### Table M-1

**Toxicity Values for RECAP Screening Standard Development**

_H. C. Drew Estate vs Neumin Production Company and Stokes & Spieler, Inc._

**North Choupique Field**

_Calcasieu Parish, Louisiana_

<table>
<thead>
<tr>
<th>Constituent</th>
<th>CAS</th>
<th>SFo (mg/kg-d)</th>
<th>REF</th>
<th>RfDo (mg/kg-d)</th>
<th>REF</th>
<th>GWss (mg/L)</th>
<th>GW1 (mg/L)</th>
<th>SoilSSni (mg/kg)</th>
<th>SoilSSGW (b, c) (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Methylnaphthalene</td>
<td>90-12-0</td>
<td>2.90E-02</td>
<td>P</td>
<td>7.00E-02</td>
<td>A</td>
<td>1.0E-02</td>
<td>1.0E-02</td>
<td>1.6E+01</td>
<td>3.1E+00</td>
</tr>
<tr>
<td>Benzo(g,h,i)perylene</td>
<td>191-24-2</td>
<td>-</td>
<td>-</td>
<td>3.00E-02</td>
<td>S</td>
<td>1.1E-01</td>
<td>1.1E+00</td>
<td>2.3E+02</td>
<td>6.1E+01</td>
</tr>
<tr>
<td>Strontium</td>
<td>7440-24-6</td>
<td>-</td>
<td>-</td>
<td>6.00E-01</td>
<td>IRIS</td>
<td>2.2E+00</td>
<td>2.2E+01</td>
<td>4.7E+03</td>
<td>4.4E+04</td>
</tr>
</tbody>
</table>

**Notes:**
- Not applicable or available
- CAS = Chemical Abstract Number
- SFo = Oral Slope Factor
- RfDo = Oral Reference Dose
- A = Agency for Toxic Substances and Disease Registry (ATSDR)
- P = Provisional Peer-Reviewed Toxicity Value (PPRTV)
- IRIS = Integrated Risk Information System (USEPA)
- S = Surrogate (pyrene)
- GWss = RECAP Groundwater Screening Standard
- GW1 = RECAP Standard for Class 1 groundwater
- SoilSSNi = Screening Standard for soil protective of human health for non-industrial land use.
- SoilSSGW = Screening Standard for soil protective of groundwater.

(a) RECAP Standards calculated in accordance with Appendix H of RECAP (2003).
(b) For organic constituents, the SoilSSGW is estimated using the LDEQ and EPA partitioning equation, where the GW1 (or Water$_{sat}$, whichever is lower) is used as the target soil leachate concentration.
(c) For inorganic constituents for which a TCLP regulatory level is not available, the SoilSSGW is estimated by multiplying the GW1 by a dilution factor of 100 and then by a factor of 20. This calculation is provided in RECAP Appendix H to duplicate the assumptions and methods used for those inorganic constituents with TCLP criteria. For a COC that is not listed in Table 3 such as strontium, the GW1 is calculated in accordance with Section H2.2.2.
(d) The analytical quantitation limit is identified as the GWss when the AQL is greater than the GWss.
Table M-2
Chemical / Physical Properties for RECAP Screening Standard Development
H. C. Drew Estate vs Neumin Production Company and Stokes & Spiehler, Inc.
North Choupique Field
Calcasieu Parish, Louisiana

<table>
<thead>
<tr>
<th>Constituent</th>
<th>CAS</th>
<th>MW</th>
<th>Koc</th>
<th>H</th>
<th>Da</th>
<th>Dw</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Methylnaphthalene</td>
<td>90-12-0</td>
<td>142.2</td>
<td>2.53E+03</td>
<td>5.14E-04</td>
<td>5.28E-02</td>
<td>7.85E-06</td>
<td>2.58E+01</td>
</tr>
<tr>
<td>Benzo(g,h,i)perylene</td>
<td>191-24-2</td>
<td>276.34</td>
<td>1.95E+06</td>
<td>3.31E-07</td>
<td>2.39E-02</td>
<td>6.09E-06</td>
<td>2.60E-04</td>
</tr>
</tbody>
</table>

Notes:
All parameters were obtained from the EPA RSL database.
CAS = chemical abstract number
MW = molecular weight
Koc = soil organic carbon partition coefficient
H = Henry’s Law Constant
Da = diffusivity in air
Dw = diffusivity in water
S (Watersol) = solubility in water