

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Water Supply and Wastewater Management

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TITLE: Proposals to Add or Remove Fluoridation Treatment by a Community Water System

EFFECTIVE DATE: March 13, 2004

AUTHORITY: Pennsylvania's Safe Drinking Water Act (35 P.S. §721.1 *et seq.*) and regulations at Title 25 Pa. Code Chapter 109

POLICY: Department of Environmental Protection (DEP) staff will follow the guidance and procedures presented in this document to direct and support implementation of required activities for community water systems that choose to add or remove water fluoridation treatment.

PURPOSE: The purpose of this document is to clarify existing regulatory requirements regarding the addition or removal of water fluoridation treatment.

APPLICABILITY: This guidance will apply to community water systems that choose to add or remove water fluoridation treatment.

DISCLAIMER: The policies and procedures outlined in this guidance are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements.

The policies and procedures herein are not an adjudication or a regulation. There is no intent on the part of DEP to give the rules in these policies that weight or deference. This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.

PAGE LENGTH: 4 pages

LOCATION: Volume 22, Tab 5

DEFINITIONS: N/A

Proposals to Add or Remove Fluoridation Treatment by a Community Water System

The Pennsylvania Department of Environmental Protection (DEP) supports local decision making on the issue of fluoridation. It is not DEP's intent or position to encourage or discourage fluoridation.

Why is DEP involved in the addition or removal of fluoridation treatment?

DEP regulates the design, construction and operation of treatment processes at public water systems within the Commonwealth. According to DEP's regulations, water systems may not use chemicals or materials which may come in contact with the water or affect the quality of the water unless the chemicals or materials are acceptable to DEP (Title 25 Pa. Code §109.606(a)). Fluoridation chemicals certified under ANSI/NSF Standard 60 are acceptable to DEP (Title 25 Pa. Code §109.606(b)). Whenever a community water system (CWS) proposes to add or remove a treatment process, the water supplier must obtain a construction permit before making any modifications, and an operation permit before operating any new or modified facility (Title 25 Pa. Code §109.501).

Pennsylvania's public water systems generally do not use sources that naturally contain fluoride at levels that would provide protection against tooth decay. Therefore, any CWS that wants to provide fluoridation must install equipment to add a chemical source of fluoride to their water. The fluoride maximum contaminant level (MCL) for drinking water was established by the United States Environmental Protection Agency to prevent the possibility that children's teeth, usually in children less than 9 years old, could be damaged. The condition, called mottling and also known as dental fluorosis, may cause brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums. DEP regulates fluoridation to ensure that the treatment process maintains the optimal level of fluoride needed to provide adequate protection from tooth decay while not exceeding the MCL of 2 mg/L.

To maintain the optimal fluoridation level in the drinking water, DEP conditions operation permits to require that suppliers closely monitor the level of fluoride being added. Suppliers providing such treatment must perform on-site fluoride monitoring at least once a day and maintain the test results on file. DEP staff also review those results during routine surveillance visits. Should an operational problem occur, the water supplier is also required to report the circumstances to DEP within 1 hour of learning of the problem (Title 25 Pa. Code §109.701(a)(3)). In the event that the fluoride level in the finished water exceeds the MCL value, the supplier must provide public notice to all consumers and take corrective actions to quickly return to compliance. In the event that the fluoride level falls below the level recommended to prevent tooth decay, the supplier must quickly take corrective actions to again meet their permit condition(s).

As defined in Title 25 Pa. Code §109.503(b)(1), the addition or removal of a treatment technique at an existing permitted community water system is a substantial modification. The public water system must therefore obtain a major permit amendment prior to the installation, operation or removal of fluoridation facilities.

The information below explains DEP's procedures regarding adding or removing fluoridation at a community water system.

What is involved in starting fluoridation?

A community water system that proposes to fluoridate must first obtain a construction permit for the proposed fluoridation facilities. In the permit application, DEP expects an applicant to provide evidence that the affected public has been adequately notified of the community water supplier's proposal to provide fluoridation and will be adequately notified prior to commencement of operation.

Initial notification may include, but is not limited to, items such as informational leaflets or pamphlets distributed within the service area, newspaper articles or direct mailings to each customer. Fluoridation proposals often receive serious consideration and generate considerable controversy and publicity. In these cases, public meetings are usually held. Referendum votes are sometimes taken. All of these activities serve to provide notice to the customers, physicians, dentists and other medical professionals that the water supplier is proposing to fluoridate. Such notices, public hearings or referendums are considered adequate public notification prior to issuance of a construction permit.

After installation of equipment but before its operation, the water supplier must also obtain an operation permit. DEP staff must first inspect the modified facility, and water system officials must certify that the installation was made in accordance with the approved plans and specifications. The water supplier must also provide documentation to show how consumers and medical professionals have been given advance notice of the date that fluoridation will begin. This notification could be, but is not limited to, a direct notice to each consumer and medical professional, press releases, newspaper articles or paid advertisements, radio and TV announcements or paid commercials. Advance notice allows medical professionals to determine if their patients should discontinue taking fluoride supplements and to consult with those individuals before the start of fluoridation.

After a system starts fluoridation, the water supplier should conduct ongoing public notification. Written notice should be given to transferred billing units and new service connections upon commencement of service. Since fluoridation will result in fluoride being detected during routine compliance self-monitoring, that information must also be included in the CWS annual Consumer Confidence Report (CCR) (Title 25 Pa. Code §109.416). Each affected CWS should take the opportunity to include information in their CCR that the fluoride level results from fluoridation of the water being served.

What is involved in stopping fluoridation?

A community water system that proposes to discontinue fluoridation must first obtain an amended water supply permit from DEP as per 109.503(b)(1). Until the amended operation permit is issued and its conditions satisfied, the supplier must continue fluoridation in accordance with their present permit.

A community water supplier, to facilitate an orderly transition from a fluoridated to a non-fluoridated system, needs to provide advance notice to consumers and medical professionals before fluoridation is stopped. Therefore, the supplier should provide evidence in their permit application that consumers and the medical professionals in the affected service area have been adequately notified of the community water supplier's decision to cease operation of fluoridation treatment. This notification could be, but is not limited to, a direct notice to each consumer and medical professional in the affected area, press releases, newspaper articles or paid advertisements, radio and TV announcements or paid commercials.

Any operation permit approving the cessation of fluoridation should include a special condition to require public notification before addition is stopped. A DEP-approved public notice should be issued,

following the distribution requirements for Tier 2 public notice found in Title 25 Pa. Code §109.409(c)(1), to all consumers and medical professionals in the affected service area 30 days prior to discontinuation of fluoridation. The water supplier should also be required to submit proof of that notification to DEP within 10 days of issuance.

A supplier that removes fluoridation should also take the opportunity in the next annual CCR to remind customers of the date that fluoridation was discontinued.