Pursuant to the authority vested in the Public Health and Health Planning Council and the Commissioner of Health by section 225 of the Public Health Law, Subpart 5-1 of Title 10 (Health) of the Official Compilation of Codes, Rules and Regulations of the State of New York is amended, to be effective upon publication of a Notice of Adoption in the New York State Register, to read as follows:

Subparagraph 5-1.43(c)(2)(i) is amended to read as follows:

(i) Any water system that maintains the range of State-specified values for the water quality parameters reflecting optimal corrosion control treatment during three consecutive years of monitoring in accordance with paragraph (1) of this subdivision may reduce the frequency with which it collects the number of distribution system samples for applicable water quality parameters specified in paragraph (1) of this subdivision from every six months to annually. This sampling shall begin during the calendar year immediately following the end of the monitoring period in which the third consecutive year of six-month monitoring occurs. Any water system that maintains the range of State-specified values for the water quality parameters reflecting optimal corrosion control treatment during three consecutive years of annual monitoring under this paragraph may reduce the frequency with which it collects the number of distribution system samples for applicable water quality parameters specified in paragraph (1) of this subdivision from annually to every three years. This sampling begins no later than the third calendar year following the end of the monitoring period in which the third consecutive year of monitoring occurs.
Subparagraph 5-1.47(b)(2)(ii)(b)(1) is amended to read as follows:

(1) contact the State for [information regarding] a list of community based organizations serving target populations, even if they are not located within the water system’s service area, and deliver education materials to all appropriate organizations along with an informational notice that encourages distribution to all the organization’s potentially affected customers or community water system’s users as determined in consultation with the State[;]. The water system must contact the State directly by phone or in person;
Repeal Table 6 of section 5-1.52 and replace with a new Table 6 to read as follows:

### Table 6. Microbiological Contaminants Maximum Contaminant Level (MCL)/Treatment Technique Trigger (TTT)/Treatment Technique Violation (TTV) Determination

<table>
<thead>
<tr>
<th>Contaminant/Trigger/Violation</th>
<th>Sample Location</th>
<th>MCL or TTT or TTV</th>
<th>Performance Standard</th>
<th>Determination of MCL/TTV and TTT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total coliform</strong>²</td>
<td>Distribution Sample Sites</td>
<td>TTT³</td>
<td>No positive sample⁴.⁵</td>
<td>A Level 1 TTT occurs at systems collecting 40 or more samples per month when more than 5.0 percent of the samples are total coliform positive.¹¹</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TTT³</td>
<td></td>
<td>A Level 1 TTT occurs at systems collecting less than 40 samples per month when two or more samples are total coliform positive.¹¹</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TTT³</td>
<td></td>
<td>A Level 1 TTT occurs at any system that fails to collect every required repeat sample after any single total coliform positive sample.¹¹</td>
</tr>
<tr>
<td><strong>Escherichia coli (E. Coli)</strong></td>
<td></td>
<td>TTT⁶</td>
<td></td>
<td>A Level 2 TTT occurs at any system that has a second Level 1 trigger within a rolling 12-month period, unless the State has determined a likely reason that the samples that caused the first Level 1 TTT were total coliform positive and has established that the system has corrected the problem.¹¹</td>
</tr>
<tr>
<td></td>
<td>MCL/TTT⁴.⁶</td>
<td>No positive sample⁵.⁷</td>
<td></td>
<td>An MCL violation and Level 2 TTT occurs when a total coliform sample is positive for E. coli and a repeat total coliform sample is positive.¹³</td>
</tr>
<tr>
<td></td>
<td>MCL/TTT⁴.⁶</td>
<td>No positive sample⁵.⁷</td>
<td></td>
<td>An MCL violation and Level 2 TTT occurs when a total coliform sample is positive for total coliform but negative for E. coli and a repeat total coliform sample is positive for E. coli.¹³</td>
</tr>
<tr>
<td></td>
<td>MCL/TTT⁴.⁶</td>
<td></td>
<td></td>
<td>An MCL violation and Level 2 TTT occurs when a total coliform sample is positive for total coliform but negative for E. coli and a repeat total coliform positive sample is not analyzed for E. coli.¹³</td>
</tr>
</tbody>
</table>
An MCL violation occurs when a system fails to collect every required repeat sample after any *E. coli* positive routine sample.

<table>
<thead>
<tr>
<th>Fecal indicator: <em>E. coli</em>, and/or enterococci, and/or coliphage&lt;sup&gt;8&lt;/sup&gt;</th>
<th>Untreated Water from a Ground Water Source</th>
<th>TTV</th>
<th>No fecal indicator in samples collected from raw source water from a ground water source.&lt;sup&gt;9,10&lt;/sup&gt;</th>
<th>A TTV occurs when a raw water sample is positive for the fecal indicator contaminant and system does not provide and document, through process compliance monitoring, 4-log virus treatment during peak flow at first customer. If repeat sampling of the raw water is directed by the State and all additional samples are negative for fecal indicator, there is no TTV.&lt;sup&gt;9,13&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other trigger or violation</td>
<td>TTV&lt;sup&gt;4&lt;/sup&gt;</td>
<td>A TTV occurs when a system exceeds a TTT and then fails to conduct the required assessment or corrective actions.&lt;sup&gt;12&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TTV&lt;sup&gt;4&lt;/sup&gt;</td>
<td>A TTV occurs when a seasonal system fails to complete a State-approved start-up procedure prior to serving water to the public.&lt;sup&gt;14&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>1</sup> All samples collected in accordance with Table 11 footnotes 1 and 2 and Table 11B of this section and samples collected in accordance with subdivision 5-1.51(g) of this Subpart shall be included in determining compliance with the MCL, TTT, and/or TTV unless any of the samples have been invalidated by the State. In accordance with 40 CFR 141.852(a)(2) systems need only determine the presence or absence of total coliforms and *E. coli*; a determination of density is not required.

<sup>2</sup> Total coliform method additions or modifications to approved methods

For total coliform (TC) samples collected from untreated surface water or GWUDI sources, the time from sample collection to initiation of analysis may not exceed 8 hours and the samples must be held below 10 degrees C during transit to the laboratory. For other TC samples, the time from collection to initiation of analysis may not exceed 30 hours. Systems are encouraged, but not required, to hold TC samples below 10 degrees C during transit.

- If the Total Coliform Fermentation Technique using standard methods 9221A or B is used, and if inverted tubes are used to detect gas production, the media should cover these tubes at least one half to two-thirds after the sample is added. Also, no requirement exists to run the completed phase on 10 percent of all TC-positive confirmed tubes. Additionally, lactose broth, as commercially available, may be used in lieu of lauryl tryptose broth, if the system conducts at least 25 parallel tests between this medium and lauryl tryptose broth using the water normally tested, and this comparison demonstrates that the false-positive rate and false-negative rate for TC, using lactose broth, is less than 10 percent.
- If Membrane Filter Technique Standard Methods 9222A, B, and optionally C are used, MI agar also may be used. Verification of colonies is not required.
- If the Standard Methods Presence-Absence (P-A) Coliform Test, 9221D is used, six-times formulation strength may be used if the medium is filter-sterilized rather than autoclaved.
- If the Total Coliform Membrane Filter Technique, Standard Methods 9222 A, B, C is used, MI agar also may be used. Verification of colonies is not required.
- For any TC testing it is strongly recommended that laboratories evaluate the false-positive and negative rates for the method(s) they use for monitoring TC. Laboratories are also encouraged to establish false-positive and false-negative rates within their own laboratory and sample matrix (drinking water or source water) with the intent that if the method they choose has an unacceptable false-positive or negative rate, another method can be used. It is
suggested that laboratories perform these studies on a minimum of 5% of all TC-positive samples, except for those methods where verification/confirmation is already required. Methods for establishing false-positive and negative-rates may be based on lactose fermentation, the rapid test for β-galactosidase and cytochrome oxidase, multi-test identification systems, or equivalent confirmation tests. False-positive and false-negative information is often available in published studies and/or from the manufacturer(s).

3 The system must complete a Level 1 assessment as soon as practical after exceeding a Level 1 TTT. The system must submit the completed Level 1 assessment form to the State within 30 days after the system learns that it has exceeded a trigger. Corrective actions shall be addressed in accordance with section 5-1.71(e) of this Subpart.

4 See Table 13 for public notification requirements

5 If any total coliform or *E. Coli* sample is positive, repeat samples must be collected in accordance with Table 11B of this section.

6 A Level 2 assessment must be completed within 30 days after the system learns that it has exceeded a trigger. Corrective actions shall be addressed in accordance with section 5-1.71(e) of this Subpart.

7 For notification purposes, an *E. coli* MCL violation in the distribution system is a public health hazard requiring Tier 1 notification. At a ground water system, Tier 1 notification is required after initial detection of *E. coli* or other fecal indicator in raw source water, if the system does not provide 4-log virus treatment and process compliance monitoring, even if not confirmed with additional sampling.

8 For any fecal indicator sample collected as described in section 5-1.52, Table 6, the time from sample collection to initiation of analysis may not exceed 30 hours. The system is encouraged but is not required to hold samples below 10 °C during transit.

9 If raw water source sample is fecal indicator positive, the water system, in consultation with the State, may collect an additional 5 samples within 24 hours at each source that tested fecal indicator positive. If none of the additional samples are fecal indicator positive, then there is no TTV. Note that Tier 1 notification must be made after the initial raw water fecal indicator positive sample, even if it is not confirmed with additional sampling.

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

11 Failure to analyze for *E. coli* following a total coliform positive routine sample is a monitoring violation.

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

13 Failure to notify the State following an *E. coli*-positive sample as required by 5-1.52 Table 13 and 5-1.77(a) of this Subpart in a timely manner is a reporting violation.

14 Failure to submit certification of completion of State approved start-up procedure by a seasonal system is a reporting violation.
Footnote 4 of section 5-1.52 Table 11A is amended to read as follows:

4 Samples must be taken and analyzed every day the system serves water to the public and the turbidity of the raw water exceeds [1.49] NTU. The samples count toward the weekly sampling requirement.

Section 5-1.80 is amended to read as follows:

The provisions of this section, and sections 5-1.81 through 5-1.83 of this Subpart apply to all public water systems, as defined in paragraph 5-1.1(cb) of this Subpart, supplied by a surface water source(s) or ground water source(s) directly influenced by surface water, provided the system serves 15 or more service connections or serves 25 or more persons. The requirements in this section for filtered systems apply to any system with a surface water or GWUDI source that is required to provide filtration, regardless of whether the system is currently operating a filtration system. All treatment must comply with the requirements of the Microbial Toolbox Components as described in 40 CFR 141.715 through 40 CFR 141.720. Any unfiltered systems that are in compliance with the filtration avoidance criteria in section 5-1.30(c) of this Subpart, are subject to the requirements in sections 5-1.80 through 5-1.83 of this Subpart pertaining to unfiltered systems. Wholesale system compliance with sections 5-1.81 through 5-1.83 of this Subpart is based on the population of the largest system in the combined distribution system. The above systems shall comply with the following requirements:
Subparagraph 5-1.81(a)(1)(iii)(c) is repealed and replaced with the following:

(c) shall sample their source water for Cryptosporidium at least twice per month for 12 months, or at least monthly for 24 months, if, based on monitoring conducted under this subparagraph, they meet one of the following criteria:

(1) For systems using lake/reservoir sources, the annual mean E. coli concentration is greater than 10 E. coli/100 mL;

(2) For systems using flowing stream sources, the annual mean E. coli concentration is greater than 50 E. coli/100 mL; or

(3) The system does not conduct E. Coli monitoring once every two weeks for 12 months.

(4) Systems using ground water under the direct influence of surface water (GWUDI) must comply with the requirements of subclause (1) through (3) of this clause based on the E. coli level that applies to the nearest surface water body. If no surface water body is nearby, the system must comply based on the requirements that apply to systems using lake/reservoir sources.

(5) the State may approve an alternative to the E. coli concentration specified in subclause (1) and subclause (2) of this clause to trigger Cryptosporidium monitoring. This approval by the State will be provided to the system in writing and will include the basis for the State’s determination that the alternative trigger concentration will provide a more accurate identification of whether a system will exceed the Bin 1 Cryptosporidium level specified in section 5-1.83(a)(2) of this Subpart.
Subdivision 5-1.92(a) is amended to read as follows:

(a) The supplier of water may request, and the department may grant, one or more exemptions from any treatment technique requirement, except for filtration and disinfection of a surface water source in accordance with 5-1.30(b), (c) and (g) of this Subpart, and/or any MCL, except for *Escherichia coli* (*E. coli*). Exemptions may be granted to any public water system based on a finding that:

* * *

(4) The supplier of water has not been granted a variance under section 5-1.90 of this Subpart.
NOTICE OF CONSENSUS RULEMAKING

Statutory Authority:

The Public Health and Health Planning Council, subject to the approval of the Commissioner of Health, is authorized by section 225 of the Public Health Law to establish, and from time to time, amend and repeal sanitary regulations, known as the sanitary code of the State of New York.

Basis:

The proposed regulatory amendments are non-substantive and non-controversial. The amendment of 10 NYCRR Subpart 5-1 "Public Water Systems" of the State Sanitary code will correct typographic errors, update references and make minor technical revisions to conform the regulation with federal requirements to obtain primacy for the implementation and enforcement of federal drinking water regulations from U.S. Environmental Protection Agency.
JOB IMPACT STATEMENT

The Department of Health has determined that the proposed revisions will not have substantial adverse impact on jobs or employment opportunities. These correct mainly typographic errors and do not change the requirements water systems need to follow to implement the regulation.