

FACT SHEET



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Total Coliform and Nitrate Monitoring Requirements for Transient NonCommunity Water Systems

Office of Water Quality

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Introduction

Public Water Systems that supply drinking water must follow certain federal and state safe drinking water regulations. 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 for monitoring and reporting for Total Coliform and Nitrate for Transient Noncommunity Water Systems.

<p>Am I a Transient Noncommunity Public Water System?</p>	<p><i>"A Public Water System is any facility that has at least fifteen (15) service connections or regularly serves at least twenty-five (25) individuals for at least sixty (60) days per year."</i></p> <p><i>Public Water Systems are classified as either community and noncommunity:</i></p> <ul style="list-style-type: none"> • <i><u>Community Water Systems</u> are those that serve at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. Examples are municipal water supplies, subdivisions providing their own water, and mobile home parks.</i> • <i><u>Noncommunity Water Systems</u> are those that have at least 15 service connections used by nonresidents or regularly serves at least 25 or more nonresident individuals daily for at least 60 days per year.</i> <p><i>Noncommunity Water Systems are further classified as nontransient or transient:</i></p> <ul style="list-style-type: none"> • <i><u>Nontransient Noncommunity Water Systems</u> regularly serve the same twenty-five (25) or more persons at least six (6) months per year. Examples are schools, daycare centers and factories.</i> • <i><u>Transient Noncommunity Water Systems</u> do not regularly serve at least twenty-five (25) of the same persons over six (6) months per year. Examples are churches, restaurants, grocery stores, and campgrounds that have water accessible to the public.</i> <p><i>If your system does not serve at least 25 of the same persons over six (6) months of the year, you are classified as a Transient Noncommunity Water System.</i></p>
<p>How does the Safe Drinking Water Act apply to me?</p>	<p><i>As a Transient Noncommunity Water System, your facility is required to sample the water for two (2) contaminants: total coliform and nitrate. Total coliform is required once during every calendar quarter in which your system is in operation, and nitrate is required once per year.</i></p>
<p>Why is it important to sample for total coliform?</p>	<p><i>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.</i></p>
<p>How do I sample for total coliform?</p>	<p><i>If your facility is a groundwater system serving 1,000 persons or fewer, you will sample once per calendar quarter from a drinking water tap at or in your facility. If your facility is a groundwater system serving more than 1,000 persons during any month, your facility must monitor at the same frequency as a like-sized community water system.</i></p> <p><i>If your system serves 250 or fewer persons using one (1) well and the routine quarterly test is unsatisfactory (test shows presence of coliform), you will be required to collect a set</i></p>

	<p>of four (4) repeat samples and one (1) ground water source sample in use at the time of the total coliform-positive sample was collected. One (1) of the repeat samples must be collected from the same sample tap as the original unsatisfactory sample. You may also use one (1) of the repeat samples as the source sample. All repeat samples must be collected on the same day.</p> <p>If your system serves 251-1000 persons using one (1) or more wells and the routine quarterly test is unsatisfactory, you will be required to collect four (4) repeat samples and one (1) ground water source sample from each ground water source 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 sample. All repeat samples and source samples must be collected on the same day.</p> <p>If any repeat sample is total coliform positive, your system has exceeded the Maximum Contaminant Level (MCL) and is required to post public notification.</p> <p>All public water systems are required to collect 5 distribution samples the month after any unsatisfactory total coliform sample (i.e. If you collect a routine sample on July 10 for third quarter and it is total coliform positive, you will collect 4 repeat samples and source samples as soon as you are notified of the positive sample and you will also collect 5 routine samples in August).</p>
Why should I sample for nitrate?	<p>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.</p> <p>Immediate health effects include “blue baby syndrome” which commonly affects infants under 6 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.</p>
How do I sample for nitrate?	<p>All public water systems must monitor for nitrate. All groundwater systems must sample annually. This sample is taken at the entry point to your system (the first place you can draw water 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.</p> <p>If your 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 under 6 months of age.</p> <p>In addition, if your sample results are higher than 20 mg/liter, then you will be required to sample quarterly for nitrate.</p>

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. IDEM’s Office of Water Quality, Drinking Water Branch regulates, monitors, permits and licenses drinking water facilities and operators.

Rule Citations: 327 IAC 8-2-4, 327 IAC 8-2-4.1, 327 IAC 8-2-7, 327 IAC 8-2-8, 327 IAC 8-2-8.1 and 327 IAC 8-2.3-4.

Public Water System's Role:

Community Water Systems must understand and comply with regulations for monitoring, treating and reporting. Community Water System owners and operators may contact IDEM's Drinking Water Branch at (317) 234-7430 to request free compliance and technical assistance.

Citizen's Role:

Citizens can find drinking water quality information by visiting IDEM's Drinking Water Watch website at <https://myweb.in.gov/IDEM/DWW/> and contacting their local Community Water Supply for the latest Consumer Confidence Report. Citizens can find information about source water protection at <http://www.in.gov/idem/4142.htm>.

Additional Information:

- For more information on the Total Coliform Rule Requirements, please visit the United States Environmental Protection Agency's (U.S. EPA's) website at <http://water.epa.gov/lawsregs/rulesregs/sdwa/tcr/regulation.cfm>.
- For Indiana's rules on Drinking Water Standards (327 IAC 8), including rules for the collection of samples for inorganic chemical testing, visit <http://www.in.gov/legislative/iac/t03270/a00080.pdf>.
- For compliance information for Indiana Public Water Systems, visit <http://in.gov/idem/cleanwater/2386.htm>.
- In addition to IDEM's Office of Water Quality Drinking Water Branch at (317) 234-7430, U.S. EPA's Safe Drinking Water Hotline, at 1-800-426-4791, offers assistance to Public Water System owners and operators and the public.

This fact sheet is intended solely as guidance and does not have the effect of law or represent formal Indiana Department of Environmental Management (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 control.