

## Groundwater Contamination Information

Parameter/Contaminant	Unit	Max. Allowable	Partial List of Potential Groundwater Sources	Partial List of High Concentrations/Long Term Exposure Effects
1,1,1-Trichloroethane	ug/L	200	Discharge from metal degreasing sites & other factories	Liver, nervous system or circulatory problems
1,1,2-Trichloroethane	ug/L	5	Discharge from industrial chemical factories	Liver, kidney or immune system problems
1,1-Dichloroethene	ug/L	7	Discharge from industrial chemical factories	Liver problems
1,2,4-Trichlorobenzene	ug/L	70	Runoff from textile finishing factories	Adrenal gland changes
1,2-Dibromo-3-chloropropane (DBC)	ug/L	0.20	Runoff/leach. from soil fumigants used on soybeans, cotton, pineapples & orchards	Reproductive difficulties; increased cancer risk
1,2-Dichloroethene	ug/L	5	Discharge from industrial chemical factories	Increased cancer risk
1,2-Dichloropropane	ug/L	5	Discharge from industrial chemical factories	Increased cancer risk
1,4-Dichlorobenzene	ug/L	75	Fumigants to contrl. moths, molds & mildews; toilet deodorants & refuse containers	Liver, throat and skin problems; weakness in limbs
2,4,5-TP (Silvex)	ug/L	50	Residue of banned herbicide	Liver problems
2,4-D	ug/L	70	Runoff from herbicides used on row crops	Kidney, liver & adrenal gland problems
4,4'-DDT	ug/L	50	Banned pesticide used to control insects in agri. and that carry diseases (ie, malaria)	Nervous system problems incl. excitability, tremors and seizures.
Alachor	ug/L	2	Runoff from herbicides used on row crops	Eye, liver, kidney or spleen problems; increased cancer risk
Aldrin	ug/L	1	Used as an insecticide incl. termite-proofing	Central nervous system and cardiovascular problems
Aluminum	ug/L	200	Nature, drainage from mines	Discolored Water
Antimony	ug/L	6	Discharge from refineries; fire retardents, ceramics, electronics, mun. waste disp.	Increase in blood cholesterol; decrease in blood sugar
Aroclors-Total	ug/L	2	Runoff from herbicides used on row crops	Eye, liver, kidney or spleen problems; anemia, increased cancer risk
Arsenic	ug/L	10	Nature, runoff from orchards, industrial waste, pesticides, smelting	A carcinogen; liver, kidney & skin damage, circulatory system problems
Asbestos	mil. fibers/liter	7	Nature. decay of asbestos cement in water mains	Increased risk of developing benign intestinal polyps
Atrazine	ug/L	3	Runoff from herbicides used on row crops	Cardiovascular system or reproductive problems
Barium	ug/L	2000	Nature, discharge from metal refineries & drilling waste	Cardiac, gastrointestinal & neuromuscular problems, high blood pressure (HBP)
Benzene	ug/L	5	Discharge from factories; leaching from gas storage tanks & landfills	Anemia, decrease in blood platelets; Increased cancer risk
Benzo(a)pyrene	ug/L	0.2	Sealants, solvents, pesticides, gasoline, disinfectants, wood preserv., waste disp.	Reproductive difficulties; increased cancer risk
Beryllium	ug/L	4	Nature, elec. equip., nuclear & space ind.; metal refine. & coal-burning factories	Possible carcinogen; damage to lungs & bones; intestinal lesions
Bis(2-ethylhexyl) adipate	ug/L	400	Discharge from chemical factories	Weight loss, liver problems; possible reproductive difficulties
Bis(2-ethylhexyl) phthalate	ug/L	6	Discharge from rubber & chemical factories	Reproductive difficulties; liver problems; increased cancer risk
Bromate	mg/L*	0.01	Byproduct of drinking water disinfection	Increased risk of cancer
Cadmium	ug/L	5	Nature, industrial production & waste, plating; runoff from waste batteries & paints	HBP, liver & kidney damage; anemia
Carbaryl	ug/L	***	Used as insecticide on a variety of crops	Neurological & muscle problems; anorexia
Carbofuran	ug/L	40	Fumigants used on rice & alfalfa	Blood, nervous system or reproductive problems
Carbon tetrachloride	ug/L	5	Discharge from chemical plants & other industrial activities	Liver problems; increased cancer risk
Chlordane (technical)	ug/L	2	Residue of banned termiticide	Liver or nervous system problems; increased cancer risk
Chloride	mg/L*	250	Nature, mineral dissolution, industrial & domestic waste	Deteriorates plumbing, water heaters & municipal waterworks equipment
Chlorite	mg/L*	1	Byproduct of drinking water disinfection	Anemia; infants & children: nervous system effects
Chlorobenzene	ug/L	100	Discharge from chemical & agricultural chemical factories	Liver or kidney problems
Chromium	ug/L	100	Nature, fossil fuel combust., cement plant emiss., waste incin., metal plating	Chromium VI: liver & kidney damage, internal hemorrhaging, respiratory damage, dermatitis, skin ulcers
cis-1,2-Dichloroethene	ug/L	70	Discharge from industrial chemical factories	Liver problems
Cobalt	mg/L*	***	Nature	Respiratory, cardiac, liver & kidney problems
Coliforms, E. Coli	100ml	***	Nature, intestines of warm-blooded animals; not a health threat-indicator only	Bacteria, viruses, parasites; can cause polio, cholera, typhoid fever, dysentery & infectious hepatitis
Coliforms, total	100ml	***	Nature, intestines of warm-blooded animals; not a health threat-indicator only	Bacteria, viruses, parasites; can cause polio, cholera, typhoid fever, dysentery & infectious hepatitis
Copper	ug/L	1300	Nature, metal plating, ind. & dom. waste, mining, corrosion of household plumb.	Stomach & intest. distress, liver & kidney damage, anemia, adverse taste, clothes staining, plant toxicity
Cyanide (as free cyanide)	mg/L*	0.20	Electroplating, steel process., plastics, syn. fibers, fert. prod., improper waste disp.	Damage to thyroid, spleen, liver, brain & nerves
Dalapon	ug/L	200	Runoff from herbicides used on rights-of-way	Minor kidney changes

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Dicamba	ug/L	***	Herbicide on corn, wheat and other crops; lawn use for control of broadleaf weeds	No Data
Dichloromethane	mg/L*	0.005	Discharge from drug & chemical factories	Liver problems; increased cancer risk
Dieldrin	ug/L	1	Used as an insecticide incl. termite-proofing	Central nervous system and cardiovascular problems
Dinoseb	ug/L	7	Runoff from herbicide used on soybeans & vegetables	Reproductive difficulties
Dioxin	mg/L*	0.0000003	Sealants, linings, solvents, pest., gasoline, disinfectants, wood preserv., waste disp.	Reproductive difficulties; increased cancer risk
Diquat	ug/L	20	Runoff from herbicide use	Cataracts
Dissolved Solids	mg/L*	***	Nature, landfill leachate, feedlots, sewage	Lack of general water acceptability, water heaters
Endothall	ug/L	100	Runoff from herbicide use	Stomach & Intestinal problems
Endrin	ug/L	2	Residue of banned insecticide	Liver problems
Ethelbenzene	ug/L	700	Discharge from petroleum refineries	Liver or kidney problems
Ethylene dibromide (EDB)	ug/L	0.05	Discharge from petroleum refineries	Liver, kidney, stomach & reproductive problems; increased cancer risk
Fluoride	mg/L*	4	Nature, add. to mun. water supplies, discharge from fertilizer and alum. factories	Decreases incidents of tooth decay but high levels can stain teeth, calcification of bones & joints
gamma-BHC (Lindane)	mg/L*	0.0002	Runoff/leaching from insecticide used on cattle, lumber & gardens	Liver or kidney problems
Glyphosate	ug/L	700	Runoff from herbicide use	Kidney problems; reproductive difficulties
Haloacetic acids (HAA5)	mg/L*	0.60	Byproduct of drinking water disinfection	Increased risk of cancer
Hardness as CaCO3	mg/L*	***	Metallic ions dissolved in water (calcium carbonate from dissolved limestone)	No Data
Heptachlor	ug/L	0.40	Residue of banned termiticide	Liver damage; increased cancer risk
Heptachlor epoxide	ug/L	0.20	Breakdown of heptachlor	Liver damage; increased cancer risk
Hexachlorobenzene	ug/L	1	Discharge from metal refineries & agricultural chemical factories	Liver or kidney problems; reproductive difficulties; increased cancer risk
Hexachlorocyclopentadiene	ug/L	50	Discharge from chemical factories	Kidney or stomach problems
Iron	mg/L*	1	Nature, mining, industrial waste, corroding metal	Taste, brownish color to laundry and plumbing fixtures
Lead	ug/L	15	Nature, ind., mining, erosion of household plumb., gasoline, coal & as a water add.	Prob. carcinogen, deficits/delays of norm. phys. & mental develop. in babies & child., kidney problems, HBP
Magnesium	mg/L*	***	Nature	Taste, laxative effect; problems for renal disease patients
Manganese	ug/L	150	Nature, mining & industrial waste	Brownish stains to water & plumbing fixtures, taste, plant toxicity
Mercury	ug/L	2	Nature, ind. waste, mining, pesticides, coal, elec. equip., smelting, fossil fuel comb.	Kidney & nervous system disorders
Methomyl	ug/L	***	Pesticide used on field vegetables, orchard crops & on turf (sod farms only).	No Data
Methoxychlor	ug/L	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa & livestock	Reproductive difficulties
Methyl Tertiary Butyl Ether (MTBE)	ug/L	70	Gasoline leaks & spills	Potential carcinogen
Methylene chloride	ug/L	5	Solvents used in paint strippers	Central nervous system problems
Molybdenum	ug/L	***	Truck washes, deicers, antifreeze, water treatment chemicals	No Data
Nickel	ug/L	***	Nature, electroplating, stainless steel & alloy products, mining, refining	Heart & liver damage in lab animals
Nitrate (measured as nitrogen)	mg/L*	10	Nature, runoff from fertilizer, feedlots & sewage, leaking underground stor. tanks	Causes "bluebaby disease," or methemoglobinemia which threatens oxygen-carrying capacity of the blood
Nitrite (measured as nitrogen)	mg/L*	1	Nature, runoff from fertilizer, feedlots & sewage	Causes "bluebaby disease," or methemoglobinemia which threatens oxygen-carrying capacity of the blood
o-Dichlorobenzene	mg/L*	0.60	Discharge from industrial chemical factories	Liver, kidney or circulatory system problems
Oxamyl (Vydate)	ug/L	200	Runoff/leaching from insecticide used on apples, potatoes & tomatoes	Slight nervous system effects
p-Dichlorobenzene	mg/L*	0.075	Discharge from industrial chemical factories	Anemia, liver, kidney or spleen damage; changed in blood
Pentachlorophenol	ug/L	1	Discharge from wood preserving factories	Liver or kidney problems; increased cancer risk
pH	pH	6.5-9.0	Runoff from coal mining	High pH: taste, encrusted water pipes and water-using appliances, add'l chlorine req'd; low pH dissolves metals
Phenolics	mg/L*	***	Prod. of resins used in const., auto. & appliance ind.; disinfectants and medicines	Anorexia, diarrhea, vertigo; gastrointestinal, blood & liver problems
Picloram	ug/L	500	Herbicide runoff	Liver problems
Polychlorinated biphenyls (PCB's)	mg/L*	0.0005	Runoff from landfills; discharge of waste chemicals	Skin & thymus gland difficulties; immune deficiencies; repro. or nervous sys. difficulties; incr. cancer risk
Propachlor	ug/L	***	Herbicide used on grasses, broadleaf weeds & sorghum crops	No Data
Selenium	ug/L	50	Nature, discharge from petroleum refineries & mines	Hair or fingernail numbness/loss; circulatory problems
Silver	ug/L	50	Ore mining, processing & disp., photography, electronic equip., electroplating	Argyria ( a blue-grey coloration of the skin), mucous membranes, eyes & organs

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Simazine	ug/L	4	Herbicide runoff	Blood problems
Sodium	mg/L*	***	Nature, de-icing & washing products	Risk to those on low sodium diet
Styrene	ug/L	100	Discharge from rubber & plastics factories, leaching from landfills	Liver, kidney & circulatory problems
Sulfate	mg/L*	250	Nature, domestic or industrial waste	Scale damage to boilers & heat exchangers, taste, laxative effect
Tetrachloroethylene	ug/L	5	Discharge from factories & dry cleaners	Liver problems; increased cancer risk
Thalium	ug/L	2	Nature, mining; electronics & pharmaceutical mfg., glass & alloys	Kidney, liver, brain & intestine damage in lab animals; hair loss
Titanium	mg/L*	***	Mining, pigment used in paint, varnishes, laquers & inks; metal process., ceramics	No Data
Toluene	ug/L	1000	Discharge from petroleum factories	Nervous system, kidney or liver problems
Total Trihalomethanes (TTMHs)	mg/L*	0.08	Byproduct of drinking water disinfection	Kidney, liver or central nervous nervous system problems; increased risk of cancer
Toxaphene	ug/L	3	Runoff/leaching from insecticide used on cotton & cattle	Kidney, liver or thyroid problems; increased cancer risk
Trans-1,2-Dichloroethene	ug/L	100	Discharge from industrial chemical factories	Liver problems
Trichloroethylene	ug/L	5	Discharge from metal degreasing sites & other factories	Liver problems; increased cancer risk
Uranium	ug/L	30	Nature	Increased cancer risk; kidney toxicity
Vanadium	mg/L*	***	Nature; steel industry	No Data
Vinyl chloride	ug/L	2	Leaching from PVC pipes; discharge from plastic factories	Increased cancer risk
Xylenes-Total	ug/L	10000	Discharge from petroleum & chemical factories	Nervous system damage
Zinc	ug/L	5000	Nature, mining, ind. waste, metal plating, plumbing; major component of sludge	Toxic to plants at high levels

Notes: ■ mg/L\* = Milligrams Per Liter = Parts Per Million (PPM)

■ ug/L = Micrograms Per Liter = Parts Per Billion (PPB)

■ ml = Milliliter

■ \*\*\* = No max. allowable could be found

■ All information taken or converted from USEPA (<https://www.epa.gov>), IEPA (<http://www.epa.illinois.gov>),

USGS (<https://www.usgs.gov>) and Illinois Water Survey (<http://www.isws.illinois.edu>) data & tables

■ This document is for informational purposes only and is not guaranteed to be complete or accurate; all information should be verified