

WAC 246-290-310 Maximum contaminant levels (MCLs) and maximum residual disinfectant levels (MRDLs). (1) General.

(a) The purveyor shall be responsible for complying with the standards of water quality identified in this section. If a contaminant exceeds its MCL or its maximum residual disinfectant level (MRDL), the purveyor shall take follow-up action under WAC 246-290-320.

(b) When enforcing the standards described under this section, the department shall enforce compliance with the primary standards as its first priority.

(2) Bacteriological.

(a) An *E. coli* MCL under this subsection is considered a primary standard.

(b) *E. coli* MCL. An *E. coli* MCL violation occurs each month in which a system is required to monitor for total coliforms when there is:

(i) *E. coli* presence in a repeat sample following a total coliform presence routine sample;

(ii) Total coliform presence in any repeat samples collected as a follow-up to a sample with *E. coli* presence;

(iii) The system fails to take all required repeat samples following an *E. coli* presence routine sample; or

(iv) The system fails to test for *E. coli* when any repeat samples test positive for total coliform.

(3) Inorganic chemical and physical.

(a) The primary and secondary standards are listed in Tables 5 and 6 of this section:

TABLE 5
INORGANIC CHEMICAL CHARACTERISTICS

Contaminant	Primary MCLs (mg/L)
Antimony (Sb)	0.006
Arsenic (As)	0.010*
Asbestos	7 million fibers/liter (longer than 10 microns)
Barium (Ba)	2.0
Beryllium (Be)	0.004
Cadmium (Cd)	0.005
Chromium (Cr)	0.1
Copper (Cu)	**
Cyanide (CN)	0.2
Fluoride (F)	4.0***
Lead (Pb)	**
Mercury (Hg)	0.002
Nitrate (as N)	10.0
Nitrite (as N)	1.0
Selenium (Se)	0.05
Sodium (Na)	**
Thallium (Tl)	0.002
Contaminant	Secondary MCLs (mg/L)
Chloride (Cl)	250.0
Fluoride (F)	2.0***

Iron (Fe)	0.3
Manganese (Mn)	0.05
Silver (Ag)	0.1
Sulfate (SO ₄)	250.0
Zinc (Zn)	5.0

Note* Does not apply to TNC systems.

Note** Although the state board of health has not established MCLs for copper, lead, and sodium, there is sufficient public health significance connected with copper, lead, and sodium levels to require inclusion in inorganic chemical and physical source monitoring. For lead and copper, the EPA has established distribution system related levels at which a system is required to consider corrosion control. These levels, called "action levels," are 0.015 mg/L for lead and 1.3 mg/L for copper and are applied to the highest concentration in ten percent of all samples collected from the distribution system. The EPA has also established a recommended level of twenty mg/L for sodium as a level of concern for those consumers that may be restricted for daily sodium intake in their diets.

Note*** If a water system provides community fluoridation, the level of fluoride and associated requirements are set under WAC 246-290-460.

TABLE 6
PHYSICAL CHARACTERISTICS

Contaminant	Secondary MCLs
Color	15 Color Units
Specific Conductivity	700 umhos/cm
Total Dissolved Solids (TDS)	500 mg/L

(b) Compliance with the MCLs, except for nitrate and nitrite, in this subsection is determined by a running annual average at each sampling point. The system will not be considered in violation of the MCL until it has completed one year of quarterly sampling and at least one sampling point is in violation of the MCL. If one sampling point is in violation of the MCL, the system is in violation of the MCL.

(i) If any sample will cause the running annual average to exceed the MCL at any sampling point, the system is out of compliance with the MCL immediately.

(ii) If a system fails to collect the required number of samples, compliance will be based on the total number of samples collected.

(iii) If a sample result is less than the detection limit, zero will be used to calculate the running annual average.

(c) Compliance with the MCLs for nitrate and nitrite is determined based on one sample if the levels of these contaminants are below the MCLs as determined under Table 5 of this section. If the levels of nitrate or nitrite exceed the MCLs in the initial sample, a confirmation sample is required under 40 C.F.R. 141.23 (f)(2), and compliance shall be determined based on the average of the initial and confirmation samples.

(4) Disinfection byproducts.

(a) The department shall consider standards under this subsection as primary standards. The MCLs in this subsection apply to monitoring required by WAC 246-290-300(6) and 40 C.F.R. 141.620 - 629.

(b) The MCLs for disinfection byproducts are as follows:

TABLE 7
DISINFECTION BYPRODUCTS

Disinfection Byproduct	MCL (mg/L)
Total Trihalomethanes (TTHMs)	0.080
Haloacetic acids (five) (HAA5)	0.060
Bromate	0.010
Chlorite	1.0

(c) Whether a system has exceeded the disinfection byproduct MCLs shall be determined in accordance with 40 C.F.R. 141.133. Beginning on the dates specified for compliance in 40 C.F.R. 141.620(c), compliance with the TTHMs and HAA5 MCLs shall be based on the LRAAs as required by 40 C.F.R. 141.64 (b)(2) and 40 C.F.R. 141.620(d). Compliance with the bromate and chlorite MCL will continue to be determined in accordance with 40 C.F.R. 141.133.

(5) Disinfectant residuals.

(a) The department shall consider standards under this subsection primary standards. The MRDLs in this subsection apply to monitoring required by WAC 246-290-300(6).

(b) The MRDL for disinfectants is as follows:

TABLE 8
DISINFECTANT RESIDUAL MRDLs

Disinfectant Residual	MRDL (mg/L)
Chlorine	4.0 (as Cl ₂)
Chloramines	4.0 (as Cl ₂)
Chlorine Dioxide	0.8 (as ClO ₂)

(c) Whether a system has exceeded MRDLs shall be determined in accordance with 40 C.F.R. 141.133.

(6) Radionuclides.

(a) The department shall consider standards under this subsection primary standards.

(b) The MCLs for radium-226 and radium-228, gross alpha particle activity, beta particle and photon radioactivity, and uranium shall be as listed in 40 C.F.R. 141.66.

(7) Organic chemicals.

(a) The department shall consider standards under this subsection primary standards.

(b) VOCs.

(i) The MCLs for VOCs are as follows:

Contaminant	Chemical Abstract Service (CAS) Number	MCL (ppb)
Vinyl chloride	75-01-4	2
Benzene	71-43-2	5
Carbon tetrachloride	56-23-5	5
1,2-Dichloroethane	107-06-2	5
Trichloroethylene	79-01-6	5
para-Dichlorobenzene	106-46-7	75
1,1-Dichloroethylene	75-35-4	7
1,1,1-Trichloroethane	71-55-6	200
cis-1,2-Dichloroethylene	156-59-2	70
1,2-Dichloropropane	78-87-5	5
Ethylbenzene	100-41-4	700
Monochlorobenzene	108-90-7	100

Contaminant	Chemical Abstract Service (CAS) Number	MCL (ppb)
o-Dichlorobenzene	95-50-1	600
Styrene	100-42-5	100
Trichloroethane	127-18-4	5
Toluene	108-88-3	1,000
trans-1,2-Dichloroethylene	156-60-5	100
Xylenes (total)	1330-20-7	10,000
Dichloromethane	75-09-2	5
1,2,4-Trichlorobenzene	120-82-1	70
1,1,2-Trichloroethane	79-00-5	5

(ii) The department shall determine compliance with this subsection based on compliance with 40 C.F.R. 141.24(f).

(c) SOCs.

(i) MCLs for SOCs shall be as listed in 40 C.F.R. 141.61(c).

(ii) The department shall determine compliance with this subsection based on compliance with 40 C.F.R. 141.24(h).

(8) Other contaminants.

The state board of health shall determine state MCLs for any additional contaminants as described in WAC 246-290-315 (5) through (8).

[Statutory Authority: RCW 43.20.050, 70A.125.080, and 70A.130.010. WSR 21-23-097, § 246-290-310, filed 11/17/21, effective 1/1/22. Statutory Authority: RCW 43.20.050 and 70.119A.080. WSR 17-01-062, § 246-290-310, filed 12/14/16, effective 1/14/17. Statutory Authority: RCW 43.20.050. WSR 09-21-045, § 246-290-310, filed 10/13/09, effective 1/4/10. Statutory Authority: RCW 70.119A.180 and 43.20.050. WSR 08-03-061, § 246-290-310, filed 1/14/08, effective 2/14/08. Statutory Authority: RCW 43.20.050 and 70.119A.080. WSR 04-04-056, § 246-290-310, filed 1/30/04, effective 3/1/04. Statutory Authority: RCW 43.20.050 (2) and (3) and 70.119A.080. WSR 03-08-037, § 246-290-310, filed 3/27/03, effective 4/27/03. Statutory Authority: RCW 43.02.050 [43.20.050]. WSR 99-07-021, § 246-290-310, filed 3/9/99, effective 4/9/99. Statutory Authority: RCW 43.20.050. WSR 94-14-001, § 246-290-310, filed 6/22/94, effective 7/23/94; WSR 93-08-011 (Order 352B), § 246-290-310, filed 3/25/93, effective 4/25/93; WSR 92-04-070 (Order 241B), § 246-290-310, filed 2/4/92, effective 3/6/92. Statutory Authority: Chapter 43.20 RCW. WSR 91-07-031 (Order 150B), § 246-290-310, filed 3/15/91, effective 4/15/91. Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-290-310, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99-339. WSR 89-21-020 (Order 336), § 248-54-175, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 34.04.045. WSR 88-05-057 (Order 307), § 248-54-175, filed 2/17/88. Statutory Authority: RCW 43.20.050. WSR 83-19-002 (Order 266), § 248-54-175, filed 9/8/83.]