



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Drinking Water and Churches

www.idem.IN.gov

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue, Mail Code 33-66, Indianapolis, IN 46204

Phone: (317) 232-8670

Toll Free: (800) 451-6027

Introduction:

- The Indiana Department of Environmental Management's (IDEM) Office of Water Quality, Drinking Water Branch regulates, monitors, permits and licenses drinking water facilities and operators in order to meet the requirements of Rule 327 IAC 8-2, Public Drinking Water Supply; Drinking Water Standards.
- Drinking water is any water supplied for the purpose of human consumption or domestic use. The source of the water can be ground water from wells or surface water from rivers and lakes.
- The purpose of this fact sheet is to define and explain the requirements to monitor and report for Total Coliform and Nitrate as a transient non-community public water system (PWS), such as a church.

What is a Public Water System?

A public water system is any facility that has at least 15 service connections or regularly serves an average of at least 25 individuals daily, for at least 60 days per year. If a facility does not serve at least 25 of the same persons over six months of the year, that facility is classified as a transient non-community public water system. Most churches are classified as transient non-community public water systems.

How Does the Safe Drinking Water Act Apply?

As a transient non-community public water system, a church is required to sample the water for two contaminants, total coliform and nitrate. Total coliform is required once per quarter during every calendar year in which the church is in operation, and nitrate is required once per year.

The Importance of Sampling for Total Coliform:

Total coliforms are common bacteria in the environment and are generally not harmful themselves. The presence of these bacteria in drinking water indicates that the water may be contaminated with other organisms that may cause disease. Disease symptoms may include diarrhea, cramps, nausea and vomiting.

Sampling for Total Coliform:

- If a church has a ground water system serving fewer than 1,000 persons, a sample of once per calendar quarter from a drinking water tap in the church is required
- If a system's routine quarterly test is unsatisfactory (test shows presence of coliform), the church will be required to collect a set of four repeat samples and one ground water source sample from each well in use at the time the total coliform-positive sample was collected and have them analyzed. At least one of the four repeat samples must be collected from the same sample tap as the original unsatisfactory samples. All four repeat samples and source samples must be collected on the same day.
- If any repeat sample is total coliform positive, that system has exceeded the maximum contaminant level (MCL) and is required to post public notification.
- All public water systems are required to collect five distribution samples the month after any unsatisfactory total coliform sample (i.e., If a routine sample is collected on July 10th for the third quarter and it is total coliform positive, then four repeat samples and source samples will be collected by the church as soon as notification of the positive sample is received, and in August, five routine samples will be collected).

The Importance of Sampling for Nitrate:

Nitrate and nitrite are chemicals that are used in fertilizers and are found in waste from humans and/or farm animals. They generally enter drinking water as a result of those activities. Nitrate can convert to nitrite in the body and can cause many health problems.



Immediate health effects include “blue baby syndrome” which commonly affects infants under six months. Blue baby syndrome is caused by the conversion of nitrate to nitrite in the body, which can interfere with the oxygen carrying capacity of the child’s blood. This can be an acute condition whereby the child’s health deteriorates rapidly over a period of days. Symptoms include shortness of breath and blueness of skin.

Sampling for Nitrate:

- All public water systems must monitor for nitrate. All ground water systems must sample annually. This sample is taken at the entry point to the system (the first place where water can be drawn after any treatment or the tap closest to the well if there is not any treatment). The maximum contaminant level (MCL) for nitrate is 10 mg/liter.
- If sample results are higher than 10 mg/liter, but less than 20 mg/liter, continuous public notification will be required and the water cannot be served to children younger than six months of age.
- In addition, if those sample results are higher than 20 mg/liter, then the church will be required to sample quarterly for nitrate.

IDEM’s Role:

The Indiana Department of Environmental Management (IDEM) is responsible for protecting human health and the environment while providing for safe industrial, agricultural, commercial and governmental operations vital to a prosperous economy.

Additional Information:

- For more information on Drinking Water and Churches, please visit IDEM’s website at www.idem.IN.gov/5093.htm.
- For more information on the rules concerning public water supply visit the Legislative Services website at www.IN.gov/legislative/iac.
- For questions and concerns, feel free to call IDEM’s Office of Water Quality, Drinking Water Branch at (317) 232-8670.¹

¹ Note: This fact sheet is intended solely as guidance and does not have the effect of law or represent formal IDEM decisions or final actions. This fact sheet shall be used in conjunction with applicable rules and statutes. It does not replace applicable rules and statutes, and if it conflicts with these rules and statutes, the rules and statutes shall control¹¹

