

Revised Total Coliform Rule Summary

NONCOMMUNITY PUBLIC WATER SYSTEMS

The Revised Total Coliform Rule (RTCR) went into effect for Noncommunity public water systems (NCPWSs) on April 1, 2016. The Rule improves public health protection by requiring drinking water system owners and operators to find and fix problems that can make the drinking water system at risk to microbial contamination. Under the Rule, monthly or quarterly samples are required to be collected unless the Minnesota Department of Health (MDH) has determined that the NCPWS is eligible for a reduced (annual) sampling schedule. **When the RTCR went into effect, systems continued with the same sampling frequency as under the previous rule. Specific criteria must continue to be met in order to maintain a reduced sampling frequency schedule.** Seasonally operated systems that depressurize their distribution system(s) have additional requirements based on the increased risk of contamination. These requirements are due to pressure loss/interruptions associated with system water pressure with start-up and shut down.

Note: Reduced (annual) monitoring is not permitted for systems using surface water or groundwater under the direct influence of surface water as a source, or for any system serving a daily population > 1,000.

What are the RTCR Requirements for all NCPWSs?

When the RTCR went into effect, sampling frequency schedules remained unchanged. However, there are certain criteria that must be met and verified by MDH in order to continue on a reduced (annual) schedule:

- Bacteria sampling must be completed as required, and is typically done annually by the MDH or delegated program staff. *E. coli* must be absent, and total coliform present no more than once in two consecutive years.
- An annual site visit inspection must be completed by MDH or delegated program staff.
- The system must be free of sanitary defects. A sanitary defect noted by MDH or delegated program staff in a sanitary survey, annual site visit, or assessment must be corrected.

If these criteria are not met, quarterly or monthly sampling will be required. The sample collection and shipment cost will be the responsibility of the NCPWS. At this time, MDH will continue to provide laboratory support and pay for the analysis.

The RTCR has specific requirements that allow a public water system to return to annual sampling. The appropriate requirements will be communicated to the individual system as necessary.

What are the RTCR Requirements for Seasonal NCPWSs?

According to the Environmental Protection Agency, a seasonal system “is a Noncommunity water system that is not operated as a public water system on a year-round basis and starts up and shuts down as the beginning and end of each operating season.”

Due to seasonal breaks in system pressurization (i.e., pressurized/depressurized piping), seasonal systems may have an increased risk to microbial contamination and, therefore, carry additional requirements to maintain reduced sampling.

Seasonal systems have the following additional requirements to remain in compliance with the RTCR and eligible for reduced (annual) monitoring:

- An MDH-approved start-up procedure must be completed by the NCPWS owner/operator prior to opening. The Seasonal Start-Up Procedure and Checklist can be found at: [Restaurants, Resorts, Campgrounds Transient \(https://www.health.state.mn.us/community/environment/water/noncom/transient.html\)](https://www.health.state.mn.us/community/environment/water/noncom/transient.html)
- Each season the NCPWS must certify (provide notification) to MDH that the approved start-up procedure has been completed.

- Seasonal NCPWSs that do not certify completion of an approved start-up procedure will be in violation of the RTCR and placed on a monthly monitoring frequency. Sample collection and shipment cost will be the responsibility of the NCPWS.

RTCR Terminology

Sanitary Defect - a system flaw or condition that creates a potential pathway for contamination to enter the system. The list of sanitary defects includes:

- A missing well cap
- Damaged or defective well casing
- Seal between a hand pump well casing and concrete slab is not watertight
- Electrical wiring for a submersible pump is not properly enclosed in conduit
- A flooded well is in use
- Openings in a pump base exist that lead directly into the well casing
- Hazardous cross-connections in the distribution system
- Pump or treatment system related cross-connections
- Unprotected openings in a water storage tank
- For chlorinating systems, the required chlorine residual is not maintained

Assessment - the follow-up investigation conducted by MDH or delegated program staff after confirmed positive total coliform or *E. coli* samples.

Key Points to Remember

- Be aware of sanitary defects and correct the defects as soon as possible after becoming aware of them. This will help reduce total coliform and *E. coli* contamination incidents.
- If you operate a seasonal water system, start up your system using the MDH-approved start-up procedure and certify to MDH its completion prior to serving water to the public.
- If your system is on a quarterly or monthly sampling schedule, be sure to collect samples on time and ship promptly so the laboratory can initiate analysis within 30 hours of collection time.

Additional Information

For further questions, contact your MDH sanitarian at [Drinking Water Protection Contacts \(https://www.health.state.mn.us/communities/environment/water/org/index.htm\)](https://www.health.state.mn.us/communities/environment/water/org/index.htm).

Delegated program staff can be reached by contacting the appropriate office.

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To obtain this information in a different format, call: 651-201-4700