

**§ 143.2**

Drinking Water Act, as amended (42 U.S.C. 300g-1). These regulations control contaminants in drinking water that primarily affect the aesthetic qualities relating to the public acceptance of drinking water. At considerably higher concentrations of these contaminants, health implications may also exist as well as aesthetic degradation. The regulations are not Federally enforceable but are intended as guidelines for the States.

**§ 143.2 Definitions.**

(a) *Act* means the Safe Drinking Water Act as amended (42 U.S.C. 300f et seq.).

(b) *Contaminant* means any physical, chemical, biological, or radiological substance or matter in water.

(c) *Public water system* means a system for the provision to the public of piped water for human consumption, if such a system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least 60 days out of the year. Such term includes (1) any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (2) any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. A public water system is either a "community water system" or a "non-community water system."

(d) *State* means the agency of the State or Tribal government which has jurisdiction over public water systems. During any period when a State does not have responsibility pursuant to section 1443 of the Act, the term "State" means the Regional Administrator, U.S. Environmental Protection Agency.

(e) *Supplier of water* means any person who owns or operates a public water system.

(f) *Secondary maximum contaminant levels* means SMCLs which apply to public water systems and which, in the judgement of the Administrator, are requisite to protect the public welfare. The SMCL means the maximum permissible level of a contaminant in water which is delivered to the free

**40 CFR Ch. I (7-1-10 Edition)**

flowing outlet of the ultimate user of public water system. Contaminants added to the water under circumstances controlled by the user, except those resulting from corrosion of piping and plumbing caused by water quality, are excluded from this definition.

[44 FR 42198, July 19, 1979, as amended at 53 FR 37412, Sept. 26, 1988]

**§ 143.3 Secondary maximum contaminant levels.**

The secondary maximum contaminant levels for public water systems are as follows:

Contaminant	Level
Aluminum .....	0.05 to 0.2 mg/l.
Chloride .....	250 mg/l.
Color .....	15 color units.
Copper .....	1.0 mg/l.
Corrosivity .....	Non-corrosive.
Fluoride .....	2.0 mg/l.
Foaming agents .....	0.5 mg/l.
Iron .....	0.3 mg/l.
Manganese .....	0.05 mg/l.
Odor .....	3 threshold odor number.
pH .....	6.5-8.5.
Silver .....	0.1 mg/l.
Sulfate .....	250 mg/l.
Total dissolved solids (TDS) .....	500 mg/l.
Zinc .....	5 mg/l.

These levels represent reasonable goals for drinking water quality. The States may establish higher or lower levels which may be appropriate dependent upon local conditions such as unavailability of alternate source waters or other compelling factors, provided that public health and welfare are not adversely affected.

[44 FR 42198, July 19, 1979, as amended at 51 FR 11412, Apr. 2, 1986; 56 FR 3597, Jan. 30, 1991]

**§ 143.4 Monitoring.**

(a) It is recommended that the parameters in these regulations should be monitored at intervals no less frequent than the monitoring performed for inorganic chemical contaminants listed in the National Interim Primary Drinking Water Regulations as applicable to community water systems. More frequent monitoring would be appropriate for specific parameters such as pH, color, odor or others under certain circumstances as directed by the State.

(b) Measurement of pH, copper and fluoride to determine compliance under

**Environmental Protection Agency**

**§ 143.4**

§143.3 may be conducted with one of the methods in §141.23(k)(1). Analyses of aluminum, chloride, foaming agents, iron, manganese, odor, silver, sulfate, total dissolved solids (TDS) and zinc to determine compliance under §143.3 may be conducted with the methods in the following table or alternative methods listed in appendix A to subpart C of part 141. Criteria for analyzing aluminum, copper, iron, manganese, silver

and zinc samples with digestion or directly without digestion, and other analytical test procedures are contained in *Technical Notes on Drinking Water Methods*, EPA-600/R-94-173, October 1994. This document is available from the National Service Center for Environmental Publications (NSCEP), P.O. Box 42419, Cincinnati, OH 45242-0419 or <http://www.epa.gov/nscep/>.

Contaminant	EPA	ASTM <sup>3</sup>	SM <sup>4</sup> 18th and 19th ed.	SM <sup>4</sup> 20th ed.	SM <sup>7</sup> Online	Other
1. Aluminum	200.7 <sup>2</sup> 200.8 <sup>2</sup> 200.9 <sup>2</sup> 300.0 <sup>1</sup> , 300.1 <sup>6</sup>	..... ..... D4327-97, 03	3120 B ..... 3113 B ..... 3111 D ..... 4110 B ..... 4500-CI- D ..... 4500-CI- B .....	3120 B ..... ..... ..... 4110 B ..... 4500-CI- D ..... 4500-CI- B .....	3120 B-99; 3113 B-99; 3111 D-99; 4110 B-00; 4500-CI- D-97; 4500-CI- B-97.	
2. Chloride		D512-89 (Re-approved 1999) B.	..... ..... .....	..... ..... .....		D6508, Rev. 2 <sup>8</sup>
3. Color		.....	2120 B .....	2120 B .....	2120 B-01.	
4. Foaming Agents		.....	5540 C .....	5540 C .....	5540 C-00.	
5. Iron	200.7 <sup>2</sup> 200.9 <sup>2</sup>	..... .....	3120 B ..... 3111 B ..... 3113 B ..... 3120 B ..... 3111 B ..... 3113 B-99; 3120 B-99; 3111 B-99; 3113 B-99; 3120 B-99; 3111 B-99; 3113 B-99; 2150 B-97; 3120 B-99; 3111 B-99; 3113 B-99; 4110 B .....	3120 B ..... 3111 B ..... 3113 B ..... 3120 B ..... 3111 B ..... 3113 B-99; 3120 B-99; 3111 B-99; 3113 B-99; 2150 B-97; 3120 B-99; 3111 B-99; 3113 B-99; 4110 B .....	3120 B-99; 3120 B-99; 3111 B-99; 3113 B-99; 3120 B-99; 3111 B-99; 3113 B-99; 2150 B-97; 3120 B-99; 3111 B-99; 3113 B-99; 4110 B-00.	I-3720-85 <sup>5</sup>
6. Manganese	200.7 <sup>2</sup> 200.8 <sup>2</sup> 200.9 <sup>2</sup>	..... ..... .....	3111 B ..... 3113 B ..... 2150 B ..... 3120 B ..... 3111 B ..... 3113 B-99; 3120 B-99; 3111 B-99; 3113 B-99; 4110 B .....	3111 B ..... 3113 B ..... 2150 B ..... 3120 B ..... 3111 B ..... 3113 B-99; 3120 B-99; 3111 B-99; 3113 B-99; 4110 B .....		
7. Odor	200.7 <sup>2</sup>	.....	.....	.....		
8. Silver	200.8 <sup>2</sup> 200.9 <sup>2</sup> 300.0 <sup>1</sup> , 300.1 <sup>6</sup> 375.2 <sup>1</sup>	..... ..... D4327-97, 03	..... ..... ..... 4500-SO <sub>4</sub> <sup>2-</sup> - F ..... 4500-SO <sub>4</sub> <sup>2-</sup> - C, D ..... 4500-SO <sub>4</sub> <sup>2-</sup> - E .....	..... ..... ..... 4500-SO <sub>4</sub> <sup>2-</sup> - F ..... 4500-SO <sub>4</sub> <sup>2-</sup> - C, D ..... 4500-SO <sub>4</sub> <sup>2-</sup> - E .....		
9. Sulfate		D516-90, 02	.....	.....		D6508, Rev. 2 <sup>8</sup>
10. Total Dissolved Solids	200.7 <sup>2</sup>	.....	2540 C .....	2540 C .....	2540 C-97.	
11. Zinc	200.8 <sup>2</sup>	.....	3120 B ..... 3111 B .....	3120 B ..... 3111 B .....	3120 B-99; 3111 B-99.	

The procedures shall be done in accordance with the documents listed below. The incorporation by reference of the following documents was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of the documents may be obtained from the sources listed below. Information regarding obtaining these documents can be obtained from the Safe Drinking Water Hotline at 800-426-4791. Documents may be inspected at EPA's Drinking Water Docket, EPA West, 1301 Constitution Avenue, NW., Room 3334, Washington, DC (Telephone: 202-566-2426), or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

<sup>1</sup>Methods for the Determination of Inorganic Substances in Environmental Samples—Supplement 1, EPA/600/R-93-100, August 1993. Available at NTIS, PB94-120821.

<sup>2</sup>Methods for the Determination of Metals in Environmental Samples—Supplement 1, EPA/600/R-94-111, May 1994. Available at NTIS, PB 95-125472.

<sup>3</sup>Annual Book of ASTM Standards, 1994, 1996, 1999, or 2004, Vols. 11.01 and 11.02, ASTM International, any year containing the cited version of the method may be used. Copies may be obtained from the ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428.

<sup>4</sup>Standard Methods for the Examination of Water and Wastewater, 18th edition (1992), 19th edition (1995), or 20th edition (1998). American Public Health Association, 1015 Fifteenth Street, NW., Washington, DC 20005. The cited methods published in any of these three editions may be used, except that the versions of 3111 B, 3111 D, and 3113 B in the 20th edition may not be used.

<sup>5</sup>Method I-3720-85, *Techniques of Water Resources Investigation of the U.S. Geological Survey*, Book 5, Chapter A-1, 3rd ed., 1989. Available from Information Services, U.S. Geological Survey, Federal Center, Box 25286, Denver, CO 80225-0425.

<sup>6</sup> "Methods for the Determination of Organic and Inorganic Compounds in Drinking Water," Vol. 1, EPA 815R-00-014, August 2000. Available at NTIS, PB2000-106981.

<sup>7</sup> Standard Methods Online are available at <http://www.standardmethods.org>. The year in which each method was approved by the Standard Methods Committee is designated by the last two digits in the method number. The methods listed are the only online versions that may be used.

<sup>8</sup> Method D6508, Rev. 2, "Test Method for Determination of Dissolved Inorganic Anions in Aqueous Matrices Using Capillary Ion Electrophoresis and Chromate Electrolyte," available from Waters Corp, 34 Maple St., Milford, MA, 01757, Telephone: 508/482-2131, Fax: 508/482-3625.

[44 FR 42198, July 19, 1979, as amended at 53 FR 5147, Feb. 19, 1988; 56 FR 30281, July 1, 1991; 59 FR 62470, Dec. 5, 1994; 64 FR 67466, Dec. 1, 1999; 67 FR 65252, Oct. 23, 2002; 69 FR 18803, Apr. 9, 2004; 72 FR 11248, Mar. 12, 2007; 74 FR 30959, June 29, 2009]