

2002 Tap Water Test Results

Regulated substances have Maximum Contaminant Levels (MCLs) set by EPA. This is the highest level allowed in drinking water. Some regulated contaminants also have MCL goals (MCLGs). This is the level of a substance where there is no known or expected health risk. MCLGs allow for a margin of safety. MCLs are set as close to MCLGs as possible using the best available treatment technology. All water systems must monitor about 80 regulated substances.

Regulated Substance Detected By Monitoring	Units Of Measure	Highest Amount Allowed In Water By EPA (MCL)	Amount Found In Joint Water Commission Water	Range Detected	Ideal Goal (MCLG)	Typical Source Of Substance
Total Trihalomethanes (TTHM)	ppb	80	Crystal: 37.7 GV: 32.05 NH: 31.6	16.5-74.0 19.9-47.2 14.9-57.7	—	Disinfection by-products
Haloacetic Acids (HAA5)	ppb	60	Crystal: 30.65 GV: 19.5 NH: 27.2	14.7-58.0 1.4-28.8 15.5-51.9	0	Disinfection by-products
Thallium (7/2/99)	ppb	2.0	1.0	—	<0.5	Leaching from ore-processing sites; glass, electronic, and drug factory discharge
Nitrate as Nitrogen	ppm	10	0.38	—	<10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Fluoride	ppm	4.0	1.06	0.98-1.1	<4.0	State-required additive; erosion of natural deposits; fertilizer, aluminum factory discharge
Alpha Emitters	pCi/L	15.4	0.4	—	0	Erosion of natural deposits

Lead and **copper** are also regulated substances, but they are evaluated using a regulatory level known as an Action Limit (AL). This is the concentration which, if exceeded, triggers treatment or other requirements a water system must follow. Lead and copper get into tap water via corrosion of home plumbing systems. The Golden Valley and New Hope distribution systems have been found to be in violation* of the lead limit. Infants and children who consume water containing lead in excess of the action level (15 parts per billion) could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. You can substantially reduce the amount of lead in your water by simply letting the tap run for 30 seconds to 2 minutes before using the water for drinking or cooking. The Joint Water Commission is working with the Minneapolis Water Works to reduce corrosion and is pursuing an ongoing public education program to inform water customers about the lead issue.

Substance Detected By Monitoring At Customers' Home	Units Of Measure	Action Level (AL)	# Of Samples Exceeding The Action Level			90% Of Samples Were Below This Level			Typical Source Of Substance
			Crystal	Golden Valley	New Hope	Crystal	Golden Valley	New Hope	
Lead	ppb	15	1 out of 30	3 out of 60	8 out of 60	6.8	8.3	21.0*	Plumbing corrosion, natural deposits
Copper	ppm	1.3	0 out of 30	0 out of 60	0 out of 60	0.12	0.15	0.13	Plumbing corrosion, natural deposits

Turbidity is monitored at the Minneapolis Water Works treatment plant as a measure of the effectiveness of the filtration system. EPA requires: 1) certain treatment processes be used to reduce turbidity; 2) 95% of monthly samples to be below 0.5 Nephelometric Turbidity Units (NTU); and 3) all samples to be less than 5 NTU.

Turbidity Monitoring	Units Of Measure	Lowest % Of Monthly Samples Meeting Limits	Highest Single Measurement	Typical Source Of Substance
Turbidity	NTU	too low to measure		Soil runoff

Many **unregulated substances** are also monitored. They are evaluated using state standards known as health risk limits. The data from this monitoring is used to determine future drinking water regulations.

Unregulated Substance Detected By Monitoring	Units Of Measure	Amount Found In Joint Water Commission Water	Range Detected	Typical Source Of Substance
Sulfate (7/2/99)	ppm	25.0	—	Erosion of natural deposits
Sodium (7/2/99)	ppm	8.3	—	Erosion of natural deposits

Other Definitions

Amount found in the water is sometimes the highest amount detected and sometimes the average of all detected amounts from samples tested throughout the year, depending on the regulation for that substance.

ppm: parts per million

ppb: parts per billion

pCi/L: pico curies per liter, measure of radioactivity

ND: Not Detected