

SECTION .1400 - FLUORIDATION OF PUBLIC WATER SUPPLIES**15A NCAC 18C .1401 POLICY**

Upon receipt of an application from a community water system to fluoridate its water supply, the Department will approve the application provided the rules for fluoridation pursuant to this Section are followed.

History Note: Authority G.S. 130A-316;

Eff. February 1, 1976;

Readopted Eff. December 5, 1977;

Amended Eff. September 1, 1990; September 1, 1979;

Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November 23, 2015.

15A NCAC 18C .1402 FORMAL APPLICATION

(a) Fluoride shall not be added to a community water system until a formal application has been submitted to and written approval is granted by the Secretary of the Department.

(b) Such approval will be considered upon written application and after adequate investigation has been made to determine if the policy adopted by the Division has been satisfied and the facilities, their accuracy and the proposed method of control are satisfactory and meet the requirements hereafter stated.

(c) The application shall include a resolution by the unit of local government or the governing body operating the community water system. The resolution shall state that the local board of health has approved the proposed fluoridation procedure.

History Note: Authority G.S. 130A-316;

Eff. February 1, 1976;

Readopted Eff. December 5, 1977;

Amended Eff. July 1, 1993; September 1, 1990; September 1, 1979;

Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November 23, 2015.

15A NCAC 18C .1404 FEEDING EQUIPMENT

Accurate feeding equipment shall be provided for applying fluoride. Either gravimetric or volumetric dry-feed equipment or positive displacement liquid-feed equipment with accuracy within five percent shall be required.

History Note: Authority G.S. 130A-316;

Eff. February 1, 1976;

Readopted Eff. December 5, 1977;

Amended Eff. September 1, 1990;

Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November 23, 2015.

15A NCAC 18C .1405 PROTECTION OF OPERATORS

(a) Special precautions shall be taken to protect the operators from inhaling fluoride dust when handling this chemical and while charging the hoppers of the feeders.

(b) Dry feeders shall be equipped with dust collectors consisting of bag filters operating under positive air pressure and vented to the outside air.

(c) Each operator who handles fluoride shall be provided with his individual toxic dust respirator to be used only when handling the chemical.

(d) When liquid or solution feed equipment is used, special precautions against siphonage and improper chemical mixing must be provided after consultation with and approval by the Department.

History Note: Authority G.S. 130A-316;

Eff. February 1, 1976;

Readopted Eff. December 5, 1977;

Amended Eff. September 1, 1990;

Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November 23, 2015.

15A NCAC 18C .1406 CONTROL OF FLUORIDE PROCESS

(a) Fluoride Levels. Fluoride levels shall not exceed the MCL set forth in Rule .1510 of this Subchapter. A supplier of water that is adding fluoride to the treated water shall maintain the following fluoride levels:

- (1) an operational control range for fluoride of 0.6 mg/l to 1.0 mg/l shall be established;
 - (2) the monthly average of the daily measurements at the entry point to the distribution system shall be within the operational control range; and
 - (3) 80 percent of the daily measurements at the entry point to the distribution system shall be within the operational control range.
- (b) A water treatment plant operator certified pursuant to 15A NCAC 18D shall conduct the necessary chemical analyses and supervise application of the fluoride.
- (c) Sample Location and Frequency.
- (1) Daily Monitoring. A supplier of water shall measure the fluoride concentration at least once per day at each entry point to the distribution system with fluoridated water.
 - (2) Split Samples. One entry point sample collected pursuant to Subparagraph (c)(1) of this Rule shall be split equally on a monthly basis. One portion shall be analyzed by water system personnel and the other portion analyzed by the North Carolina State Laboratory for Public Health or another laboratory certified to analyze drinking water samples for fluoride by the North Carolina State Laboratory of Public Health. A supplier of water that has all fluoride samples under this Rule analyzed by a laboratory certified to analyze drinking water samples for fluoride by the North Carolina State Laboratory for Public Health shall not be required to conduct split sampling.
 - (3) Distribution System Monitoring. The supplier of water of a public water system that has multiple entry points that are either not all fluoridated or the fluoride level at an entry point to the distribution system is not within the range set forth in Subparagraph (a)(1) of this Rule shall conduct sampling as follows:
 - (A) measure the fluoride concentration in the distribution system at least two times per month;
 - (B) one sample per month shall be a split sample and analyzed in accordance with Subparagraph (c)(2) of this Rule;
 - (C) sample sites shall be rotated throughout the distribution system at monitoring locations approved for coliform compliance sampling; and
 - (D) sample results shall be available for review by the Department upon request.
 - (4) Annual Raw Water Sample. A supplier of water shall measure the fluoride concentration of the raw water at least annually by a laboratory certified to analyze fluoride in drinking water by the North Carolina State Laboratory of Public Health.
 - (5) Discrepancies. A supplier of water shall compare the results of the split samples and shall consult with the North Carolina State Laboratory of Public Health to investigate and resolve all discrepancies greater than 15 percent within 30 days of receipt.
- (d) Analysis Methods. The fluoride content of water shall be determined in accordance with methods set forth in Rule .1508 of this Subchapter.
- (e) Monthly Reporting. Records of all fluoride analyses performed in accordance with Subparagraph (c)(1) of this Rule, shall be recorded on forms approved by the Department and submitted to the Department monthly. The forms shall specify the sample dates, times, locations, and results. Fluoride results performed by certified laboratories in accordance with Subparagraph (c)(1) of this Rule, shall be reported by the certified laboratory electronically in a format prescribed by the Department.
- (f) Reporting Exceedances. Any fluoride result above the MCL set forth in Rule .1510 of this Subchapter shall be reported to the Department as soon as possible, but in all cases within 24 hours after receipt of the analysis.
- (g) Fluoride Products. All fluoridation products used by a public water system shall meet the requirements of Rule .1537 of this Subchapter.
- (h) Discontinuation of Fluoridation. Prior to the discontinuation of fluoride addition, a supplier of water shall provide to the Department and the Department of Health and Human Services, Oral Health Section, copies of documentation by the unit of local government or the governing body operating the community water system that:
- (1) the resolution provided in the formal application to add fluoride has been rescinded or replaced; and
 - (2) the local board of health has been notified.

History Note: Authority G.S. 90A-29; 130A-316;

Eff. February 1, 1976;

Readopted Eff. December 5, 1977;

Amended Eff. April 1, 2014; July 1, 1994; September 1, 1990; December 17, 1979;

Readopted Eff. July 1, 2019.

15A NCAC 18C .1407 APPROVAL MAY BE RESCINDED

Failure to thoroughly and effectively carry out the requirements governing the application of fluoride, or for other good cause, shall be considered sufficient cause to rescind the approval of the Department and to withdraw the authorization granted for the permission to add fluoride to a community water system.

History Note: Authority G.S. 130A-316;

Eff. February 1, 1976;

Readopted Eff. December 5, 1977;

Amended Eff. September 1, 1990; September 1, 1979;

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