

Contaminant/MCL or SMCL	Uses and/or Sources	Possible Health or Water Quality Effects/Treatment Methods
Fluoride* 4.0 mg/l	Occurs in rocks and soil, found in industrial waste	Mottling of teeth; Bone damage -Anion exchange -Reverse osmosis -Distillation -Activated alumina
Nitrate (as N)* 10.0 mg/l	Occurs in soils and mineral deposits; found in fertilizers, sewage, animal wastes, and explosives; used as heat-transfer fluid and heat-storage medium for solar heating applications; used in glass making and meat curing	Methemoglobinemia (blue baby syndrome) in infants -Anion exchange -Reverse osmosis -Distillation
Chloride** 250 mg/l	Found in natural minerals, sea water, road salt, fertilizers, industrial wastes, and sewage	Salty taste; corroded pipes, fixtures, and appliances; blackening and pitting of stainless steel -Distillation -Reverse osmosis
Color** 15 color units	Results from iron, copper, or manganese; organic chemicals; and decaying organic matter	Visible tint -Activated carbon -Ozonation -Precoat filter containing activated carbon -Multimedia filter containing activated carbon
Iron** .3 mg/l	Found in natural deposits in rock and soil; results from corrosion of iron pipes and fixtures in water distribution systems	Rusty sediment; bitter, metallic taste; brown-orange stains on fixtures; iron bacteria; discolored beverages -Water softener (0.3 to 3.0 mg/l) -Chlorination followed by filtration(7/0 mg/l)
Odor** 3 threshold odor numbers	Results from dissolved gases, minerals, and chemicals; leaking underground storage tanks; landfill or septic runoff; and organic matter	"Rotten egg," septic, musty, or chemical smell -Activated carbon -Ozonation -Precoat filter with activated carbon -Multimedia filter containing activated carbon
Sulfate** 250 mg/l	Found in natural deposits or salts, byproducts of coal mining, industrial wastes and sewage, and streams draining coal or metal-sulfide mines	Bitter, medicinal taste; scaly deposits; laxative effects, "rotten egg" odor from hydrogen sulfide gas formation -Distillation -Reverse osmosis -Anion exchange
Total Dissolved Solids (TDS)** 500 mg/l	May result from carbonates, bicarbonates, chlorides, sulfates, phosphates, nitrates, calcium, magnesium, sodium, potassium, iron, manganese, or other constituents	Hardness; scaly deposits; sediment; cloudy, discolored water; odor; staining; salty or bitter taste -Distillation -Reverse Osmosis
Coliform Bacteria** no coliform bacteria	Coliform bacteria found in human and animal waste; also found in decaying vegetation	In general, not harmful to humans, but, their presence may indicate contamination of a water supply with human or animal waste and disease causing organisms. -Boiling -Chlorination -Iodination -Ozonation -Ultraviolet light

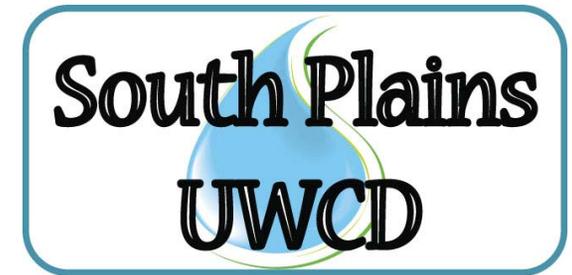
***Maximum Contaminant Levels (MCLs)** are the maximum possible concentration of a contaminant in municipally supplied drinking water as established by the U.S. EPA Primary Drinking Water Standards. Primary drinking water standards are set by the U.S. EPA for municipal water treatment facilities to regulate levels of drinking water contaminants that affect human health. MCLs are taken from *Drinking Water Regulations and Health Advisories*, Office of Water, U.S., EPA, Washington, D.C. (May 1994). Uses and/or sources, possible chronic health effects, and possible water treatment methods all excerpted from various health advisories published on various dates by the EPA Office of Water.

****Secondary Maximum Contaminant Levels (SMCLs)** are part of the U.S. EPA's secondary drinking water standards. These standards concern drinking water contaminants that are not considered hazards to human health, but that affect taste, odor, color, or cause staining on plumbing fixtures or clothing. The EPA does not require compliance with these standards, but they are enforced by some state governments. SMCLs are taken from *Drinking Water Regulations and Health Advisories*, Office of Water, U.S., EPA, Washington, D.C. (May 1994). Uses and/or sources, possible water quality effects, and possible water treatment methods all excerpted from various health advisories published on various dates by the EPA Office of Water.

The SPUWCD gratefully acknowledges the Northeast Regional Agricultural Engineering Service for use of its publications NRAES-47 and NRAES-48 in developing this brochure.

Each year the SPUWCD receives a number of questions regarding drinking water quality. The District offers free water quality analyses for its constituents. These analyses may include testing of Chlorides, Nitrates, Sulfates, Iron, Fluoride, TDS, and Coliform Bacteria. The enclosed table is intended as a reference only. Specific questions regarding the suitability of a particular treatment method should be answered by a professional trained in the area of concern. Some water quality problems may be reduced by proper well construction and maintenance. Proper surface and annular completion of wells is required by District Rules and State law.

Water Quality Issues For Home Owners



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