

FORM 3: RTCR Sample Siting Plan Form Instructions

For Public Water Systems Identifying more than 20 Routine Sample Locations

Who should use this form?

Pennsylvania public water systems that are collecting **routine** coliform samples from **more than 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 2, but fewer than 20 locations will be identified for routine compliance monitoring, use *Form 2: BSDWxxxxxx, RTCR Sample Siting Plan for Public Water Systems Identifying 2 to 20 Routine Sample Locations*.

Part 1: General System Information

- **Date Plan Updated:** Above the Part 1 heading, enter 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 descriptive words to indicate 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. Monthly Routine Sample Schedule Information Tables:

Recommendations on Rotating Routine Sampling Sites:

To ensure representative distribution sampling throughout the calendar year, you may choose to rotate between different sample locations each month. For example, a system required to collect 30 samples per month may have 45 different locations available. A plan can be created that rotates through the 45 different locations throughout the year, while continuing to collect 30 samples per month.

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., 30 routine samples a month requires 30 zones to be sampled). Select locations that are representative of each zone. Each month, a different sample from each zone could be collected.

For each month, complete the following information:

- **Population Served:** Enter the estimated maximum population by month.
- **Number of routine coliform samples per month:** Enter the required number of routine coliform samples per month. Use the Monthly Distribution Sample table below to assist in determining this number. Similar to 2A, if you plan to rotate locations in different months for more representative sampling, be sure to list them.

RTCR Monitoring: Monthly Distribution Samples			
Population Served month	Min. # of samples per	Population Served month	Min. # of samples per
21,501 to 25,000	25	320,001 to 450,000	180
25,001 to 33,000	30	450,001 to 600,000	210
33,001 to 41,000	40	600,001 to 780,000	240
41,001 to 50,000	50	780,001 to 970,000	270
50,001 to 59,000	60	970,001 to 1,230,000	300
59,001 to 70,000	70	1,230,001 to 1,520,000	330
70,001 to 83,000	80	1,520,001 to 1,850,000	360
83,001 to 96,000	90	1,850,001 to 2,270,000	390
96,001 to 130,000	100	2,270,001 to 3,020,000	420
130,001 to 220,000	120	3,020,001 to 3,960,000	450
220,001 to 320,000	150	3,960,000 or more	480

- **Number of Samples by Location:**
 - **Location ID:** Enter the identification number for the sample site equivalent to the one used in the previous “Sample Location Information” Table.
 - In the blank boxes, enter the number of samples taken at that location.

If you require more rows, please see Addendum C: Additional Sample Schedule Information.

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 through 730 the 1st week of the month
 - “Samples are collected at locations 731 through 760 the 2nd week of the month
 - “Samples are collected at locations 761 through 790 the 3rd week of the month

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.

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