**Section 900.35 Revised Total Coliform Rule for Non-Community Public Water Systems**

a) Sanitary Surveys

1) A biennial sanitary survey shall be obtained by all non-community public water systems that are not recreational facilities licensed by the Department.

2) All non-community public water supplies licensed by the Department as recreational facilities shall obtain an annual sanitary survey.

3) Special Monitoring Evaluation

A) To determine whether the system is on an appropriate monitoring schedule, the Department will perform a special monitoring evaluation during each sanitary survey. After the Department has performed the special monitoring evaluation, it may modify the system's monitoring schedule.

B) For seasonal systems on quarterly or annual monitoring, the special monitoring evaluation will include review of the approved sample siting plan, which must designate the time period or periods for monitoring based on site-specific considerations (e.g., during periods of highest demand or highest vulnerability to contamination).

b) Monitoring

1) Routine Monitoring

A) A non-community water system supplier using only groundwater, excluding groundwater under the direct influence of surface water, as defined in 35 Ill. Adm. Code 611.102, and serving 1,000 persons or fewer must conduct the following total coliform and E.coli monitoring:

i) Quarterly Monitoring. The supplier must monitor each calendar quarter that the system provides water to the public.

ii) Reduced Monitoring. The Department may reduce the quarterly monitoring frequency to not less than annually, if the most recent sanitary survey shows that the system is free of sanitary defects, has a protected water source and the wells conform to the requirements of the Water Well Construction Code.

B) Non-community water systems that do not meet the requirements of subsection (b)(1)(A) are subject to the monitoring requirements of 35 Ill Adm. Code 611.1056 and 611.1057 except vending machines classified as non-community water systems, which must comply with (b)(1)(A).

C) Monitoring after E. coli Violations

i) A water system that incurs an E. coli violation, as specified in subsection (h)(1), shall be placed on monthly monitoring for a minimum of one year beginning in the next month in which the supplier provides water to the public, unless the cause of the violation has been definitely determined by the Department and corrected prior to water being served to the public.

ii) When the cause of the violation has not been definitely determined by the Department and corrected, monitoring must be conducted during the most vulnerable times each month for the next 12 months following an E. coli MCL violation. If any sample result (routine, repeat, additional routine, or clearance sample) is Total Coliform Positive within 12 months following the MCL violation, the system must collect monthly samples for a minimum of 12 consecutive months. Monthly monitoring must begin in the next month in which the supplier provides water to the public.

iii) After 12 consecutive months of monitoring, the Department may allow the water system to return to quarterly monitoring in accordance with subsection (b)(1)(A) if the water system meets the criteria specified in subsection (b)(1)(E).

D) A water system that incurs a coliform treatment technique violation, as specified in subsection (h)(2), shall be placed on monthly monitoring for a minimum of one year beginning in the next month in which the supplier provides water to the public. After 12 consecutive months of monitoring, the Department may allow the water system to return to quarterly monitoring in accordance with subsection (b)(1)(A).

E) A supplier may return to quarterly monitoring after being triggered to monthly monitoring under subsection (b)(1)(C), once all of the following criteria are met:

i) The system is free of sanitary defects, has a protected source, and the wells conform to the requirements of the Water Well Construction Code;

ii) The on-site assessment and all corrective actions specified by the Department have been completed;

iii) The system has conducted any increased monitoring required by the Department; and

iv) The system is in compliance with cross-connection requirements in Section 900.40(l).

2) Repeat Monitoring

A) If a sample taken under subsection (b)(1) or (b)(4) is total coliform-positive, the supplier must collect a set of repeat samples within 24 hours after being notified of the positive result. The supplier must collect no fewer than three repeat samples for each total coliform-positive sample found. The Department will extend the 24- hour limit if the supplier has a logistical problem in collecting the repeat samples within 24 hours that is beyond its control. The Department will not waive the requirement for a supplier to collect the repeat samples described in subsections (b)(2)(A) through (C).

B) The supplier must collect all repeat samples on the same day, except the Department will allow a supplier with a single service connection to collect the required set of repeat samples over a three-day period or to collect a larger volume of repeat samples in one or more sample containers of any size, as long as the total volume collected is at least 300 milliliters.

C) The supplier must collect an additional set of repeat samples in the manner specified in subsections (b)(2)(A) through (C) if one or more repeat samples in the current set of repeat samples is total coliform-positive. The supplier must collect the additional set of repeat samples within 24 hours after being notified of the positive result, unless the Department extends the limit as provided in subsection (b)(2)(A). The supplier must continue to collect additional sets of repeat samples until either total coliforms are not detected in one complete set of repeat samples or the supplier determines that a coliform treatment technique trigger specified in subsection (d) has been exceeded as a result of a repeat sample being total coliform-positive and notifies the Department. If a trigger identified in subsection (d) is exceeded as a result of a routine sample being total coliform-positive, the supplier is required to conduct only one round of repeat monitoring for each total coliform-positive routine sample.

D) After a supplier collects a routine sample and before it learns the results of the analysis of that sample, if the supplier collects another routine sample from within five adjacent service connections of the initial sample, and the initial sample, after analysis, is found to contain total coliforms, then the supplier may count the subsequent sample as a repeat sample instead of as a routine sample.

E) Results of all routine and repeat samples taken under subsection (b) not invalidated by the Department must be used to determine whether a coliform treatment technique trigger specified in subsection (d) has been exceeded.

3) Escherichia coli (E. coli) Testing

A) If any routine or repeat sample is total coliform-positive, the supplier's certified laboratory must analyze that total coliform-positive culture medium to determine if E. coli are present. If E. coli are present, the supplier must notify the Department by the end of the day when the supplier is notified of the test result. If the supplier is notified of the result after the Department office is closed and the Department does not have either an after-hours phone line or an alternative notification procedure, the supplier must notify the Department before the end of the next business day.

B) The Department will allow a supplier to forego E. coli testing on a total coliform-positive sample if that supplier assumes that the total coliform-positive sample is E. coli-positive. Accordingly, the supplier must notify the Department as specified in subsection (b)(3)(A) and must notify the public in accordance with 35 Ill. Adm. Code 611.Subpart V.

4) Additional Routine Monitoring the Month Following a Total Coliform-Positive Sample

A) Except as provided in subsection (b)(4)(D), a supplier conducting monitoring pursuant to subsection (b)(1)(A) must collect at least three routine samples during the month following a total coliform-positive sample.

B) The supplier shall either collect samples at regular time intervals throughout the month or shall collect all required routine samples on a single day if samples are taken from different sites.

C) The supplier must use the results of additional routine samples in coliform treatment technique trigger calculations under subsection (d).

D) Waiver. Except as provided in subsection (b)(4)(F), the Department will waive the requirement to collect three routine samples the next month in which the supplier provides water to the public if:

i) The Department performs a site visit before the end of the next month in which the supplier provides water to the public. Although a sanitary survey is not required, the site visit must be sufficiently detailed to allow the Department to determine whether additional monitoring or any corrective action is needed;

ii) The Department determines why the sample was total coliform-positive and establishes that the supplier has corrected the problem or will correct the problem before the end of the next month in which the supplier serves water to the public; or

iii) The Department determines that the supplier has corrected the contamination problem before the supplier takes the set of repeat samples required in subsection (b)(2) and all repeat samples were total coliform-negative.

E) The Department must document any decision to waive the additional monitoring requirements in writing, have it approved and signed by the supervisor of the Department official who recommends that decision, and make this document available to USEPA and the public. The written documentation must describe the specific cause of the total coliform-positive sample and what action the supplier has taken or will take to correct this problem.

F) Any supplier that fails to collect all required repeat samples following any total coliform-positive sample must collect three routine samples the next month in which the supplier provides water to the public.

5) Sample Siting Plans. A supplier must develop a written sample siting plan that identifies sampling sites and a sample collection schedule that are representative of water throughout the distribution system. These plans are subject to Department review and revision. The supplier must collect total coliform samples according to the sample siting plan. Routine and repeat sample sites and any raw water sampling sites necessary to conduct triggered source water monitoring must be reflected in the sampling plan.

c) All seasonal non-community public water system suppliers must demonstrate completion of a Department-approved start-up procedure, which shall include a requirement for startup sampling to demonstrate coliform bacteria is not present prior to serving water to the public. This demonstration must be certified by the supplier on a form provided by the Department and submitted to the Department prior to serving water to the public. This requirement may be waived for seasonal systems if the entire distribution system remains pressurized during the entire period that the system is not operating. In addition to the start-up sampling, seasonal systems must have an approved sample siting plan that designates the time period for monitoring based on site-specific considerations (e.g., during periods of highest demand or highest vulnerability to contamination). Seasonal suppliers must collect compliance samples during this time period.

d) Coliform Treatment Technique Triggers. A supplier must conduct assessments in accordance with subsection (e) after exceeding treatment technique triggers in subsection (d)(1) or (d)(2).

1) Monitoring Assessment Triggers

A) The supplier fails to take a routine sample as required in subsection (b)(1)(A).

B) The supplier fails to take every required repeat sample after any single total coliform-positive sample, as required in subsection (b)(2).

C) The supplier fails to take additional routine monitoring samples as required in subsection (b)(4).

2) On-site Assessment Triggers

A) An E. coli MCL violation, as specified in subsection (h)(1).

B) A system has two or more total coliform-positive samples in the same month.

e) Requirements for Assessments

1) A supplier must ensure that monitoring assessments are conducted in order to identify the cause of the monitoring violation and to institute procedures to prevent future monitoring violations.

2) A supplier must ensure that on-site assessments are conducted in order to identify the possible presence of sanitary defects and defects in distribution system coliform monitoring practices. On-site assessments must be conducted by the Department or parties approved by the Department.

3) When conducting on-site assessments, the supplier must ensure that the assessor evaluates minimum elements that include review and identification of inadequacies in sample sites; sampling protocol; sample processing; atypical events that could affect distributed water quality or indicate that distributed water quality was impaired; changes in distribution system maintenance and operation that could affect distributed water quality (including water storage); source and treatment considerations that bear on distributed water quality, where appropriate (e.g., small ground water systems); and existing water quality monitoring data. The supplier must conduct the assessment consistent with specific assessment elements with respect to the size and type of the system and the size, type, and characteristics of the distribution system.

4) Monitoring Assessments. A supplier shall obtain a monitoring assessment if the water system exceeds one of the treatment technique triggers in subsection (d)(1).

A) The supplier must complete a monitoring assessment as soon as practical after any trigger in subsection (d)(1). In the completed assessment form, the supplier must describe corrective actions completed, and a proposed timetable for any corrective actions not already completed. The supplier must submit the completed monitoring assessment form to the Department within 30 days after the supplier learns that it has exceeded a trigger.

B) If the Department reviews the completed monitoring assessment and determines that the assessment is not sufficient (including any proposed timetable for any corrective actions not already completed), the Department must consult with the supplier. If the Department requires revisions after consultation, the supplier must submit a revised assessment form to the Department on an agreed-upon schedule not to exceed 30 days after the date of the consultation.

C) Upon completion and submission of the assessment form by the supplier, the Department must determine if the supplier has identified a likely cause for the monitoring assessment trigger and, if so, establish that the supplier has corrected the problem, or has included a schedule acceptable to the Department for correcting the problem.

D) Monitoring assessments must include submittal of replacement samples for all missed samples that caused a monitoring assessment trigger to be exceeded.

E) Monitoring Assessments do not require an on-site visit and may be conducted by telephone or electronic correspondence.

5) On-site Assessments. A supplier shall obtain an on-site assessment if the water system exceeds one of the treatment technique triggers in subsection (d)(2). The supplier must comply with any expedited actions or additional actions required by the Department in the case of an E. coli MCL violation.

A) The supplier must ensure that an on-site assessment is completed by the Department or by a third party approved by the Department as soon as practical after any trigger in subsection (d)(2). The supplier must submit a completed on-site assessment form to the Department within 30 days after the supplier learns that it has exceeded a trigger. The assessment form must describe sanitary defects detected, corrective actions completed, and a proposed timetable for any corrective actions not already completed. The assessment form may also note that no sanitary defects were identified.

B) If the Department reviews the completed on-site assessment and determines that the assessment is not sufficient (including any proposed timetable for any corrective actions not already completed), the Department must consult with the supplier. If the Department requires revisions after consultation, the supplier must submit a revised assessment form to the Department on an agreed-upon schedule not to exceed 30 days.

C) Upon completion and submission of the assessment form by the supplier, the Department must determine if a definitive cause for the on-site trigger has been identified and determine whether the supplier has corrected the problem or has included a schedule acceptable to the Department for correcting the problem.

D) On-site assessments must include clearance samples and submittal of replacement samples for all missed routine, repeat and additional routine samples.

f) Corrective Action. A supplier must correct sanitary defects found through either monitoring or on-site assessments conducted under subsection (e). For corrections not completed by the time of submission of the assessment form, the supplier must complete the corrective actions in compliance with a timetable approved by the Department in consultation with the supplier. The supplier must notify the Department when each scheduled corrective action is completed.

g) Consultation. At any time during the assessment or corrective action phase, either the supplier or the Department may request a consultation with the other party to determine the appropriate actions to be taken. The supplier may consult with the Department on all relevant information that may impact on its ability to comply with a requirement of this Section, including the method of accomplishment, an appropriate timeframe, and other relevant information.

h) Violations

1) E. coli MCL Violations. A supplier is in violation of the MCL for E. coli when any of the conditions identified in this subsection (h)(1) occur.

A) The supplier has an E. coli-positive repeat sample following a total coliform-positive routine sample.

B) The supplier has a total coliform-positive repeat sample following an E. coli-positive routine sample.

C) The supplier fails to take all required repeat samples following an E. coli-positive routine sample.

D) The supplier fails to test for E. coli when any repeat sample tests positive for total coliform.

2) Treatment Technique Violation

A) A treatment technique violation occurs when a supplier exceeds a treatment technique trigger specified in subsection (d) and then fails to complete the required assessment or corrective actions, including the collection of all required samples in accordance with subsections (d)(1) and (d)(2), within the timeframe specified in subsections (e) and (f).

B) A treatment technique violation occurs when a seasonal supplier fails to complete a Department-approved start-up procedure prior to serving water to the public.

3) Monitoring Violations

A) Failure to take every required routine or additional routine sample in a compliance period is a monitoring violation.

B) Failure to analyze for E. coli following a total coliform-positive routine sample is a monitoring violation.

4) Reporting Violations

A) Failure to submit a monitoring report or completed assessment form after a supplier properly conducts monitoring or assessment in a timely manner is a reporting violation.

B) Failure to notify the Department following an E. coli-positive sample as required by subsection (b)(3)(A) in a timely manner is a reporting violation.

C) Failure to submit certification of completion of Department-approved start-up procedure by a seasonal supplier is a reporting violation.

i) Reporting

1) E. coli

A) A supplier must notify the Department by the end of the day when the system learns of an E. coli MCL violation. If the supplier learns of the violation after the Department office is closed and the Department does not have either an after-hours phone line or an alternative notification procedure, the supplier must notify the Department before the end of the next business day. The supplier must also notify the public in accordance with 35 Ill. Adm. Code 611.Subpart V.

B) A supplier must notify the Department by the end of the day when the supplier is notified of an E. coli-positive routine sample. If the supplier is notified of the result after the Department office is closed and the Department does not have either an after-hours phone line or an alternative notification procedure, the supplier must notify the Department before the end of the next business day.

2) A supplier that has violated the treatment technique for coliforms in subsections (e) and (f) must report the violation to the Department no later than the end of the next business day after it learns of the violation and must notify the public in accordance with 35 Ill. Adm. Code 611.Subpart V.

3) A supplier required to conduct an assessment under subsection (e) must submit the assessment report within 30 days. The supplier must notify the Department in accordance with subsection (f) when each scheduled corrective action is completed for corrections not completed by the time of submission of the assessment form.

4) A supplier that has failed to comply with a coliform monitoring requirement must report the monitoring violation to the Department within 10 days after the supplier discovers the violation and must notify the public in accordance with 35 Ill. Adm. Code 611.Subpart V.

5) A seasonal supplier must certify, prior to serving water to the public, that it has complied with the Department-approved start-up procedure.

j) Recordkeeping

1) The supplier must maintain all assessment forms, and documentation of corrective actions completed as a result of those assessments, or other available summary documentation of the sanitary defects and corrective actions taken under subsections (e) and (f) for Department review. This record must be maintained by the supplier for a period not less than five years after completion of the assessment or corrective action.

2) The supplier must maintain a record of any repeat sample taken that meets Department criteria for an extension of the 24-hour period for collecting repeat samples as provided for under subsection (b)(2)(A).

(Source: Added at 44 Ill. Reg. 15785, effective September 1, 2020)