-01 | 3.56E-02 | | 3.56E-02 | 1.87E-02 | 2.39E-04 | 1.89E-02 | | 1.64E+01 | 1.64E+01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-37
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-27S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | Adrenal Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | **4.72E+00** | | **4.72E+00** | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 1.87E-02 | | 1.87E-02 | | | | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | 1.25E-05 | | 1.25E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | | | |
| Mercury | 3.14E-03 | | 3.14E-03 | | | | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | 3.80E-01 | 6.83E-05 | 3.80E-01 | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 3.76E-03 | | 3.76E-03 | | | | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | **2.29E+00** | | **2.29E+00** | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | **2.87E-02** | | **2.87E-02** | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | |
| Total | 3.83E-01 | 6.83E-05 | 3.83E-01 | 3.84E-01 | 6.83E-05 | 3.84E-01 | 1.87E-02 | | 1.87E-02 | 3.80E-01 | 6.83E-05 | 3.80E-01 | **7.02E+00** | | **7.02E+00** | 2.87E-02 | | 2.87E-02 | 1.25E-05 | | 1.25E-05 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-38
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-26S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Liver Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Dec. Longevity | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.33E-07 | 2.33E-07 |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | 7.22E-03 | | 7.22E-03 | | | | | | | | | | | 2.54E-03 | 2.54E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | 2.30E-04 | 2.30E-04 | | | | | | | | | | | 2.30E-04 | 2.30E-04 | | | | 1.87E-02 | 2.30E-04 | 1.89E-02 | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | **1.15E+00** | 1.84E-01 | **1.33E+00** | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | 1.18E-03 | 2.05E-07 | 1.18E-03 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | 9.83E-04 | 1.85E-07 | 9.83E-04 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | 8.56E-04 | 1.61E-07 | 8.56E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | 9.26E-04 | 1.75E-07 | 9.26E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | 6.13E-04 | 3.59E-05 | 6.49E-04 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | 1.89E-04 | 3.56E-08 | 1.89E-04 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | 1.46E-02 | | 1.46E-02 | 1.46E-02 | | 1.46E-02 | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | 6.24E-04 | 1.18E-07 | 6.24E-04 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | 3.56E-02 | | 3.56E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | 4.67E-02 | 3.01E-02 | 7.67E-02 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | 4.72E-06 | 4.72E-06 | | | | | | | | | | | | |
| Naphthalene | 5.09E-01 | | 5.09E-01 | | | | | | | | | | | | | | | | | | | | | | | | | | **1.64E+01** (a) | **1.64E+01** |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | 1.72E-02 | | 1.72E-02 | | 9.34E-04 | 9.34E-04 | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | 2.26E-02 | | 2.26E-02 | | | | | | | | | | | | | | 6.04E-02 | 6.04E-02 | | | | | | | 1.72E-02 | | 1.72E-02 | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 5.32E-01 | | 5.32E-01 | 7.22E-03 | 2.30E-04 | 7.45E-03 | **1.15E+00** | 1.84E-01 | **1.33E+00** | 1.46E-02 | | 1.46E-02 | 3.72E-02 | 3.56E-05 | 3.72E-02 | 4.67E-02 | 9.42E-02 | 1.41E-01 | 3.56E-02 | | 3.56E-02 | 1.87E-02 | 2.30E-04 | 1.89E-02 | 1.72E-02 | | 1.72E-02 | | **1.64E+01** | **1.64E+01** |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a CDC.

TABLE G-38
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-26S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | 1.06E-05 | | 1.06E-05 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 1.87E-02 | | 1.87E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.25E-05 | | 1.25E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | 3.56E+00 | | 3.56E+00 |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 3.14E-03 | | 3.14E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 3.80E-01 | 6.63E-05 | 3.80E-01 | 3.80E-01 | 6.63E-05 | 3.80E-01 | | | | 3.80E-01 | 6.63E-05 | 3.80E-01 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 3.76E-03 | | 3.76E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | 9.47E-02 | | 9.47E-02 | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 3.83E-01 | 6.63E-05 | 3.83E-01 | 3.84E-01 | 6.63E-05 | 3.84E-01 | 1.87E-02 | | 1.87E-02 | 3.80E-01 | 6.63E-05 | 3.80E-01 | 9.47E-02 | | 9.47E-02 | 3.56E+00 | | 3.56E+00 |

Notes
COPC - Compound of Potential Concern.
Dec. - Decreased.
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GI - Gastrointestinal.
HQ - Hazard Quotient.
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PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-39
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-29S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | 2.33E-07 | 2.33E-07 |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | 7.22E-03 | | 7.22E-03 | | | | | | | | 3.54E-03 | 3.54E-03 | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | 2.39E-04 | 2.39E-04 | | | | | | | | 2.39E-04 | 2.39E-04 | | | | 4.59E-02 | 2.39E-04 | 4.62E-02 | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 6.38E-04 | 1.84E-01 | 1.85E-01 | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.09E-03 | 2.05E-07 | 1.09E-03 | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 9.83E-04 | 1.85E-07 | 9.83E-04 | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 8.56E-04 | 1.61E-07 | 8.56E-04 | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 9.26E-04 | 1.75E-07 | 9.26E-04 | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 6.13E-04 | 3.50E-05 | 6.49E-04 | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 1.80E-04 | 3.56E-08 | 1.80E-04 | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 6.24E-04 | 1.18E-07 | 6.24E-04 | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 6.20E-02 | | 6.20E-02 | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 2.50E-01 | 3.01E-02 | 2.81E-01 | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 4.72E-06 | 4.72E-06 | | | | | | | | | |
| Naphthalene | 1.48E-04 | | 1.48E-04 | | | | | | | | | | | | | | | | | | | | 1.64E+01 (a) | 1.64E+01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | 9.34E-04 | 9.34E-04 | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | 6.04E-02 | 6.04E-02 | | | | | | | | | |
| Trichloroethane | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.48E-04 | | 1.48E-04 | 7.22E-03 | 2.39E-04 | 7.45E-03 | 6.38E-04 | 1.84E-01 | 1.85E-01 | 5.28E-03 | 3.68E-05 | 5.32E-03 | 2.50E-01 | 9.42E-02 | 3.45E-01 | 6.20E-02 | | 6.20E-02 | 4.59E-02 | 2.39E-04 | 4.62E-02 | | 1.64E+01 | 1.64E+01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-39
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-29S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | 2.65E-04 | | 2.65E-04 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 1.87E-02 | | 1.87E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.25E-05 | | 1.25E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | 6.26E-01 | | 6.26E-01 |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 3.14E-03 | | 3.14E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 3.80E-01 | 6.83E-05 | 3.80E-01 | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 3.76E-03 | | 3.76E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 3.83E-01 | 6.83E-05 | 3.83E-01 | 3.84E-01 | 6.83E-05 | 3.84E-01 | 1.87E-02 | | 1.87E-02 | 3.80E-01 | 6.83E-05 | 3.80E-01 | 2.65E-04 | | 2.65E-04 | 6.26E-01 | | 6.26E-01 |

Notes:
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Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-40
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-31S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Liver Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Liver Effects | | | Nasal Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.33E-07 | 2.33E-07 |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | 7.22E-03 | | 7.22E-03 | | | | | | | | | | | 2.54E-03 | 2.54E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | 2.39E-04 | 2.39E-04 | | | | | | | | | | | 2.39E-04 | 2.39E-04 | | | | 1.67E-02 | 2.39E-04 | 1.69E-02 | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | 1.84E-01 | 1.84E-01 | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | 1.09E-03 | 2.05E-07 | 1.09E-03 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | 9.83E-04 | 1.85E-07 | 9.83E-04 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | 8.56E-04 | 1.61E-07 | 8.56E-04 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | 9.26E-04 | 1.75E-07 | 9.26E-04 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | 6.13E-04 | 3.59E-05 | 6.49E-04 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | 1.89E-04 | 3.56E-08 | 1.89E-04 | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | 6.24E-04 | 1.18E-07 | 6.24E-04 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | 3.56E-02 | | 3.56E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | 4.67E-02 | 3.01E-02 | 7.67E-02 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | 4.72E-06 | 4.72E-06 | | | | | | | | | | | | |
| Naphthalene | 1.48E-04 | | 1.48E-04 | | | | | | | | | | | | | | | | | | | | | | | | | | 1.64E+01 (a) | 1.64E+01 |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | 9.34E-04 | 9.34E-04 | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | 6.04E-02 | 6.04E-02 | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | 7.01E-05 | | 7.01E-05 | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 1.93E-02 | | 1.93E-02 | | | | | | | 1.93E-02 | | 1.93E-02 | | | | | | | | | | | | | 1.93E-02 | | 1.93E-02 | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.94E-02 | | 1.94E-02 | 7.22E-03 | 2.39E-04 | 7.45E-03 | | 1.84E-01 | 1.84E-01 | 1.93E-02 | | 1.93E-02 | 5.35E-03 | 3.68E-05 | 5.39E-03 | 4.67E-02 | 9.42E-02 | 1.41E-01 | 3.56E-02 | | 3.56E-02 | 1.67E-02 | 2.39E-04 | 1.69E-02 | 1.93E-02 | | 1.93E-02 | | 1.64E+01 | 1.64E+01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-49
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS
FUTURE ON-SITE WORKER - AOC 13 (MW-31B)
NWV SWMU, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Immune Effects | | | Near and Red Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | 2.69E-04 | | 2.69E-04 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | 1.87E-02 | | 1.87E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | 1.88E-05 | | 1.88E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | |
| Dibenzo(a,h)anthracene | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | |
| Diphenylamine | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | |
| Isophoronene | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | |
| Mercury | 3.14E-03 | | 3.14E-03 | | | | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | |
| Silver | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | |
| Total PCBs | 3.80E-01 | 6.83E-05 | 3.80E-01 | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | 3.80E-01 | 6.83E-05 | 3.80E-01 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | 3.76E-03 | | 3.76E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | |
| Total | 3.83E-01 | 6.83E-05 | 3.83E-01 | 3.94E-01 | 6.83E-05 | 3.94E-01 | 1.87E-02 | | 1.87E-02 | 3.80E-01 | 6.83E-05 | 3.80E-01 | 2.69E-04 | | 2.69E-04 | 1.88E-05 | | 1.88E-05 |

Notes
COPC - Compound of Potential Concern.
Det. - Detected.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-41
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - AOC 1 (MW-12S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Liver Effects | | | Dec. Longevity | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | 1.83E-03 | | 1.83E-03 | | | | | | | 1.83E-03 | | 1.83E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | 1.41E-01 | | 1.41E-01 | | | | | | | | 2.70E-03 | 2.70E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | 2.70E-03 | 2.70E-03 | | | | | | | | 3.25E-04 | 3.25E-04 | | | | 2.53E-02 | 3.25E-04 | 2.57E-02 | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 1.74E-03 | 1.48E-01 | 1.49E-01 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 3.01E-03 | 5.68E-07 | 3.01E-03 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 2.59E-03 | 4.87E-07 | 2.59E-03 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 2.02E-03 | 3.81E-07 | 2.02E-03 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 2.44E-03 | 4.60E-07 | 2.44E-03 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 1.40E-02 | 8.22E-04 | 1.49E-02 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | 2.87E-03 | 5.41E-07 | 2.87E-03 | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 1.01E-07 | 1.01E-07 | 2.02E-07 | | | | | | | | | | | | | | | |
| Dibenzofuran | 2.17E-02 | 9.77E-06 | 2.17E-02 | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | 5.89E-03 | 1.11E-06 | 5.89E-03 | 5.89E-03 | 1.11E-06 | 5.89E-03 | | | | | | | | | | 5.89E-03 | 1.11E-06 | 5.89E-03 | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 1.45E-03 | 2.73E-07 | 1.45E-03 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 3.42E-01 | | 3.42E-01 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 3.94E-01 | 4.57E-02 | 4.40E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Naphthalene | 2.35E-02 | | 2.35E-02 | | | | | | | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | 5.43E-03 | 1.02E-06 | 5.43E-03 | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | 8.30E-05 | | 8.30E-05 | | | | | | | | | | | 5.15E-02 | 5.15E-02 | | | | | | | | | | 8.30E-05 | | 8.30E-05 |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | 6.46E-03 | | 6.46E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 4.53E-02 | 9.77E-06 | 4.53E-02 | 1.43E-01 | 2.70E-03 | 1.45E-01 | 1.41E-02 | 1.48E-01 | 1.62E-01 | 3.98E-02 | 8.27E-04 | 4.06E-02 | 3.96E-01 | 1.00E-01 | 4.96E-01 | 3.42E-01 | | 3.42E-01 | 2.53E-02 | 3.25E-04 | 2.57E-02 | 5.89E-03 | 1.11E-06 | 5.89E-03 | 8.30E-05 | | 8.30E-05 |

Notes:
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Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-41
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - AOC 1 (MW-12S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Nasal Effects | | | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | 1.23E-05 | 1.23E-05 | | | | | | | | | | | | | 1.40E-02 | | 1.40E-02 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | | | 2.53E-02 | | 2.53E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | 8.22E-04 | 8.22E-04 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | 1.72E-04 | | 1.72E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | | | | | |
| Naphthalene | | 2.03E+00 | 2.03E+00 | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | 2.98E+00 | | 2.98E+00 | 2.98E+00 | | 2.98E+00 | | | | 2.98E+00 | | 2.98E+00 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | 5.81E-02 | | 5.81E-02 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | |
| Total | | 2.03E+00 | 2.03E+00 | 2.98E+00 | | 2.98E+00 | 3.04E+00 | | 3.04E+00 | 2.53E-02 | | 2.53E-02 | 2.98E+00 | | 2.98E+00 | 1.40E-02 | 8.22E-04 | 1.48E-02 | 1.72E-04 | | 1.72E-04 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-42
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - AOC 1 (MW-17M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Liver Effects | | | Dec. Longevity | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | 1.83E-03 | | 1.83E-03 | | | | | | | 1.83E-03 | | 1.83E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | 7.66E-03 | | 7.66E-03 | | | | | | | | 2.70E-03 | 2.70E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | 2.70E-03 | 2.70E-03 | | | | | | | | 3.25E-04 | 3.25E-04 | | | | 2.53E-02 | 3.25E-04 | 2.57E-02 | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 1.74E-03 | 1.48E-01 | 1.49E-01 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 3.01E-03 | 5.68E-07 | 3.01E-03 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 2.59E-03 | 4.87E-07 | 2.59E-03 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 2.02E-03 | 3.81E-07 | 2.02E-03 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 2.44E-03 | 4.60E-07 | 2.44E-03 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 1.40E-02 | 8.22E-04 | 1.49E-02 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | 2.87E-03 | 5.41E-07 | 2.87E-03 | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 1.01E-07 | 1.01E-07 | 2.02E-07 | | | | | | | | | | | | | | | |
| Dibenzofuran | 2.17E-02 | 9.77E-06 | 2.17E-02 | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | 5.89E-03 | 1.11E-06 | 5.89E-03 | 5.89E-03 | 1.11E-06 | 5.89E-03 | | | | | | | | | | 5.89E-03 | 1.11E-06 | 5.89E-03 | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 1.45E-03 | 2.73E-07 | 1.45E-03 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 7.54E-02 | | 7.54E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 7.08E-02 | 4.57E-02 | 1.16E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Naphthalene | 2.35E-02 | | 2.35E-02 | | | | | | | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | 5.43E-03 | 1.02E-06 | 5.43E-03 | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | 6.30E-05 | | 6.30E-05 | | | | | | | | | | | 5.15E-02 | 5.15E-02 | | | | | | | | | | 6.30E-05 | | 6.30E-05 |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | 6.46E-03 | | 6.46E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | 4.72E-03 | | 4.72E-03 | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 4.53E-02 | 9.77E-06 | 4.53E-02 | 9.48E-03 | 2.70E-03 | 1.22E-02 | 1.41E-02 | 1.48E-01 | 1.62E-01 | 3.84E-02 | 8.27E-04 | 4.06E-02 | 7.26E-02 | 1.00E-01 | 1.73E-01 | 7.54E-02 | | 7.54E-02 | 2.53E-02 | 3.25E-04 | 2.57E-02 | 1.06E-02 | 1.11E-06 | 1.06E-02 | 6.30E-05 | | 6.30E-05 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-42
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - AOC 1 (MW-17M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Hepatic Effects | | | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | |
| 3,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dinitrophenol | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | 1.23E-05 | 1.23E-05 | | | | | | | | | | | | | 1.40E-03 | | 1.40E-03 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | | | 2.53E-03 | | 2.53E-03 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | 8.23E-04 | 8.23E-04 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | 2.48E-05 | | 2.48E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | |
| Dibenzo(a,h)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | | | | | |
| Naphthalene | | 3.62E+00 | 3.62E+00 | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | 3.00E+00 | | 3.00E+00 | 3.00E+00 | | 3.00E+00 | | | | 3.00E+00 | | 3.00E+00 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | 4.79E-03 | | 4.79E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | |
| Total | | 3.62E+00 | 3.62E+00 | 3.00E+00 | | 3.00E+00 | 3.00E+00 | | 3.00E+00 | 2.53E-03 | | 2.53E-03 | 3.00E+00 | | 3.00E+00 | 1.40E-03 | 8.23E-04 | 1.40E-03 | 2.48E-05 | | 2.48E-05 |

Notes:
COPC - Compound of Potential Concern.
Conc. - Concentration.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-43
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - AOC 1 (MW-17S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Liver Effects | | | Dec. Longevity | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | 1.83E-03 | | 1.83E-03 | | | | | | | 1.83E-03 | | 1.83E-03 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | 7.66E-03 | | 7.66E-03 | | | | | | | | 2.70E-03 | 2.70E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | 2.70E-03 | 2.70E-03 | | | | | | | | 3.25E-04 | 3.25E-04 | | | | 4.04E-02 | 3.25E-04 | 4.07E-02 | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 1.74E-03 | 1.48E-01 | 1.49E-01 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 3.01E-03 | 5.68E-07 | 3.01E-03 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 2.59E-03 | 4.87E-07 | 2.59E-03 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 2.02E-03 | 3.81E-07 | 2.02E-03 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 2.44E-03 | 4.60E-07 | 2.44E-03 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 1.40E-02 | 8.22E-04 | 1.49E-02 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | 2.87E-03 | 5.41E-07 | 2.87E-03 | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 1.01E-07 | 1.91E-07 | 2.02E-07 | | | | | | | | | | | | | | | |
| Dibenzofuran | 2.17E-02 | 9.77E-06 | 2.17E-02 | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | 5.89E-03 | 1.11E-06 | 5.89E-03 | 5.89E-03 | 1.11E-06 | 5.89E-03 | | | | | | | | | | 5.89E-03 | 1.11E-06 | 5.89E-03 | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 1.45E-03 | 2.73E-07 | 1.45E-03 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 7.54E-02 | | 7.54E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 3.46E-01 | 4.57E-02 | 3.92E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Naphthalene | 2.35E-02 | | 2.35E-02 | | | | | | | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | 5.43E-03 | 1.02E-06 | 5.43E-03 | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | 8.30E-05 | | 8.30E-05 | | | | | | | | | | | 5.15E-02 | 5.15E-02 | | | | | | | | | | 8.30E-05 | | 8.30E-05 |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | 6.46E-03 | | 6.46E-03 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 4.53E-02 | 9.77E-06 | 4.53E-02 | 9.46E-03 | 2.70E-03 | 1.22E-02 | 1.41E-02 | 1.49E-01 | 1.62E-01 | 3.98E-02 | 8.27E-04 | 4.06E-02 | 3.46E-01 | 1.00E-01 | 4.46E-01 | 7.54E-02 | | 7.54E-02 | 4.04E-02 | 3.25E-04 | 4.07E-02 | 5.89E-03 | 1.11E-06 | 5.89E-03 | 8.30E-05 | | 8.30E-05 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-43
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - AOC 1 (MW-17S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Nasal Effects | | | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | 1.23E-05 | 1.23E-05 | | | | | | | | | | | | | 1.40E-02 | | 1.40E-02 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | | | 4.04E-02 | | 4.04E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | 8.22E-04 | 8.22E-04 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | 2.48E-05 | | 2.48E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | 6.36E-02 | | 6.36E-02 |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | | | | | | | | |
| Naphthalene | | 2.03E+00 | 2.03E+00 | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | 2.98E+00 | | 2.98E+00 | 2.98E+00 | | 2.98E+00 | | | | 2.98E+00 | | 2.98E+00 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | 4.75E-03 | | 4.75E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | |
| Total | | 2.03E+00 | 2.03E+00 | 2.98E+00 | | 2.98E+00 | 2.98E+00 | | 2.98E+00 | 4.04E-02 | | 4.04E-02 | 2.98E+00 | | 2.98E+00 | 1.40E-02 | 8.22E-04 | 1.48E-02 | 6.36E-02 | | 6.36E-02 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-44
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - SOUTHERN PARCEL - (MW-1D)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Liver Effects | | | Dec. Longevity | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | 1.43E-02 | | 1.43E-02 | | | | | | | 1.43E-02 | | 1.43E-02 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | 7.59E-04 | | 7.59E-04 | | | |
| Aluminum | | | | 9.41E-03 | | 9.41E-03 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 |
| Arsenic | | | | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 2.13E-02 | 2.82E-04 | 2.15E-02 | | | | | | |
| Barium | | | | | 4.06E-04 | 4.06E-04 | | | | 5.83E-04 | | 5.83E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 4.18E-06 | 3.53E-04 | 3.58E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.58E-03 | 3.68E-08 | 1.58E-03 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 1.23E-03 | 2.72E-08 | 1.23E-03 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 1.01E-03 | 2.51E-08 | 1.01E-03 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | 6.16E-04 | | 6.16E-04 | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 1.18E-03 | 2.54E-08 | 1.18E-03 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 1.12E-03 | 8.45E-05 | 1.20E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | 1.44E-03 | | 1.44E-03 | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | 7.77E-04 | | 7.77E-04 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 1.49E-04 | 5.76E-09 | 1.49E-04 | | | | | | | | | | | | | | | |
| Dibenzofuran | 1.19E-02 | | 1.19E-02 | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | 3.08E-03 | | 3.08E-03 | 3.08E-03 | | 3.08E-03 | | | | | | | | | | 3.08E-03 | | 3.08E-03 | | | |
| Fluorene | | | | | | | 1.22E-03 | | 1.22E-03 | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 5.80E-04 | 1.72E-08 | 5.80E-04 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 5.50E-02 | | 5.50E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 2.08E-01 | 7.36E-02 | 2.82E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 2.42E-06 | 2.42E-06 | | | | | | | | | | | | |
| Naphthalene | 7.53E-03 | | 7.53E-03 | | | | | | | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | 3.39E-03 | | 3.39E-03 | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | 6.30E-04 | | 6.30E-04 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.94E-02 | | 1.94E-02 | 2.37E-02 | 6.86E-04 | 2.44E-02 | 1.45E-01 | 3.53E-04 | 1.45E-01 | 1.60E-02 | 8.46E-05 | 1.60E-02 | 2.22E-01 | 7.75E-02 | 3.00E-01 | 5.58E-02 | | 5.58E-02 | 2.13E-02 | 2.82E-04 | 2.15E-02 | 3.84E-03 | | 3.84E-03 | 1.40E-01 | | 1.40E-01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-44
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - SOUTHERN PARCEL - (MW-1D)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Renal Effects | | | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | 6.74E-03 | | 6.74E-03 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | | | 2.13E-02 | | 2.13E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | 6.45E-05 | 6.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | 7.51E-05 | | 7.51E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | |
| Dichloromethane | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | |
| Isophoronetone | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | |
| Magnesium | | | | | | | | | | | | | | | | | | | | | |
| Mercury | | | | 7.36E-04 | | 7.36E-04 | | | | | | | | | | | | | | | |
| Naphthalene | | 6.48E-01 | 6.48E-01 | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | 5.63E-04 | | 5.63E-04 |
| Phenol | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | |
| Silver | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | 2.68E-02 | 6.01E-06 | 2.68E-02 | 2.68E-02 | 6.01E-06 | 2.68E-02 | | | | 2.68E-02 | 6.01E-06 | 2.68E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | 4.74E-03 | | 4.74E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | |
| Total | | 6.48E-01 | 6.48E-01 | 2.75E-02 | 6.01E-06 | 2.75E-02 | 2.72E-02 | 6.01E-06 | 2.72E-02 | 2.13E-02 | | 2.13E-02 | 2.68E-02 | 6.01E-06 | 2.68E-02 | 6.74E-03 | 6.45E-05 | 6.82E-03 | 8.57E-04 | | 8.57E-04 |

Notes
COPC - Compound of Potential Concern.
Det. - Detected.
Develop. - Developmental.
GI - Gastrointestinal.
HI - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard ratio of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is clearly defined as a COC.

TABLE G-45
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - SOUTHERN PARCEL (MW-1S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Liver Effects | | | Dec. Longevity | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | 1.43E-02 | | 1.43E-02 | | | | | | | 1.43E-02 | | 1.43E-02 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | 7.59E-04 | | 7.59E-04 | | | |
| Aluminum | | | | 6.41E-03 | | 6.41E-03 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 |
| Arsenic | | | | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 2.07E-01 | 2.82E-04 | 2.07E-01 | | | | | | |
| Barium | | | | | 4.06E-04 | 4.06E-04 | | | | 5.83E-04 | | 5.83E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 2.28E-03 | 3.53E-04 | 2.63E-03 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.62E-03 | 3.68E-06 | 1.62E-03 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 1.39E-03 | 2.72E-06 | 1.39E-03 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 1.01E-03 | 2.51E-06 | 1.01E-03 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | 6.16E-04 | | 6.16E-04 | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 1.18E-03 | 2.54E-06 | 1.18E-03 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 1.12E-03 | 8.45E-05 | 1.20E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | 1.44E-03 | | 1.44E-03 | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | 7.77E-04 | | 7.77E-04 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 1.40E-04 | 5.76E-09 | 1.40E-04 | | | | | | | | | | | | | | | |
| Dibenzofuran | 6.86E-02 | | 6.86E-02 | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | 3.08E-03 | | 3.08E-03 | 3.08E-03 | | 3.08E-03 | | | | | | | | | | 3.08E-03 | | 3.08E-03 | | | |
| Fluorene | | | | | | | 1.22E-03 | | 1.22E-03 | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 5.80E-04 | 1.72E-06 | 5.80E-04 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 3.67E-02 | | 3.67E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 7.94E-01 | 7.36E-02 | 8.68E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 2.42E-06 | 2.42E-06 | | | | | | | | | | | | |
| Naphthalene | 6.62E-02 | | 6.62E-02 | | | | | | | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | 3.39E-03 | | 3.39E-03 | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | 6.30E-04 | | 6.30E-04 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.35E-01 | | 1.35E-01 | 2.37E-02 | 6.69E-04 | 2.44E-02 | 1.47E-01 | 3.53E-04 | 1.47E-01 | 1.61E-02 | 8.46E-05 | 1.61E-02 | 8.09E-01 | 7.75E-02 | 8.86E-01 | 3.75E-02 | | 3.75E-02 | 2.07E-01 | 2.82E-04 | 2.07E-01 | 3.84E-03 | | 3.84E-03 | 1.40E-01 | | 1.40E-01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-45
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - SOUTHERN PARCEL (MW-1S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Nasal Effects | | | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | 2.46E-02 | | 2.46E-02 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | | | 2.07E-01 | | 2.07E-01 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | 7.51E-05 | | 7.51E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | 4.57E-02 | | 4.57E-02 |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | | | |
| Mercury | | | | 7.36E-04 | | 7.36E-04 | | | | | | | | | | | | | | | |
| Naphthalene | | 6.49E-01 | 6.49E-01 | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | 5.82E-04 | | 5.82E-04 |
| Phenol | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | 2.68E-02 | 9.61E-06 | 2.68E-02 | 2.68E-02 | 9.61E-06 | 2.68E-02 | | | | 2.68E-02 | 9.61E-06 | 2.68E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | 4.74E-03 | | 4.74E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | |
| Total | | 6.49E-01 | 6.49E-01 | 2.75E-02 | 9.61E-06 | 2.75E-02 | 3.15E-02 | 9.61E-06 | 3.15E-02 | 2.07E-01 | | 2.07E-01 | 2.68E-02 | 9.61E-06 | 2.68E-02 | 2.46E-02 | 8.45E-05 | 2.47E-02 | 4.64E-02 | | 4.64E-02 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-48
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - SOUTHERN PARCEL - (MW-3D)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neurol. Effects | | | GI Effects | | | Vascular Effects | | | Liver Effects | | | Gen. Lowering | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7,8-TCDD TEQ | | | | 1.43E-02 | | 1.43E-02 | | | | | | | 1.43E-02 | | 1.43E-02 | | | | | | | | | | | | |
| 2,4-Dinitrophenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | 7.93E-04 | | 7.93E-04 | | | |
| Aluminum | | | | 5.41E-03 | | 5.41E-03 | | | | | | | | 3.60E-03 | 3.60E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 |
| Arsenic | | | | | 3.63E-04 | 3.63E-04 | | | | | | | | 3.63E-04 | 3.63E-04 | | | | 3.13E-03 | 3.63E-04 | 3.13E-03 | | | | | | |
| Barium | | | | | 4.59E-04 | 4.59E-04 | | | | 5.84E-04 | | 5.84E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 4.14E-05 | 2.37E-04 | 2.80E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.54E-03 | 3.60E-03 | 1.26E-03 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 1.38E-03 | 3.72E-03 | 1.29E-03 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 1.01E-03 | 3.51E-03 | 1.07E-03 | | | | | | | | | | | | | | | |
| Benzo(k,l,m)perylene | | | | | | | | | | 6.16E-04 | | 6.16E-04 | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 1.16E-03 | 3.54E-03 | 1.16E-03 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 1.13E-03 | 4.48E-03 | 1.30E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | 1.44E-03 | | 1.44E-03 | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | 7.77E-04 | | 7.77E-04 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenzo(a,h)anthracene | | | | | | | | | | 1.48E-04 | 5.76E-03 | 1.48E-04 | | | | | | | | | | | | | | | |
| Dibenzofuran | 1.14E-03 | | 1.14E-03 | | | | | | | | | | | | | | | | | | | | | | | | |
| Dieldrin | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | 3.60E-03 | | 3.60E-03 | 3.60E-03 | | 3.60E-03 | | | | | | | | | | 3.60E-03 | | 3.60E-03 | | | |
| Fluorene | | | | | | | 1.33E-03 | | 1.33E-03 | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 5.60E-04 | 1.73E-03 | 5.60E-04 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 3.67E-03 | | 3.67E-03 | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 2.11E-01 | 7.30E-03 | 2.18E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 2.43E-03 | 2.43E-03 | | | | | | | | | | | | |
| Naphthalene | 7.63E-03 | | 7.63E-03 | | | | | | | | | | | | | | | | | | | | | | | | |
| n-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | 3.39E-03 | | 3.39E-03 | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Silver | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tin | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichlorophene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Uranium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | 5.39E-04 | | 5.39E-04 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.04E-02 | | 1.04E-02 | 2.13E-02 | 8.06E-04 | 2.04E-02 | 1.40E-01 | 2.62E-04 | 1.40E-01 | 1.60E-02 | 8.40E-03 | 1.60E-02 | 2.35E-01 | 7.73E-03 | 2.62E-01 | 3.73E-03 | | 3.73E-03 | 3.13E-03 | 3.63E-04 | 3.13E-03 | 3.60E-03 | | 3.60E-03 | 1.40E-01 | | 1.40E-01 |

Notes
COPC - Component of Potential Concern.
Gen. - Generated.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neurol. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-49
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - SOUTHERN PARCEL - (MW-3D
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Hepatic Effects | | | Immune Effects | | | Kidney and Blood Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | 6.74E-03 | | 6.74E-03 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | | | 2.13E-03 | | 2.13E-03 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | 8.48E-05 | 8.48E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | 7.81E-05 | | 7.81E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | |
| Dibenzo(a,h)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | |
| Diphenamine | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | | | |
| Mercury | | | | 7.36E-04 | | 7.36E-04 | | | | | | | | | | | | | | | |
| Naphthalene | | 6.49E-01 | 6.49E-01 | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| Pentachlorophenol | | | | | | | | | | | | | | | | | | | 5.62E-04 | | 5.62E-04 |
| Phenol | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | 2.89E-03 | 8.61E-06 | 2.89E-03 | 2.89E-03 | 8.61E-06 | 2.89E-03 | | | | 2.89E-03 | 8.61E-06 | 2.89E-03 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | 4.74E-03 | | 4.74E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | |
| Total | | 6.49E-01 | 6.49E-01 | 2.75E-02 | 8.61E-06 | 2.75E-02 | 3.15E-03 | 8.61E-06 | 3.15E-03 | 2.13E-03 | | 2.13E-03 | 2.89E-03 | 8.61E-06 | 2.89E-03 | 6.74E-03 | 8.48E-05 | 6.83E-03 | 5.57E-04 | | 5.57E-04 |

Notes
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-47
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - SOUTHERN PARCEL - (MW-2S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Liver Effects | | | Dec. Longevity | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | 1.43E-02 | | 1.43E-02 | | | | | | | 1.43E-02 | | 1.43E-02 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | 7.59E-04 | | 7.59E-04 | | | |
| Aluminum | | | | 9.41E-03 | | 9.41E-03 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 |
| Arsenic | | | | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 5.13E-02 | 2.82E-04 | 5.15E-02 | | | | | | |
| Barium | | | | | 4.06E-04 | 4.06E-04 | | | | 5.83E-04 | | 5.83E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 4.18E-06 | 3.53E-04 | 3.58E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.58E-03 | 3.68E-06 | 1.58E-03 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 1.23E-03 | 2.72E-06 | 1.23E-03 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 1.01E-03 | 2.51E-06 | 1.01E-03 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | 6.16E-04 | | 6.16E-04 | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 1.18E-03 | 2.54E-06 | 1.18E-03 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 1.12E-03 | 8.45E-05 | 1.20E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | 1.44E-03 | | 1.44E-03 | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | 7.77E-04 | | 7.77E-04 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 1.49E-04 | 5.76E-09 | 1.49E-04 | | | | | | | | | | | | | | | |
| Dibenzofuran | 1.19E-02 | | 1.19E-02 | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | 3.08E-03 | | 3.08E-03 | 3.08E-03 | | 3.08E-03 | | | | | | | | | | 3.08E-03 | | 3.08E-03 | | | |
| Fluorene | | | | | | | 1.22E-03 | | 1.22E-03 | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 5.80E-04 | 1.72E-08 | 5.80E-04 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 3.67E-02 | | 3.67E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 8.92E-02 | 7.36E-03 | 1.63E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 2.42E-06 | 2.42E-06 | | | | | | | | | | | | |
| Naphthalene | 7.52E-03 | | 7.52E-03 | | | | | | | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | 3.39E-03 | | 3.39E-03 | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | 2.45E-01 | | 2.45E-01 | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | 6.30E-04 | | 6.30E-04 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.94E-02 | | 1.94E-02 | 2.37E-02 | 6.86E-04 | 2.44E-02 | 3.90E-01 | 3.53E-04 | 3.90E-01 | 1.60E-02 | 8.46E-05 | 1.60E-02 | 1.03E-01 | 7.75E-02 | 1.81E-01 | 3.75E-02 | | 3.75E-02 | 5.13E-02 | 2.82E-04 | 5.15E-02 | 3.84E-03 | | 3.84E-03 | 1.40E-01 | | 1.40E-01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-47
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - SOUTHERN PARCEL - (MW-2S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Nasal Effects | | | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | Clinical Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | 6.74E-03 | | 6.74E-03 | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | | | 5.13E-02 | | 5.13E-02 | | | | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | 7.51E-05 | | 7.51E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | | | | | | |
| Mercury | | | | 7.38E-04 | | 7.38E-04 | | | | | | | | | | | | | | | | | | |
| Naphthalene | | 6.49E-01 | 6.49E-01 | | | | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | 5.82E-04 | | 5.82E-04 |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | 4.15E-02 | | 4.15E-02 | 4.15E-02 | | 4.15E-02 | | | | | | | 4.15E-02 | | 4.15E-02 | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | 2.68E-02 | 9.61E-06 | 2.68E-02 | 2.68E-02 | 9.61E-06 | 2.68E-02 | | | | 2.68E-02 | 9.61E-06 | 2.68E-02 | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | 4.74E-03 | | 4.74E-03 | | | | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | | 6.49E-01 | 6.49E-01 | 2.75E-02 | 9.61E-06 | 2.75E-02 | 7.30E-02 | 9.61E-06 | 7.30E-02 | 9.27E-02 | | 9.27E-02 | 2.68E-02 | 9.61E-06 | 2.68E-02 | 6.74E-03 | 8.45E-05 | 6.82E-03 | 4.15E-02 | | 4.15E-02 | 6.57E-04 | | 6.57E-04 |

Notes.
COPC - Compound of Potential Concern.
Dec. - Decreased.
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GI - Gastrointestinal.
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PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE 6-45
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - SOUTHERN PARCEL - (ABA-10)
MIDDLETOWN, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Resp. Effects | | | GI Effects | | | Vascular Effects | | | Liver Effects | | | Dev. Longevity | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Diphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | 1.43E-02 | | 1.43E-02 | | | | | | | 1.43E-02 | | 1.43E-02 | | | | | | | | | | | | |
| 2,4-Dinitrophenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | 7.39E-04 | | 7.39E-04 | | | |
| Alachlor | | | | 5.41E-03 | | 5.41E-03 | | | | | | | | 3.05E-03 | 3.05E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 |
| Arsenic | | | | | 3.03E-04 | 3.03E-04 | | | | | | | | 3.03E-04 | 3.03E-04 | | | | 3.11E-03 | 3.03E-04 | 3.14E-03 | | | | | | |
| Barium | | | | | 4.05E-04 | 4.05E-04 | | | | 5.07E-04 | | 5.07E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 4.14E-03 | 3.07E-04 | 3.04E-03 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.39E-03 | 3.44E-03 | 1.83E-03 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 1.39E-03 | 3.73E-03 | 1.39E-03 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 1.01E-03 | 2.91E-03 | 1.01E-03 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | 8.14E-04 | | 8.14E-04 | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 1.13E-03 | 3.04E-03 | 1.13E-03 | | | | | | | | | | | | | | | |
| Calcium | | | | | | | | | | 1.13E-03 | 4.45E-03 | 1.20E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | 1.44E-03 | | 1.44E-03 | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | 7.77E-04 | | 7.77E-04 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenzo(a,h)anthracene | | | | | | | | | | 1.49E-04 | 5.76E-03 | 1.49E-04 | | | | | | | | | | | | | | | |
| Dibenzofuran | 1.16E-03 | | 1.16E-03 | | | | | | | | | | | | | | | | | | | | | | | | |
| Diethylphthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | 3.08E-03 | | 3.08E-03 | 3.08E-03 | | 3.08E-03 | | | | | | | | | | 3.08E-03 | | 3.08E-03 | | | |
| Fluorene | | | | | | | 1.23E-03 | | 1.23E-03 | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 6.68E-04 | 1.73E-03 | 6.68E-04 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 3.47E-02 | | 3.47E-02 | | | | | | | | | |
| Isophoronene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Magnesium | | | | | | | | | | | | | 1.29E-01 | 7.39E-03 | 3.33E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 3.43E-03 | 3.43E-03 | | | | | | | | | | | | |
| Naphthalene | 7.53E-03 | | 7.53E-03 | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (p-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| o-Cresol (o-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pentachlorophenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | 3.39E-03 | | 3.39E-03 | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Silver | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethylene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | 6.39E-04 | | 6.39E-04 | | | | | | | | | | | | | | | | | | |
| 1-Methylphenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,3,5-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.94E-02 | | 1.94E-02 | 2.77E-02 | 3.03E-04 | 2.40E-02 | 1.40E-01 | 3.03E-04 | 1.40E-01 | 1.63E-02 | 8.02E-03 | 1.63E-02 | 1.29E-01 | 7.76E-03 | 2.43E-01 | 3.73E-02 | | 3.73E-02 | 3.11E-03 | 3.03E-04 | 3.14E-03 | 3.08E-03 | | 3.08E-03 | 1.40E-01 | | 1.40E-01 |

Notes:
COPC - Component of Potential Concern.
Dev. - Developmental.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Resp. - Respiratory.
PCBs - Polychlorinated Biphenyls.
Bold value indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-48
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - SOUTHERN PARCEL - (MW-3C
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Nasal Effects | | | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | 6.74E-03 | | 6.74E-03 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | | | 3.11E-02 | | 3.11E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | 7.51E-05 | | 7.51E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | | | |
| Mercury | | | | 7.38E-04 | | 7.38E-04 | | | | | | | | | | | | | | | |
| Naphthalene | | 6.49E-01 | 6.49E-01 | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | 5.82E-04 | | 5.82E-04 |
| Phenol | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | 2.68E-02 | 9.61E-06 | 2.68E-02 | 2.68E-02 | 9.61E-06 | 2.68E-02 | | | | 2.68E-02 | 9.61E-06 | 2.68E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | 4.74E-03 | | 4.74E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | |
| Total | | 6.49E-01 | 6.49E-01 | 2.75E-02 | 9.61E-06 | 2.75E-02 | 3.15E-02 | 9.61E-06 | 3.15E-02 | 3.11E-02 | | 3.11E-02 | 2.68E-02 | 9.61E-06 | 2.68E-02 | 6.74E-03 | 8.45E-05 | 6.82E-03 | 6.57E-04 | | 6.57E-04 |

Notes:
COPC - Compound of Potential Concern.
Decr. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-49
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - SOUTHERN PARCEL - (MW-3S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Liver Effects | | | Dec. Longevity | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | 1.43E-02 | | 1.43E-02 | | | | | | | 1.43E-02 | | 1.43E-02 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | 7.59E-04 | | 7.59E-04 | | | |
| Aluminum | | | | 9.41E-03 | | 9.41E-03 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | 1.78E-01 | | 1.78E-01 | | | | | | | | | | | | | | | | 1.78E-01 | | 1.78E-01 |
| Arsenic | | | | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 1.91E-01 | 2.82E-04 | 1.91E-01 | | | | | | |
| Barium | | | | | 4.06E-04 | 4.06E-04 | | | | 5.83E-04 | | 5.83E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 4.18E-06 | 3.53E-04 | 3.58E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.58E-03 | 3.66E-08 | 1.58E-03 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 1.23E-03 | 2.72E-08 | 1.23E-03 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 1.01E-03 | 2.51E-08 | 1.01E-03 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | 6.16E-04 | | 6.16E-04 | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 1.18E-03 | 2.54E-08 | 1.18E-03 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 1.12E-03 | 8.45E-05 | 1.20E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | 1.44E-03 | | 1.44E-03 | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | 7.77E-04 | | 7.77E-04 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 1.49E-04 | 5.76E-09 | 1.49E-04 | | | | | | | | | | | | | | | |
| Dibenzofuran | 1.19E-02 | | 1.19E-02 | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | 3.08E-03 | | 3.08E-03 | 3.09E-03 | | 3.09E-03 | | | | | | | | | | 3.08E-03 | | 3.08E-03 | | | |
| Fluorene | | | | | | | 1.22E-03 | | 1.22E-03 | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 5.80E-04 | 1.72E-08 | 5.80E-04 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 8.24E-02 | | 8.24E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 4.51E-01 | 7.36E-02 | 5.25E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 2.42E-08 | 2.42E-08 | | | | | | | | | | | | |
| Naphthalene | 7.52E-03 | | 7.52E-03 | | | | | | | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | 3.39E-03 | | 3.39E-03 | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | 7.25E-01 | | 7.25E-01 | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | 6.30E-04 | | 6.30E-04 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.94E-02 | | 1.94E-02 | 2.37E-02 | 6.86E-04 | 2.44E-02 | 9.07E-01 | 3.53E-04 | 9.08E-01 | 1.60E-02 | 8.46E-05 | 1.60E-02 | 4.65E-01 | 7.75E-02 | 5.43E-01 | 8.32E-02 | | 8.32E-02 | 1.91E-01 | 2.82E-04 | 1.91E-01 | 3.84E-03 | | 3.84E-03 | 1.78E-01 | | 1.78E-01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-49
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - SOUTHERN PARCEL - (MW-35
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Nasal Effects | | | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | 6.74E-03 | | 6.74E-03 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | | | 1.91E-01 | | 1.91E-01 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | 7.51E-05 | | 7.51E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | 5.28E-02 | | 5.28E-02 |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | | | |
| Mercury | | | | 7.38E-04 | | 7.38E-04 | | | | | | | | | | | | | | | |
| Naphthalene | | 6.40E-01 | 6.40E-01 | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | 5.82E-04 | | 5.82E-04 |
| Phenol | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | 2.68E-02 | 9.61E-06 | 2.68E-02 | 2.68E-02 | 9.61E-06 | 2.68E-02 | | | | 2.68E-02 | 9.61E-06 | 2.68E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | 4.74E-03 | | 4.74E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | |
| Total | | 6.40E-01 | 6.40E-01 | 2.75E-02 | 9.61E-06 | 2.75E-02 | 3.15E-02 | 9.61E-06 | 3.15E-02 | 1.91E-01 | | 1.91E-01 | 2.68E-02 | 9.61E-06 | 2.68E-02 | 6.74E-03 | 8.45E-05 | 6.82E-03 | 5.35E-02 | | 5.35E-02 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedance of the target hazard index of 1, or values that significantly contribute to an exceedance.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-50
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - SOUTHERN PARCEL - (MW-4M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Liver Effects | | | Dec. Longevity | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | 1.43E-02 | | 1.43E-02 | | | | | | | 1.43E-02 | | 1.43E-02 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | 7.59E-04 | | 7.59E-04 | | | |
| Aluminum | | | | 9.41E-03 | | 9.41E-03 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 |
| Arsenic | | | | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 6.95E-02 | 2.82E-04 | 6.96E-02 | | | | | | |
| Barium | | | | | 4.06E-04 | 4.06E-04 | | | | 5.83E-04 | | 5.83E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 4.18E-06 | 3.53E-04 | 3.58E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.58E-03 | 3.68E-08 | 1.58E-03 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 1.23E-03 | 2.72E-08 | 1.23E-03 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 1.01E-03 | 2.51E-08 | 1.01E-03 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | 6.16E-04 | | 6.16E-04 | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 1.18E-03 | 2.54E-08 | 1.18E-03 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 1.12E-03 | 8.45E-05 | 1.20E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | 1.44E-03 | | 1.44E-03 | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | 7.77E-04 | | 7.77E-04 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 1.49E-04 | 5.76E-09 | 1.49E-04 | | | | | | | | | | | | | | | |
| Dibenzofuran | 1.19E-02 | | 1.19E-02 | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | 3.08E-03 | | 3.08E-03 | 3.08E-03 | | 3.08E-03 | | | | | | | | | | 3.08E-03 | | 3.08E-03 | | | |
| Fluorene | | | | | | | 1.22E-03 | | 1.22E-03 | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 5.80E-04 | 1.72E-08 | 5.80E-04 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 9.71E-02 | | 9.71E-02 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 1.44E-01 | 7.36E-02 | 2.17E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 2.42E-06 | 2.42E-06 | | | | | | | | | | | | |
| Naphthalene | 7.52E-03 | | 7.52E-03 | | | | | | | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | 3.39E-03 | | 3.39E-03 | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | 6.30E-04 | | 6.30E-04 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1.94E-02 | | 1.94E-02 | 2.37E-02 | 6.89E-04 | 2.44E-02 | 1.45E-01 | 3.53E-04 | 1.45E-01 | 1.60E-02 | 8.46E-05 | 1.60E-02 | 1.58E-01 | 7.75E-02 | 2.36E-01 | 9.79E-02 | | 9.79E-02 | 6.95E-02 | 2.82E-04 | 6.96E-02 | 3.84E-03 | | 3.84E-03 | 1.40E-01 | | 1.40E-01 |

Notes
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-50
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - SOUTHERN PARCEL - (MW-4M)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Nasal Effects | | | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | 6.74E-03 | | 6.74E-03 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | | | 6.95E-02 | | 6.95E-02 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | 7.51E-05 | | 7.51E-05 |
| Chrysene | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | | | |
| Mercury | | | | 7.38E-04 | | 7.38E-04 | | | | | | | | | | | | | | | |
| Naphthalene | | 6.49E-01 | 6.49E-01 | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | 5.62E-04 | | 5.62E-04 |
| Phenol | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | 2.68E-02 | 9.61E-06 | 2.68E-02 | 2.68E-02 | 9.61E-06 | 2.68E-02 | | | | 2.68E-02 | 9.61E-06 | 2.68E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | 4.74E-03 | | 4.74E-03 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | |
| Total | | 6.49E-01 | 6.49E-01 | 2.75E-02 | 9.61E-06 | 2.75E-02 | 3.15E-02 | 9.61E-06 | 3.15E-02 | 6.95E-02 | | 6.95E-02 | 2.68E-02 | 9.61E-06 | 2.68E-02 | 6.74E-03 | 8.45E-05 | 6.82E-03 | 6.57E-04 | | 6.57E-04 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
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GI - Gastrointestinal.
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Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-51
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - SOUTHERN PARCEL - (MW-4S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| Chemical | Changes in Body Weight | | | Develop. Effects | | | Blood Effects | | | Kidney Effects | | | Neuro. Effects | | | GI Effects | | | Vascular Effects | | | Liver Effects | | | Dec. Longevity | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | 1.43E-02 | | 1.43E-02 | | | | | | | 1.43E-02 | | 1.43E-02 | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | | 7.59E-04 | | 7.59E-04 | | | |
| Aluminum | | | | 7.91E-02 | | 7.91E-02 | | | | | | | | 3.65E-03 | 3.65E-03 | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | 1.40E-01 | | 1.40E-01 | | | | | | | | | | | | | | | | 1.40E-01 | | 1.40E-01 |
| Arsenic | | | | | 2.82E-04 | 2.82E-04 | | | | | | | | 2.82E-04 | 2.82E-04 | | | | 2.43E-01 | 2.82E-04 | 2.43E-01 | | | | | | |
| Barium | | | | | 4.06E-04 | 4.06E-04 | | | | 5.63E-04 | | 5.63E-04 | | | | | | | | | | | | | | | |
| Benzene | | | | | | | 4.18E-06 | 5.53E-04 | 5.58E-04 | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | 1.58E-03 | 3.68E-08 | 1.58E-03 | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | 1.23E-03 | 2.72E-08 | 1.23E-03 | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | 1.01E-03 | 2.51E-08 | 1.01E-03 | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | 8.16E-04 | | 8.16E-04 | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | 1.18E-03 | 2.54E-08 | 1.18E-03 | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | 1.12E-03 | 8.45E-05 | 1.20E-03 | | | | | | | | | | | | | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | 1.44E-03 | | 1.44E-03 | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | 7.77E-04 | | 7.77E-04 | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | 1.49E-04 | 5.76E-09 | 1.49E-04 | | | | | | | | | | | | | | | |
| Dibenzofuran | 1.19E-02 | | 1.19E-02 | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | 3.08E-03 | | 3.08E-03 | 3.08E-03 | | 3.08E-03 | | | | | | | | | | 3.08E-03 | | 3.08E-03 | | | |
| Fluorene | | | | | | | 1.22E-03 | | 1.22E-03 | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | 5.80E-04 | 1.72E-08 | 5.80E-04 | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | 1.35E-01 | | 1.35E-01 | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | 2.37E-01 | 7.36E-02 | 3.10E-01 | | | | | | | | | | | | |
| Mercury | | | | | | | | | | | | | | 2.42E-06 | 2.42E-06 | | | | | | | | | | | | |
| Naphthalene | 8.11E-03 | | 8.11E-03 | | | | | | | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | 3.39E-03 | | 3.39E-03 | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zinc | | | | | | | 6.30E-04 | | 6.30E-04 | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 2.00E-02 | | 2.00E-02 | 8.33E-02 | 6.88E-04 | 8.40E-02 | 1.45E-01 | 3.53E-04 | 1.45E-01 | 1.60E-02 | 9.46E-05 | 1.60E-02 | 2.51E-01 | 7.75E-02 | 3.26E-01 | 1.36E-01 | | 1.36E-01 | 2.43E-01 | 2.82E-04 | 2.43E-01 | 3.84E-03 | | 3.84E-03 | 1.40E-01 | | 1.40E-01 |

Notes:
COPC - Compound of Potential Concern.
Dec. - Decreased.
Develop. - Developmental.
GI - Gastrointestinal.
HQ - Hazard Quotient.
Ing - Ingestion.
Inh - Inhalation.
Neuro. - Neurological.
PCBs - Polychlorinated Biphenyls.
Bold values indicate an exceedence of the target hazard index of 1, or values that significantly contribute to an exceedence.
Highlighting denotes that the groundwater pathway is included in the target organ HI.
(a) Individual COPC with an HQ greater than 1 is already defined as a COC.

TABLE G-51
TOXIC ENDPOINTS FOR POTENTIAL
NONCARCINOGENIC EFFECTS (COMBINED SOIL)
FUTURE ON-SITE WORKER - SOUTHERN PARCEL - (MW-4S)
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

| | Nasal Effects | | | Immune Effects | | | Hair and Nail Effects | | | Skin Effects | | | Eye Effects | | | Respiratory Effects | | | No Adverse Effects | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total | Ing | Inh | Total |
| 1,1-Biphenyl | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7-8 TCDD TEQ | | | | | | | | | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | | | | | 6.74E-03 | | 6.74E-03 | | | |
| Acenaphthene | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | | | | | | | | | | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | | | | | | | | | | 2.43E-01 | | 2.43E-01 | | | | | | | | | |
| Barium | | | | | | | | | | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | | | | | | 8.45E-05 | 8.45E-05 | | | |
| Carbazole | | | | | | | | | | | | | | | | | | | | | |
| Chromium (total) | | | | | | | | | | | | | | | | | | | 1.84E-04 | | 1.84E-04 |
| Chrysene | | | | | | | | | | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | | | | | | | | | | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | | | | | | | |
| Mercury | | | | 7.38E-04 | | 7.38E-04 | | | | | | | | | | | | | | | |
| Naphthalene | | 6.49E-01 | 6.49E-01 | | | | | | | | | | | | | | | | | | |
| o-Cresol (2-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| p-Cresol (4-Methylphenol) | | | | | | | | | | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | | | | | | | | 5.82E-04 | | 5.82E-04 |
| Phenol | | | | | | | | | | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | | | | | | | | | | |
| Total PCBs | | | | 2.68E-02 | 9.61E-06 | 2.68E-02 | 2.68E-02 | 9.61E-06 | 2.68E-02 | | | | 2.68E-02 | 9.61E-06 | 2.68E-02 | | | | | | |
| Total Xylenes | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | 4.01E-02 | | 4.01E-02 | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | | | | | | |
| Total | | 6.49E-01 | 6.49E-01 | 2.75E-02 | 9.61E-06 | 2.75E-02 | 6.69E-02 | 9.61E-06 | 6.69E-02 | 2.43E-01 | | 2.43E-01 | 2.68E-02 | 9.61E-06 | 2.68E-02 | 6.74E-03 | 8.45E-05 | 6.82E-03 | 7.67E-04 | | 7.67E-04 |

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