



Colorado Department
of Public Health
and Environment

Drinking Water Contaminants

National Primary Drinking Water standards protect drinking water quality by limiting the levels of specific contaminants that can adversely affect public health and are known or anticipated to occur in water. These standards are not enforceable upon private wells, but provide means of measuring test results. The National Secondary Drinking Water Regulation is a non-enforceable guideline regarding contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. These standards provide useful means of measuring test results to determine undesirable, but not unhealthy, contaminants.

- MDL = method detection level
- MCL = maximum contaminant level (enforceable)
- SMCL = suggested maximum contaminant level
- AL = action level (enforceable)

CONTAMINANT	METHOD	MDL	MCL	SMCL	AL
ALKALINITY-PHENOTHALENE		10 mg/l			
ALKALINITY-TOTAL	310.1/SM2320	10 mg/l			
ALUMINUM (Al)	200.7	50 ug/l		50-200	
AMERICIUM (Am)	ASTM D-3865M	Varies			
AMMONIA-DISTILLED (NH ₄ ⁺)	SM4500- NH ₃ B&D/350.2	1 mg/l			
ANTIMONY (Sb)	ASTM D3697-87	1 ug/l	6		
ARSENIC (As)	SM3114 B/206.3	1 ug/l	50		
BARIUM (Ba)	200.7	2 ug/l	200		
BERYLLIUM (Be)	200.9	1 ug/l	4		
BIOCHEMICAL OXYGEN DEMAND	SM5210B/405.1	1 mg/l			
BORON (B)	200.7	6 ug/l			
CADMIUM-GTA (Cd)	200.9	0.25 ug/l	5		
CADMIUM-ICP (Cd)	200.7	4 ug/l	5		
CALCIUM (Ca)	200.7	20 ug/l			
CHLORIDE (Cl ⁻)	325.3/300.0/SM4110B	1 mg/l		250	
CHLORINE (Cl ₂)	330.1	0.05 mg/l			
CHROMIUM (Cr)	200.7	10 ug/l	100		
CHROMIUM-HEXAVALANT (Cr ⁺⁶)	SM3500-Cr/218.5	10 mg/l			
COLBALT (Co)	200.7	6 ug/l			
CHEMICAL OXYGEN DEMAND	410.1	30 mg/l			
COPPER-GFAA (Cu)	200.9	1 ug/l			1300
COPPER-ICP (Cu)	200.7	4 ug/l			1300
CORROSITIVITY	N/A	N/A			
CYANIDE-DIRECT (CN ⁻)	335.2	0.01 mg/l	0.2		
CYANIDE-DISTILLED (CN ⁻)	SM4500-Cn C&E	0.01 mg/l			
CYANIDE-WEAK ACID DISSOCIABLE	SM4500-Cnl	0.01 mg/l			
FLUORIDE (F ⁻)	SM4500-F c/340.2	0.1 mg/l	4	2	

CONTAMINANT	METHOD	MDL	MCL	SMCL	AL
GROSS ALPHA	900.0/SM7110 B	3 pCi/l	15		
GROSS BETA	900.0/SM7110 B	8pCi/l	50		
HARDNESS-TOTAL	200.7				
IRON (Fe)	200.7	10 ug/l		300	
LEAD-GTA (Pb)	200.9	1 ug/l			15
LEAD-ICP (Pb)	200.7	50 ug/l			15
MAGNESIUM (Mg)*	200.7	60 ug/l			
MAGANESE (Mn)	200.7	4 ug/l		50	
MERCURY (Hg)	SM3112 B/245.1	0.2 ug/l	2		
MOLYBDENUM (Mo)	200.7	10 ug/l			
NICKEL (Ni)	200.7	20 ug/l	100		
NITRATE/NITRITE (NO ₃ /NO ₂ -N)	353.2	0.5 mg/l	10		
N-AMMONIA (NH ₄ -N)	350.1	0.1 mg/l			
N-KJELDAHL	351.2	1 mg/l			
N-NITRATE (NO ₃ -N)	N/A	0.5 mg/l	10		
N-NITRITE (NO ₂ -N)	SM4500-NO ₂ B/354.1	0.02 mg/l	1		
NITROGEN-TOTAL	353.2	0.2 mg/l			
OIL & GREASE	413.1	5 mg/l			
pH	150.1	N/A		6.5-8.5	
PHENOL	420.1	0.1 mg/l			
PHOSPHATE-ORTHO (o-PO ₄ ⁻³)	365.2/300.0	0.02 mg/l			
PHOSPHATE-TOTAL (PO ₄ ⁻³)	365.1	0.05 mg/l			
PLUTONIUM (Pu)	ASTM D3865M	Varies			
POTASSIUM (K)	200.7	800 mg/l			
RADIUM 226 (²²⁶ Ra)	SM7500-Ra B/903.0	1 pCi/l	²²⁶ Ra+ ²²⁸ Ra=5		
RADIUM 228 (²²⁸ Ra)	SM7500-Ra D/904.0	1 pCi/l	²²⁶ Ra+ ²²⁸ Ra=5		
SELENIUM (Se)	SM3114 B/270.3	1 ug/l	50		
SILICON (Si)	200.7	5 ug/l			
SILVER-GTA (Ag)	200.9	0.2 ug/l		100	
SILVER-ICP (Ag)	200.7	6 ug/l		100	
SODIUM (Na)	200.7	20 mg/l			
SOLIDS-DISSOLVED	160.1	10 mg/l		500	
SOLIDS-SETTLEABLE	160.5	0.5 ml/l			
SOLIDS-SUSPENDED	160.2	10 mg/l			
SOLIDS-TOTAL	160.3	10 mg/l			
SOLIDS-VOLATILE	160.4	10 mg/l			
SPECIFIC CONDUCTANCE	120.1	1 uohm			
SULFATE (SO ₄ ⁻²)	300.0	5 mg/l		250	
SULFIDE (S ⁻²)	376.2	0.1 mg/l			
THALLIUM (TI)	200.9	1 mg/l	2		
TIN (Sn)	200.7	200 ug/l			
TRITIUM (³ H)	906.0	125 pCi/l			
URANIUM (U)	908.1	2 pCi/l			
VANADIUM (V)	200.7	4 ug/l			
ZINC (Zn)	200.7	8 ug/l		5000	