

FORM 2: RTCR SAMPLE SITING PLAN FORM INSTRUCTIONS

For Public Water Systems Identifying 2 to 20 Routine Sample Locations

Who should use this form?

Pennsylvania public water systems that are collecting **routine** coliform samples from **2 to 20 locations** per month should use this form to meet the Revised Total Coliform Rule (RTCR) sample siting plan requirements. Systems are welcome to submit this information in another format, as long as all of the required elements are included.

If more than 20 locations will be identified for routine compliance monitoring, use *Form 3: BSDWxxxxxxx, RTCR Sample Siting Plan for Public Water Systems Identifying more than 20 Routine Sample Locations*.

Part 1: General System Information

- **Date Plan Updated:** Above the Part 1 heading, insert the date that the sample siting plan was last updated.
- **Water System Name:** Name of the public water system (PWS).
- **PWS ID:** The seven-digit PWS identification number assigned by DEP.
- **Mailing Address:** Mailing address of the public water system.
- **Contact Person:** Name of the person who is the point of contact for the public water system.
- **Phone #:** Phone number of the public water system contact person.
- **E-mail:** E-mail address for the public water system contact person.
- **System Type:** Check the appropriate system type.
 - **CWS (community water system):** A PWS that supplies water to the same residential population year-round.
 - **NTNCWS (Non-Transient Noncommunity Water System):** A water system that is not a community system that regularly serves at least 25 of the same persons over 6 months per year (e.g., schools, factories and hospitals).
 - **TNCWS (Transient Noncommunity Water System):** A noncommunity water system that does not regularly serve the same persons over 6 months per year (e.g., restaurants, rest stops and campgrounds).
- **Seasonal System:** Check “Yes” if your noncommunity water system does not operate as a public water system on a year-round basis and starts up and shuts down at the beginning and end of each operating season.
- **Population Served:** Enter the population served. The asterisk (*) indicates that in Part 2 Table B you will be asked for monthly population numbers.
- **Source Types:** Check the type of source water used by your PWS (check all that apply).
- **Selling finished water to any other public water system?** Check “Yes” if you sell finished water to any other public water system.
- **Disinfection Treatment Used:** Check the box for each type of disinfection used (check all that apply).
- **Distribution map reviewed in developing the sample siting plan?** Check “Yes” if you reviewed your distribution map while you created this sample siting plan. The system distribution map should be used in determining representative sample locations.
- **Name(s) of Individual(s) or Company Collecting the Samples:** The name(s) of the individual(s) from either the water system or the laboratory who collects coliform samples.

Part 2: Sampling Information

Important Note: Chlorine residual measurements for compliance monitoring must be conducted at the same times and locations as routine and check coliform samples.

A. Sample Location Information Table:

Systems may rotate between different sampling locations to ensure representative sampling. Be sure to list all sample locations in this table. For recommendations on rotating routine sampling see 2B below.

- **Location ID:** A 3-digit identification number for the sample site. If you are using a Stage 2 DBP site for coliform sampling, use the same 3-digit number. If you are not using a Stage 2 DBP site, choose a unique number from 700 to 999 for each routine coliform sampling location. Use the same routine Location ID number for associated check sample locations.
- **Site location (address and tap location):** The site location name and address, plus a description of the tap location (e.g., XYZ restaurant at 303 Main Street; kitchen sink tap.)
- **Check (C) or Distribution (D):** Indicate whether the samples to be collected at this location are routine Distribution samples (D) or Check samples (C) to be taken in response to any coliform-positive samples.
 - Note that for each distribution sample (in addition to the original tap being considered a check sample location) there must be two additional check sample locations: one at a tap within five service connections upstream of the original coliform-positive sample and one at a tap within five service connections downstream of the original sampling site.
 - Each check sample can be listed in a range of applicable taps within five service connections of the original coliform-positive sample. Example: 304 to 308 Main Street
- **Limited Accessibility?** Check the box if there are any difficulties with obtaining samples from the site (e.g., closed on weekends/evenings). If site accessibility is limited, include the *Addendum A: Limited Access Descriptions* with the Sample Siting Plan submission.
- **Representative Location Code:** Use the numbers below to indicate which types of distribution locations are represented. You may use more than one code for a particular site (e.g., a finished water storage facility may also have high water age and be designated 4, 6.) For check samples, you can leave the representative location code column blank.

1 – General Distribution Location	4 – Finished Water Storage Facility
2 – Dead End	5 – Interconnection with another PWS
3 – First Service Connection	6 – Area of high water age

If you require more Sample Location Information Table rows, please see Addendum B: Additional Sample Location Information.

B. Sample Schedule Information Table:

Recommendations on Rotating Routine Sampling Sites:

To ensure representative sampling throughout the calendar year, you may choose to rotate between different sample locations each month. For example, a system required to collect 3 samples per month may have 6 different locations available. Each month, 3 of the locations are sampled and in the alternate months, the other 3 locations are sampled.

A recommended approach is to divide the system distribution map into the same number of zones that there are routine coliform samples required each month (e.g., two routine samples a month requires two zones to be sampled). Select locations that are representative of each zone. Each month, a different sample from each zone should be collected.

- **Population Served:** Enter the estimated maximum population served for each month.
 - This is significant if the population fluctuates enough to change the required number of routine samples. Otherwise, you may leave this column blank.
 - Example: A ski resort serves 3,000 people in the winter months of the year, but only serves a population of 100 in the summer months.
- **Number of routine coliform samples per month:** Use the Monthly Distribution Sample table below to assist in determining this number (e.g., a system serving a population of 2,700 would take a minimum of 3 monthly distribution samples). Similar to 2A, if you plan to rotate locations in different months for more representative sampling, be sure to list them. Systems with groundwater sources that serve a population of 4,900 or fewer people may collect all required samples on the same day *if they are taken from different locations in the distribution system.*

RTCR Monitoring: Monthly Distribution Samples			
Population Served month	Min. # of samples per	Population Served month	Min. # of samples per
25 to 1,000	1	5,801 to 6,700	7
1,001 to 2,500	2	6,701 to 7,600	8
2,501 to 3,300	3	7,601 to 8,500	9
3,301 to 4,100	4	8,501 to 12,900	10
4,101 to 4,900	5	12,901 to 17,200	15
4,901 to 5,800	6	17,201 to 21,500	20

- **Number of Samples by Location:** Enter the number of samples collected each month at each location ID.

C. Sample Interval Description:

- In this section, describe how you plan to ensure that samples are collected at regular intervals throughout the month.
 - Example: “Samples are collected at locations 701 and 702 the 1st week of the month and at location 703 the 3rd week of the month. Location 704 is substituted for location 702 on alternate months.”

Part 3: Groundwater Rule Source Water Monitoring

- Check “yes” if the system has not installed 4-log treatment of viruses for one or more groundwater sources.
- If you checked yes, complete the table with the source water ID(s) and a description of raw water sample tap locations. Note: the raw water tap is a sampling tap **prior to** any treatment.