



Vermont Department of Environmental Conservation Drinking Water & Groundwater Protection Division

 1 National Life Drive, Main 2
 [phone]
 802-828-1535

 Montpelier, VT 05620-3521
 [fax]
 802-828 1541

 dec.vermont.gov/water

*** 2017 MONITORING SCHEDULE AND REQUIREMENTS***

2017 monitoring schedules for Public Water Systems (Community and Non-Transient Non-Community) are available online at https://anrweb.vt.gov/DEC/DWGWP/SearchWS.aspx/.

The online monitoring schedule for a public water system is updated as needed and includes current monitoring requirements reflecting any waivers that have been granted/denied/revoked and any reduced or increased monitoring requirements. Systems are notified by the Division of any changes during the year. The online schedule may not reflect new source testing requirements, additional sampling directed by compliance schedules, or pending applications.

Monitoring for each of the chemical groups/contaminants listed on the 2017 schedule is required. All water quality analyses must be conducted by a Laboratory certified by the Vermont Department of Health for drinking water. You may access the certified lab list at http://dec.vermont.gov/water/drinking-water/water-quality-monitoring. Clearly indicate sample location, Facility ID, Sample Point ID and WSID number with your samples on your lab's chain of custody forms. It is the responsibility of the water system to make sure sampling results are reported to the Division. If any monitoring is not completed by the end of each designated monitoring period on your schedule (e.g., month, quarter, or six-month period) the Division must issue a Notice of Alleged Violation (NOAV) requiring the water system to issue Public Notice for failure to monitor. We highly recommend that you sample early in the monitoring period so that you have sufficient time to resample if, for example, bottles are lost in transit or a sample is invalidated by the lab.

Distribution System Monitoring (Total Coliform, Lead & Copper, Disinfection Byproducts)

<u>Total Coliform:</u> The Revised Total Coliform Rule (RTCR) went into effect on April 1, 2016 with different requirements for bacterial monitoring and system assessments than the previous TCR. Review the Division's RTCR website at http://dec.vermont.gov/water/drinking-water/water-quality-monitoring/total-coliform.

Total coliform bacteria samples must be taken in the distribution system at locations in the system's approved Coliform Sampling Plan. Record the category for each total coliform sample on the lab forms that are submitted to the lab along with each sample: Routine (RT) = Routine distribution sample(s) required by monitoring schedule and any required distribution samples the following month after a TC+ Routine sample. Repeat (RP) = distribution samples required immediately after TC+ Routine Sample. Triggered Source (TG) = groundwater source sample(s) required immediately after TC+ routine sample. Note that samples coded as Special (SP) do not count for compliance purposes.

When using a chemical disinfectant, a system must also measure and record free chlorine residual (or total residual if free chlorine residual is not detectable) at the same time and locations where each Total Coliform sample is collected. These results must be reported on the lab forms that are submitted to the lab along with the sample(s) to be analyzed and also on the system's monthly operations report.

<u>Lead & Copper:</u> Review the resources available on the Division's lead and copper website for updated information including procedures for lead and copper sampling: http://dec.vermont.gov/water/drinking-water/water-quality-monitoring/lead-copper-rule-resources As a reminder, it is against EPA and Division guidance to intentionally flush sample taps prior to the 6 hour stagnation period. Select sample taps that see routine and regular use.

Samples must be taken in the distribution system at locations previously approved in the System's Lead and Copper Sampling Plan. If your system does not have a current lead and copper sampling plan, please review the resources available on the website and submit a new plan to the Division. When you submit samples, indicate the facility ID (e.g., DS001 or DS002) and sample point (e.g., LC001 for all distribution samples). If you need to submit source water or special diagnostic samples, make sure they are coded correctly.

Water systems are required to provide a copy of the lead and copper test results to all consumers whose homes/businesses were sampled (whether or not there was an exceedance). When a 90th percentile lead action level exceedance occurs, additional public education is required. Templates for participant tap notification and public education are available on the website above or by mail. All Public Community Water Systems must also include lead risk reduction language in their annual CCR.

<u>Disinfection Byproducts (DBP)</u>: Community and NTNC Systems which regularly and routinely contain or apply a chemical disinfectant (i.e., chlorine or chloramine) are required to test for total trihalomethanes (TTHM) and the five regulated haloacetic acids (HAA5) at the time when the water contains the chemical disinfectant. This includes Systems that disinfect for a short period during the year (e.g., summer). This requirement does not apply when a system that does not routinely disinfect introduces a disinfectant under a defined emergency condition for a short duration of time. Please contact the DBP Rule Coordinator to prepare a monitoring plan and schedule if this system fits these criteria and DBP monitoring is missing from the schedule.

Sample at locations specified in your approved Stage 2 DBP Compliance Monitoring Plan and on your monitoring schedule. Some Systems must sample for TTHM and HAA5 at different locations. Record the Sample Point ID (TH001, HA001, etc.), the Facility ID (DS001, DS002, etc.), and the Sample Location (911 address or building name) on the chain of custody form. This is critical for compliance which is calculated as a Locational Running Annual Average for each sampling location. Monitoring & Reporting Violations will be issued for the use of unapproved sampling locations and for samples taken in the wrong month.

Finished Water Monitoring (Chemicals and Radionuclides)

<u>Chemical and Radionuclide</u> samples must be taken at the entry point to the distribution system. This sample point is located after any treatment and storage and prior to the distribution system. Some systems without a sampling tap prior to distribution resort to taking entry point samples at the first tap. Please refer to your schedule for the sample point location specifics for your system.

NOTE: Testing for asbestos, cyanide and radium are not performed by the Vermont Department of Health Lab.

Raw Water Monitoring (Groundwater Rule & LT2)

<u>Groundwater Rule:</u> The Groundwater Rule requires groundwater systems to have a source sample tap installed before water treatment. Source water monitoring is required if total coliform is present in the distribution system (otherwise known as "triggered source monitoring" or TG). A raw water sampling tap for each source must be installed and identified on the Revised Total Coliform Rule sampling plan.

<u>LT2:</u> The Long Term 2 Enhanced Surface Water Treatment Rule applies to systems using a surface water source or groundwater under direct influence of surface water (GWUDISW).

Monitoring schedules for "Schedule 4" systems (serving fewer than 10,000 people) include monitoring for *E. coli* enumeration starting October 2017 unless the water system arranges to begin sampling earlier. This monitoring will be conducted every two weeks for one year. The Division will send systems instructions to prepare and submit a monitoring plan and schedule by July 1, 2017.

Monitoring schedules for "Schedule 3" systems (serving from 10,000 to 49,999 people) reflect requirements for *Cryptosporidium*, *E. coli*, and turbidity monitoring that started October 2016 or earlier.

The following Division contacts can answer questions regarding specific rule monitoring:

Total Coliform & Groundwater RuleDavid Love, Compliance Analyst
(802) 585-4902, david.love@vermont.gov

Lead and Copper, DBPs & LT2 Amy Galford, Compliance Analyst (802) 585-4891, amy.galford@vermont.gov Chemicals, Radionuclides & Waivers
Janelle Wilbur, Compliance Analyst
(802) 585-4898, janelle.wilbur@vermont,gov

Surface Water Treatment Rule
Julie Hackbarth, Compliance Manager
(802) 585-4897, julie.hackbarth@vermont.gov