
DRINKING WATER REGULATIONS AND HEALTH ADVISORIES

by

**Office of Water
U.S. Environmental Protection Agency
Washington, D.C.
202-260-7571**

**SAFE DRINKING WATER HOTLINE
1-800-426-4791
Monday thru Friday, 9:00 AM to 5:30 PM EST**

November 1994



Recycled/Recyclable
Printed with Soy/Canola Ink on paper that
contains at least 50% recycled fiber

Faint header text at the top of the page, possibly containing a title or reference number.

First line of faint, illegible text in the upper section.

Second line of faint, illegible text in the upper section.

Third line of faint, illegible text in the upper section.

Fourth line of faint, illegible text in the upper section.

Fifth line of faint, illegible text in the upper section.

Faint footer text at the bottom of the page, possibly containing a date or page number.

LEGEND

Abbreviations column descriptions are:

- MCLG - Maximum Contaminant Level Goal. A non-enforceable concentration of a drinking water contaminant that is protective of adverse human health effects and allows an adequate margin of safety.
- MCL - Maximum Contaminant Level. Maximum permissible level of a contaminant in water which is delivered to any user of a public water system.
- RfD - Reference Dose. An estimate of a daily exposure to the human population that is likely to be without appreciable risk of deleterious effects over a lifetime.
- DWEL - Drinking Water Equivalent Level. A lifetime exposure concentration protective of adverse, non-cancer health effects, that assumes all of the exposure to a contaminant is from a drinking water source.

(*) The codes for the Status Reg and Status HA columns are as follows:

- F - final
D - draft
L - listed for regulation
P - proposed
T - tentative

Other codes found in the table include the following:

- NA - not applicable
PS - performance standard 0.5 NTU - 1.0 NTU
TT - treatment technique

** - No more than 5% of the samples per month may be positive. For systems collecting fewer than 40 samples/month, no more than 1 sample per month may be positive.

*** - guidance

- Large discrepancies between Lifetime and Longer-term HA values may occur because of the Agency's conservative policies, especially with regard to carcinogenicity, relative source contribution, and less than lifetime exposures in chronic toxicity testing. These factors can result in a cumulative UF (uncertainty factor) of 10 to 1000 when calculating a Lifetime HA.

The scheme for categorizing chemicals according to their carcinogenic potential is as follows: *

Group A: Human carcinogen

Sufficient evidence in epidemiologic studies to support causal association between exposure and cancer

Group B: Probable human carcinogen

Limited evidence in epidemiologic studies (Group B1) *and/or* sufficient evidence from animal studies (Group B2)

Group C: Possible human carcinogen

Limited evidence from animal studies *and* inadequate or no data in humans

Group D: Not classifiable

Inadequate or no human and animal evidence of carcinogenicity

Group E: No evidence of carcinogenicity for humans

No evidence of carcinogenicity in at least two adequate animal tests in different species *or* in adequate epidemiologic and animal studies

Drinking Water Health Advisories (HAs) are defined as follows:

One-day HA

The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to 5 consecutive days of exposure, with a margin of safety.

Ten-day HA

The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects up to 14 consecutive days of exposure, with a margin of safety.

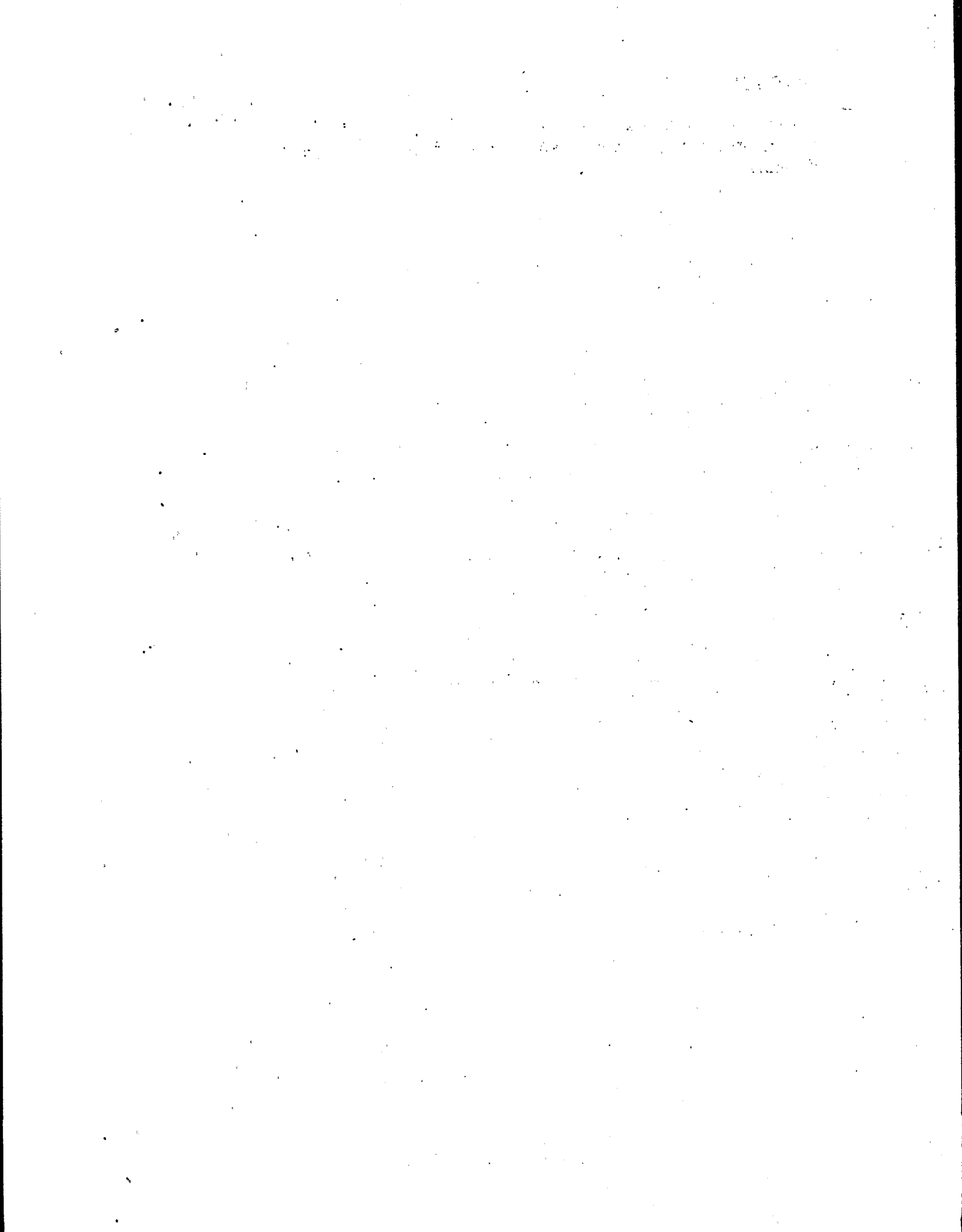
Long-term HA

The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects up to approximately 7 yr (10% of an individual's lifetime) of exposure, with a margin of safety.

*EPA is in the process of revising the Cancer Guidelines.

Lifetime HA

The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects over a lifetime of exposure, with a margin of safety.



Drinking Water Standards and Health Advisories

Chemicals	Standards			Status HA	Health Advisories							Cancer Group			
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult							
					One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RD (mg/kg/day)	DWEL (mg/l)	Lifetime (mg/l)		mg/l at 10 ⁻⁴ Cancer Risk		
ORGANICS															
Acenaphthene	T	zero	-	-	-	-	-	-	-	0.06	-	-	-	-	-
Acifluorfen	F	zero	-	2	0.1	-	0.4	0.013	-	0.013	0.4	-	-	0.1	B2
Acrylamide	F	zero	TT	1.5	0.3	0.02	0.07	0.002	0.007	0.002	0.007	-	-	0.001	B2
Acrylonitrile	T	zero	-	-	-	-	-	-	-	-	-	-	-	0.006	B1*
Adipate (diethylhexyl)	F	0.4	0.4	20	20	20	60	0.6	20	0.6	20	0.4	3	-	C
Alachlor	F	zero	0.002	0.1	0.1	-	-	0.01	0.4	0.01	0.4	-	-	0.04	B2
Aldicarb**	D	0.007	0.007	-	-	-	-	0.001	0.035	0.001	0.035	0.007	-	-	D
Aldicarb sulfone**	D	0.007	0.007	-	-	-	-	0.001	0.035	0.001	0.035	0.007	-	-	D
Aldicarb sulfoxide**	D	0.007	0.007	-	-	-	-	0.001	0.035	0.001	0.035	0.007	-	-	D
Aldrin	-	-	-	0.0003	0.0003	0.0003	0.0003	0.00003	0.001	0.00003	0.001	-	-	0.0002	B2
Ametryn	-	-	-	9	9	0.9	3	0.009	0.3	0.009	0.3	0.06	-	-	D
Ammonium sulfamate	-	-	-	20	20	20	80	0.28	8	0.28	8	2	-	-	D
Anthracene (PAH)	-	-	-	-	-	-	-	0.3	-	0.3	-	-	-	-	D
Atrazine	F	0.003	0.003	0.1	0.1	0.05	0.2	0.035	0.2*	0.035	0.2*	0.003*	-	-	C
Baygon	-	-	-	0.04	0.04	0.04	0.1	0.004	0.1	0.004	0.1	0.003	-	-	C
Bentazon	T	0.02	-	0.3	0.3	0.3	0.9	0.0025	0.09	0.0025	0.09	0.02	-	-	C
Benz(a)anthracene (PAH)	P	zero	0.0001	-	-	-	-	-	-	-	-	-	-	-	D
Benzene	F	zero	0.005	0.2	0.2	-	-	-	-	-	-	-	-	-	B2
Benzo(a)pyrene (PAH)	F	zero	0.0002	-	-	-	-	-	-	-	-	-	-	0.1	A
Benzo(b)fluoranthene (PAH)	P	zero	0.0002	-	-	-	-	-	-	-	-	-	-	-	B2*
Benzo(g,h,i)perylene (PAH)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B2
Benzo(k)fluoranthene (PAH)	P	zero	0.0002	-	-	-	-	-	-	-	-	-	-	-	D
bis-2-Chloroisopropyl ether	-	-	-	4	4	4	13	0.04	1	0.04	1	0.3	-	-	B2
Bromacil	L	-	-	5	5	3	9	0.13	5	0.13	5	0.09	-	-	D
Bromobenzene	L	-	-	-	-	-	-	-	-	-	-	-	-	-	C

* Under review.
 **NOTE: The HA value or the MCLG/MCL value for any two or more of these three chemicals should remain at 0.007 mg/L because of similar mode of action.
 NOTE: Anthracene and Benzo(g,h,i)perylene — not proposed in Phase V.
 NOTE: Changes from the last version are noted in *italic* and **Bold Face** print.

Drinking Water Standards and Health Advisories

Chemicals	Standards			Status HA	Health Advisories						Cancer Group			
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult						
					One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RD (mg/kg/day)	DWEL (mg/l)		Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
Bromochloroacetonitrile	L	-	-	D	-	-	-	-	-	-	-	-	-	-
Bromochloromethane	T	zero	0.1*/0.08*	F	50	1	1	5	0.013	0.5	0.09	-	-	B2
Bromodichloromethane (THM)	T	zero	0.1*/0.08*	D	6	6	4	13	0.02	0.7	-	0.06	-	B2
Bromoform (THM)	T	zero	-	D	5	2	2	6	0.02	0.7	-	0.4	-	D
Bromomethane	T	-	-	F	0.1	0.1	0.1	0.5	0.001	0.04	0.01	-	-	C
Butyl benzyl phthalate (PAE)	P	zero	0.1	F	-	-	-	-	0.2	6	-	-	-	D
Butylate	-	-	-	F	2	2	1	4	0.05	2	0.35	-	-	-
Butylbenzene n-	-	-	-	D	-	-	-	-	-	-	-	-	-	-
Butylbenzene sec-	-	-	-	D	-	-	-	-	-	-	-	-	-	-
Butylbenzene tert-	-	-	-	D	-	-	-	-	-	-	-	-	-	-
Carbaryl	-	-	-	D	1	1	1	1	0.1	4	0.7	-	-	D
Carbofuran	F	0.04	0.04	F	0.05	0.05	0.05	0.2	0.005	0.2	0.04	-	-	E
Carbon tetrachloride	F	zero	0.005	F	4	0.2	0.07	0.3	0.0007	0.03	-	0.03	-	B2
Carboxin	-	-	-	F	1	1	1	4	0.1	4	0.7	-	-	D
Chloral hydrate	T	0.04	0.06**	D	7	0.2	0.2	0.6	0.0002	0.06	0.06	-	-	C
Chloramben	-	-	-	F	3	3	0.2	0.5	0.015	0.5	0.1	-	-	D
Chlordane	F	zero	0.002	F	0.06	0.06	-	-	0.00006	0.002	-	0.003	-	B2
Chlorodibromomethane (THM)	T	0.06	0.1*/0.08*	D	6	6	2	8	0.02	0.7	0.06	-	-	C
Chloroethane	L	-	-	D	-	-	-	-	-	-	-	-	-	-
Chloroform (THM)	T	zero	0.1*/0.08*	D	4	4	0.1	0.4	0.01	0.4	-	0.6	-	B2
Chloromethane	L	-	-	F	9	0.4	0.4	1	0.004	0.1	0.003	-	-	C
Chlorophenol (2-)	-	-	-	D	0.05	0.05	0.05	0.2	0.005	0.2	0.04	-	-	D
p-Chlorophenyl methyl sulfide/sulfone/sulfoxide	-	-	-	**	-	-	-	-	-	-	-	-	-	D
Chloropicrin	L	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorothalonil	-	-	-	F	0.2	0.2	0.2	0.5	0.015	0.5	-	0.15	-	B2
Chlorotoluene o-	L	-	-	F	2	2	2	7	0.02	0.7	0.1	-	-	D
Chlorotoluene p-	L	-	-	F	2	2	2	7	0.02	0.7	0.1	-	-	D
Chlorpyrifos	-	-	-	F	0.03	0.03	0.03	0.1	0.003	0.1	0.02	-	-	D
Chrysene (PAH)	P	zero	0.0002	-	-	-	-	-	-	-	-	-	-	B2
Cyanazine	T	0.001	-	D	0.1	0.1	0.02	0.07	0.002	0.07	0.001	-	-	C

* Current MCL ** 1994 Proposed rule for Disinfectants and Disinfection By-products: Total for all THMs combined cannot exceed the 0.08 level. **Total for all haloacetic acids cannot exceed 0.06 level. **A HA will not be developed due to insufficient data; a "Database Deficiency Report has been published.

Drinking Water Standards and Health Advisories

Chemicals	Standards			Status HA	Health Advisories						Cancer Group			
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult						
					One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RID (mg/kg/day)	DWEL (mg/l)		Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
Cyanogen chloride	L	-	-	-	-	-	-	-	-	-	-	-	-	-
Cymene p-2,4-D	F	0.07	0.07	D	1	0.3	0.1	0.4	0.01	0.4	0.07	-	-	D
DCPA (Dacthal)	L	-	-	F	80	80	5	20	0.5	20	4	-	-	D
Dalapon	F	0.2	0.2	F	3	3	0.3	0.9	0.026	0.9	0.2	-	-	D
Di[2-ethylhexyl]adipate	F	0.4	0.4	-	20	20	20	60	0.6	20	0.4	3	-	C
Diazinon	-	-	-	F	0.02	0.02	0.005	0.02	0.00009	0.003	0.0006	-	-	E
Dibenz(a,h)anthracene (PAH)	P	zero	0.0003	-	-	-	-	-	-	-	-	-	-	B2
Dibromoacetonitrile	L	-	-	D	2	2	2	8	0.02	0.8	0.02	-	-	C
Dibromochloropropane (DBCP)	F	zero	0.0002	F	0.2	0.05	-	-	-	-	-	0.003	-	B2
Dibromomethane	L	-	-	-	-	-	-	-	-	-	-	-	-	D
Dibutyl phthalate (PAE)	-	-	-	-	-	-	-	-	-	-	-	-	-	D
Dicamba	L	-	-	F	0.3	0.3	0.3	1	0.03	4	0.2	-	-	D
Dichloroacetaldehyde	L	-	-	D	-	-	-	-	-	-	-	-	-	D
Dichloroacetic acid	T	zero	0.06**	D	1	1	1	4	0.004	0.1	-	-	-	D
Dichloroacetonitrile	L	-	-	D	1	1	0.8	3	0.008	0.3	0.006	-	-	B2
Dichlorobenzene o-	F	0.6	0.6	F	9	9	9	30	0.09	3	0.6	-	-	C
Dichlorobenzene m-	F	0.6	0.6	F	9	9	9	30	0.09	3	0.6	-	-	D
Dichlorobenzene p-	F	0.075	0.075	F	10	10	10	40	0.1	4	0.075	-	-	D
Dichlorodifluoromethane	L	-	-	F	40	40	9	30	0.2	5	1	-	-	C
Dichloroethane (1,1-)	L	-	-	D	-	-	-	-	-	-	-	-	-	D
Dichloroethane (1,2-)	F	zero	0.005	F	0.7	0.7	0.7	2.6	-	-	-	0.04	-	B2
Dichloroethylene (1,1-)	F	0.007	0.007	F	2	1	1	4	0.009	0.4	0.007	-	-	C
Dichloroethylene (cis-1,2-)	F	0.07	0.07	F	4	3	3	11	0.01	0.4	0.07	-	-	D
Dichloroethylene (trans-1,2-)	F	0.1	0.1	F	20	2	2	6	0.02	0.6	0.1	-	-	D
Dichloromethane	F	zero	0.005	F	10	2	-	-	0.06	2	-	0.5	-	B2
Dichlorophenol (2,4-)	-	-	-	D	0.03	0.03	0.03	0.1	0.003	0.1	0.02	-	-	D
Dichloropropane (1,1-)	-	-	-	D	-	-	-	-	-	-	-	-	-	D
Dichloropropane (1,2-)	F	zero	0.005	F	-	-	-	-	-	-	-	-	-	D
Dichloropropane (1,3-)	L	-	-	D	-	0.09	-	-	-	-	-	0.05	-	-

* The values for m-dichlorobenzene are based on data for o-dichlorobenzene.

** Total for all halobacetic acids cannot exceed 0.06 level.

Drinking Water Standards and Health Advisories

November 1994

Page 4

Chemicals	Standards			Status HA	Health Advisories							Cancer Group			
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult							
					One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RfD (mg/kg/day)	DWEL (mg/l)	Lifetime (mg/l)		mg/l at 10 ⁻⁴ Cancer Risk		
Dichloropropane (2,2-)	L	-	-	D	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene (1,1-)	L	-	-	D	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene (1,3-)	T	zero	-	F	0.03	0.03	0.03	0.09	0.0003	0.01	-	-	-	0.02	B2
Dieldrin	-	-	-	F	0.0005	0.0005	0.0005	0.002	0.00005	0.002	-	-	-	0.0002	B2
Diethyl phthalate (PAE)	-	-	-	D	-	-	-	-	0.8	30	5	-	-	-	D
Diethylene glycol dinitrate	-	-	-	**	-	-	-	-	-	-	-	-	-	-	-
Diethylhexyl phthalate (PAE)	F	zero	0.006	D	-	-	-	-	0.02	0.7	-	-	-	0.3	B2*
Diisopropyl methylphosphonate	-	-	-	F	8	8	8	30	0.08	3	0.6	-	-	-	D
Dimethrin	-	-	-	F	10	10	10	40	0.3	10	2	-	-	-	D
Dimethyl methylphosphonate	-	-	-	F	2	2	2	6	0.2	7	0.1	-	-	0.7	C
Dimethyl phthalate (PAE)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D
1,3-Dinitrobenzene	-	-	-	F	0.04	0.04	0.04	0.14	0.0001	0.005	0.001	-	-	-	D
Dinitrotoluene (2,4-)	L	-	-	F	0.50	0.50	0.30	1	0.002	0.1	-	-	-	-	-
Dinitrotoluene (2,6-)	L	-	-	F	0.40	0.40	0.40	1	0.001	0.04	-	-	-	-	-
tg 2,6 & 2,4 dinitrotoluene ***	-	-	-	-	-	-	-	-	-	-	-	-	-	0.005	B2
Dinoseb	F	0.007	0.007	F	0.3	0.3	0.01	0.04	0.001	0.04	0.007	-	-	-	D
Dioxane p-	-	-	-	F	4	0.4	-	-	-	-	-	-	-	0.7	B2
Diphenamid	-	-	-	F	0.3	0.3	0.3	1	0.03	1	0.2	-	-	-	D
Diphenylamine	-	-	-	F	1	1	0.3	1	0.03	1	0.2	-	-	-	D
Diquat	F	0.02	0.02	-	-	-	-	-	0.0022	0.08	0.02	-	-	-	D
Disulfoton	-	-	-	F	0.01	0.01	0.003	0.009	0.00004	0.001	0.0003	-	-	-	E
Dithiane (1,4-)	-	-	-	F	0.4	0.4	0.4	1	0.01	0.4	0.08	-	-	-	D
Diuron	-	-	-	F	1	1	0.3	0.9	0.002	0.07	0.01	-	-	-	D
Endothall	F	0.1	0.1	F	0.8	0.8	0.2	0.2	0.02	0.7	0.1	-	-	-	D
Endrin	F	0.002	0.002	F	0.02	0.02	0.003	0.01	0.0003	0.01	0.002	-	-	-	D
Epichlorohydrin	F	zero	TT	F	0.1	0.1	0.07	0.07	0.002	0.07	-	-	-	0.4	B2
Ethylbenzene	F	0.7	0.7	F	30	3	1	3	0.1	3	0.7	-	-	-	D
Ethylene dibromide (EDB)	F	zero	0.00005	F	0.008	0.008	-	-	-	-	-	-	-	0.00004	B2
Ethylene glycol	-	-	-	F	20	6	6	20	2	40	7	-	-	-	D
ETU	L	-	-	F	0.3	0.3	0.1	0.4	0.00008	0.003	-	-	-	0.03	B2
Fenamiphos	-	-	-	F	0.009	0.009	0.005	0.02	0.00025	0.009	0.002	-	-	-	D

* Under review. ** A HA will not be developed due to insufficient data; a "Database Deficiency Report" has been published.
 ***: tg = technical grade

Drinking Water Standards and Health Advisories

Chemicals	Standards			Status HA	10-kg Child				70-kg Adult					Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/kg/day)	RD (mg/l)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk		
													5	
Fluometron	-	-	-	2	2	2	2	0.013	0.4	0.09	-	D		
Fluorene (PAH)	-	-	-	-	-	-	-	0.04	-	-	-	D		
Fluorotrichloromethane	L	-	-	7	7	3	10	0.3	10	2	-	D		
Fog Oil	-	-	-	-	-	-	-	-	-	-	-	-		
Fonofos	-	-	-	0.02	0.02	0.02	0.07	0.002	0.07	0.01	-	D		
Formaldehyde	-	-	-	10	5	5	20	0.15	5	1	-	B1		
Gasoline, unleaded (benzene)	-	-	-	-	-	-	-	-	-	0.005	-	-		
Glyphosate	F	0.7	0.7	20	20	1	1	0.1	4	0.7	-	E		
Heptachlor	F	zero	0.0004	0.01	0.01	0.005	0.005	0.0005	0.02	-	0.0008	B2		
Heptachlor epoxide	F	zero	0.0002	0.01	-	0.0001	0.0001	1E-5	0.0004	-	0.0004	B2		
Hexachlorobenzene	F	zero	0.001	0.05	0.05	0.05	0.2	0.0008	0.03	-	0.002	B2		
Hexachlorobutadiene	T	0.001	-	0.3	0.3	0.1	0.4	0.002	0.07	0.001	-	C		
Hexachlorocyclopentadiene	F	0.05	0.05	-	-	-	-	0.007	0.2	-	-	D		
Hexachloroethane	L	-	-	5	5	0.1	0.5	0.001	0.04	0.001	-	C		
Hexane (n-)	-	-	-	10	4	4	10	-	-	-	-	D		
Hexazinone	-	-	-	3	3	3	9	0.033	1	0.2	-	D		
HMX	-	-	-	5	5	5	20	0.05	2	0.4	-	D		
Indeno(1,2,3-c,d)pyrene (PAH)	P	zero	0.0004	-	-	-	-	-	-	-	-	B2		
Isophorone	L	-	-	15	15	15	15	0.2	7	0.1	4	C		
Isopropyl methylphosphonate	-	-	-	30	30	30	100	0.1	4.0	0.7	-	D		
Isopropylbenzene	-	-	-	-	-	-	-	-	-	-	-	-		
Lindane	F	0.0002	0.0002	1	1	0.03	0.1	0.0003	0.01	0.0002	-	C		
Malathion	-	-	-	0.2	0.2	0.2	0.8	0.02	0.8	0.2	-	D		
Maleic hydrazide	-	-	-	10	10	5	20	0.5	20	4	-	D		
MCPA	-	-	-	0.1	0.1	0.1	0.4	0.0015	0.05	0.01	-	E		
Methomyl	L	-	-	0.3	0.3	0.3	0.3	0.025	0.9	0.2	-	D		
Methoxychlor	F	0.04	0.04	0.05	0.05	0.05	0.2	0.005	0.2	0.04	-	D		
Methyl ethyl ketone	-	-	-	-	-	-	-	-	-	-	-	-		
Methyl parathion	-	-	-	0.3	0.3	0.03	0.1	0.00025	0.009	0.002	-	D		

* Under review.

Drinking Water Standards and Health Advisories

Chemicals	Standards			Status HA	Health Advisories							Cancer Group	
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RfD (mg/kg/day)	DWEL (mg/l)	Lifetime (mg/l)		mg/l at 10 ⁻⁴ Cancer Risk
Methyl tert butyl ether	L	-	-	D	3	3	0.5	2	0.005	0.2	0.04	-	D
Metolachlor	L	-	-	F	1	1	1	3.5	0.1	3.5	0.07	-	C
Metribuzin	L	-	-	F	5	5	0.3	0.9	0.025	0.9	0.2	-	D
Monochloroacetic acid	L	-	-	D	-	-	-	-	-	-	-	-	-
Monochlorobenzene	F	0.1	0.1	F	2	2	2	7	0.02	0.7	0.1	-	D
Naphthalene	-	-	-	F	0.5	0.5	0.4	1	0.004	0.1	0.02	-	D
Nitrocellulose (non-toxic)	-	-	-	F	-	-	-	-	-	-	-	-	-
Nitroguanidine	-	-	-	F	10	10	10	40	0.1	4	0.7	-	D
Nitrophenol p-	-	-	-	F	0.8	0.8	0.8	3	0.008	0.3	0.06	-	D
Oxamyl (Vydate)	F	0.2	0.2	F	0.2	0.2	0.2	0.9	0.025	0.9	0.2	-	E
Paraquat	-	-	-	F	0.1	0.1	0.05	0.2	0.0045	0.2	0.03	-	E
Pentachloroethane	-	-	-	D	-	-	-	-	-	-	-	-	-
Pentachlorophenol	F	zero	0.001	F	1	0.3	0.3	1	0.03	1	-	0.03	B2
Phenanthrene (PAH)	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	-	-	-	D	6	6	6	20	0.6	20	4	-	D
Picloram	F	0.5	0.5	F	20	20	0.7	2	0.07	2	0.5	-	D
Polychlorinated biphenyls (PCBs)	F	zero	0.0005	P	-	-	-	-	-	-	-	0.0005	B2
Prometon	L	-	-	F	0.2	0.2	0.2	0.5	0.015*	0.5*	0.1*	-	D
Pronamide	-	-	-	F	0.8	0.8	0.8	3	0.075	3	0.05	-	C
Propachlor	-	-	-	F	0.5	0.5	0.1	0.5	0.013	0.5	0.09	-	D
Propazine	-	-	-	F	1	1	0.5	2	0.02	0.7	0.01	-	C
Propham	-	-	-	F	5	5	5	20	0.02	0.6	0.1	-	D
Propylbenzene n-	-	-	-	D	-	-	-	-	-	-	-	-	-
Pyrene (PAH)	-	-	-	-	-	-	-	-	0.03	-	-	-	D
RDX	-	-	-	F	0.1	0.1	0.1	0.4	0.003	0.1	0.002	0.03	C
Simazine	F	0.004	0.004	F	0.07	0.07	0.07	0.07	0.005	0.2	0.004	-	C
Styrene	F	0.1	0.1	F	20	2	2	7	0.2	7	0.1	-	C
2,4,5-T	L	-	-	F	0.8	0.8	0.8	1	0.01	0.35	0.07	-	D
2,3,7,8-TCDD (Dioxin)	F	zero	3E-08	F	1E-06	1E-07	1E-08	4E-08	1E-09	4E-08	-	2E-08	B2

* Under review. NOTE: Phenanthrene — not proposed.

Drinking Water Standards and Health Advisories

Chemicals	Standards			Status HA	Health Advisories						Cancer Group		
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RFD (mg/kg/day)	DWEL (mg/l)		Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk
Tebuthiuron	-	-	-	F	3	3	0.7	2	0.07	2	0.5	-	D
Terbacil	-	-	-	F	0.3	0.3	0.3	0.9	0.013	0.4	0.09	-	E
Terbufos	-	-	-	F	0.005	0.005	0.001	0.005	0.00013	0.005	0.0009	-	D
Tetrachloroethane (1,1,1,2-)	L	-	-	F	2	2	0.9	3	0.03	1	0.07	0.1	C
Tetrachloroethane (1,1,2,2-)	L	-	-	D	-	-	-	-	-	-	-	-	-
Tetrachloroethylene	F	zero	0.005	F	2	2	1	5	0.01	0.5	-	0.07	-
Tetranitromethane	-	-	-	**	-	-	-	-	-	-	-	-	-
Toluene	F	1	1	F	20	2	2	7	0.2	7	1	-	D
Toxaphene	F	zero	0.003	F	-	-	-	-	0.1*	-	-	0.003	B2
2,4,5-TP	F	0.05	0.05	F	0.2	0.2	0.07	0.3	0.0075	0.3	0.05	-	D
1,1,2-Trichloro-1,2,2-trifluoroethane	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroacetic acid	T	0.3	0.06**	D	4	4	4	13	0.1	4.0	0.3	-	C
Trichloroacetonitrile	L	-	-	D	0.05	0.05	-	-	-	-	-	-	-
Trichlorobenzene (1,2,4-)	F	0.07	0.07	F	0.1	0.1	0.1	0.5	0.01	0.4	0.07	-	D
Trichlorobenzene (1,3,5-)	-	-	-	F	0.6	0.6	0.6	2	0.006	0.2	0.04	-	D
Trichloroethane (1,1,1-)	F	0.2	0.2	F	100	40	40	100	0.035	1	0.2	-	D
Trichloroethane (1,1,2-)	F	0.003	0.005	F	0.6	0.4	0.4	1	0.004	0.1	0.003	-	C
Trichloroethanol (2,2,2-)	L	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethylene	F	zero	0.005	F	-	-	-	-	-	0.3	-	0.3	B2
Trichlorophenol (2,4,6-)	L	-	-	D	-	-	-	-	-	-	-	0.3	B2
Trichloropropane (1,1,1-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Trichloropropane (1,2,3-)	L	-	-	F	0.6	0.6	0.6	2	0.006	0.2	0.04	-	B2
Trifluralin	L	-	-	F	0.08	0.08	0.08	0.3	0.0075	0.3	0.005	0.5	C
Trimethylbenzene (1,2,4-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Trimethylbenzene (1,3,5-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Trinitroglycerol	-	-	-	F	0.005	0.005	0.005	0.005	-	-	0.005	-	-
Trinitrotoluene	-	-	-	F	0.02	0.02	0.02	0.02	0.0005	0.02	0.002	0.1	C
Vinyl chloride	F	zero	0.002	F	3	3	0.01	0.05	-	-	-	0.0015	A
Xylenes	F	10	10	F	40	40	40	100	2	60	10	-	D

* Under review.
 ** A HA will not be developed due to insufficient data; a "Database Deficiency Report" has been published.
 ** Total for all haloacetic acids cannot exceed 0.05 mg/l level.

Drinking Water Standards and Health Advisories

Chemicals	Standards			Status HA	Health Advisories						Cancer Group		
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RfD (mg/kg/day)	DWEL (mg/l)		Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk
INORGANICS													
Aluminum	L	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia	-	-	-	-	-	-	-	-	-	-	30	-	-
Antimony	F	0.006	0.006	F	0.01	0.01	0.015	0.0004	0.01	0.003	-	-	-
Arsenic	*	-	0.05	D	-	-	-	-	-	-	-	0.002	-
Asbestos (fibers/l >10µm length)	F	7 MFL	7 MFL	-	-	-	-	-	-	-	-	700 MFL	-
Barium	F	2	2	F	-	-	-	0.07	2	2	-	-	-
Beryllium	F	0.004	0.004	D	30	4	20	0.005	0.2	-	-	0.0008	B2
Boron	L	-	-	D	4	0.9	3	0.09	3	0.6	-	-	D
Bromate	L	zero	0.01	-	-	-	-	-	-	-	-	-	-
Cadmium	F	0.005	0.005	F	0.04	0.04	0.02	0.0005	0.02	0.005	-	-	D
Chloramine	T	4***	4	D	1	1	1	0.1	3.3	3/4***	-	-	-
Chlorate	L	-	-	D	-	-	-	-	-	-	-	-	-
Chlorine	P	4	4	D	-	-	-	0.1	-	-	-	-	D
Chlorine dioxide	T	0.3	0.8	D	-	-	-	0.01	0.35	0.3	-	-	D
Chlorite	L	0.08	1	D	-	-	-	0.003	0.1	0.08	-	-	D
Chromium (total)	F	0.1	0.1	F	1	0.2	0.8	0.005	0.2	0.1	-	-	D
Copper	F	1.3	TT**	-	-	-	-	-	-	-	-	-	D
Cyanide	P	0.2	0.2	F	0.2	0.2	0.8	0.022	0.8	0.2	-	-	D
Fluoride*	F	4	4	-	-	-	-	0.12	-	-	-	-	-
Hypochlorite	P	4'	-	-	-	-	-	-	-	-	-	-	-
Hypochlorous acid	P	4'	-	-	-	-	-	-	-	-	-	-	-
Lead (at tap)	F	zero	TT**	-	-	-	-	-	-	-	-	-	-
Manganese	L	-	-	D	-	-	-	0.1 ¹ / 0.005 ²	-	-	-	-	B2
Mercury (inorganic)	F	0.002	0.002	F	-	-	0.002	0.0003	0.01	0.002	-	-	D
Molybdenum	L	-	-	D	0.2	0.2	0.05	0.005	0.2	0.04	-	-	D
Nickel	F	0.1	0.1	F	1	1	1.7	0.02	0.6	0.1	-	-	D
Nitrate (as N)	F	10	10	F	-	10*	-	1.6	-	-	-	-	*

* Under review. ** Copper — action level 1.3 mg/L. *** Measured as free chlorine. ¹ Regulated as chlorine. ² In food.
Lead — action level 0.015 mg/L. ³ In water.

Drinking Water Standards and Health Advisories

Chemicals	Standards			Status HA	Health Advisories							Cancer Group		
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult						
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RfD (mg/kg/day)	DWEL (mg/l)	Lifetime (mg/l)		mg/l at 10 ⁻⁴ Cancer Risk	
Nitrite (as N)	F	1	1	F	1*	-	-	-	-	0.16*	-	-	-	*
Nitrate + Nitrite (both as N)	F	10	10	F	-	-	-	-	-	-	-	-	-	*
Selenium	F	0.05	0.05	-	-	-	-	-	-	0.005	-	-	-	-
Silver	-	-	-	D	0.2	0.2	0.2	0.2	0.2	0.005	0.2	0.1	-	D
Sodium	-	-	-	D	-	-	-	-	-	-	20***	-	-	-
Strontium	L	-	-	D	25	25	25	90	90	0.6	90	17	-	D
Sulfate	P	**	**	D	-	-	-	-	-	-	-	-	-	-
Thallium	F	0.0005	0.002	F	0.007	0.007	0.007	0.02	0.00007	0.00007	0.002	0.0004	-	-
Vanadium	L	-	-	D	-	-	-	-	-	-	-	-	-	D
White phosphorous	-	-	-	F	-	-	-	-	-	0.00002	0.0005	0.0001	-	D
Zinc	L	-	-	F	6	6	3	10	0.3	0.3	10	2	-	D
Zinc chloride (measured as Zinc)	L	-	-	F	6	6	3	10	0.3	0.3	10	2	-	D
RADIONUCLIDES														
Beta particle and photon activity (formerly man-made radionuclides)	P	zero	4 mrem	-	-	-	-	-	-	-	-	-	4 mremly	A
Gross alpha particle activity	P	zero	15 pCi/L	-	-	-	-	-	-	-	-	-	15 pCi/L	A
Radium 226	P	zero	20 pCi/L	-	-	-	-	-	-	-	-	-	20 pCi/L	A
Radium 228	P	zero	20 pCi/L	-	-	-	-	-	-	-	-	-	20 pCi/L	A
Radon	P	zero	300 pCi/L+	-	-	-	-	-	-	-	-	-	150 pCi/L	A
Uranium	P	zero	20 µg/L	-	-	-	-	-	0.003	-	-	-	*	A

* Under review. +1991 Proposed National Primary Drinking Water Rule for Radionuclides

** Deferred:

*** Guidance.

Secondary Maximum Contaminant Levels

November 1994

Page 10

Chemicals	Status	SMCLs (mg/L)
Aluminum	F	0.05 to 0.2
Chloride	F	250
Color	F	15 color units
Copper	F	1.0
Corrosivity	F	non-corrosive
Fluoride*	F	2.0
Foaming agents	F	0.5
Iron	F	0.3
Manganese	F	0.05
Odor	F	3 threshold odor numbers
pH	F	6.5 — 8.5
Silver	F	0.1
Sulfate	F	250
Total dissolved solids (TDS)	F	500
Zinc	F	5

Status Codes: P — proposed, F — final

* Under review.

Microbiology

November 1994

Page 11

	Status	MCLG	MCL
Cryptosporidium	L	-	-
Giardia lamblia	F	zero	TT
Legionella	F ^B	zero	TT
Standard Plate Count	F ^B	NA	TT
Total Coliforms	F	zero	**
Turbidity	F	NA	PS
Viruses	F ^B	zero	TT

Key: PS, TT, F, defined as previously stated.

^B Final for systems using surface water; also being considered for regulation under groundwater disinfection rule.

