7. REGULATIONS AND ADVISORIES

Because of its potential to cause adverse effects in exposed people, a number of regulations and advisory values have been established for BDCM by various national and state agencies. These values are summarized in Table 7-1. No international values were located.

7. REGULATIONS AND ADVISORIES

TABLE 7-1. Regulations and Guidelines Applicable to BDCM

Regulations a. Water EPA ODW Maximum Contaminant Level (MCL) for Total Trihalomethanes Monitoring Required for All Systems EPA OSW Groundwater Monitoring List (Appendix IX) EPA OWRS General Permits Under the National Pollutant Discharge Elimination System (NFDES) General Pretreatment Regulations for Existing and New Sources of Pollution (halomethanes) FDA Permissible Level in Bottled Water (Total Trihalomethanes) b. Non-specific Media EPA OWRS Ambient Water Quality Criteria to Protect Human Health (b) Ingesting Water and Organisms 100-5 10-6 10-7 Ingesting Organisms Only 10-6 10-7 Ingesting Organisms Only 10-6 10-7 EPA Reference Dose (RfD) State Regulations and Guidelines	Value	References
A. Water EPA ODW Maximum Contaminant Level (MCL) for Total Trihalomethanes Monitoring Required for All Systems EPA OSW Groundwater Monitoring List (Appendix IX) EPA OWRS General Permits Under the National Pollutant Discharge Elimination System (NPDES) General Pretreatment Regulations for Existing and New Sources of Pollution (halomethanes) FDA Permissible Level in Bottled Water (Total Trihalomethanes) D. Non-specific Media EPA OERR Reportable Quantity Suidelines EPA OWRS Ambient Water Quality Criteria to Protect Human Health Ingesting Water and Organisms 10-5 10-7 10-6 10-7 Ingesting Organisms Only 10-6 10-7 Reference Dose (RfD)		
Maximum Contaminant Level (MCL) for Total Trihalomethanes Monitoring Required for All Systems EPA OSW Groundwater Monitoring List (Appendix IX) EPA OWRS General Permits Under the National Pollutant Discharge Elimination System (NPDES) General Pretreatment Regulations for Existing and New Sources of Pollution (halomethanes) FDA Permissible Level in Bottled Water (Total Trihalomethanes) b. Non-specific Media EPA OERR Reportable Quantity Guidelines EPA OWRS Ambient Water Quality Criteria to Protect Human Health Ingesting Water and Organisms 10-5 10-6 10-7 Ingesting Organisms Only 10-5 10-6 10-7 Reference Dose (RfD)		
EPA OSW Groundwater Monitoring List (Appendix IX) EPA OWRS General Permits Under the National Pollutant Discharge Elimination System (NPDES) General Pretreatment Regulations for Existing and New Sources of Pollution (halomethanes) FDA Permissible Level in Bottled Water (Total Trihalomethanes) b. Non-specific Media EPA OERR Reportable Quantity Guidelines EPA OWRS Ambient Water Quality Criteria to Protect Human Realth Ingesting Water and Organisms 10-5 10-6 10-7 Ingesting Organisms Only 10-6 10-6 10-7 EPA Reference Dose (RfD)	0.10 mg/L	40 CFR 141.12
(Appendix IX) General Permits Under the National Pollutant Discharge Elimination System (NPDES) General Pretreatment Regulations for Existing and New Sources of Pollution (halomethanes) FDA Permissible Level in Bottled Water (Total Trihalomethanes) D. Non-specific Media EPA OERR Reportable Quantity Guidelines EPA OWRS Ambient Water Quality Criteria to Protect Human Health (b) Ingesting Water and Organisms 10-6 10-7 Ingesting Organisms Only 10-6 10-6 10-7 Reference Dose (RfD)	NA(a)	40 CFR 141.40 EPA 1987a
National Pollutant Discharge Elimination System (NPDES) General Pretreatment Regulations for Existing and New Sources of Pollution (halomethanes) FDA Permissible Level in Bottled Water (Total Trihalomethanes) b. Non-specific Media EPA OERR Reportable Quantity Guidelines EPA OWRS Ambient Water Quality Criteria to Protect Human Health Ingesting Water and Organisms 10-5 10-6 10-7 Ingesting Organisms Only 10-5 10-6 10-7 Reference Dose (RfD)	NA:	40 CFR 264 EPA 1987b
for Existing and New Sources of Pollution (halomethanes) Permissible Level in Bottled Water (Total Trihalomethanes) D. Non-specific Media EPA OERR Reportable Quantity Guidelines EPA OWRS Ambient Water Quality Criteria to Protect Human Health (b) Ingesting Water and Organisms 10-5 10-6 10-7 Ingesting Organisms Only 10-5 10-6 10-7 Reference Dose (RfD)	NA	40 CFR 122 Appendix D Table II
(Total Trihalomethanes) b. Non-specific Media EPA OERR Reportable Quantity Guidelines EPA OWRS Ambient Water Quality Criteria to Protect Human Health(b) Ingesting Water and Organisms 10-5 10-6 10-7 Ingesting Organisms Only 10-5 10-6 10-7 Reference Dose (RfD)	NA	40 CFR 403
EPA OERR Reportable Quantity Guidelines EPA OWRS Ambient Water Quality Criteria to Protect Human Health Dingesting Water and Organisms 10-6 10-7 Ingesting Organisms Only 10-6 10-6 10-7 EPA Reference Dose (RfD)	0.10 mg/L	21 CFR 103.35
EPA OWRS Ambient Water Quality Criteria to Protect Human Health (b) Ingesting Water and Organisms 10-5 10-6 10-7 Ingesting Organisms Only 10-5 10-6 10-7 Reference Dose (RfD)		
Ambient Water Quality Criteria to Protect Human Health (b) Ingesting Water and Organisms 10-5 10-6 10-7 Ingesting Organisms Only 10-5 10-6 10-7 Reference Dose (RfD)	5000 1Ъ	40 CFR 302.4 EPA 1985a
to Protect Human Health (b) Ingesting Water and Organisms 10-5 10-6 10-7 Ingesting Organisms Only 10-5 10-6 10-6 10-7 Reference Dose (RfD)		
Ingesting Organisms Only 10 ⁻⁵ 10 ⁻⁶ 10 ⁻⁷ EPA Reference Dose (RfD)	1.9 μ _g /L	EPA 1980b
Ingesting Organisms Only 10 ⁻⁵ 10 ⁻⁶ 10 ⁻⁷ Reference Dose (RfD)	0.19 μg/L 0.019 μg/L	
EPA Reference Dose (RfD)	157 μ _g /L 15.7 μ _g /L	
· · · · · · · · · · · · · · · · · · ·	1.57 µg/L	
State Regulations and Guidelines	2E-2 mg/kg/d	EPA 1988
State Drinking Water Standards and Environmental Guidelines Agencies		FSTRAC 1988
Illinois Vermont	1.0 μg/L 100 μg/L	

⁽a)Not applicable.

⁽b)Because of its carcinogenic potential, the EPA-recommended concentration for BDCM in ambient water is zero. However, because attainment of this level may not be possible, levels which correspond to upper bound incremental lifetime cancer risks of 10^{-5} , 10^{-6} and 10^{-7} are estimated. Since no quantitative data are available on the cancer risk from BDCM, the values are assumed to be equal to those for chloroform.