

Table M-1
Toxicity Values for RECAP Screening Standard Development
H. C. Drew Estate vs Neumin Production Company and Stokes & Spiehler, Inc.
North Choupique Field
Calcasieu Parish, Louisiana

Constituent	CAS	Toxicity Values				RECAP Standards (a)			
		SFo (mg/kg-d) ⁻¹	REF	RfDo mg/kg-d	REF	GWss mg/L	GW1 mg/L	Soil _{SSni} mg/kg	Soil _{SSGW} (b, c) mg/kg
1-Methylnaphthalene	90-12-0	2.90E-02	P	7.00E-02	A	1.0E-02 (d)	1.0E-02 (d)	1.6E+01	3.1E+00
Benzo(g,h,i)perylene	191-24-2	-	-	3.00E-02	S	1.1E-01	1.1E+00	2.3E+02	6.1E+01
Strontium	7440-24-6	-	-	6.00E-01	IRIS	2.2E+00	2.2E+01	4.7E+03	4.4E+04

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

Soil_{SSni} = Screening Standard for soil protective of human health for non-industrial land use.

Soil_{SSGW} = Screening Standard for soil protective of groundwater.

(a) RECAP Standards calculated in accordance with Appendix H of RECAP (2003).

(b) For organic constituents, the Soil_{SSGW} is estimated using the LDEQ and EPA partitioning equation, where the GW1 (or Water_{sol}, 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 Soil_{SSGW} 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

Constituent	CAS	MW g/g-mole	Koc cm ³ /g	H atm-m ³ /mol	Da cm ² /s	Dw cm ² /s	S mg/L
1-Methylnaphthalene	90-12-0	142.2	2.53E+03	5.14E-04	5.28E-02	7.85E-06	2.58E+01
Benzo(g,h,i)perylene	191-24-2	276.34	1.95E+06	3.31E-07	2.39E-02	6.09E-06	2.60E-04

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