

The Revised Total Coliform Rule is Now In Effect!

By Chris O'Brien, Minnesota Department of Health

Previous editions of the *NonCom Scoop* have introduced various aspects of the Revised Total Coliform Rule (RTCR) that went into effect earlier this year. This article provides a summary of how things have gone so far and what to anticipate moving forward.

Response to Total Coliform Detections

An important change with the implementation of the RTCR is the required public notification when a noncommunity public water system has a confirmed total coliform contamination. Previously, when total coliform or *E. coli* bacteria were detected, systems were required to provide public notice that included "Do Not Drink" language and provide an alternate source of water. While these requirements remain in place when *E. coli* is detected, the revised rule considers the presence of total coliform to be an indicator that a pathway may exist for other potentially harmful contaminants to enter the system. The presence of total coliform in itself does not necessarily pose a health risk.

The new consumer awareness notice for total coliform does not include "Do Not Drink" language, but serves to inform the public of the presence of total coliform in the water and its significance. Although no longer required, the Minnesota Department of Health (MDH) strongly encourages systems to provide an alternate source of water until the total coliform contamination is resolved.

Systems are required to take corrective action and/or utilize best management practices (e.g. disinfecting the water system) until total coliform are no longer detected. State or local program staff investigating a total coliform or *E. coli* contamination will inform you of any sanitary defects that require correction. Systems that do not take action toward resolving the contamination within 30 days (or other approved timeline) will be in violation of the RTCR, and placed on monthly coliform bacteria monitoring. The system will be responsible for collecting the monthly water samples as well as overnight shipping costs.

Sampling Frequency

The RTCR places an increased emphasis on linking sampling frequency to risk. In addition to collecting water samples during our annual site visit, staff will also be looking for potential sanitary defects in the system. Any identified sanitary defect must be corrected for systems to remain on a reduced annual monitoring frequency. For detailed information on the annual site visit and sanitary defects, please see the Spring/Summer and Fall/Winter 2015 editions of the *NonCom Scoop* at: Noncom Scoop (<http://www.health.state.mn.us/divs/eh/water/ncom/scoop/index.html>)

Additionally, systems that experience two consecutive total coliform or single *E. coli* contaminations will be placed on a monthly coliform monitoring frequency for a minimum of one year. The system will be responsible for collecting the monthly water samples as well as overnight shipping costs.

Seasonal System Start-up Procedure and Certification

Although many water systems have experienced little or no impact due to the revised rule, seasonal public water systems that fully depressurize in the off-season are affected by the new requirement to start up their water system each year with a state-approved start-up procedure and provide certification to MDH when completed. Detailed information regarding the seasonal start-up procedure is located at [Transient Noncommunity Public Water Supply Documents](http://www.health.state.mn.us/divs/eh/water/ncom/transient.html) (<http://www.health.state.mn.us/divs/eh/water/ncom/transient.html>)

In 2016, the focus was on increasing awareness rather than enforcement. We thank the seasonal water system owners and operators for their efforts in meeting this new requirement. This is a change for both public water systems and regulators. Your cooperation and patience is appreciated. We achieved approximately a 90% compliance rate in the number of certifications received. Our goal is to improve this rate in upcoming years.

For 2017, a reminder notice will be sent in mid-April to all seasonal water systems that are required to perform a state-approved start-up procedure. It will contain information on how to certify (i.e. respond back to us) once the start-up procedure has been completed. Systems that fail to certify will receive a violation and placed on monthly coliform bacteria monitoring. The system will be responsible for collecting the monthly water samples as well as overnight shipping costs.

Owners and operators of seasonal water systems play the most important role in ensuring success in meeting the start-up requirements of the revised rule. In addition to sending in your completed certification of start-up each spring, you can help by letting MDH know when:

1. You are selling your establishment so we can make the new owners aware of the RTCR requirements
2. You are a new owner of a seasonal water system
3. There are changes in the use of your water system (e.g. you previously shut down for the winter, and now keep the system, or parts of the system, online year-round)

Although the new requirement focuses on properly starting up your system, properly shutting down your system is just as important. Leaving piping and other components in sanitary condition will lessen the chance of the introduction of bacteria into the water system. For example, clean and sanitize water softener brine tanks and/or non-pressurized water storage tanks, be sure to purge all water from the system, and properly protect any openings in the system.

Additional Information

For an overview of the RTCR, please see the *Revised Total Coliform Rule Summary* located at the link below. This link also provides other important reference documents relating to noncommunity public water systems. [Transient Noncommunity Public Water Supply Documents](http://www.health.state.mn.us/divs/eh/water/ncom/transient.html) (<http://www.health.state.mn.us/divs/eh/water/ncom/transient.html>)

Previous editions of the *NonCom Scoop* also include RTCR-related information. [Noncom Scoop](http://www.health.state.mn.us/divs/eh/water/ncom/scoop/index.html) (<http://www.health.state.mn.us/divs/eh/water/ncom/scoop/index.html>)

Contact your sanitarian/engineer if you have questions. The link below will connect you to our MDH contact page, or call 651-201-4700 or 888-345-0823. If you are in a delegated local program jurisdiction, please contact the appropriate office.

[Drinking Water Protection Contacts \(http://www.health.state.mn.us/divs/eh/water/org/index.cfm\)](http://www.health.state.mn.us/divs/eh/water/org/index.cfm)



New Coliform Sample Drop-off Site in International Falls

Certain noncommunity public water systems are required to collect a monthly or quarterly total coliform sample and send the sample to a designated laboratory for analysis. There has been an increase in total coliform samples shipped from International Falls and the surrounding area not arriving at Pace Analytical in Virginia, Minnesota, within the required 30-hour hold time. As a result, the sample cannot be analyzed and must be recollected. This delay is likely due to changes with the United States Postal Service Distribution Centers located throughout the state. In addition to using an overnight courier service, a new option is now available for submitting samples to the laboratory.

Pace Analytical will now **pick up samples** from the **Koochiching County Public Health Office** in International Falls at **noon every Wednesday**. If you are interested, collect your sample on Wednesday morning and deliver by noon with the completed lab form to:

Koochiching County Public Health and Human Services
Forestland Annex
1000 5th Street, International Falls

This new option will guarantee that your sample arrives at the lab the same day it is collected.

The pickup charge is \$15.00. Please bring the exact amount in cash, or check made payable to Pace Analytical (noting "sample pickup charge" in the memo section). Samples cannot be dropped off at the county health office without payment.

Contact information for the drop-off location:

Debra Polkinghorne PHN
Phone (218) 283-7070

About Plan Review for Noncommunity Systems

By Krishna Mohan, Minnesota Department of Health

This article has been prepared as a guide in the design and development of noncommunity public water systems. The objective is that public water systems will be capable of producing an adequate supply of potable water in compliance with applicable regulations.

Why is Plan Review required?

[Minnesota Rules, part 4720.0010 \(https://www.revisor.mn.gov/rules/?id=4720.0010\)](https://www.revisor.mn.gov/rules/?id=4720.0010) states that prior to the installation, alteration, or extension of any public water supply infrastructure, plans and specifications must be submitted to the Minnesota Department of Health (MDH) for review and approval. Review of these projects is necessary to:

- Protect public health
- Enable water systems to meet and remain in compliance with current and future Safe Drinking Water Act (SDWA) standards
- Ensure conformity with SDWA design standards
- Allow changes to be made before construction begins

When is Plan Review required?

Plan review is required **prior** to installation or alteration of any public water supply treatment system including:

- All water treatment installations used to remove or reduce regulated contaminants listed in the SDWA
- Replacement of existing treatment equipment
- Changes or modifications to the plumbing of an existing treatment facility
- Any chemical feed equipment
- Changes in water source
- Storage tanks
- Water service lines from a new well

When is Plan Review not required?

Installation of:

- Noncommunity water supply wells. Work must still be performed by a licensed well contractor, who shall submit a well notification to MDH, Section of Well Management
- Point-of-use devices that are used for aesthetic purposes only
- Water softeners used only for hardness, iron or manganese removal
(Note: Nontransient water systems installing a new softening unit (not replacement) should notify MDH prior to the installation of the unit so that water quality parameters can be collected)

Who can submit plans for review?

Obtaining the plan approval is ultimately the responsibility of the water system owner. An engineer, vendor or licensed well contractor may submit plans on behalf of the owner, but the owner has the legal obligation to make sure the approval process is completed **prior** to beginning any work.

The plans and specifications are to be signed by the engineer, vendor or licensed well contractor who is performing the work.

Plans may be submitted electronically, by mail or by fax. There is no fee for Plan Review.

How long is a plan approval valid?

A plan approval is valid for two years from the date issued. If a project is not constructed within that time, plans will have to be resubmitted and approved prior to construction.

What needs to be included in the plan submittal?

In general, plans need to indicate:

- a. What equipment is being installed
- b. Where it is being installed, and
- c. How and when it will be operated and maintained

Specific requirements:

- Treatment objective: Specify the contaminant to be removed - Iron, manganese, arsenic, nitrate, etc
- Type and numbers of population being served: Employees, church congregation, daycare, etc
- Design criteria:
 - ✓ Flow rate
 - ✓ Water system demand
 - ✓ Chemicals used for treatment (all chemicals must be ANSI/NSF Standard 60 listed)
 - ✓ Expected volume of water to be treated per cycle
- Treatment specifications:
 - ✓ Type of filter or softener media
 - ✓ Number of vessels and orientation
 - ✓ Chemical feed equipment, including feed rates
 - ✓ Make and model numbers of all equipment (all devices, components and materials in contact with drinking water must be ANSI/NSF Standard 61 listed)
- Detailed floor plans showing :
 - ✓ Treatment equipment
 - ✓ All piping and pipe sizes (Piping to comply with Minnesota Plumbing Code, Minn. Rules Chapter 4714)
 - ✓ Cross connection control devices
 - ✓ Existing components of the system
 - ✓ Chemical injection points
 - ✓ Sample taps

Forms for the submittal of plans are in the process of being developed. You will find them on the Plan Review webpage when finalized. [Plan Review for Noncommunity Systems](http://www.health.state.mn.us/divs/eh/water/planreview/noncommunity.html)
(<http://www.health.state.mn.us/divs/eh/water/planreview/noncommunity.html>)

For any questions on Plan Review, please call 651/201-4700.

Private Water Supply: Conversion to Public Water Supply

By Doug Edson, Minnesota Department of Health

Have you ever wondered what happens when a public water supply acquires a private water supply? The Public Water Supply rules do not address this question, but the Rules for Well and Borings (Well Code) does. The Well Code revisions of 2008 state "A well, previously not used as a public water-supply well, may be used as a noncommunity or community public water-supply well only if the well meets the standards of this chapter. Plans and specifications must be submitted to, and approved by, the commissioner prior to use as a public water-supply well." This means any private well not used as a

noncommunity or community public water supply needs approval by the Well Management Section before being used as a public water supply well. Any public water supply well, constructed after August of 2008 must meet the current Well Code requirements. In addition, any private well constructed before August of 2008 that is going to be used as a noncommunity or community water supply will need to go through the well conversion process.

The Well Management Section:

- Reviews the construction of the well, and
- Inspects the well to ensure it meets rule requirements and complies with the Well Code.

The 2008 well code has several requirements that private wells must meet in order to be converted to a public water supply well, including full length grouting of the well casing. A grout seal is important because it helps to prevent surface water and contamination from entering the groundwater and provides support for the well casing.

A public water supply system that acquires property with a well, should talk to their sanitarian or district engineer to determine if a well conversion is needed. If there are no plans to use the well, then the well must be sealed by a licensed well contractor in accordance with the Well Code.

Upcoming Training

Class D Small Public Water Systems

Date	Location
TBD	TBD

Class E Small Public Water Systems

Date	Location
October 25	Two Harbors
November 22	Cologne
December 6	Hastings
December 14	Bemidji



If you have any questions regarding plan review, call 651-201-4700

All trainings are offered by Minnesota Rural Water Association

For more information on the courses and upcoming events visit Minnesota Rural Water Association at **Minnesota Rural Water Association (<http://www.mrwa.com/>)**

The Noncom Scoop is published by the Noncommunity Public Water Supply Unit, Minnesota Department of Health. Contact: Leslie.Winter@state.mn.us