



**ALL SYSTEMS WITH 4 OR MORE BUILDINGS
OR MORE THAN ONE SOURCE**

**REVISED TOTAL COLIFORM RULE (RTCR)
COLIFORM SAMPLING PLAN FOR ALL PUBLIC WATER SYSTEMS
SERVING A POPULATION OF 1,000 OR LESS**

| System Information | | |
|--|---|--|
| System Name: | PWS Number: | System Type (check one): <input type="checkbox"/> TNC <input type="checkbox"/> NTNC <input type="checkbox"/> Community |
| # of Service Connections (if there are only a few connections, <u>also</u> write in the total number of available sampling taps): | Source Water Type (check one): <input type="checkbox"/> Groundwater <input type="checkbox"/> Surface Water/4 Log Removal <input type="checkbox"/> Consecutive (Purchase) | |
| System Population: | | |

Instructions for completion: This form is designed to be completed by all public drinking water systems serving a population of 1,000 or less. Attach a map to this plan. The map must include the water system name and identification (PWS) number, clearly labeled coliform sampling locations that are included in this plan, clearly labeled groundwater source sample tap locations (if the system uses groundwater), locations served by the system, directional flow of the system and major water system infrastructure such as: all sources, treatment facilities, storage tanks, pump stations, pressure zones and major distribution lines. If the system consists of a single or few buildings, a sketch of the layout of the rooms, sampling locations, and/or connections will suffice. If the system has only one or a few service connections, identify the number of connections and the number of available sample taps available in the “#of Service Connections” box above.

For Community Systems, any system served by surface water or Groundwater Under the Direct Influence of Surface Water: Fill out **Table 1 and Table 3**. These types of systems are required to sample monthly. If the system uses groundwater or a combination of groundwater and surface water, also fill out **Table 4**.

For NTNC and TNC systems served by only groundwater: fill out **Table 1, Table 2, Table 3, and Table 4**. Filling out Table 3 is required because while these systems are allowed to sample quarterly, if certain events happen, the system will be required to sample monthly. See the attached guidance for more information.

Repeat Sampling for all systems: If the system has a total coliform or E. coli presence in a routine compliance sample, collection of 3 repeat samples is required for each routine positive sample. Repeat sampling locations include: Repeat Sample #1 at the location where the original positive sample was taken; Repeat Sample location #2 within 5 connections upstream (toward from the well/source of water) of the original positive; and Repeat Sample location #3 within 5 connections downstream (away from the well/source of water). This form allows a system to list all 5 connections upstream and downstream although only one location is required. **All sample locations used for compliance purposes under the Revised Total Coliform Rule must be identified on this form.**

All repeat samples must be taken within 24 hours once you have received notification from the laboratory.

Please contact our office to determine if a Level 1 or Level 2 Assessment will also be required.

| | Routine Location Address | Justification | 5 Connections Upstream For repeat locations Numbers 2 – 5 are optional | 5 Connections Downstream For repeat locations Numbers 2 – 5 are optional |
|---|------------------------------|---------------|--|--|
| 1 | Routine Location 1: _____ | | 1 | 1 |
| | | | 2 | 2 |
| | | | 3 | 3 |
| | | | 4 | 4 |
| | | | 5 | 5 |
| 2 | Routine Location 2: _____ | | 1 | 1 |
| | | | 2 | 2 |
| | | | 3 | 3 |
| | | | 4 | 4 |
| | | | 5 | 5 |
| 3 | Routine Location 3: _____ | | 1 | 1 |
| | | | 2 | 2 |
| | | | 3 | 3 |
| | | | 4 | 4 |
| | | | 5 | 5 |
| 4 | Routine Location 4: _____ | | 1 | 1 |
| | | | 2 | 2 |
| | | | 3 | 3 |
| | | | 4 | 4 |
| | | | 5 | 5 |
| 5 | Routine Location 5: _____ | | 1 | 1 |
| | | | 2 | 2 |
| | | | 3 | 3 |
| | | | 4 | 4 |
| | | | 5 | 5 |
| 6 | Routine Location 6: _____ | | 1 | 1 |
| | | | 2 | 2 |
| | | | 3 | 3 |
| | | | 4 | 4 |
| | | | 5 | 5 |
| 7 | Routine Location 7: _____ | | 1 | 1 |
| | | | 2 | 2 |
| | | | 3 | 3 |
| | | | 4 | 4 |
| | | | 5 | 5 |

Table 1 – Sampling Locations

Instructions: The locations for all routine samples taken for compliance purposes must be identified in this table. 1) List up to 7 routine monitoring locations. These are the locations where the required routine compliance samples (monthly or quarterly) are collected. If possible, list the 911 addresses for each location. If those addresses are not available, list where the samples are taken. 2) Explain why the system chooses to sample at each location under the “Justification” column. 3) List at least 1 and up to 5 repeat samples within 5 connections upstream and 5 connections downstream for each Routine sampling location listed.

Table 2 – Quarterly Monitoring

To be completed only by **NTNC and TNC systems using groundwater**. Systems must alternate between locations as identified on the previous page, depending on system complexity. Identify in what quarter each Routine sample location will be sampled.

| Quarter | Routine Sampling Location |
|---|---------------------------|
| 1 st : January 1 through March 31 | |
| 2 nd : April 1 through June 30 | |
| 3 rd : July 1 through September 30 | |
| 4 th : October 1 through December 31 | |

Table 3 – Monthly Monitoring

To be completed by any **public water system serving 1,000 people or less**. Systems must alternate between locations as identified on the previous page, depending on system complexity. Identify in what month each Routine sample location will be sampled.

| Month | Routine Sampling Location |
|-----------|---------------------------|
| January | |
| February | |
| March | |
| April | |
| May | |
| June | |
| July | |
| August | |
| September | |
| October | |
| November | |
| December | |

Table 4 – Groundwater Rule Source Information

Does your system use a groundwater source (well) that does not have 4-log inactivation treatment for viruses: Yes No

If yes, provide the names/numbers of groundwater sources (wells, springs, etc.) and the source sample tap location where each source may be sampled **prior to any treatment**

Assessment samples must be taken at the same time as the routine compliance samples and for each total coliform positive sample.

| Source Name/Number | Description of location of raw water sample tap |
|---------------------------|---|
| Source 1: | |
| Source 2 (if applicable): | |

Checklist Prior to Form Submission:

- A map, including the following information:
 - Water system name and identification (PWS) number,
 - Clearly labeled coliform sampling locations that are included in this plan,
 - Clearly labeled groundwater source sample tap locations for systems,
 - Locations served by the system,
 - Directional flow of the system and
 - All major water system infrastructure such as:
 - Sources,
 - Treatment facilities,
 - Storage tanks, and
 - Major distribution lines.

- All required tables are complete, including:
 - Complete basic system information on page 1,
 - Justification for each routine sampling location,
 - At least 1 repeat location within 5 connections upstream and 5 connections downstream of each routine location,
 - Monthly and/or quarterly locations identified as required in Tables 2 and 3,
 - All ground water sources and source sample tap locations identified in Table 4.

- Make and retain a copy of this plan for Water System records.

| Signature of System Owner or Administrative Contact | |
|---|--------|
| I have read the Coliform Sampling Plan Guidance document and certify that the above information is true and accurate to the best of my knowledge. | |
| Signature: | Date: |
| Printed Name: | Title: |

Return this form to:
Department of Health - Hillsborough
Environmental Health - Safe Drinking Water
1105 E Kennedy Blvd
Tampa, FL 33602
Phone: 813-307-8059
Fax: 813-272-7242

Distribution Sampling Location and Rationale

Locate a compliance sample location near the center of the distribution system, either geographically or based on the population center of the system if the two are different. Select additional sample locations, based on the complexity of the water system and the availability of suitable sampling locations, to represent the entire distribution system. All samples collected at these locations are considered distribution samples and must be denoted as such on the laboratory sample collection / chain-of-custody forms.

Collect the first monitoring period sample center of the distribution system. The next sample must come from one of the other pre-selected locations from **Table 1**. Up to 6 other Routine sampling locations may be added to reflect the rest of the distribution system. Repetition of this pattern will ensure that the entire system is monitored effectively over the course of a year.

Please note that if there is more than one pressure zone, each zone must have a sample that is representative of that zone. Different pressure zones create isolation zones from the rest of the system which may produce areas of vulnerability. These locations must be listed as Routine Sampling locations in **Table 1**.

Sample Collection and submittal to the Laboratory

Please refer to the laboratory's sampling instructions for important collection information. The free chlorine residual must be measured at the time when the coliform sample is collected and recorded on the sample collection/chain-of-custody form that is submitted with the coliform sample to the laboratory. Identify sample locations on the form using the 911 address wherever possible. The Potable Water System (PWS) Number must be included on the sample collection /chain-of-custody form as well as other sample identification information. This information is listed on the system monitoring schedule issued by the Department (Facility ID, Sample Point ID) and outlined in the attached TCR/Chemical Sample Collection Form Guidance. Remember to record the coliform sample type.

Repeat Samples

If the system receives a positive result during routine monitoring, collection of three repeat samples within 24 hours of notification of the positive result is required. Always keep four to seven sample containers on hand at any given time so that the system is able to collect repeat samples within the 24-hour time requirement. The Revised Total Coliform Rule requires that the extent and severity of the contamination be examined. All repeat samples must be taken on the same day. The system must take:

1. One sample from the original sample location.
2. One sample from a tap within five connections upstream of the original sample point.
3. One sample from a tap within five connections downstream of the original sample point.
4. If the system is served by any groundwater sources, then source samples will be required from each groundwater source that was active as of the time of the routine positive sample for Groundwater Rule compliance purposes.

Return to Routine Monitoring Schedule

Systems with routine quarterly coliform monitoring frequencies are required to take three "additional routine" samples during the month following a routine positive sample result and will only return to quarterly monitoring frequency if no additional positive coliform sample results are reported. In the month following a positive sample result, systems with a routine monthly coliform monitoring frequency are required to resume normal monitoring by continuing to sample at designated locations according to their approved monitoring locations.

This form and related environmental information are available electronically via the internet. For information visit the Florida Department of Health- Hillsborough County Homepage at <http://hillsborough.floridahealth.gov>

Florida Department of Health Hillsborough County
1105 E. Kennedy Blvd
Tampa, FL 33602