Bacteriological Sampling Plan

(Community Water System serving 1,000 or less persons)

(System name)

_____ (PWS ID #_____

(System address) _____

<u>Purpose</u>: To help the Water System identify specific bacteriological sample locations representative of water quality throughout distribution, and to comply with Florida Administrative Code (FAC) Rule 62-550.

Sampling Plan Overview:

- The _____ Water System is currently required to collect monthly one raw water sample from each active well and <u>one</u> sample from the distribution system for coliform analysis.
- Distribution sample sites are shown on the following page and are also plotted on the system map on Page 4. In case of a positive bacteriological sample result, required upstream and downstream (repeat, or check) sample sites are also shown. (Fill-in these portions of the Template to complete your Plan.)

Rules Regarding Bacteriological Sampling:

 Routine – F.A.C. Rule 62-550 requires community water systems to sample monthly for coliform bacteria, with the number of samples collected being determined by the population served. The Water System has a population of 1,000 or less, meaning a minimum of one (1) distribution sample and one (1) raw water sample that is representative of each ground water source, as shown in FAC Rule 62-550.518. <u>Please note that "plant"</u> taps ("treated" or "finished" water taps) and pressure tanks are not acceptable sample sites for bacteriological monitoring (FAC Rule 62-550.518(1)).

Procedures for total coliform positive (TC+) or E. coli positive (EC+) results:

- Distribution samples: For any total coliform ("TC+") routine distribution sample, "repeat" (or "check") samples must be taken within 24 hours of notification of the result, unless a delay is otherwise approved by FDEP. The repeat sampling consists of three (3) samples; one from the original location of the positive sample, one within five taps upstream of the original site, and one taken within five taps down. If the original TC+ sample is at the end of the distribution system or at the end of a line, a total of three (3) repeat samples must still be collected; one from the original site and two just upstream or downstream of the original site, whichever applies in each situation. The system must collect no fewer than three (3) repeat samples for each TC+ sample result, all on the same day. All TC+ samples must also be analyzed for *E. coli (EC)*. Call FDEP at the phone number(s) below to discuss repeat sampling requirements.
- Positive raw (well) samples: Any EC+ raw well sample will require immediate Tier 1 boil water notice (BWN) unless: 1) the well can be shut off immediately, and 2) distribution samples taken the same day are total coliform negative (TC-). After learning of an EC+ well sample result, the system must take five (5) raw samples from the affected well. Then, upon receipt of TC- results on these raw samples, the BWN may be lifted and the well may be returned to service. (If the well is removed from service immediately and all distribution samples are absent for total coliform a Tier 1 Public Notice is still required for an EC+ raw sample result, but the Notice does not necessarily require the PBWN language., the Tier 1 notice can state such, but it still must be issued.) For wells having two or more TC+ (but EC-) samples in two consecutive months, Hillsborough County may require systems to disinfect the well and, after adequate flushing, perform a follow-up ten-sample bacteriological survey, per F.A.C. Rules 62-555.315(6)(a) and (c).
- For systems sampling monthly, no <u>additional</u> routine samples will be required for the month following a TC+ sample. Just continue on your normal sampling plan.
- Level 1 Assessments (PWS owner or operator performs basic examination of source water, treatment, distribution system, and relevant operational practices); Required if 2 or more TC+ routine/repeat samples are received in same month, or PWS fails to take all required repeats after any TC+ routine/repeat sample.
- Level 2 Assessments (Completed by FDEP-approved party Licensed operator, Florida P.E., or FRWA); Required for either *E. coli* MCL violations, a 2nd Level 1 assessment triggered within any rolling 12-month period, or, for annual sampling systems, a Level 1 assessment triggered in two consecutive years.
- *E. coli* (EC) positive results Report any EC+ results to FDEP as soon as possible, but no later than the end of the business day that you learn of the result. Contact the DOH-Hillsborough County at the number(s) below to discuss repeat sampling requirements and possible Public Notice / Boil Water Notice requirements. Collect three (3) repeat samples within 24 hours unless a Level 2 Assessment has been triggered.
- DOH-Hillsborough County, 813-307-8015 Kathy Norman, ext. 5938 or Therese LaDouceur ext. 5934, <u>Katherine.Norman@FLHealth.gov</u> or <u>Therese.LaDouceur@FLHealth.gov</u> (Alternate phone: 813-307-8059 or after hours 813-307-8000

SAMPLING SITES AND SCHEDULE

(Site numbers shown on System Map on Page 4)

Choose a number of sample sites from your existing plan and a frequency of rotation which assures that the entire distribution system will be represented in your sampling during the course of the year. (Delete months from, or add sites to, this form, if necessary.)

Month Rotation
1. Site # (Primary/Routine)
Site # (Repeat Up)
Site # (Repeat Down)
2. Raw Sample (well)
Month Rotation
1. Site # (Primary/Routine)
Site # (Repeat Up)
Site # (Repeat Down)
2. Raw Sample (well)
Month Rotation
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Site # (Repeat Up)
Site # (Repeat Down)
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Site # (Repeat Down)
2. Raw Sample (well)
Month Rotation
1. Site # (Primary/Routine)
Site # (Repeat Up) Site # (Repeat Down)
2. Raw Sample (well)

SAMPLING SITES AND SCHEDULE (Site numbers shown on System Map on Page 4)

Month Rotation	
3. Site # (Primary/Routine)	
Site # (Repeat Up)	
Site # (Repeat Down)	
4. Raw Sample (well)	
Month Rotation	
3. Site # (Primary/Routine)	
Site # (Repeat Up)	
Site # (Repeat Down)	
4. Raw Sample (well)	
Month Rotation	
3. Site # (Primary/Routine)	
Site # (Repeat Up)	
Site # (Repeat Down)	
4. Raw Sample (well)	
Month Rotation	
3. Site # (Primary/Routine)	
Site # (Repeat Up)	
Site # (Repeat Down)	
4. Raw Sample (well)	
Month Rotation	
3. Site # (Primary/Routine)	
Site # (Repeat Up)	
Site # (Repeat Down)	
4. Raw Sample (well)	
Month Rotation	
3. Site # (Primary/Routine)	
Site # (Repeat Up)	
Site # (Repeat Down)	
4. Raw Sample (well)	

System Map (with Sample Sites)

(Please create a simple map specific to your system. Include locations of four different primary sample sites (one each quarter), repeat sites (one upstream and two downstream for each primary site), and any additional sites (for additional sampling the month after any TC+ distribution result.)