

**PART XVIII
SECONDARY DRINKING WATER STANDARDS**

§ 1801 PURPOSE

This part establishes the Navajo Nation's Secondary Drinking Water Standards pursuant to § 2532 of the NNSDWA. These standards control contaminants in drinking water that primarily affect aesthetic qualities relating to public acceptance of drinking water. At considerably higher concentrations of these contaminants, health implications may exist as well as aesthetic degradation. These standards serve as a goal and are not enforceable by the NNEPA.

§ 1802 SECONDARY MAXIMUM CONTAMINANT LEVELS

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

TABLE 1800.1 Secondary Maximum Contaminant Level

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

§1803 ANALYTICAL METHODS

- A. It is recommended that the parameters in these standards should be monitored at intervals no less frequent than the monitoring performed for inorganic chemical contaminants listed in the NNPDR as applicable to CWSs. More frequent monitoring would be appropriate for specific parameters such as pH, color, odor, or others under certain circumstances as recommended by the Director.
- B. Measurement of pH, copper and fluoride may be conducted with one of the methods in §402, Table 400.4. Analyses of aluminum, chloride, foaming agents, iron, manganese, odor, silver, sulfate, total dissolved solids (TDS) and zinc may be conducted with the methods in the following table. 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, which is available at NTIS PB95-104766.

Table 1800.2 METHODOLOGY

Contaminant	EPA	ASTM ³	SM4	Other
Aluminum	2200.7		3120B	

	² 200.8 ² 200.9		3113B 3111D	
Chloride	¹ 300.0	D4327-91	4110 4500-Cl-D	
Color			2120B	
Foaming Agent			5540C	
Iron	² 200.7 ² 200.9		3120B 3111B 3113B	
Manganese	² 200.7 ² 200.8 ² 200.9		3120B 3111B 3113B	
Odor			2150B	
Silver	² 200.7 ² 200.8 ² 200.9		3120B 3111B 3113B	I-3720-85 ⁵
Sulfate	¹ 300.0 ¹ 375.2	D4327-91	4110 4500-SO ₄ -F 4500-SO ₄ -C, D	
TDS			2540C	
Zinc	² 200.7 ² 200.8		3120B 3111B	

1. "Methods for the Determination of Inorganic Substances in Environmental Samples", EPA-600/R-93-100, August 1993. Available at NTIS, PB94-121811.

2. "Methods for the Determination of Metals in Environmental Samples-Supplement I", EPA-600/R-94-111, May 1994. Available at NTIS, PB94-184942.

3. The procedures shall be done in accordance with the *Annual Book of ASTM Standards*, 1994, Vols. 11.01 and 11.02, American Society for Testing and Materials. Copies may be obtained from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103. Copies may be inspected at EPA's Drinking Water Docket, 401 M Street SW, Washington, D.C. 20460; or at the Office of the Federal Register, 800 North Capitol Street, NW, Suite 700, Washington, D.C.

4. The procedures shall be done in accordance with the 18th edition, or latest edition, of *Standard Methods for the Examination of Water and Wastewater*, 1992. American Public Health Association. Copies may be obtained from the American Public Health Association, 1015 Fifteenth Street NW., Washington, D.C. 20005. Copies may be inspected at EPA's Drinking Water Docket, 401 M. Street, SW., Washington, DC 20460; or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, D.C.

5. Available from Books and Open-File Reports Section, USGS Federal Center, Box 25425, Denver, CO, 80225-0425.

§ 1804 COMPLIANCE WITH SECONDARY MAXIMUM CONTAMINANT LEVEL AND PUBLIC NOTIFICATION FOR FLUORIDE

A. CWSs, as defined in § 104 of these regulations, that exceed the SMCL for fluoride as determined by the last single sample taken in accordance with the requirements of § 406.1 of the NNPDWR, but not to exceed the MCL for fluoride as specified by § 204 of the NNPDWR, shall provide the notice described in subsection (B) of this section to all billing units annually, all new billing units at the time service begins, and the Director.

B. The notice required by subsection (A) of this section shall contain the following language, including the language necessary to replace the superscripts:

PUBLIC NOTICE

Dear User:

The Navajo Nation Environmental Protection Agency and the U.S. Environmental Protection Agency require that we send you this notice on the level of fluoride in your drinking water. The drinking

water in your community has a fluoride concentration of ¹ milligrams per liter (mg/l).

Both the Navajo Nation Primary Drinking Water Drinking Regulations and federal regulations require that fluoride, which may occur naturally in your water supply, not exceed a concentration of 4.0 mg/l in drinking water. This is an enforceable standard called a Maximum Contaminant Level (MCL), and it has been established to protect the public health. Exposure to drinking water levels above 4.0 m/l for many years may result in some cases of crippling skeletal fluorosis, which is a serious bone disorder.

Both Navajo Nation and federal law also require that we notify you when sampling indicates that the fluoride in your drinking water exceeds 2.0 mg/l. This is intended to alert families about dental problems that might affect children under nine years of age. The fluoride concentration of your water exceeds this guideline.

Fluoride in children's drinking water at levels of approximately 1 mg/l reduces the number of dental cavities. However, some children exposed to levels of fluoride greater than about 2.0 mg/l may develop dental fluorosis. Dental fluorosis, in its moderate and severe forms, is a brown staining and/or pitting of the permanent teeth.

Because dental fluorosis occurs only when developing teeth (before they erupt from the gums) are exposed to elevated fluoride levels, households without children are not expected to be affected by this level of fluoride. Families with children under the age of nine are encouraged to seek other sources of drinking water for their children to avoid the possibility of staining and pitting.

Your water supplier can lower the concentration of fluoride in your water so that you will still receive the benefits of cavity prevention while the possibility of stained and pitted teeth is minimized. Removal of fluoride may increase your water costs. Treatment systems are also commercially available for home use. Information on such systems is available at the address given below. Low fluoride bottled drinking water that would meet all standards is also commercially available.

For further information, contact ² at your water system.

¹PWS shall insert the compliance result which triggered notification under this part.

²PWS shall insert the name, address, and telephone number of a contact person at the PWS.