This document contains draft language for the Revised Total Coliform Rule as well as language for other sections of Regulation 11 that have been affected by this rule. Substantive changes have been made to 11.11 Groundwater Rule, 11.13 Groundwater Rule: Disinfection Waivers, 11.33 Public Notification Rule, and 11.34 Consumer Confidence Report Rule. The numbers in brackets indicate the federal citation(s) that correspond to the new language. In RTCR, the absence of brackets means the language was added for clarity or it is a Colorado-specific requirement. For the other rules, a strikethrough indicates that the language was deleted and a double underline indicates language that has been added. The language surrounding those changes is there for context and has not been altered from the current version of Regulation 11.
11.16 REVISED TOTAL COLIFORM RULE

11.16(1)  Applicability and Definitions [141.851]

(a)  For all public water systems, the supplier must comply with the requirements specified in this rule beginning April 1, 2016 unless otherwise specified. [141.851(b)][141.21(h)][141.851(c)]

(b)  “CLEAN COMPLIANCE HISTORY” means a record of no MCL violations, no sampling violations, and no treatment technique trigger exceedances or treatment technique violations under this rule. [141.2]

(c)  “LEVEL 1 ASSESSMENT” means an evaluation conducted by the supplier to identify sanitary defects and the possible cause(s) that the system triggered the assessment. Level 1 assessments must meet the requirements specified in 11.16(10). [141.2]

(d)  “LEVEL 2 ASSESSMENT” means an evaluation conducted by the Department or Department-approved party to identify sanitary defects and the possible cause(s) that the system triggered the assessment. Level 2 assessments must meet the requirements specified in 11.16(10). A Level 2 assessment is a more detailed examination of the system than a Level 1 assessment through a comprehensive investigation and review of available information, additional internal and external resources, and other relevant practices. [141.2]

(e)  “SANITARY DEFECT” means a defect: [141.2]

(i)  That could provide a pathway of entry for microbial contamination into the distribution system; [141.2]

(ii)  That is indicative of a failure or imminent failure in a barrier that is already in place; or [141.2]

(iii)  That is indicative of inadequate or inappropriate distribution system coliform sampling practices. [141.859(b)(1)]

(f)  “SEASONAL SYSTEM” means a non-community water system that is not operated as a public water system on a year-round basis. [141.2]

(g)  “SPECIAL PURPOSE SAMPLE” means a sample that is not collected in accordance with the sampling plan. Special purpose samples will not be used to determine compliance with sampling requirements, the E. coli MCL, or in determining if a treatment technique trigger has been exceeded. [141.853(b)]

11.16(2)  MCL for Escherichia coli (E. coli)

(a)  The system exceeds the E. coli MCL if: [141.63(c)]

(i)  A repeat sample is E. coli-positive following a total coliform-positive routine sample. [141.63(c)(1)]

(ii)  A repeat sample is total coliform-positive following an E. coli-positive routine sample. [141.63(c)(2)]

(iii)  The supplier fails to collect the required repeat samples following an E. coli-positive routine sample. [141.63(c)(3)]
(iv) The supplier fails to analyze a total coliform-positive repeat sample for *E. coli*. [141.63(c)(4)]

(b) The BATs for achieving compliance with the MCLs for *E. coli* are specified in 40 CFR 141.63(e-f) as amended July 1, 2014. [141.63(e)][141.63(e)(1)][141.63(e)(2)][141.63(e)(3)][141.63(e)(4)][141.63(e)(5)][141.63(f)]

**11.16(3) Total Coliform Treatment Technique Triggers**

(a) The Level 1 treatment technique triggers are as follows: [141.859(a)(1)]

(i) If the supplier collects greater than or equal to (≥) 40 samples per month, more than 5.0 percent of the samples collected for the month are total coliform-positive. [141.859(a)(1)(i)]

(ii) If the supplier collects less than (<) 40 samples per month, more than one sample collected for the monitoring period is total coliform-positive. [141.859(a)(1)(ii)]

(iii) The supplier fails to collect all required repeat samples after any single routine total coliform-positive sample. [141.859(a)(1)(iii)]

(b) The Level 2 treatment technique triggers are as follows: [141.859(a)(2)]

(i) An *E. coli* MCL violation occurs as specified in 11.16(12)(a). [141.859(a)(2)(i)]

(ii) A second Level 1 treatment technique trigger, as specified in 11.16(3)(a), within 12 consecutive months, except: [141.859(a)(2)(ii)]

(A) If the Department has determined the possible cause(s) for the total coliform-positive sample(s) that caused the first Level 1 treatment technique trigger and the Department has established that the supplier has corrected the problem(s), a second Level 1 treatment technique trigger will not result in a Level 2 treatment technique trigger. [141.859(a)(2)(ii)]

**11.16(4) Individual Rule Sampling Plan for the Revised Total Coliform Rule [141.853(a)]**

(a) No later than March 31, 2016, as part of the monitoring plan specified in 11.5, the supplier must develop a written sampling plan that identifies all of the following: [141.853(a)(1)]

(i) A sample collection schedule that meets the requirements specified in 11.16(6)(a)(iii). [141.853(a)(1)][141.853(a)(2)]

(ii) Routine total coliform sample sites that are representative of water throughout the distribution system. [141.853(a)(1)][141.853(a)(5)]

(iii) Any sample sites necessary to meet the sampling requirements specified in 11.11(4)(b). [141.853(a)(1)][141.853(a)(5)]

(iv) Repeat sample sites. [141.853(a)(1)]

(B) The supplier must identify repeat sampling locations in one of the following ways:

(i) Identify sampling locations based on the following requirements: [141.853(a)(5)]
One total coliform sample at the tap where the original total coliform-positive sample was collected. [141.853(a)(5)]

One total coliform sample at a tap within five service connections upstream from the tap where the original total-coliform positive sample was collected. [141.853(a)(5)]

One total coliform sample at a tap within five service connections downstream from the tap where the original total-coliform positive sample was collected. [141.853(a)(5)]

If the supplier collected the original total coliform-positive sample from the end of the distribution system or one tap away from the end of the distribution system, the Department may allow an alternative sampling location for collecting repeat samples at the upstream or downstream locations. [141.853(a)(5)]

(II) Identify alternative fixed repeat sampling sites that the supplier believes to be representative of a pathway for contamination of the distribution system. [141.853(a)(5)(i)]

(III) Develop criteria for selecting repeat sampling sites on a situational basis that the supplier believes to best verify and determine the extent of potential contamination and a potential pathway for contamination of the distribution system in a standard operating procedure (SOP) that is included in the sampling plan. [141.853(a)(5)(i)]

(a) The Department may modify the SOP or require alternative repeat sampling locations. [141.853(a)(5)(i)]

(b) Sample sites may include a customer’s premises, dedicated sampling station, or other designated compliance sampling location. [141.853(a)(1)]

(c) The Department may review, revise, and approve the written sampling plan. [141.853(a)(1)]

11.16(5) Start-up Requirements for Seasonal Systems [141.854(b)][141.854(i)]
[141.856(a)(4)][141.857(a)(4)]

(a) The supplier must complete Department-approved start-up procedures and certify that the start-up procedures were completed before supplying water to the public each season. [141.854(i)(1)][141.856(a)(4)(i)][141.857(a)(4)(i)][141.861(a)(5)]

(i) No later than the 10th of the month following the month in which the supplier began supplying water to the public, the supplier must submit the certification that start-up procedures were completed.

(b) The supplier must either submit start-up procedures for Department approval or use the pre-approved procedures in the Department’s [NAME OF HANDBOOK]. [141.854(i)(3)][141.856(a)(4)(ii)][141.857(a)(4)(ii)]

(c) The supplier must collect a total coliform sample in the distribution system before supplying water to the public as part of the start-up procedures. [141.854(i)(1)][141.856(a)(4)(i)][141.857(a)(4)(i)]

11.16(6) Sampling Requirements for Total Coliform [141.853]
(a) General Sampling Requirements for Total Coliform

(i) To determine compliance with the MCL for *E. coli* or to determine if a treatment technique trigger is exceeded, the supplier must collect total coliform samples as specified in 11.16(6) and 11.16(7).

(A) If an *E. coli* MCL violation occurs or if a treatment technique trigger is exceeded, the supplier must still collect at least the minimum number of required routine samples. [141.853(a)(3)]

(ii) The supplier must collect total coliform samples according to the written sampling plan as specified in 11.16(4). [141.853(a)(1)]

(iii) The supplier must collect total coliform samples at regular time intervals throughout the month, except: [141.853(a)(2)]

(A) For groundwater systems that supply less than or equal to (≤) 4,900 people, the supplier may collect all required samples on a single day if the samples are collected from different locations. [141.853(a)(2)][141.854(j)]

(iv) The supplier may collect more samples than the minimum number of routine total coliform samples required as specified in Table 11.16-I as a tool to investigate potential problems in the distribution system. [141.853(a)(4)]

(A) The supplier must use these sample results to determine if a treatment technique trigger has been exceeded if: [141.853(a)(4)]

(I) The supplier collects these samples in accordance with the sampling plan; and [141.853(a)(4)]

(II) The supplier collects these samples from locations that are representative of water throughout the distribution system. [141.853(a)(4)]

(B) If any of the sample results are total coliform-positive, the supplier must collect repeat samples as specified in 11.16(7).

(v) If the supplier collects special purpose samples, these samples are not routine or repeat samples and these sample results will not be used to determine compliance with the *E. coli* MCL or to determine if a treatment technique trigger has been exceeded. [141.853(b)]

(A) The supplier must submit, as specified in 11.35(2)(a), all *E. coli*-positive special purpose sample results that are representative of water throughout the distribution system.

(b) Routine Sampling Requirements for Total Coliform

(i) For all public water systems, including seasonal systems, the supplier must collect the number of routine total coliform samples specified in Table 11.16-I each month except: [141.855(a)(1)][141.855(b)][141.856(b)][141.857(b)][141.858(a)(1)][141.858(a)]

[141.854(b)][141.854(c)(1)][141.854(i)(2)]

(A) For non-seasonal, non-community groundwater systems that supply less than or equal to (≤) 1,000 people, the supplier must collect one total coliform sample
during each quarter that water is supplied to the public, unless the supplier is required to increase the routine sampling frequency as specified in 11.16(6)(c). [141.854][141.854(a)(1)] [141.854(b)][141.857(d)]

(I) In any month where the system supplies greater than (>) 1,000 people, the supplier must collect the number of routine total coliform samples specified in Table 11.16-I each month. [141.857(d)]

(a) The supplier must have written Department-approval to alternate between quarterly and monthly sampling frequencies based on when the population supplied is less than or equal to (≤) 1,000 people or when the population supplied is greater than (> ) 1,000 people. [141.857(d)]

(ii) The Department shall perform a special sampling evaluation during each sanitary survey to determine whether the supplier is collecting total coliform samples on an appropriate frequency. Based on the special sampling evaluation: [141.854(c)(2)] [141.855(c)(2)]

(A) The Department may modify the sampling frequency. [141.854(c)(2)] [141.855(c)(2)]

(B) The Department may allow the supplier to begin less frequent sampling only if the supplier meets the criteria for less frequent sampling specified in 11.16(6)(c)(ii). [141.854(c)(2)] [141.855(c)(2)]

(ii) For systems that do not provide chemical disinfection, the supplier must collect the number of routine total coliform samples specified in Table 11.16-I each month, and is not eligible for a quarterly sampling frequency as specified in 11.16(6)(b)(i)(A).

<table>
<thead>
<tr>
<th>Population supplied</th>
<th>Minimum number of samples required</th>
<th>Population supplied</th>
<th>Minimum number of samples required</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 to 1,000¹</td>
<td>1</td>
<td>59,001 to 70,000</td>
<td>70</td>
</tr>
<tr>
<td>1,001 to 2,500</td>
<td>2</td>
<td>70,001 to 83,000</td>
<td>80</td>
</tr>
<tr>
<td>2,501 to 3,300</td>
<td>3</td>
<td>83,001 to 96,000</td>
<td>90</td>
</tr>
<tr>
<td>3,301 to 4,100</td>
<td>4</td>
<td>96,001 to 130,000</td>
<td>100</td>
</tr>
<tr>
<td>4,101 to 4,900</td>
<td>5</td>
<td>130,001 to 220,000</td>
<td>120</td>
</tr>
<tr>
<td>4,901 to 5,800</td>
<td>6</td>
<td>220,001 to 320,000</td>
<td>150</td>
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<td>320,001 to 450,000</td>
<td>180</td>
</tr>
<tr>
<td>6,701 to 7,600</td>
<td>8</td>
<td>450,001 to 600,000</td>
<td>210</td>
</tr>
<tr>
<td>7,601 to 8,500</td>
<td>9</td>
<td>600,001 to 780,000</td>
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</tbody>
</table>

¹ For systems that do not provide chemical disinfection, the supplier must collect the number of routine total coliform samples specified in Table 11.16-I each month, and is not eligible for a quarterly sampling frequency as specified in 11.16(6)(b)(i)(A).
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
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<tbody>
<tr>
<td>8,501 to 12,900</td>
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<td>780,001 to 970,000</td>
<td>270</td>
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<td>12,901 to 17,200</td>
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<td>970,001 to 1,230,000</td>
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<td>1,230,001 to 1,520,000</td>
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<td>25,001 to 33,000</td>
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<td>1,850,001 to 2,270,000</td>
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<td>33,001 to 41,000</td>
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<td>2,270,001 to 3,020,000</td>
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<td>41,001 to 50,000</td>
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<td>3,020,001 to 3,960,000</td>
<td>450</td>
</tr>
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<td>50,001 to 59,000</td>
<td>60</td>
<td>3,960,001 or more</td>
<td>480</td>
</tr>
</tbody>
</table>

1 Includes systems that have greater than or equal to (≥) 15 service connections, but supply less than (<) 25 people.

(c) For Non-seasonal, Non-community Groundwater Systems Supplying Less Than or Equal to (≤) 1,000 People – Increased Routine Sampling Requirements for Total Coliform [141.854(f)]

(i) If the supplier is sampling quarterly, the supplier must increase the routine sampling frequency to monthly beginning the month following any of the following events:

(A) A Level 2 treatment technique trigger is exceeded under 11.16(3)(b). [141.854(f)(1)][141.854(f)(2)]

(B) A treatment technique violation occurs under 11.16(12)(b). [141.854(f)(3)]

(C) Two sampling violations occur within 12 consecutive months. [141.854(f)(4)]

(D) A Level 1 treatment technique trigger is exceeded and a sampling violation occurs within 12 consecutive months. [141.854(f)(4)]

(ii) If the supplier is sampling monthly, the Department may allow the supplier to return to a routine quarterly sampling frequency if all of the following criteria are met:

(A) Within the last 12 months, the Department or a Department-approved party has completed a sanitary survey or a Level 2 assessment. [141.854(g)(1)]

(B) The system is free of sanitary defects and all significant deficiencies have been corrected. [141.854(g)(1)]

(C) The system’s water source(s) is protected from the direct influence of surface water or any other source of contamination. [141.854(g)(1)]

(D) The system has a clean compliance history for at least 12 months. [141.854(g)(2)]

d) For Non-seasonal, Non-community Groundwater Systems Supplying Less Than or Equal to (≤) 1,000 People – Additional Routine Sampling Requirements in the Month Following a Total Coliform-positive Sample Result [141.854(j)]
(i) If the supplier is collecting total coliform samples on a quarterly frequency and one or more of the samples collected is total coliform-positive, the supplier must collect at least three routine samples during the following month. [141.854(j)]

(A) The supplier may either collect the samples at regular time intervals throughout the month or collect all required additional routine samples on a single day if the samples are collected from different sites. [141.854(j)]

(ii) If any of the additional routine sample results are total coliform-positive, the supplier must collect repeat samples as specified in 11.16(7).

(iii) The supplier must use the results of additional routine samples to determine whether an E. coli MCL violation has occurred or if a treatment technique trigger has been exceeded. [141.854(j)]

(iv) If all three additional routine samples are total coliform-negative, the supplier may return to collecting one total coliform sample on a quarterly sampling frequency. The supplier must collect the quarterly total coliform sample in the calendar quarter following the month that the three additional routine samples were required.

11.16(7) Repeat Sampling Requirements for Total Coliform [141.858][141.858(a)]

(a) For each routine sample result that is total coliform-positive, the supplier must collect a set of at least three repeat total coliform samples no later than 24 hours after being notified of the positive sample result. [141.858(a)(1)][141.854(a)(2)][141.855(a)(2)][141.856(a)(2)][141.857(a)(2)]

(i) If the supplier has a logistical problem beyond their control that prevents the supplier from collecting the repeat samples within the 24-hour limit, the Department may extend the 24-hour limit on a case-by-case basis. [141.858(a)(1)]

(A) If the Department grants the extension, the Department shall specify how much time the supplier has to collect the repeat samples. [141.858(a)(1)]

(b) The supplier must collect repeat samples in accordance with the written sampling plan required under 11.16(4)(a)(iv). [141.853(a)(5)]

(c) The supplier must collect all repeat samples on the same day. [141.858(a)(2)]

(i) If the system has only one service connection, the Department may allow the supplier to collect a larger volume repeat sample(s) in one or more sample containers of any size, as long as the total volume collected is at least 300 ml. [141.858(a)(2)]

(d) If a treatment technique trigger is exceeded based on routine sample results, the supplier is required to collect only one repeat sample set for each total coliform-positive routine sample and is not required to comply with the requirements specified in 11.16(7)(e). [141.858(a)(3)]

(e) If one or more of the repeat sample results is total coliform-positive, the supplier must:

[141.858(a)(3)]

(i) Collect an additional repeat sample set as specified in 11.16(7)(a-d) for each location that had a total coliform-positive sample result. [141.858(a)(3)]

(A) The additional repeat sample set(s) must be collected no later than 24 hours after being notified of the total coliform-positive sample result(s), unless the
Department extends the 24-hour limit as specified in 11.16(7)(a)(i). [141.858(a)(3)]

(ii) Continue to collect additional repeat sample sets as specified in 11.16(7)(e)(i) until either:

(A) Total coliforms are not detected in one complete repeat sample set; or [141.858(a)(3)]

(B) A treatment technique trigger specified in 11.16(3) has been exceeded based on total coliform-positive repeat sample results and the supplier has notified the Department. [141.858(a)(3)]

(f) If the supplier collects a routine sample, which after analysis is found to be total coliform-positive, but before receiving that sample result the supplier collects another routine sample within five service connections of the original sample, the supplier may use the subsequent routine sample as a repeat sample instead of as a routine sample. [141.858(a)(4)]

(g) For groundwater systems, the supplier must collect triggered source water monitoring samples as specified in 11.11(4) in addition to repeat samples required in this section, 11.16(7). [141.853(a)(5)]

(i) For a groundwater system with a single well supplying less than or equal to (≤) 1,000 people, if the supplier is required to collect a triggered source water monitoring sample, the supplier, with written Department approval, may collect one of the repeat total coliform samples at the sample site required for triggered source water monitoring under 11.11(4). [141.853(a)(5)(ii)]

(A) If approved by the Department, the supplier may use the repeat total coliform sample to meet both the triggered source water monitoring requirements specified in 11.11(4) and the total coliform repeat sampling requirements specified in this section, 11.16(7). [141.853(a)(5)(ii)]

(h) The Department shall not waive the requirement to collect repeat samples. [141.853(b)][141.858(a)(1)]

(i) Repeat samples are not considered special purpose samples and must be used to determine if the treatment technique trigger has been exceeded. [141.853(b)]

11.16(8) **Invalidation of Total Coliform Samples** [141.853(c)]

(a) The Department may invalidate a total coliform-positive sample result only if one or more of the following conditions are met: [141.853(c)(1)]

(i) The laboratory establishes that improper sample analysis caused the total coliform-positive sample result. [141.853(c)(1)(i)]

(ii) Based on repeat sample results, the Department determines that the total coliform-positive sample resulted from a domestic or other non-distribution system plumbing problem. [141.853(c)(1)(ii)]

(A) "DOMESTIC OR OTHER NON-DISTRIBUTION SYSTEM PLUMBING PROBLEM" means coliform contamination that is limited to the specific service connection from which the total coliform-positive sample was collected in a public water system with more than one service connection. [141.2]
(B) The Department shall not invalidate a sample result on the basis of repeat sample results unless all repeat sample(s) collected at the same tap as the original total coliform-positive sample are also total coliform-positive, and all repeat samples collected at a location other than the original tap are total coliform-negative. [141.853(c)(1)(ii)]

(iii) The Department has substantial grounds to believe that a total coliform-positive sample result was due to a circumstance or condition that does not reflect water quality in the distribution system. [141.853(c)(1)(iii)]

(A) The Department shall document the decision and supporting rationale for invalidating a total coliform-positive sample result in writing, have it approved and signed by a supervisor of the Department official who recommended the decision, and make this document available to the EPA and the public. [141.853(c)(1)(iii)]

(I) The written documentation must state the specific cause of the total coliform-positive sample result and what action the supplier has taken, or will take, to correct the problem. [141.853(c)(1)(iii)]

(II) The Department shall not invalidate a total coliform-positive sample based only on the fact that all repeat sample results are total coliform-negative. [141.853(c)(1)(iii)]

(B) If the Department makes this determination, the supplier must still collect the required number of repeat samples and use them to determine compliance with the treatment technique triggers specified in 11.16(3). [141.853(c)(1)(iii)]

(b) The laboratory must invalidate a total coliform-negative sample result if one or more of the following conditions are met: [141.853(c)(2)]

(i) The sample produces a turbid culture in the absence of gas production using an analytical method where gas formation is examined (e.g., the Multiple-Tube Fermentation Technique). [141.853(c)(2)]

(ii) The sample produces a turbid culture in the absence of an acid reaction in the Presence-Absence (P-A) Coliform Test. [141.853(c)(2)]

(iii) The sample exhibits confluent growth or produces colonies too numerous to count with an analytical method using a membrane filter (e.g., Membrane Filter Technique). [141.853(c)(2)]

(A) "CONFLUENT GROWTH" means, in the context of bacterial testing, a continuous bacterial growth covering the entire filtration area of a membrane filter, or a portion thereof, in which bacterial colonies are not discrete. [141.2]

(B) "TOO NUMEROUS TO COUNT" means that the total number of bacterial colonies exceeds 200 on a 47-millimeter (mm) diameter membrane filter used for coliform detection. [141.2]

(c) If the laboratory invalidates a total coliform-negative sample result, the supplier must collect a replacement total coliform sample from the same location as the invalidated sample no later than 24 hours after being notified of the invalidation, and have it analyzed for the presence of total coliforms. [141.853(c)(2)]
(i) The Department may extend the 24-hour limit on a case-by-case basis. [141.853(c)(2)]

(ii) The supplier must continue to collect replacement total coliform samples until a valid sample result is obtained. [141.853(c)(2)]

(d) If a total coliform-positive sample result is invalidated, the sample result will not count towards determining any of the following: [141.853(c)][141.858(a)(5)]

(i) Compliance with the sampling requirements specified in this rule. [141.853(c)]

(ii) Compliance with the *E. coli* MCL. [141.858(a)(5)]

(iii) Whether a treatment technique trigger has been exceeded. [141.858(a)(5)]

11.16(9) **Sampling Requirements for *E. coli* [141.858][141.858(b)]**

(a) If any routine or repeat sample result is total coliform-positive, the supplier must have a laboratory analyze the total coliform-positive culture medium to determine if *E. coli* are present. [141.858(b)(1)][141.854(a)(2)][141.855(a)(2)][141.856(a)(2)][141.857(a)(2)]

(b) If any routine, repeat, or special purpose sample result is *E. coli*-positive, the supplier must notify the Department no later than the end of the day that the supplier is notified of the sample result. [141.858(b)(1)][141.861(a)(1)(ii)]

(i) If the supplier is notified of the sample result after the Department is closed, the supplier must contact the Department’s after-hours phone line. [141.858(b)(1)][141.861(a)(1)(ii)]

(ii) The supplier must only notify the Department of *E. coli*-positive special purpose sample results if the result is representative of water throughout the distribution system.

11.16(10) **Treatment Technique Requirements: Level 1 and Level 2 Assessment Requirements [141.859]**

If at the end of the monitoring period a treatment technique trigger specified in 11.16(3) has been exceeded, the supplier must comply with treatment technique requirements as specified in this section 11.16(10). [141.859(a)][141.858(a)(5)][141.854(a)(3)][141.855(a)(3)][141.856(a)(3)][141.857(a)(3)][141.854(j)]

(a) **General Requirements for Assessments [141.859(b)]**

(i) To identify and correct sanitary defects, the supplier must ensure that Level 1 and Level 2 assessments are conducted. [141.859(b)(1)][141.2][141.859]

(ii) The supplier must ensure that the assessor evaluates at least all of the following elements: [141.859(b)(2)][141.2]

(A) Review and identification of inadequacies in sample sites. [141.859(b)(2)][141.2]

(B) Review and identification of inadequacies in sampling protocol. [141.859(b)(2)][141.2]

(C) Review and identification of inadequacies in sample processing. [141.859(b)(2)][141.2]
(D) Atypical events that could affect distributed water quality or indicate that distributed water quality was impaired. [141.859(b)(2)][141.2]

(E) Changes in distribution system maintenance and operation, including water storage, that could affect distributed water quality. [141.859(b)(2)][141.2]

(F) Source and treatment considerations that affect distributed water quality. [141.859(b)(2)][141.2]

(G) Existing water quality monitoring data. [141.859(b)(2)][141.2]

(iii) The supplier must ensure that the assessment is conducted consistent with any Department directives which modify specific assessment elements with respect to the size and type of the system and the size, type, and characteristics of the distribution system. [141.859(b)(2)][141.2]

(iv) If required by the Department, the supplier must comply with any expedited schedules or additional actions, which may include requiring the supplier to collect additional total coliform samples and chlorine residual disinfectant concentration samples. [141.859(b)(4)][141.2]

(v) The supplier or the Department may request a consultation with the other party at any time during the assessment or corrective action phase. The consultation may be used to determine appropriate actions to be taken or to discuss relevant information that may impact the supplier’s ability to comply with the requirements specified in 11.16(10). [141.859(d)]

(vi) The supplier must complete corrective action by correcting sanitary defects identified during Level 1 or Level 2 assessments. [141.859(c)]

(A) If the supplier has not completed corrective action for any sanitary defect before the submission of the assessment form, the supplier must complete the corrective action(s) on a Department-approved schedule. [141.859(c)]

(I) The supplier must notify the Department when each scheduled corrective action is completed. [141.859(c)][141.861(a)(3)]

(b) Level 1 Assessments [141.859(b)(3)]

(i) If any Level 1 treatment technique trigger is exceeded, the supplier must complete a Level 1 assessment as soon as practical. [141.859(b)(3)][141.859(b)(3)(i)]

(ii) No later than 30 days after learning of a Level 1 treatment technique trigger exceedance, the supplier must submit for review a completed Level 1 assessment form. [141.859(b)(3)(i)][141.861(a)(3)]

(A) In the completed form, the supplier must state whether sanitary defects were identified and if so, describe all of the following: [141.859(b)(3)(i)]

(I) Sanitary defects identified. [141.859(b)(3)(i)]

(II) The possible cause(s) for the Level 1 treatment technique trigger. [141.859(b)(3)(iii)]
(III) If sanitary defects are identified, corrective actions completed. [141.859(b)(3)(i)]

(IV) If sanitary defects are identified, a proposed schedule for any corrective actions not already completed. [141.859(b)(3)(i)]

(iii) Upon Department review of the Level 1 assessment form, if the Department determines that the assessment is not sufficient, the Department shall consult with the supplier. [141.859(b)(3)(ii)]

(A) If the Department requires revisions after consultation, the supplier must submit a revised assessment form to the Department on an agreed-upon date no later than 30 days from the date of the consultation. [141.859(b)(3)(ii)]

(iv) Upon completion and submission of the assessment form by the supplier, the Department shall determine if the supplier identified the possible cause(s) for the Level 1 treatment technique trigger. [141.859(b)(3)(iii)]

(A) If the supplier identified the possible cause(s) for the Level 1 treatment technique trigger, the Department shall determine if the supplier corrected the problem or included a Department-approved schedule for correcting the problem. [141.859(b)(3)(iii)]

(v) For systems operating under a disinfection waiver, the supplier must distribute Tier 2 public notice as specified in 11.33 if a Level 1 treatment technique trigger is exceeded.

(c) **Level 2 Assessments** [141.859(b)(4)]

(i) If any Level 2 treatment technique is exceeded, the supplier must ensure that a Level 2 assessment is conducted as soon as practical. [141.859(b)(4)(i)]

(A) The supplier must ensure that the Level 2 assessment is completed by the Department or Department-approved party. [141.859(b)(1)][141.859(b)(4)(i)]

(ii) No later than 30 days after learning of a Level 2 treatment technique trigger exceedance, the supplier must submit for review a completed Level 2 assessment form. [141.859(b)(4)(i)][141.861(a)(3)]

(A) The supplier must state whether sanitary defects were identified and if so, describe all of the following: [141.859(b)(4)(i)]

(I) Sanitary defects identified. [141.859(b)(4)(i)]

(II) The possible cause(s) for the Level 2 treatment technique trigger. [141.859(b)(4)(iv)]

(III) If sanitary defects are identified, corrective actions completed. [141.859(b)(4)(i)]

(IV) If sanitary defects are identified, a proposed schedule for any corrective actions not already completed. [141.859(b)(4)(i)]
Upon Department review of the Level 2 assessment form, if the Department determines that the completed assessment form is not to the satisfaction of the Department, the Department shall consult with the supplier. [141.859(b)(4)(iii)]

(A) If the Department requires revisions after consultation, the supplier must submit a revised assessment form to the Department on an agreed-upon schedule no later than 30 days from the date of the consultation. [141.859(b)(4)(iii)]

Upon completion and submission of the assessment form by the supplier, the Department shall determine if the supplier identified the possible cause(s) for the Level 2 treatment technique trigger. [141.859(b)(4)(iv)]

(A) If the supplier identified the possible cause(s) for the Level 2 treatment technique trigger, the Department shall determine if the supplier corrected the problem or included a Department-approved schedule for correcting the problem. [141.859(b)(4)(iv)]

11.16(11) Compliance Determination for the E. coli

To determine if the E. coli MCL has been violated, the supplier must include the results of all routine and repeat samples collected under 11.16(6) and 11.16(7) in the monitoring period. [141.63(d)][141.858(a)(5)]

11.16(12) Violations for the Revised Total Coliform Rule [141.860]

(a) The following constitute E. coli MCL violations: [141.860(a)]

(i) A repeat sample is E. coli-positive following a total coliform-positive routine sample. [141.860(a)(1)][141.853(a)(5)(i)(A)][141.853(a)(5)(i)(B)]

(ii) A repeat sample is total coliform-positive following an E. coli-positive routine sample. [141.860(a)(2)]

(iii) The supplier fails to collect all required repeat samples following an E. coli-positive routine sample. [141.860(a)(3)]

(iv) The supplier fails to analyze a total coliform-positive repeat sample for E. coli. [141.860(a)(4)]

(b) The following constitute treatment technique violations: [141.860(b)]

(i) A treatment technique trigger exceedance occurred and the supplier failed to conduct the required assessment or corrective action(s) as specified in 11.16(10). [141.860(b)(1)]

(ii) For seasonal systems, the supplier fails to complete Department-approved start-up procedures before supplying water to the public. [141.860(b)(2)]

11.16(13) Response to Violations of the Total Coliform Rule [141.861]

(a) In the event of an E. coli MCL violation, the supplier must: [141.861(a)][141.861(a)(1)]

(i) Notify the Department no later than the end of the day that the supplier learns of the violation. [141.861(a)(1)(i)]

(A) If the supplier learns of the violation after the Department is closed, the supplier must contact the Department’s after-hours phone line. [141.861(a)(1)(ii)]
(ii) Distribute Tier 1 public notice as specified in 11.33. [141.861(a)(1)(i)][141.63(c)]

(b) In the event of a treatment technique violation, the supplier must: [141.861(a)(2)]

(i) Notify the Department no later than the end of the next business day after the supplier learns of the violation. [141.861(a)(2)]

(ii) Distribute Tier 2 public notice as specified in 11.33. [141.861(a)(2)]
11.11 GROUNDWATER RULE

11.11(4) Triggered Source Water Monitoring

(a) Applicability for Triggered Source Water Monitoring [141.402(a)]

(i) The supplier must conduct triggered source water monitoring if: [141.402(a)(1)]

(A) The supplier does not provide at least 4-log treatment of viruses at the entry point for each groundwater source as specified in 11.11(3); and either [141.402(a)(1)(i)]

(B) The supplier is notified that a sample collected under 11.17(3)(b) is total coliform-positive and the sample was not invalidated under 11.17(5) until March 31, 2016; and-or [141.402(a)(1)(ii)]

(B) The supplier does not provide at least 4-log treatment of viruses at the entry point for each groundwater source as specified in 11.11(3).

(C) The supplier is notified that a sample collected under 11.16(6)(b-d) is total coliform-positive and the sample was not invalidated under 11.16(8) beginning April 1, 2016. [141.402(a)(1)(iii)]

(ii) The supplier is not required to conduct triggered source water monitoring if either of the following conditions are met:

(A) The Department determines and documents in writing that the routine total coliform-positive sample was caused by a distribution system deficiency and not by the source water.

(B) The supplier collected the routine total coliform-positive sample at a location that meets Department criteria for distribution system conditions that will cause total coliform-positive sample results and therefore the total coliform-positive sample result was not caused by the source water.

(I) No later than 30 days after receiving the total coliform-positive sample result, the supplier must submit documentation that demonstrates the sample location met Department criteria.

(b) Monitoring Requirements for Triggered Source Water Monitoring

(i) The supplier must collect triggered source water monitoring samples no later than 24 hours after being notified of a total coliform-positive sample collected under 11.17(3)(b) until March 31, 2016, or collected under 11.16(6)(b-d) beginning April 1, 2016. [141.402(a)(2)]

(A) If the supplier experiences circumstances beyond their control that prevent the supplier from collecting the source water samples, the Department may extend the 24-hour limit on a case-by-case basis.

(I) If the Department approves the extension, the Department shall specify how much time the supplier has to collect the source water samples.

(ii) The supplier must collect at least one triggered source water monitoring sample from each groundwater source that was in use at the time the total coliform-positive sample...
was collected. These samples must be collected at the well, before any treatment is applied.

(A) If the system's configuration does not allow for the supplier to sample at the well itself, the Department may:

(I) Approve the collection of triggered source water monitoring samples at a location that represents the water quality of that well or a location after treatment; and/or

(II) Require that sampling equipment be installed at the well itself.

(B) For systems with more than one groundwater source, the Department may approve collection of the triggered source water monitoring samples from a representative groundwater source(s).

(I) The representative source(s) must supply water to the section of the distribution system where the total coliform-positive sample was collected.

(II) If required by the Department, the supplier must submit, for approval, a triggered source water monitoring plan to use a representative source(s).

(a) The triggered source water monitoring plan must identify which source(s) the supplier intends to use for representative sampling of groundwater sources. For each representative source identified, the supplier must identify each total coliform sampling location that the source represents in the system's sampling plan specified in 11.17(3)(a) until March 31, 2016, or 11.16(4) beginning April 1, 2016. [141.402(a)(2)(ii)]

(C) For a groundwater system supplying less than or equal to (≤) 1,000 people that uses E. coli as a fecal indicator for triggered source water monitoring, the supplier may use a triggered source water monitoring sample to meet both the repeat sampling requirements specified in 11.17(3)(c) until March 31, 2016, or 11.16(7) beginning April 1, 2016, and the triggered source water monitoring requirements. [141.402(a)(2)(iii)][141.402(a)(2)(iv)]

(iii) The supplier must have all groundwater source samples analyzed for the presence of one of the following fecal indicators: E. coli, enterococci, or coliphage.

(c) Additional Triggered Source Water Monitoring Requirements for Consecutive and Wholesale Systems

(i) For consecutive systems, no later than 24 hours after being notified of the sample result, the supplier responsible for the consecutive system must notify all of their wholesalers of a total coliform-positive sample result collected under 11.17(3)(b) until March 31, 2016, or collected under 11.16(6)(b-d) beginning April 1, 2016 no later than 24 hours after being notified of the sample result. [141.402(a)(4)(i)]

(ii) For wholesale systems, the wholesaler must sample the groundwater source(s) as specified above in 11.11(4)(b) no later than 24 hours after being notified by the supplier responsible for the consecutive system of their total coliform-positive sample result collected under 11.17(3)(b) until March 31, 2016, or collected under 11.16(6)(b-d) beginning April 1, 2016. [141.402(a)(4)(ii)(A)]
11.13 GROUNDWATER RULE: DISINFECTION WAIVERS

11.13(4) Disinfection Waiver Withdrawal

(a) A disinfection waiver may be withdrawn immediately if:
   
   (i) The supplier fails to correct significant deficiencies as specified in 11.38(3).

   (ii) The supplier fails to comply with 11.17 Total Coliform Rule until March 31, 2016.

   (iii) Beginning April 1, 2016, the supplier fails to comply with 11.16 Revised Total Coliform Rule or a treatment technique trigger is exceeded under 11.16(3).

11.33 PUBLIC NOTIFICATION RULE

11.33(2) Tier 1 Public Notice Form, Manner, and Frequency of Notice [141.202]

(a) The supplier must distribute Tier 1 public notice for the following violations or situations specified in Table 11.33-II:

<table>
<thead>
<tr>
<th>Violation or Situation Description</th>
<th>As specified in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violation of the total coliform MCL where fecal coliforms or E. coli are present in the distribution system</td>
<td>11.17(9)(a)</td>
</tr>
<tr>
<td>Failure to test for fecal coliforms or E. coli following a total coliform-positive repeat sample</td>
<td>11.17(10)(a)</td>
</tr>
<tr>
<td>Violation of the E. coli MCL</td>
<td>11.16(12)(a)</td>
</tr>
</tbody>
</table>

1 Effective until March 31, 2016.
2 Effective beginning April 1, 2016.

11.33(3) Tier 2 Public Notice Form, Manner, and Frequency of Notice [141.203]

(b) For Tier 2 public notice the supplier must:

***

(ii) Repeat the distribution of the public notice every three months as long as the violation or situation persists.

   (A) Based on the circumstances, the Department may require a different repeat notice frequency.

   (I) In no case will the repeat public notice frequency be less than annual.
Until March 31, 2016, the Department shall not allow a less frequent repeat public notice for an MCL violation under 11.17, or a treatment technique violation under 11.8, or across-the-board reductions in the repeat public notice frequency for other ongoing violations requiring a Tier 2 repeat public notice. [141.203(b)(2)]

Beginning April 1, 2016, the Department shall not allow a less frequent repeat public notice for an MCL violation under 11.16. [141.203(b)(2)]

The Department shall not allow a less frequent repeat public notice for a treatment technique violation under 11.8, or across-the-board reductions in the repeat public notice frequency for other ongoing violations requiring a Tier 2 repeat public notice. [141.203(b)(2)]

If the Department allows repeat public notices to be distributed less frequently than once every three months, the decision must be documented in writing.

11.33(4) Tier 3 Public Notice Form, Manner, and Frequency of Notice [141.204]

(a) The supplier must distribute Tier 3 public notice for the following violations or situations specified in Table 11.33-IV:

<table>
<thead>
<tr>
<th>Violation or Situation Description</th>
<th>As specified in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring and reporting violations, except where a Tier 1 or Tier 2 public notice is required</td>
<td>.</td>
</tr>
<tr>
<td>Failure to comply with a testing procedure, except where a Tier 1 or Tier 2 public notice is required</td>
<td>.</td>
</tr>
<tr>
<td>Operation under a variance or an exemption</td>
<td>11.43</td>
</tr>
<tr>
<td>Availability of unregulated contaminant monitoring results</td>
<td>11.47</td>
</tr>
<tr>
<td>Exceedance of the fluoride secondary maximum contaminant level</td>
<td>11.19(7)</td>
</tr>
<tr>
<td>Revised total coliform rule recordkeeping violations</td>
<td>11.16</td>
</tr>
</tbody>
</table>

1 Beginning April 1, 2016.

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>MCL/MRDL/TT violations</th>
<th>Monitoring &amp; testing procedure violations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tier of public notice required</td>
<td>Citation</td>
</tr>
<tr>
<td>Violations of Colorado Primary Drinking Water Regulations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microbiological Contaminants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total coliform</td>
<td>2</td>
<td>11.17(9)(b)</td>
</tr>
<tr>
<td>Fecal coliform/E. coli</td>
<td>1</td>
<td>11.17(9)(a)</td>
</tr>
<tr>
<td>Contaminant</td>
<td>MCLG mg/L</td>
<td>MCL mg/L</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Microbiological Contaminants</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total coliform[^1][^2]</td>
<td>Zero</td>
<td>N/A</td>
</tr>
<tr>
<td>Fecal coliform/E. coli[^2]</td>
<td>Zero</td>
<td>Zero</td>
</tr>
<tr>
<td>Fecal indicators (GWR)</td>
<td>Zero</td>
<td>TT</td>
</tr>
</tbody>
</table>

[^1]: Total coliform (TT violations resulting from failure to conduct assessments or corrective actions, and violations resulting from failure to monitor or report): 2 11.16(12)(b)(i) 3 11.16(6)

[^2]: Seasonal system failure to follow Department-approved start-up procedures before supplying water to the public or failure to submit certification of completed start-up procedures: 2 11.16(12)(b)(ii) 3 11.16(5)(a)

[^3]: *E. coli* (MCL violation, monitoring violations, and reporting violations): 1 11.16(12)(a) 3 11.16(9)(a-b) 11.16(10)(b)(ii) 11.16(10)(c)(ii)

[^4]: *E. coli* (TT violations resulting from failure to conduct Level 2 assessments or corrective action): 2 11.16(12)(b)(i) N/A N/A

3 Effective until March 31, 2016.
5 Effective beginning April 1, 2016.
<table>
<thead>
<tr>
<th>Fecal indicators</th>
<th>Violation type</th>
<th>TT</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. coli (GWR)</td>
<td>None</td>
<td>TT</td>
</tr>
<tr>
<td>Enterococci (GWR)</td>
<td>None</td>
<td>TT</td>
</tr>
<tr>
<td>Coliphage (GWR)</td>
<td>None</td>
<td>TT</td>
</tr>
</tbody>
</table>

Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

Inadequately treated or inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that are found.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that are found.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that are found.

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We violated the standard for E. coli, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct a detailed assessment to identify problems and to correct any problems that are found.

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We violated the standard for E. coli, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct a detailed assessment to identify problems and to correct any problems that are found.
E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.

1 Until March 31, 2016.

2 If the supplier is collecting at least 40 samples per month, no more than 5.0 percent of the monthly samples may be positive for total coliforms. If the supplier is collecting fewer than 40 samples per month, no more than one sample per month may be positive for total coliforms.

3 Beginning April 1, 2016.

4 E. coli-positive repeat sample following a total coliform-positive routine sample, total coliform-positive repeat sample following an E. coli-positive routine sample, failure to collect all required repeat samples following an E. coli-positive routine sample, or failure to analyze a total-coliform positive repeat sample for E. coli.

11.34 CONSUMER CONFIDENCE REPORT (CCR) RULE

11.34(2) Content Requirements for the CCR

(a) General Content Requirements for the CCR

***

(iii) If the CCR includes any of the following terms, the supplier must include the applicable definition(s) in the CCR:

***

(F) Level 1 assessment means a study of the water system to identify possible problems and determine, if possible, why total coliform bacteria have been found in our water system. [141.153(c)(4)(i)]

(G) Level 2 assessment means a very detailed study of the water system to identify possible problems and determine, if possible, why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions. [141.153(c)(4)(ii)]

(d) Detected Contaminant Content Requirements for the CCR

***

(iii) For each regulated contaminant, the table(s) of detected contaminants must include all of the following:

***

(C) For contaminants subject to an MCL, except total coliforms and E. coli, the highest contaminant level used to determine compliance and the range of detected levels as follows:

***

(F) For total coliform until March 31, 2016: [141.153(d)(4)(vii)]
(I) If the supplier collects less than (<) 40 total coliform samples per month, the highest number of total coliform-positive samples in a month.

(II) If the supplier collects greater than or equal to (≥) 40 samples per month, the highest monthly percentage of total coliform-positive samples.

(G) For fecal coliform until March 31, 2016, the total number of fecal coliform-positive samples. [141.153(d)(4)(viii)]

(H) For E. coli, the total number of E. coli-positive samples. [141.153(d)(4)(x)]

(e) Additional Content Requirements for the CCR

***

(xiii) Beginning April 1, 2016, if the supplier is required to conduct a Level 1 assessment and/or a Level 2 assessment that is not triggered by an E. coli MCL violation, the supplier must include the following: [141.153(h)(7)][141.153(h)(7)(i)]

(A) The following language exactly as written: [141.153(h)(7)(i)]

(I) "Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments." [141.153(h)(7)(i)(A)]

(B) The following applicable language for a Level 1 assessment and/or a Level 2 assessment exactly as written, providing the specific information for the text in brackets: [141.153(h)(7)(i)]

(I) During the past year we were required to conduct [INSERT NUMBER OF LEVEL 1 ASSESSMENTS] Level 1 assessment(s). [INSERT NUMBER OF LEVEL 1 ASSESSMENTS] Level 1 assessment(s) were completed. In addition, we were required to take [INSERT NUMBER OF CORRECTIVE ACTIONS] corrective actions and we completed [INSERT NUMBER OF CORRECTIVE ACTIONS] of these actions. [141.153(h)(7)(i)(B)]

(II) During the past year [INSERT NUMBER OF LEVEL 2 ASSESSMENTS] Level 2 assessments were required to be completed for our water system. [INSERT NUMBER OF LEVEL 2 ASSESSMENTS] Level 2 assessments were completed. In addition, we were required to take [INSERT NUMBER OF CORRECTIVE ACTIONS] corrective actions and we completed [INSERT NUMBER OF CORRECTIVE ACTIONS] of these actions. [141.153(h)(7)(i)(C)]

(xiv) Beginning April 1, 2016, if the supplier is required to conduct a Level 2 assessment that is triggered by an E. coli MCL violation, the supplier must include the following language exactly as written, providing the specific information for the text in brackets: [141.153(h)(7)(ii)]
"E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We found E. coli bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments." [141.153(h)(ii)(A)]

We were required to complete a Level 2 assessment because we found E. coli in our water system. In addition, we were required to take [INSERT NUMBER OF CORRECTIVE ACTIONS] corrective actions and we completed [INSERT NUMBER OF CORRECTIVE ACTIONS] of these actions. [141.153(h)(ii)(B)]

Beginning April 1, 2016, if a treatment technique violation occurs under 11.16(12)(b)(i), the supplier must include one or both of the following statements, as applicable: [141.153(h)(ii)(i)(D)] [141.153(h)(ii)(i)(C)]

(A) We failed to conduct the required assessment. [141.153(h)(ii)(i)(D)(1)] [141.153(h)(ii)(i)(C)(1)]

(B) We failed to correct all identified sanitary defects that were found during the assessment. [141.153(h)(ii)(i)(D)(2)] [141.153(h)(ii)(i)(C)(2)]

Beginning April 1, 2016, for an E. coli MCL violation occurred, the supplier must include one or more of the following statements, as applicable: [141.153(h)(ii)(ii)]

(A) We had an E. coli-positive repeat sample following a total coliform-positive routine sample. [141.153(h)(ii)(ii)(A)]

(B) We had a total coliform-positive repeat sample following an E. coli-positive routine sample. [141.153(h)(ii)(ii)(B)]

(C) We failed to take all required repeat samples following an E. coli-positive routine sample. [141.153(h)(ii)(ii)(C)]

(D) We failed to test for E. coli when any repeat sample tests positive for total coliform. [141.153(h)(ii)(ii)(D)]

Beginning April 1, 2016, if an E. coli-positive sample has not violated the E. coli MCL, the supplier must include a statement that explains that although they have detected E. coli, they are not in violation of the E. coli MCL. [141.153(h)(ii)(iii)]

<table>
<thead>
<tr>
<th>Contaminant (units)</th>
<th>MCL (in mg/L unless otherwise noted)</th>
<th>To convert for CCR, multiply by MCL in CCR units</th>
<th>MCLG</th>
<th>Major sources in drinking water</th>
<th>Health effects language</th>
</tr>
</thead>
</table>

**Microbiological Contaminants**
<table>
<thead>
<tr>
<th>Total coliform bacteria¹</th>
<th>Systems that collect greater than or equal to (&gt; 40 samples/month) 5% of monthly samples are positive</th>
<th>N/A</th>
<th>(Systems that collect greater than or equal to (&gt; 40 samples/month) 5% of monthly samples are positive)</th>
<th>0</th>
<th>Naturally present in the environment.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Systems that collect less than (&lt; 40 samples/month) 1 positive monthly sample.</td>
<td>N/A</td>
<td>(Systems that collect less than (&lt; 40 samples/month) 1 positive monthly sample.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

<table>
<thead>
<tr>
<th>Total coliform bacteria²</th>
<th>TT</th>
<th>TT</th>
<th>N/A</th>
<th>Naturally present in the environment</th>
</tr>
</thead>
</table>

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution.

<table>
<thead>
<tr>
<th>Fecal Indicators including E. coli¹, enterococci or coliphage</th>
<th>TT</th>
<th>N/A</th>
<th>TT</th>
<th>N/A</th>
<th>Human and animal fecal waste</th>
</tr>
</thead>
</table>

Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.
Fecal coliforms and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

<table>
<thead>
<tr>
<th>Fecal coliform and <em>E. coli</em></th>
<th>0</th>
<th>N/A</th>
<th>0</th>
<th>0</th>
<th>Human and animal fecal waste.</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. coli&lt;sup&gt;2&lt;/sup&gt; positive repeat sample following a total coliform-positive routine sample, total coliform-positive repeat sample following an E. coli-positive routine sample, failure to collect all required repeat samples following an E. coli-positive routine sample, or failure to analyze a total-coliform positive repeat sample for E. coli.</td>
<td>E. coli&lt;sup&gt;2&lt;/sup&gt; positive repeat sample following a total coliform-positive routine sample, total coliform-positive repeat sample following an E. coli-positive routine sample, failure to collect all required repeat samples following an E. coli-positive routine sample, or failure to analyze a total-coliform positive repeat sample for E. coli.</td>
<td>0</td>
<td>E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immune systems.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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1. Effective until March 31, 2016.
2. Effective beginning April 1, 2016.