

**Maine CDC**  
**Maximum Exposure Guidelines (MEGs) for Drinking Water**

Updates to MEGs for Manganese, Uranium, and Perfluorooctanoic acid (PFOA) and Perfluorooctane sulfonate (PFOS)

December 31, 2016  
Environmental and Occupational Health Program



*Paul R. LePage, Governor*

*Mary C. Mayhew, Commissioner*

**Maximum Exposure Guidelines (MEGs) for Drinking Water**  
Maine Center for Disease Control and Prevention

**December 31, 2016**

<b>CHEMICALS</b>	<b>CASRN</b>	<b>2016 MEG (ppb)</b>	<b>EPA HA (ppb)</b>	<b>EPA MCL (ppb)</b>
<b>INORGANICS</b>				
Aluminum	7429-90-5	7000		
Ammonia	7664-41-7	30000	30000	
Ammonium sulfamate	7773-06-0	1000	2000	
Antimony	7440-36-0	3	6	6
Arsenic	7440-38-2	10		10
Barium	7440-39-3	1000		2000
Beryllium	7440-41-7	10		4
Boron	7440-42-8	1000	6000	
Cadmium	7440-43-9	1	5	5
Chloramine	10599-90-3	700	3000	4000
Chlorate	14866-68-3	7		
Chlorine dioxide	10049-04-4	200	800	800
Chlorite	7758-19-2	200	800	1000
Chromium (total)	7440-47-3	20		100
Chromium III	16065-83-1	10000		
Chromium VI (soluble salts)	18540-29-9	20		
Cobalt	7440-48-4	10		
Copper	7440-50-8	500		1300
Cyanide	57-12-5	4	200	200
Fluoride	7782-41-4	2000		4000
Iodide	20461-54-5	300		
Iron	7439-89-6	5000		
Lead	7439-92-1	10		15
Manganese	7439-96-5	300	300	
Mercury (mercuric chloride)	7487-94-7	2	2	2
Molybdenum	7439-98-7	40	40	
Nickel (soluble salts)	7440-02-0	20	100	
Nitrate (as N)	14797-55-8	10000		10000
Nitrite (as N)	14797-65-0	1000		1000
Radon	10043-92-2	4000 pCi/L		
Selenium	7782-49-2	40	50	50
Silver	7440-22-4	40	100	
Sodium	7440-23-5	20000		
Strontium	7440-24-6	4000	4000	
Thallium (chloride)	7791-12-0	0.6		2
Uranium	7440-61-1	30		30
Vanadium	7440-62-2	200		
White Phosphorous	7723-14-0	0.1	0.1	
Zinc	7440-66-6	2000	2000	

Maximum Exposure Guidelines for Drinking Water  
Maine CDC. December, 2016

CHEMICALS	CASRN	2016 MEG (ppb)	EPA HA (ppb)	EPA MCL (ppb)
<b>ORGANICS</b>				
Acenaphthene	83-32-9	400		
Acetamiprid	135410-20-7	500		
Acetochlor	34256-82-1	10		
Acetone	67-64-1	6000		
Acrolein	107-02-8	4		
Acrylamide	79-06-1	0.7		
Acrylonitrile	107-13-1	0.6		
Alachlor	15972-60-8	6		2
Aldicarb	116-06-3	7	7	3
Aldicarb sulfone	1646-88-4	7	7	2
Aldrin	309-00-2	0.02		
Allyl chloride	107-05-1	20		
Ametryn	834-12-8	60	60	
Anthracene	120-12-7	2000		
Asulam	3337-71-1	40		
Atrazine	1912-24-9	2		3
Azinophos - methyl	86-50-0	10		
Baygon (propoxur)	114-26-1	30	3	
Bentazon	25057-89-0	200	200	
Benzene	71-43-2	4		5
Benzo(a)anthracene	56-55-3	0.5		
Benzo(a)pyrene	50-32-8	0.05		0.2
Benzo(b)fluoranthene	205-99-2	0.5		
Benzo(k)fluoranthene	207-08-9	5		
Benzoic Acid	65-85-0	30000		
Benzyl chloride	100-44-7	2		
Biphenyl (1,1-)	92-52-4	400		
bis-2-Chloro isopropyl ether	108-60-1	300	300	
bis-2-Chloroethyl ether	111-44-4	0.3		
Boscalid	188425-85-6	200		
Bromacil	314-40-9	70	70	
Bromochloromethane	74-97-5	100	90	
Bromodichloromethane	75-27-4	6		80
Bromoform	75-25-2	40		80
Bromomethane	74-83-9	10	10	
Butadiene (1,3-)	106-99-0	0.1		
Butyl benzyl phthalate	85-68-7	200		
Butylate	2008-41-5	400	400	
Captan	133-06-2	200		
Carbaryl	63-25-2	70		
Carbofuran	1563-66-2	40		40

Maximum Exposure Guidelines for Drinking Water  
Maine CDC. December, 2016

<b>CHEMICALS</b>	<b>CASRN</b>	<b>2016 MEG (ppb)</b>	<b>EPA HA (ppb)</b>	<b>EPA MCL (ppb)</b>
Carbon disulfide	75-15-0	600		
Carbon tetrachloride	56-23-5	5		5
Carboxin	5234-68-4	700	700	
Chloral hydrate	302-17-0	70		
Chloramben (Amiben)	133-90-4	100	100	
Chlordane/Nonachlor	12789-03-6	1		2
Chlorendic Acid	115-28-6	4		
Chloroaniline (4-)	106-47-8	2		
Chlorobenzene	108-90-7	100		
Chloroform	67-66-3	70	70	80
Chloromethane	74-87-3	20	30	
Chlorophenol (2-)	95-57-8	40	40	
Chlorothalonil	1897-45-6	100		
Chlorotoluene (2- or ortho-)	95-49-8	100	100	
Chlorotoluene (4- or para-)	106-43-4	500	100	
Chlorpyrifos	2921-88-2	10	2	
Chrysene	218-01-9	50		
Cyanazine	21725-46-2	1.4	1	
Dacthal (DCPA)	1861-32-1	70	70	
Dalapon	75-99-0	200	200	200
DDD	72-54-8	1		
DDE	72-55-9	1		
DDT	50-29-3	1		
Di-(2-ethylhexyl)adipate	103-23-1	300	400	400
Di-(2-ethylhexyl)phthalate (PAE)	117-81-7	30		6
Diallate (Avadex)	2303-16-4	6		
Diazinon	333-41-5	5	1	
Dibenz(a,h)anthracene	53-70-3	0.05		
Dibromo-3-chloropropane (1,2-) (DBCP)	96-12-8	0.4		0.2
Dibromochloromethane	124-48-1	4	60	80
Dibutylphthalate	84-74-2	700		
Dicamba	1918-00-9	200	4000	
Dichlobenil	1194-65-6	9		
Dichlorobenzamide (2,6-) (BAM)	2008-58-4	10		
Dichlorobenzene (1,2- or ortho)	95-50-1	200	600	600
Dichlorobenzene (1,3- or meta)	541-73-1	1	600	
Dichlorobenzene (1,4- or para-)	106-46-7	70	75	75
Dichlorobenzidine (3,3-)	91-94-1	0.8		
Dichlorodifluoromethane	75-71-8	1000	1000	
Dichloroethane (1,1-)	75-34-3	60		
Dichloroethane (1,2-)	107-06-2	4		5
Dichloroethylene (1,1-)	75-35-4	40		7

Maximum Exposure Guidelines for Drinking Water  
Maine CDC. December, 2016

CHEMICALS	CASRN	2016 MEG (ppb)	EPA HA (ppb)	EPA MCL (ppb)
Dichloroethylene (cis-1,2-)	156-59-2	10	70	70
Dichloroethylene (trans-1,2-)	156-60-5	100	100	100
Dichloromethane	75-09-2	40		5
Dichlorophenol (2,4-)	120-83-2	20	20	
Dichlorophenoxyacetic acid (2,4-)	94-75-7	70		70
Dichloropropane (1,2-)	78-87-5	10		5
Dichloropropane (1,3-)	142-28-9	100		
Dichloropropene (1,3-)	542-75-6	4		
Dieldrin	60-57-1	0.02		
Diethyl phthalate (PAE)	84-66-2	6000		
Diisopropyl methylphosphonate	1445-75-6	600	600	
Dimethylformamide (N,N-)	68-12-2	700		
Dimethylphenol (2,4-)	105-67-9	100		
Dimethylphenol (2,6-)	576-26-1	4		
Dinitrobenzene (1,2- or ortho)	528-29-0	0.7		
Dinitrobenzene (1,3- or meta)	99-65-0	0.7	1	
Dinitrobenzene (1,4- or para)	100-25-4	0.7		
Dinitrophenol (2,4-)	51-28-5	10		
Dinitrotoluene (2,4-)	121-14-2	1		
Dinitrotoluene (2,6-)	606-20-2	0.5		
Dinoseb	88-85-7	7	7	7
Dioxane (1,4-)	123-91-1	4		
Diphenamid	957-51-7	200	200	
Diphenylamine	122-39-4	200		
Diquat	85-00-7	20		20
Disulfoton	298-04-4	0.3	0.7	
Dithiane (1,4-)	505-29-3	70	80	
Diuron	330-54-1	10		
Endosulfan	115-29-7	40		
Endothall	145-73-3	100	50	100
Endrin	72-20-8	2	2	2
Epichlorohydrin	106-89-8	40		
Ethyl chloride	75-00-3	7		
Ethylbenzene	100-41-4	30	700	700
Ethylene dibromide (EDB)	106-93-4	0.2		0.05
Ethylene glycol	107-21-1	10000	14000	
Ethylene glycol monobutyl ether	111-76-2	700		
Ethylene thiouria (ETU)	96-45-7	0.6		
Fenamiphos	22224-92-6	2	0.7	
Ferbam	14484-63-1	4		
Fluometuron	2164-17-2	90	90	
Fluoranthene	206-44-0	300		

Maximum Exposure Guidelines for Drinking Water  
Maine CDC. December, 2016

CHEMICALS	CASRN	2016 MEG (ppb)	EPA HA (ppb)	EPA MCL (ppb)
Fluorene	86-73-7	300		
Fluorotrichloromethane	75-69-4	2000	2000	
Fluridone	59756-60-4	600		
Folpet	133-07-3	100		
Fonofos	944-22-9	10	10	
Formaldehyde	50-00-0	100	1000	
Glyphosate	1071-83-6	700		700
Heptachlor	76-44-8	0.07		0.4
Heptachlor epoxide	1024-57-3	0.04		0.2
Hexachlorobenzene	118-74-1	0.2		1
Hexachlorobutadiene	87-68-3	4		
Hexachlorocyclohexane (alpha-)	319-84-6	0.06		
Hexachlorocyclohexane (beta-)	319-85-7	0.2		
Hexachlorocyclohexane (gamma-) (Lindane)	58-89-9	0.03		0.2
Hexachlorocyclopentadiene	77-47-4	40		50
Hexachloroethane	67-72-1	5	1	
Hexachlorophene	70-30-4	2		
Hexane (n-)	110-54-3	400		
Hexazinone	51235-04-2	200	400	
HMX (cyclo-tetramethylenetetranitramine)	2691-41-0	400	400	
Imidacloprid	138261-41-3	400		
Indeno(1,2,3-cd)pyrene	193-39-5	0.5		
Isophorone	78-59-1	400	100	
Isopropylmethylphosphonate	1832-54-8	700	700	
Isopropyltoluene (p-cymene)	99-87-6	70		
Malathion	121-75-5	100	500	
Maleic hydrazide	123-33-1	4000	4000	
Mancozeb	8018-01-7	6		
Maneb	12427-38-2	6		
MCPA (2-Methyl-4-chlorophenoxyacetic acid)	94-74-6	4	30	
Mesotrione	104206-82-8	50		
Metalaxyl	57837-19-1	400		
Methanol	67-56-1	4000		
Methomyl	16752-77-5	200	200	
Methoxychlor	72-43-5	40	40	40
Methoxyfenozide	161050-58-4	700		
Methyl ethyl ketone	78-93-3	4000	4000	
Methyl isobutyl ketone	108-10-1	500		
Methyl methacrylate	80-62-6	10000		
Methyl parathion	298-00-0	2	1	
Methyl tert butyl ether (MTBE)	1634-04-4	35		
Methylnaphthalene (2-)	91-57-6	30		

Maximum Exposure Guidelines for Drinking Water  
Maine CDC. December, 2016

<b>CHEMICALS</b>	<b>CASRN</b>	<b>2016 MEG (ppb)</b>	<b>EPA HA (ppb)</b>	<b>EPA MCL (ppb)</b>
Methylphenol (2-)	95-48-7	40		
Methylphenol (3-)	108-39-4	40		
Methylphenol (4-)	106-44-5	3.5		
Metolachlor	51218-45-2	100	700	
Metribuzin	21087-64-9	200	70	
Naphthalene	91-20-3	10	100	
Napropamide	15299-99-7	800		
Nitrobenzene	98-95-3	1		
Nitroguanidine	556-88-7	700	700	
Nitrophenol (p-)	100-02-7	60	60	
Norflurazon	27314-13-2	10		
Oxamyl (Vydate)	23135-22-0	200		200
Paraquat	1910-42-5	3	30	
Parathion	56-38-2	4		
PCNB (pentachloronitrobenzene)	82-68-8	2		
Pentachlorophenol	87-86-5	0.9		1
Perchlorate	14797-73-0	0.8		
Perfluorooctane sulfonate (PFOS) *	1763-23-1	0.07	0.07	
Perfluorooctanoic acid (PFOA) *	335-67-1	0.07	0.07	
Phenol	108-95-2	2000	2000	
Phorate	298-02-2	1		
Picloram	1918-02-1	500		500
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5		0.5
Prometon	1610-18-0	100	400	
Prometryn	7287-19-6	30		
Pronamide	23950-58-5	10		
Propachlor	1918-16-7	90		
Propanil	709-98-8	40		
Propazine	139-40-2	100	10	
Propham	122-42-9	100	100	
Propiconazole	60207-90-1	9		
Propylene glycol	57-55-6	140000		
Pyrene	129-00-0	200		
RDX (1,3,5-trinitro-1,3,5-triazine)	121-82-4	3	2	
Resorcinol (1,3-Benzenediol)	108-46-3	100		
Rotenone	83-79-4	30		
Simazine	122-34-9	4		4
Styrene	100-42-5	100	100	100
Tebufenozide	112410-23-8	100		
Tebuthiuron	34014-18-1	500	500	
Terbacil	5902-51-2	90	90	
Terbufos	13071-79-9	0.2	0.4	

Maximum Exposure Guidelines for Drinking Water  
Maine CDC. December, 2016

CHEMICALS	CASRN	2016 MEG (ppb)	EPA HA (ppb)	EPA MCL (ppb)
Tetrachlorodibenzo-p-dioxin (2,3,7,8-)	1746-01-6	0.000003		0.00003
Tetrachloroethane (1,1,1,2-)	630-20-6	10	70	
Tetrachloroethane (1,1,2,2-)	79-34-5	2		
Tetrachloroethylene	127-18-4	40	10	5
Tetrahydrofuran	109-99-9	600		
Thiram	137-26-8	40		
Toluene	108-88-3	600		1000
Toxaphene	8001-35-2	0.3		3
Tribenuron methyl	101200-48-0	6		
Trichlorobenzene (1,2,4-)	120-82-1	70		
Trichlorobenzene (1,3,5-)	108-70-3	40		
Trichloroethane (1,1,1-)	71-55-6	10000		200
Trichloroethane (1,1,2-)	79-00-5	6	3	5
Trichloroethylene	79-01-6	4		5
Trichlorophenol (2,4,5-)	95-95-4	700		
Trichlorophenol (2,4,6-)	88-06-2	7		
Trichlorophenoxyacetic acid (2,4,5-)	93-76-5	70	70	
Trichlorophenoxypropionic acid (2,4,5-)	93-72-1	60		
Trichloropropane (1,2,3-)	96-18-4	0.01		
Triclopyr acid	55335-06-3	400		
Trifluralin	1582-09-8	50	10	
Trinitroglycerol (nitroglycerin)	55-63-0	5	5	
Trinitrophenol (2,4,6-)	88-89-1	60		
Trinitrotoluene (2,4,6-)	118-96-7	3.5	2	
Tris (1,3-dichloroisopropyl) phosphate	13674-87-8	10		
Vinyl acetate	108-05-4	7000		
Vinyl Chloride	75-01-4	0.2		2
Xylenes	1330-20-7	1000		10000
Zineb	12122-67-7	400		
Ziram	137-30-4	4		
<b>Petroleum Hydrocarbon Fractions</b>				
C5-C8 Aliphatics	NA	300		
C9-C12 Aliphatics	NA	700		
C9-C18 Aliphatics	NA	700		
C19-C36 Aliphatics	NA	10000		
C9-C10 Aromatics	NA	200		
C11-C22 Aromatics	NA	200		

\* According to the U.S. EPA HA for PFOA and PFOS, when both PFOS and PFOA are present in drinking water combined levels are not to exceed 0.07 ppb (<https://www.epa.gov/sites/production/files/2016-05/documents/2016-12361.pdf>).



Maximum Exposure Guidelines for Drinking Water  
Maine CDC. December, 2016

**Abbreviations:**

CASRN - Chemical Abstracts Service Registry Number

EPA HA - United States Environmental Protection Agency EPA Health Advisory

EPA MCL - United States Environmental Protection Agency Maximum Contaminant Level

MEG - Maximum Exposure Guideline

NA - Not applicable

pCi/L - picocuries per liter

ppb - parts per billion (1 ppb = 1 micrograms per liter, ug/L)