

TT. "toxic pollutant" means a water contaminant or combination of water contaminants in concentration(s) which, upon exposure, ingestion, or assimilation either directly from the environment or indirectly by ingestion through food chains, will unreasonably threaten to injure human health, or the health of animals or plants which are commonly hatched, bred, cultivated or protected for use by man for food or economic benefit. As used in this definition injuries to health include death, histopathologic change, clinical symptoms of disease, behavioral abnormalities, genetic mutation, physiological malfunctions or physical deformations in such organisms or their offspring. In order to be considered a toxic pollutant a contaminant must be one or a combination of the potential toxic pollutants listed below and be at a concentration shown by scientific information currently available to the public to have potential for causing one or more of the effects listed above.

Any water contaminant or combination of the water contaminants in the list below creating a lifetime risk of more than one cancer per 100,000 exposed persons is a toxic pollutant.

- acrolein
- acrylonitrile
- aldrin
- benzene
- benzidine
- carbon tetrachloride
- chlordane
- chlorinated benzenes
  - monochlorobenzene
  - hexachlorobenzene
  - pentachlorobenzene
  - 1,2,4,5-tetrachlorobenzene
- chlorinated ethanes
  - 1,2-dichloroethane
  - hexachloroethane
  - 1,1,2,2-tetrachloroethane
  - 1,1,1-trichloroethane
  - 1,1,2-trichloroethane
- chlorinated phenols
  - 2,4-dichlorophenol
  - 2,4,5-trichlorophenol
  - 2,4,6-trichlorophenol
- chloroalkyl ethers
  - bis (2-chloroethyl) ether

bis (2-chloroisopropyl) ether  
bis (chloromethyl) ether  
chloroform  
DDT  
dichlorobenzene  
dichlorobenzidine  
1,1-dichloroethylene  
dichloropropenes  
dieldrin  
2,4-dinitrotoluene  
diphenylhydrazine  
endosulfan  
endrin  
ethylbenzene  
halomethanes  
    bromodichloromethane  
    bromomethane  
    chloromethane  
    dichlorodifluoromethane  
    dichloromethane  
    tribromomethane  
    trichlorofluoromethane  
heptachlor  
hexachlorobutadiene  
hexachlorocyclohexane (HCH)  
    alpha-HCH  
    beta-HCH  
    gamma-HCH  
    technical HCH  
hexachlorocyclopentadiene  
isophorone  
nitrobenzene  
nitrophenols  
    2,4-dinitro-o-cresol  
    dinitrophenols  
nitrosamines  
    N-nitrosodiethylamine  
    N-nitrosodimethylamine  
    N-nitrosodibutylamine  
    N-nitrosodiphenylamine  
    N-nitrosopyrrolidine  
pentachlorophenol  
phenol  
phthalate esters  
    dibutyl phthalate

di-2-ethylhexyl phthalate  
 diethyl phthalate  
 dimethyl phthalate  
 polychlorinated biphenyls (PCB's)  
 polynuclear aromatic hydrocarbons (PAH)  
   anthracene  
   3,4-benzofluoranthene  
   benzo (k) fluoranthene  
   fluoranthene  
   fluorene  
   phenanthrene  
   pyrene  
 tetrachloroethylene  
 toluene  
 toxaphene  
 trichloroethylene  
 vinyl chloride  
 xylenes  
   o-xylene  
   m-xylene  
   p-xylene

1,1-dichloroethane  
 ethylene dibromide (EDB)  
 cis-1,2-dichloroethylene  
 trans-1,2-dichloroethylene  
 naphthalene  
 1-methylnaphthalene  
 2-methylnaphthalene  
 benzo-a-pyrene

[2-18-77, 6-26-80, 7-2-81, 1-29-82, 3-3-86]  
 3103. STANDARDS FOR GROUND WATER OF 10,000 mg/l TDS CONCENTRATION OR LESS.

The following standards are the allowable pH range and the maximum allowable concentration in ground water for the contaminants specified unless the existing condition exceeds the standard or unless otherwise provided in Section 3109.D. Regardless of whether there is one contaminant or more than one contaminant present in ground water, when an existing pH or concentration of any water contaminant exceeds the standard specified in Subsection A, B, or C, the existing pH or concentration shall be the allowable limit, provided that the discharge at such concentrations will not result in concentrations at any place of withdrawal for present or reasonably foreseeable future use in excess of the standards of this Section.

These standards shall apply to the dissolved portion of the contaminants specified with a definition of dissolved being that given in the publication "Methods for Chemical Analysis of Water and Waste of the U.S. Environmental Protection Agency," with the exception that standards for mercury, organic compounds and non-aqueous phase liquids shall apply to the total unfiltered concentrations of the contaminants. [2-18-77, 11-17-83, 3-3-86, 12-1-95]

A. Human Health Standards-Ground water shall meet the standards of Subsection A and B unless otherwise provided. If more than one water contaminant affecting human health is present, the toxic pollutant criteria as set forth in the definition of toxic pollutant in Section 1101 for the combination of contaminants, or the Human Health Standard of Section 3103.A. for each contaminant shall apply, whichever is more stringent.

Non-aqueous phase liquid shall not be present floating atop of or immersed within ground water, as can be reasonably measured.

Arsenic (As)	0.1 mg/l
Barium (Ba)	1.0 mg/l
Cadmium (Cd)	0.01 mg/l
Chromium (Cr)	0.05 mg/l
Cyanide (CN)	0.2 mg/l
Fluoride (F)	1.6 mg/l
Lead (Pb)	0.05 mg/l
Total Mercury (Hg)	0.002 mg/l
Nitrate (NO <sub>3</sub> as N)	10.0 mg/l
Selenium (Se)	0.05 mg/l
Silver (Ag)	0.05 mg/l
Uranium (U)	5.0 mg/l
Radioactivity: Combined	
Radium-226 & Radium-228	30.0 pCi/l
Benzene	0.01 mg/l
Polychlorinated biphenyls (PCB's)	0.001 mg/l
Toluene	0.75 mg/l
Carbon Tetrachloride	0.01 mg/l
1,2-dichloroethane (EDC)	0.01 mg/l
1,1-dichloroethylene (1,1-DCE)	0.005 mg/l
1,1,2,2-tetrachloroethylene (PCE)	0.02 mg/l
1,1,2-trichloroethylene (TCE)	0.1 mg/l
ethylbenzene	0.75 mg/l
total xylenes	0.62 mg/l
methylene chloride	0.1 mg/l

chloroform	0.1 mg/l
1,1-dichloroethane	0.025 mg/l
ethylene dibromide (EDB)	0.0001 mg/l
1,1,1-trichloroethane	0.06 mg/l
1,1,2-trichloroethane	0.01 mg/l
1,1,2,2-tetrachloroethane	0.01 mg/l
vinyl chloride	0.001 mg/l
PAHs: total naphthalene plus monomethylnaphthalenes	0.03 mg/l
benzo-a-pyrene	0.0007 mg/l
[2-18-77, 1-29-82, 3-3-86, 12-1-95]	

#### B. Other Standards for Domestic Water Supply

Chloride (Cl)	250.0 mg/l
Copper (Cu)	1.0 mg/l
Iron (Fe)	1.0 mg/l
Manganese (Mn)	0.2 mg/l
Phenols	0.005 mg/l
Sulfate (SO <sub>4</sub> )	600.0 mg/l
Total Dissolved Solids (TDS)	1000.0 mg/l
Zinc (Zn)	10.0 mg/l
pH	between 6 and 9
[2-18-77]	

C. Standards for Irrigation Use - Ground water shall meet the standards of Subsection A, B, and C unless otherwise provided.

Aluminum (Al)	5.0 mg/l
Boron (B)	0.75 mg/l
Cobalt (Co)	0.05 mg/l
Molybdenum (Mo)	1.0 mg/l
Nickel (Ni)	0.2 mg/l
[2-18-77]	