



Maryland Cleanup Standards for Petroleum Contaminated Groundwater and Soil

Analyte	Groundwater Standards – Residential Cleanup Standards (mg/L)	Soil Standards ¹		
		Residential Cleanup	Non-Residential Cleanup Standards (mg/kg)	Protection of Groundwater (mg/kg)
Gasoline Range Organics (GRO)	4.7E-02	2.3E+02	6.2E+02	--
Diesel Range Organics (DRO)	4.7E-02	2.3E+02	6.2E+02	--
Methyl tert-butyl ether (MTBE) ²	2.0E+01 ³ 2.0E-02 ⁴	1.6E+02	7.2E+02	1.2E-02

1) TPH soil standards were calculated based solely on an ingestion exposure pathway. TPH soil cleanup numeric standards were derived using equation 7 and reference dose information for hydrocarbon fractions published by the Massachusetts Department of Environmental Protection (Characterizing Risks Posed by Petroleum Contaminated Sites: Implementation of MADEP VPH/EPH Approach, October 31, 2002, Policy # WSC-02-0411). Gasoline Range Organics (GRO) standards were defined as the lowest RBC value calculated for the C5-C8 aliphatic, C9-C12 aliphatic, and C9-C10 aromatic fractions. Diesel Range Organics (DRO) standards were defined as the lowest RBC value calculated for the C9-C18 aliphatic, C19-C36 aliphatic, and C11-C22 aromatic fractions.

2) MTBE action level in Maryland is 20 ug/L.

2) Type 1 Aquifer

3) Type 2 Aquifer

Contact: Christopher Ralston, Oil Control Program, Maryland Department of the Environment, 410-537-3470

E-mail: cralston@mde.state.md.us

Web site: <http://www.mde.state.md.us/Pages/Home.aspx>