

4. The department may allow the substitution of environmental surveillance data taken in conjunction with a nuclear facility for direct monitoring of man-made radioactivity by the supplier of water where the department determines such data is applicable to a particular community water system.

(d) If the average annual maximum contaminant level for man-made radioactivity set forth in s. NR 109.16 is exceeded, the operator of a community water system shall give notice to the department under s. NR 109.80 and to the public as required by s. NR 109.81. Monitoring at monthly intervals shall be continued until the concentration no longer exceeds the maximum contaminant level or until a monitoring schedule as a condition to a variance, exemption or enforcement action shall become effective.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78; am. (1) (a) (intro.) and (2) (a) (intro.), r. (1) (a) 2.a., renum. (1) (a) 2.b. and c. to be (1) (b) and (c), r. (2) (b), renum. (2) (c), (d), (intro.) and (e) to be (2) (b), (c), (intro.) and (d) and am., Register, April, 1982, No. 316, eff. 5-1-82.

Part II — Secondary Chemical and Physical Standards and Monitoring Requirements

NR 109.60 Secondary inorganic chemical and physical standards. (1) Waters containing inorganic chemicals in quantities above the limits contained in this section are not hazardous to health but may be objectionable to an appreciable number of persons.

(2) The following are the secondary standards for inorganic chemicals:

Standard	Milligrams per liter (micrograms per liter in parenthesis) - except as noted
Chloride	250
Color	15 units
Copper	1.0 (1,000 ug/1)
Corrosivity	Noncorrosive
Foaming agents	
MBAS (Methylene-Blue Active Substances)...	0.5
Hydrogen Sulfide	not detectable
Iron	0.3
Manganese	0.05 (50 ug/1)
Odor	3 (Threshold No.)
Sulfate	250
Total Residue	500
Zinc	5 (5,000 ug/1)

(3) The secondary standards contained in this section apply to all public water systems. Compliance with these standards shall be calculated in accordance with NR 109.61.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78; am. (2), Register, April, 1982, No. 316, eff. 3-1-82.

NR 109.61 Sampling and analytical requirements for secondary standards. (1) If the department receives complaints regarding the aesthetic quality of the water the supplier of water may be required to implement a monitoring program to determine compliance with NR 109.60.

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(2) If it is determined by the department that physical or chemical substances or both in excess of those standards contained in s. NR 109.60 are objectionable to an appreciable number of persons and are detrimental to the public welfare the department may, on its own motion, require remedial action by the supplier of water to insure that the public receives the highest quality water practicably obtainable.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78; am. (2), Register, April, 1982, No. 316, eff. 4-1-82.

Part III — Miscellaneous Chemical Monitoring Requirements, Raw Surface Water Standards and Approved Laboratories.

NR 109.70 Additional requirements for systems which chlorinate or fluoride water. (1) **FLUORIDE.** (a) The supplier of water for a community water system artificially fluoridating the water shall establish a monitoring program in order to maintain the fluoride concentration within the range of 1.0 to 1.5 milligrams per liter as recommended by the dental health section of the department of health and social services for optimum dental benefits.

(b) The monitoring program shall include:

1. Submission of the results of daily fluoride tests of samples from the distribution system, and

2. One sample per month taken from a representative location in the distribution system and submitted to the state laboratory of hygiene.

Note: For waterworks with large distribution systems and multiple sources, more than one fluoride test per day may be necessary to assure proper feed rates. See NR 111.54(5) for testing equipment requirements. Exceptions to the daily fluoride test requirement may be approved by the department if it is demonstrated that the optimum fluoride concentration in (a) above will be maintained by a reduced monitoring program.

(c) The sample submitted to the state laboratory of hygiene shall be a portion of a split sample so that the operator can determine the fluoride concentration with the operator's equipment and compare it to the state laboratory results. The fluoride concentration obtained by the operator shall be noted on the data sheet prior to submission to the state laboratory.

(2) **CHLORINE.** The suppliers of water for all waterworks which chlorinate water shall test chlorine residuals at locations and intervals necessary to control the chlorination process. At ground water supplies, the chlorine residual of a sample from a representative location in the distribution system shall be checked at least twice per week. Waterworks having surface water treatment plants shall determine the chlorine residual in the plant effluent at least every 2 hours and in the distribution system at least daily in representative locations. Where water quality changes rapidly, residuals shall be tested at more frequent intervals as specified by the department and in those individual cases, continuous monitoring equipment may be required if the department determines it is necessary to protect public health.

Note: Chlorine residual testing is recommended when bacteriological samples are taken; results should be included on the sample slip.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78; am. (1) (b)1., Register, April, 1982, No. 316, eff. 5-1-82.

Register, October, 1985, No. 358

NR 109.71 Raw surface water standards. The intate water shall be the highest quality reasonably available and which, with appropriate treatment and adequate safeguards, will meet the drinking water standards in this chapter.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78.

NR 109.72 Laboratories. (1) For the purpose of compliance with this chapter, samples shall be analyzed at the state laboratory of hygiene, at a laboratory facility acceptable to the U.S. environmental protection agency, or, for bacteriological analysis, at a laboratory facility approved by the department of health and social services.

(2) All community water systems utilizing surface water sources shall analyze bacteriological samples for in-plant operational control at a laboratory facility approved by the department of health and social services.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78; renum. to be (1), cr. (2), Register, April, 1982, No. 316, eff. 5-1-82.

NR 109.73 Monitoring of consecutive public water systems. When a public water system supplies water to one or more other public water systems, the department may modify the monitoring requirements imposed by this chapter to the extent that the interconnection of the systems justifies treating them as a single system for monitoring purposes. Any modified monitoring shall be conducted pursuant to a schedule specified by the department and concurred in by the administrator of the U.S. environmental protection agency.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78.

NR 109.74 Sampling and analytical requirements for other chemicals. (1) If the department determines that the public health, safety or welfare requires testing for chemical or physical constituents in water which are not contained in this chapter the department may order such testing as it deems necessary.

(a) The department shall provide public notice and an opportunity for public hearing within 90 days after any order under this subsection.

(b) Hearings under this subsection shall be class 1 hearings and shall be held in accordance with ch. 227, Stats.

(2) Testing for other chemical constituents shall be performed at water systems as necessary for control of treatment processes.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78.

Part IV — Reporting, Public Notification and Recordkeeping

NR 109.80 Reporting requirements. (1) Except where a shorter reporting period is specified in this chapter, the supplier of water shall report to the department the results of any test measurement or analysis required by this chapter within:

(a) The first 10 days following the month in which the result is received; or

(b) The first 10 days following the end of the required monitoring period as stipulated by the department, whichever of these is shortest.

(2) The supplier of water shall report to the department within 48 hours the failure to comply with any maximum contaminant level or monitoring requirement set forth in this chapter.

(3) The supplier of water is not required to report analytical results to the department in cases where the state laboratory of hygiene performs the analysis and reports the results to the department or where a laboratory facility approved by the department of health and social services performs a bacteriological analyses and reports the results to the department within the time required by NR 109.31 .

(4) The supplier of water, within 10 days of completion of each public notification required under s. NR 109.81, shall submit to the department a representative copy of each type of notice distributed, published, posted, or made available to the persons served by the system or to the media, or both.

(5) Upon the request of the department, the supplier of water shall submit to the department copies of any records required to be maintained under s. NR 109.82 or copies of any documents then in existence which the department is entitled to inspect under the authority of s. 144.09, Stats.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78; am. (1), cr. (4) and (5), Register, April, 1982, No. 316, eff. 5-1-82.

NR 109.81 Public notification. (1)(a) The supplier of water of a community water system shall notify persons served by the system if the water supply system:

1. Fails to comply with an applicable maximum contaminant level established in ss. NR 109.11, 109.20, 109.30(1) or (2), 109.40, 109.50, or 109.51; or

2. Is granted a variance or an exemption from an applicable maximum contaminant level; or

3. Fails to comply with the requirements of any schedule prescribed pursuant to a variance or exemption.

(b) In all cases notice under this subsection shall be by inclusion of a notice in the first set of water bills of the system issued after the failure or grant and in any event by written notice within 3 months. In the case of a failure to comply with a maximum contaminant level such notice shall be repeated at least once every 3 months so long as the system's failure continues or the variance or exemption remains in effect. If the system issues water bills less frequently than quarterly, or does not issue water bills, the notice shall be made by or supplemented by another form of direct mail.

(2) If a non-community water system fails to comply with an applicable maximum contaminant level established in Part I of this chapter, is granted a variance or an exemption from an applicable maximum contaminant level, or fails to comply with the requirement of any schedule prescribed pursuant to a variance or exemption the supplier of water shall give notice of such failure or grant to the persons served by the system. Such notice shall be by conspicuous posting in a location where it can be seen by consumers and shall insure that the public using the system is adequately informed of the failure or grant.