Content

Title： Drinking Water Quality Standards Ch

Date： 2017.01.10

Legislative： 1.Nine Articles drafted and promulgated by Environmental Protection Administration Order (87) Huan-Shu-Tu-Tzu No. 004428 on February 4, 1998
2.Revisions to Article 3 promulgated by Environmental Protection Administration Order Huan-Shu-Tu-Tzu No. 0920028896 on May 7, 2003
3.Revisions to Articles 3, 4, 5 and 6 promulgated by Environmental Protection Administration Order Huan-Shu-Tu-Tzu No. 0940039894 on May 30, 2005
4.Revisions to Article 3 promulgated by Environmental Protection Administration Order Huan-Shu-Tu-Tzu No. 0960100652 on January 2, 2008
5.Revisions to Article 3 promulgated by Environmental Protection Administration Order Huan-Shu-Tu-Tzu No.0980106331E on November 26, 2009.
6.Revisions to Article 3 promulgated by Environmental Protection Administration Order Huan-Shu-Tu-Tzu No.1030001229 on January 9, 2014.
7.Revisions to Article 3, 4, 5 promulgated by Environmental Protection Administration Order Huan-Shu-Tu-Tzu No.1060000881 on January 10, 2017.

Content： Article1 These Standards are determined pursuant to Article 11, Paragraph 2 of the Drinking Water Management Act (herein referred to as "this Act").
Article2 These standards shall apply to drinking water supplied from drinking water equipment designated in Article 4 of this Act and other drinking water designated by the central competent authority.
Article3 Regulations of these standards are set forth herein.
I. Bacterial standards: (Samples for total bacterial count must be collected from the finished water distribution networks that receive water from water treatment utilities with disinfection regime)

Item	Maximum limit	Unit
1. Coliform group	6 (Multiple-tube fermentation method)	Most probable number (MPN)/100 milliliters
	6 (Membrane filtration method)	Colony-forming unit(CFU)/100 milliliters
2. Total bacterial count	100	Colony-forming unit(CFU)/milliliter

II. Physical standards:

Item	Maximum limit	Unit
1. Odor	3	Threshold odor number (TON)
2. Turbidity	2	NTU (nephelometric turbidity unit)
3. Color	5	Platinum-cobalt unit

III. Chemical standards:
A. Substances that impact health:

Item	Maximum limit	Unit
1. Arsenic	0.01	milligrams/liter

2. Lead		0.01	milligrams/liter
3. Selenium		0.01	milligrams/liter
4. Total chromium		0.05	milligrams/liter
5. Cadmium		0.005	milligrams/liter
6. Barium		2.0	milligrams/liter
7. Antimony		0.01	milligrams/liter
8. Nickel		0.1 0.07 This standard is effective starting on July 1, 2018. 0.02 This standard is effective starting on July 1, 2020.	milligrams/liter
9. Mercury		0.002 0.001 This standard is effective starting on July 1, 2020.	milligrams/liter
10. Cyanide (as CN-)		0.05	milligrams/liter
11. Nitrite-nitrogen		0.1	milligrams/liter
Disinfection byproducts	12. Total Trihalomethanes	0.08	milligrams/liter
	13. Haloacetic acids (This concentration is defined as the sum of measured concentrations for five haloacetic acids, including monochloroacetic acid (MCAA), dichloroacetic acid (DCAA), trichloroacetic acid (TCAA), monobromoacetic acid (MBAA), and dibromoacetic acid.)	0.060	milligrams/liter
	14. Bromate	0.01	milligrams/liter

		15. Chlorite (This regulation only applies to water supply systems that use gaseous chlorine dioxide as disinfectant)	0.7	milligrams/liter
	Volatile organic compounds	16. Trichloroethene	0.005	milligrams/liter
		17. Carbon tetrachloride	0.005	milligrams/liter
		18. 1,1,1-Trichloroethane	0.20	milligrams/liter
		19. 1,2-Dichloroethane	0.005	milligrams/liter
		20. Vinyl chloride	0.002 0.0003 This standard is effective starting on July 1, 2018.	milligrams/liter
		21. Benzene	0.005	milligrams/liter
		22. 1,4-Dichlorobenzene	0.075	milligrams/liter
		23. 1.1-Dichloroethylene	0.007	milligrams/liter
		24. Dichloromethane	0.02	milligrams/liter
		25. 1,2-Dichlorobenzene	0.6	milligrams/liter
		26. Toluene	0.7	milligrams/liter
		27. Xylenes (This regulated concentration for Xylenes is defined as the sum of the measured concentrations of three xylene isomers, including 1,2-Xylene, 1,3-Xylene, and 1,4-Xylene.)	0.5	milligrams/liter
		28. Cis-1,2-Dichloroethene	0.07	milligrams/liter
		29. Trans-1,2-Dichloroethene	0.1	milligrams/liter
		30. Tetrachloroethene	0.005	milligrams/liter
	Agricultural chemicals	31. Endosulfan	0.003	milligrams/liter
		32. Lindane	0.0002	milligrams/liter

33. Butachlor	0.02	milligrams/liter
34. Dichlorophenoxyacetic acid	0.07	milligrams/liter
35. Paraquat	0.01	milligrams/liter
36. Methomyl	0.01	milligrams/liter
37. Carbofuran	0.02	milligrams/liter
38. Isoprocarb	0.02	milligrams/liter
39. Methamidophos	0.02	milligrams/liter
40. Diazinon	0.005	milligrams/liter
41. Parathion	0.02	milligrams/liter
42. EPN	0.005	milligrams/liter
43. Monocrotophos	0.003	milligrams/liter

Persistent organic pollutants	44 Dioxin This regulated concentration for Dioxin is defined as the sum of the measured concentrations of 17 compounds, including 2,3,7,8-Tetrachlorinated dibenzo-p-dioxin-2,3,7,8-TeCDD, 2,3,7,8-Tetra chlorinated dibenzofuran,2,3,7,8-TeCDF and 2,3,7,8- penta-, hexa-, hepta-, and octa-chlorinated dioxins and furan. This regulated concentration for Dioxin is multiplied by the dioxin toxic equivalency factor (WHO-TEFs) provided by World Health Organization, and is expressed as a total toxicity equivalency quantity (TEQ). (If any drinking water treatment facilities locate within a 5-kilometer distance having a large pollution source, it must be monitored once every year. If the measured Dioxin concentrations do not exceed the maximum permitted limit for two consecutive years, the monitoring frequency may be reduced to once every two years starting in the following year.)	3	Petagram - World Health Organization - total toxicity equivalency quantity/liter (pg-WHO-TEQ/L)

B. Substances with potential health impact:

Item	Maximum limit	Unit
1. Flouride (as F-)	0.8	milligrams/liter
2. Nitrate nitrogen	10.0	milligrams/liter
3. Silver	0.05	milligrams/liter
4. Molybdenum (This regulation only applies to water supply systems with a potential pollution source, such as those with semiconductor fabrication plants, optoelectronic manufacturing plants, or parts manufacturing plants, located within a 5-kilometer distance upstream from their water intake. The testing frequency is once per quarter. If the test values do not exceed the maximum permissible limits for two consecutive years, the testing frequency could reduce to once per year from the following year.)	0.07	milligrams/liter

5. Indium (This regulation only applies to water supply systems with a potential pollution source, such as those with semiconductor fabrication plants, optoelectronic manufacturing plants, or parts manufacturing plants, located within a 5-kilometer distance upstream from their water intake The testing frequency is once per quarter. If the test values do not exceed the maximum permissible limits for two consecutive years, the testing frequency could reduce to once per year from the following year.)	0.07	milligrams/liter

C. Contaminants that cause aesthetic, cosmetic, and technical effects:

Item	Maximum limit	Unit
1. Iron	0.3	milligrams/liter
2. Manganese	0.05	milligrams/liter
3. Copper	1.0	milligrams/liter
4. Zinc	5.0	milligrams/liter
5. Sulfate (as SO_4^{2-})	250	milligrams/liter
6. Phenols	0.001	milligrams/liter
7. Anionic surface-active agents	0.5	milligrams/liter
8. Chloride (as Cl^-)	250	milligrams/liter
9. Ammonia nitrogen	0.1	milligrams/liter
10. Total hardness (as $CaCO_3$)	300	milligrams/liter
11. Total dissolved solids	500	milligrams/liter

12. Aluminum (This regulation concentration is defined as the concentration of total aluminum.)	0.3 0.2 This standard is effective starting on July 1, 2019. (This regulation is not applicable when the turbidity of the water source is over 500 NTU in the period of typhoon landfall warning, and when the turbidity of water source is over 1000 NTU during the three days after the warning is lifted.)	milligrams/liter

D. Limit range of residual chlorine (Limited to water supply systems using chlorine as disinfectant):

Item	Limit range	Unit
Free available residual chlorine	0.2-1.0	milligrams/liter

E. Range for pH index (water treated by stationary continuous water supply equipment on public or private premises are not be subjected to this limitation):

Item	Limit range	Unit
Hydrogen ion concentration index (pH value)	6.0-8.5	No unit

Article4　For tap water, small water treatment facilities, and community-installed public water supply systems, when source water turbidity values exceed 1,500 NTU caused by torrential rains or other natural disasters, the maximum turbidity limit for drinking water may apply to 4 NTU.
Drinking water source turbidity testing data in the foregoing paragraph shall be provided by tap water enterprises, small water treatment units or community-installed public water supply units.
Article5　For tap water, small water treatment facilities, and community-installed public water supply systems, when source water turbidity values exceed 1,500 NTU caused by torrential rains or other natural disasters, the limit range of free available residual chlorine may apply to follow values (shall apply only to water supply systems that add chlorine disinfectants).

Item	Limit range	Unit
Free available residual chlorine	0.2-2.0	milligrams

Article6　(Deleted)
Article7　Testing methods for each water quality item designated in these Standards shall be designated and officially announced by the central competent authority.
Article8　A competent authority that conducts water quality analysis in accordance with these Standards may commission an approved analysis laboratory to assist with analysis.
Article9　Unless an implementation date is separately designated, the regulation items in these standards shall take effect on the date of promulgation.