



**NEW YORK CITY
DEPARTMENT OF HEALTH AND MENTAL HYGIENE**

Notice of Adoption of Amendments to the Rules of the City of New York

In compliance with section 1043(b) of the New York City Charter (“Charter”) and pursuant to the authority granted to the New York City Board of Health (“Board of Health”) by section 558 of the Charter, a notice of public hearing and opportunity to comment on proposed amendments to Chapter 8 (*Cooling Towers*) of Title 24 of the Rules of the City of New York (“Chapter 8” of the “RCNY”) was published in the City Record on February 16, 2026 and a public hearing was held on March 16, 2026. Five members of the public provided testimony at the hearing, and 200 written comments were submitted on the proposed rule.

At the hearing, three of the testimonies were in support of the proposed rule, while two of the speakers were generally supportive of public health measures to reduce the risk of Legionnaires’ disease infections but expressed concerns about the added costs and time that will be required due to the increase in the frequency of cooling tower sample testing.

Most of the written comments (170) were letters of support for the proposed amendments signed by Harlem community members collected through the efforts of the Harlem Legionnaires Task Force. Of the remaining 30 submitted comments, many expressed concerns about the potential financial and logistical burdens the rule might place on property owners and managers. Some questioned the effectiveness of increasing the frequency of monitoring and testing, though several comments on this issue failed to note that monthly testing of cooling towers is only required during times of year when the towers are in use.

Many of the comments asked for clarification of various aspects of the proposed rules. The Department will issue written guidance setting forth additional clarification and will hold Q&A sessions prior to the implementation of the rule. The Department has made the following changes to the amendments based on comments received from the public:

- Section 8-05(f)(2): In response to concerns that dip slides would no longer be accepted, the Department clarified that the requirement that a bacteriological indicator must be analyzed by a laboratory accredited by the New York State Environmental Laboratory Approval Program (ELAP) applies only to bacteriological indicators performed by HPC (heterotrophic plate count). Dip slides, which are processed and interpreted outside of laboratories, are not affected by the rule amendment.
- Section 8-05(f)(3): The Department adjusted language from “no less frequently than” to “at least as frequently as” to match the language of LL159, and deleted the word “calendar” as a descriptor of “month,” to clarify the primacy of pacing sampling every 31 days and to reduce the likelihood of either oversampling or allowing too long a period to elapse between sampling.
- Section 8-05, Table 8-2: The Department removed the reference to “manual” monitoring and added language regarding bacteriological indicators to improve clarity regarding the monitoring and testing requirements applicable to particular scenarios and conditions.
- Section 8-09: The Department adjusted the description of the penalty for violation of 24 RCNY §8-06(b)(2) in the table to align with changes to the text of 24 RCNY §8-06(b)(2).

Statement of Basis and Purpose

Section 17-194.1 of the NYC Administrative Code governs cooling tower operation and maintenance, and the Department’s rules promulgated pursuant to Section 17-194.1 are located in Chapter 8 (§§ 8-01 to 8-09) of Title 24 of the RCNY.

The Department is amending the penalty schedule set forth in Section 8-09 to conform to changes made pursuant to Local Law 76 of 2019 (“LL76”), which amended Administrative Code section 17-194.1. LL76 requires owners of buildings with cooling towers to report the date on which *Legionella* sample testing was conducted to the Department within 5 days of conducting such testing. Section 17-194.1 also requires that owners provide inspection and testing records to the Department immediately upon request.

The Department also amends Chapter 8 to conform it to changes made pursuant to Local Law 159 of 2025 (“LL159”). LL 159 requires an increase in the frequency of *Legionella* culture testing inspections of cooling towers to as frequently as every month during periods when such towers are in use.

The Department’s amendments also conform the rule to New York State *Legionella* protection regulations, which require all *Legionella* culture analyses to be performed by a laboratory certified by the New York State Environmental Laboratory Accreditation Program (ELAP) (10 NYCRR Subpart 4-1.5). The amendments also clarify requirements for record retention and production.

Specifically, the amendments:

- Amend Sections 8-02, 8-04, and 8-05 to remove references to “immediate” and “immediately” and to add specific time periods where none were included, to improve clarity.
- Amend Section 8-02 to revise the definition of ANSI/ASHRAE 188 to remove direct reference to the sections and publication year, and instead reference “the latest edition” to allow future versions to be considered without requiring a new rulemaking each time.
- Amend Section 8-02 to update the definitions of “cooling tower,” “cooling tower system;” “maintenance program and plan,” “qualified person,” “system shutdown” and “system startup;” and to add definitions of “cooling tower system components,” “commissioning,” “decommissioning,” “installation,” “operation” and “operation period” for clarification purposes.
- Amend Section 8-03 to require the preparer of the maintenance program and plan (MPP) for a cooling tower to annually certify the MPP, and to create a valve schedule as part of the MPP.
- Amend Sections 8-03, 8-04, 8-05 and 8-06 to reference the amended Section 8-07(a) for record retention and production requirements.
- Amend Section 8-05 to require the inclusion of operating configurations that result in low flow or no flow to a cooling tower risk management assessment.
- Amend Section 8-05 to require that fill water for the commissioning or startup of a cooling tower be obtained from a municipal water supply.
- Amend Section 8-05 to require that a *Legionella* sample test be conducted by a laboratory certified by the New York State Environmental Laboratory Accreditation Program (“ELAP”) and to clarify the recordkeeping requirements relating to the *Legionella* sample test.
- Amend section 8-05 to require that *Legionella* culture testing be conducted at least every month during cooling tower system operation.
- Amend the corrective actions schedule set forth in Section 8-05 to reflect a single requirement that any results greater than or equal to 10,000 CFU/ml trigger a requirement for monitoring of the water treatment program.
- Amend Section 8-06 to add additional requirements for cooling tower commissioning, startup and shutdown processes.
- Amend Section 8-07(a) to clarify requirements for record retention and require production of records to the Department at the time of inspection.
- Amend Section 8-08 to conform to standardization of modification provisions recently implemented in the Health Code.
- Amend the penalty schedule set forth in Section 8-09 to increase the existing monetary penalties for failure to comply with any of the requirements presented in Chapter 8 and to add new monetary penalties for improper water treatment when a cooling tower is operational, failure to report the

date of a *Legionella* sample test, failure to report such a test date within 5 days, and failure to report cooling tower operation, startup and shutdown dates.

Statutory Authority

These amendments are made pursuant to sections 555, 556 and 1043 of the Charter and section 17-194.1 of the Administrative Code. Section 555(b)(2) of the Charter authorizes the Commissioner to impose any penalty prescribed for noncompliance with any law enforceable by the Department under the Charter, or for noncompliance with any related lawful notice, order or regulation pursuant thereto. Section 556 of the Charter authorizes the Department to regulate all matters pertaining to the health of the City. Section 1043 of the Charter grants the Department rulemaking authority. Section 17-194.1 of the Administrative Code requires owners of buildings with cooling towers to maintain, clean and disinfect such cooling towers and authorizes the Department to adopt rules to implement these requirements.

The proposed rules are as follows:

Underlined text is new.

Deleted text is in [brackets].

Ellipses (****) indicate unamended text.

“Shall” and “must” indicate mandatory actions in the Department’s rules and have been used and are intended to be used interchangeably, unless otherwise specified or unless the context clearly indicates otherwise.

Section 1. The definition of “Idling” set forth in section 8-02 of chapter 8 of Title 24 of the Rules of the City of New York is REPEALED.

§ 2. The definition of “Immediate or immediately” set forth in section 8-02 of chapter 8 of Title 24 of the Rules of the City of New York is REPEALED.

§ 3. The definitions of “ANSI/ASHRAE,” “cooling tower,” “cooling tower system,” “maintenance program and plan,” “qualified person,” “system shutdown,” and “system startup” set forth in section 8-02 of chapter 8 of Title 24 of the Rules of the City of New York are amended to read as follows:

"ANSI/ASHRAE [188-2015] 188" means [sections 5, 6 and 7.2] the latest edition of ANSI/ASHRAE Standard [188-2015] 188 Legionellosis: Risk Management for Building Water Systems, a publication issued by the American National Standards Institute (ANSI)/American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE)[, final approval date of June 26, 2015, at pages 4 – 8].

“Cooling tower” (CT or “Cooling tower equipment”) means [a cooling tower, evaporative condenser or fluid cooler that is part of a recirculated water system incorporated into a building’s cooling, industrial process, refrigeration, or energy production system] any device using recirculating water where such water is exposed to air for evaporative cooling, radiant cooling, or air cleaning or scrubbing.

“Cooling tower system” (“CTS” or “system”) means [one] a single or [more] multiple cooling towers, which may share some or all superstructure components, and all of the [recirculating water system components,] process instruments and appurtenances through which water flows or with which water has contact [key parts consisting of biocide, anti-scaling and anti-corrosion chemical applicators, valves, pumps, the tower superstructure, condensers and heat exchangers and other related components. The cooling tower system may comprise multiple cooling towers that share some or all superstructure components.], including all cooling tower system components.

"Maintenance program and plan" or "plan" means a written set of measures describing monitoring, cleaning, disinfection and all other activities for the prevention and control of *Legionella* growth in a cooling tower system, that is in accordance with section 5, 6 and 7.2 of ANSI/ASHRAE [188-2015] 188 and with the manufacturer's instructions, and is developed by a qualified person.

"Qualified person" means a New York State licensed and registered professional engineer; a certified industrial hygienist; a certified water technologist with training and experience developing management plans and performing inspections in accordance with current standard industry protocols including, but not limited to ANSI/ASHRAE [188-2015] 188; or an environmental consultant who has at least two (2) years of operational experience in water management planning and operation.

"System shutdown" (or "shutdown") means [shutting off or closing and draining the cooling tower system when cooling is no longer needed] the process of suspending the operation of a given cooling tower system by fully draining any water from all components of the cooling tower system in accordance with requirements of this Chapter.

"System start[-]up" (or "startup") means [commissioning a new system, or putting the cooling tower system into operation after system shutdown or idling] the process of putting one or more cooling tower(s) or component(s) of a cooling tower system into operation in accordance with requirements of this Chapter.

§ 4. Section 8-02 of chapter 8 of Title 24 of the Rules of the City of New York is amended to add definitions of the terms "cooling tower system components," "commissioning," "decommissioning," "installation," "operation," and "operation period" to read as follows:

"Cooling tower system components" ("CTS components" or "components") means all of the individual devices, parts, or units in the cooling tower system that interact with the recirculating water that flows to the cooling tower. Any mechanical part or equipment that has a wet surface during water circulation is a component. These include, but are not limited to all cooling tower equipment, chillers, water-cooled condensers, heat exchangers and other heat transfer devices, circulation pumps, treatment devices, chemical controllers, metering pumps, filtration devices, process control measurement location(s) and related equipment, and all associated piping and fittings.

"Commissioning" means performing the system startup for a newly installed cooling tower system or cooling tower equipment or for the first time. This may include filling the equipment or system with water and recirculating the water.

"Decommissioning" means the removal or permanent discontinuation of use of a cooling tower system or cooling tower equipment. Decommissioning includes removal of all water, permanent disconnection of water supply to the cooling tower system, and permanent disconnection of the power supply for the cooling tower equipment.

"Installation" means the physical connection of cooling tower equipment to a water supply and a power supply by piping and plumbing work.

"Operation" (or "operating") means the condition that exists after a cooling tower or cooling tower system has been filled or partially filled with water. Cooling towers with non-continuous use,

including seasonal or on demand use, are in operation, independent of whether the system is actively providing thermal/heat exchange as long as water is present in the cooling tower system.

“Operation period” means the time period for operation of a cooling tower system based on its planned use. Operation periods must be reported at time of registration, in a manner specified by the Department, which shall include, at a minimum, annual (year-round), seasonal (summer operation), seasonal (winter operation), or on demand (a cooling tower does not run continuously but is put into operation only when needed).

§ 5. The introductory paragraph of section 8-03 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

For each cooling tower system the owner must have a maintenance program and plan prepared by a qualified person in accordance with [sections 5, 6 and 7.2 of] professional or industry bodies with expertise in cooling tower regulations and guidance, such as ANSI/ASHRAE [188-2015] 188, the manufacturer’s instructions, and the requirements of this Chapter. [The plan must be kept current and amended by a responsible or qualified person as needed to reflect any changes in the management and maintenance team, system design, operation or system control requirements for the cooling tower system.] The plan must be [kept in the building where a cooling tower or cooling tower system is located, or in an adjacent building or structure on the same campus, complex, lot, mall or on-site central engineering division, and must be made available to the Department for inspection upon and at the time of a request] retained and produced in accordance with subdivision (a) of section 8-07. At a minimum, the plan must include and describe:

§ 6. Subdivision (a) of section 8-03 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

(a) *Management and maintenance team.* Identification, including names and contact information (mail and email addresses and telephone numbers) and description of the function of each person on the cooling tower system management and maintenance team in a manner specified by the Department, including:

§ 7. Paragraph (2) of subdivision (c) of section 8-03 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

(2) Operating configurations and conditions that may [occur after periods of extended inactivity lasting more than three (3) days, including idling or] result in low [circulation while not being fully drained] flow or no flow in any part of the cooling tower system.

§ 8. Paragraph (2) of subdivision (d) of section 8-03 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

(2) Specific, detailed seasonal and temporary shutdown and [start-up] startup procedures.

§ 9. Subdivision (d) of section 8-03 of chapter 8 of Title 24 of the Rules of the City of New York is amended to add a paragraph (4) to read as follows:

(4) A valve schedule for each operating configuration and condition including, at a minimum, any times when cooling tower component(s) are brought online.

§ 10. Section 8-03 of chapter 8 of Title 24 of the Rules of the City of New York is amended to add a subdivision (e) to read as follows:

(e) *Plan preparer certification.* The maintenance program and plan must be annually certified by a qualified person, in a manner specified by the Department, who must attest that the program and plan (1) meets the requirements of this Chapter, §28-317.3 and §17-194.1 of the New York City Administrative Code, and all applicable requirements of the New York City Health Code and (2) reflects any changes made to the management and maintenance team, system design, operation or system control requirements for the cooling tower system.

§ 11. Section 8-04 of chapter 8 of Title 24 of the Rules of the City of New York is amended to add an introductory paragraph to read as follows:

All records required pursuant to this section must be retained and produced in accordance with subdivision (a) of section 8-07.

§ 12. Paragraph (5) of subdivision (a) of section 8-04 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

(5) Any system anomalies or problems must be recorded on the checklist and reported to the management and maintenance team for [immediate] corrective action to be completed within 24 hours.

§ 13. Paragraph (4) of subdivision (f) of section 8-04 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

(4) A Legionella culture sample must be collected in accordance with §8-05(f)(3) within 3 to [45] 31 days after the hyperhalogenation required by paragraph (1) of this subdivision. Sample results must be interpreted, and corrective actions implemented, in accordance with the result levels indicated in Table 8-1 of this Chapter.

§ 14. Paragraph (5) of subdivision (f) of section 8-04 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

(5) An owner must submit a declaration of summertime hyperhalogenation within 30 days of completion of the hyperhalogenation required by paragraph (1) of this subdivision through the NYC Cooling Tower Registration Portal. The declaration must include the cooling tower system ID; the hyperhalogenation protocol performed, including the name and quantity of biocides and chemicals applied; dose and contact time; effective pH range of biocides; pH and halogen residual monitoring results during hyperhalogenation; service date and name and qualifications of the person who applied the biocide. [The declaration must be kept with required cooling tower records in accordance with §8-07(a).]

§ 15. The introductory paragraph of section 8-05 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

Prior to changing an existing chemical treatment system or introducing a new chemical treatment agent, cooling tower design, installation, operation, and maintenance must be evaluated by a qualified person to ensure compatibility between the chemicals and the cooling tower system's materials, and to minimize microbial growth and the release of aerosols. The evaluation must describe the optimum level of chemicals to achieve the desired result in a manner which can be used as a system performance

measure. All records required pursuant to this section must be retained and produced in accordance with subdivision (a) of section 8-07.

§ 16. Subdivision (b) of section 8-05 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

(b) *Recirculating system.* A cooling tower system must [be operated and programmed to] continually recirculate the water when it is in operation. Any period of no circulation lasting three (3) days or more in any part of the cooling tower system requires that applicable risk management procedures described in [irrespective of the building's cooling demand of the system, unless]the maintenance program and plan [specifies in detail how the intended water treatment schedule will be]be carried out and documented to achieve[, and how] effective biofilm and microorganism control[will be achieved when the whole or a part of the system is idle during the scheduled chemical injection].

§ 17. Subdivision (e) of section 8-05 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

(e) *[Makeup] Fill/makeup water.* Fill water for commissioning or startup of a cooling tower system must be obtained from a municipal water supply. For makeup water, [Owners] owners may use municipal water or [using] water derived from a [rainwater capture or recycling water systems as a source of cooling tower system makeup water] nonpotable water source. If water from a nonpotable water source is used, the owner must [install a drift eliminator and test and treat water in accordance with a specific] submit an alternative water source [water]plan. This plan is a separate document in addition to the maintenance program and plan required by §8-03 of this Chapter and must be approved by the Department. The alternative water source plan must identify each nonpotable water source and include provisions for adequate design of the treatment and control components and on-going evaluation to eliminate any risk to public health.

§ 18. Subparagraph (B) of paragraph (1) of subdivision (f) of section 8-05 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

(B) *Continuous, automated and/or remote measurements.* When continuous, automated and/or remote measurements and recordings are used, the management program and plan must show how effective measurements of system process [control] controls are being monitored. [Automated measurements must be properly recorded and results made immediately available to responsible and qualified persons and to Department inspectors when requested.]

§ 19. Paragraph (2) of subdivision (f) of section 8-05 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

(2) *Minimum weekly biological process control indicators.* A bacteriological indicator to estimate microbial content of recirculating water must be collected and interpreted in accordance with Table 8-2 at least once each week while the cooling tower system is operating. Indicators must be taken at times and from water sampling points, as detailed in the maintenance program and plan, that will be representative of water microbial content. Indicators may be taken at any time from constant chemical treatment systems. Indicators from systems that use intermittent biocide applications must be taken before biocide application and reflect normal cooling tower operating conditions. If indicator is performed by HPC, it

must be analyzed by a laboratory accredited by the New York State Environmental Laboratory Approval Program (ELAP).

§ 20. Paragraph (3) of subdivision (f) of section 8-05 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

(3) *Legionella* samples. *Legionella* culture testing must be conducted [no less] at least as frequently [than] as every [90 days] month, with no more than 31 days between sample events, during cooling tower system operation. A *Legionella* sample must be analyzed by a [U.S. Centers for Disease Control and Prevention ELITE Program certified laboratory, by the New York State Department of Health Wadsworth Center or other] laboratory [approved by the Department] accredited by the New York State Environmental Laboratory Approval Program (ELAP). The results of such a test must be recorded in a final analytical report from the laboratory that includes a copy of the signed chain of custody and the laboratory's ELAP certification number. Test results of all *Legionella* species at or above the magnitude of level 4 as indicated in Table 8-1 must be reported to the Department within 24 hours of receiving the test results. Test results of all *Legionella* species must be evaluated by the qualified persons and the management and maintenance team to ensure *Legionella* control. Additional emergency *Legionella* sampling must be conducted if any of the following occur:

- (A) Power failure of sufficient duration to allow for growth of bacteria;
- (B) Loss of biocide treatment sufficient to allow for growth of bacteria;
- (C) Failure of conductivity controls to maintain proper cycles of concentration;
- (D) At the request of the Department upon a determination that one or more cases of legionellosis is or may be associated with the cooling tower, based on epidemiological data or laboratory testing[.];
- [(E) Any time two consecutive bacteriological indicator sample results are above Level 4 as indicated in Table 8-2;] or
- [(F)]E Any other conditions specified by the Department.

§ 21. Paragraph (5) of subdivision (f) of section 8-05 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

(5) *Water quality corrective actions.* The maintenance program and plan must identify the procedures, responsible parties, required response time(s) and notification protocol for corrective actions and must include, at a minimum, corrective actions that must be implemented according to the result levels in Table 8-1 and Table 8-2. For hyperhalogenating, as indicated in Table 8-1, dose the cooling tower water system with 5 to 10 ppm Free Halogen Residual for at least 1 hour. The hyperhalogenation must be carried out with the appropriate pH level for effective disinfection. The disinfectant and pH level must be documented in the corrective action procedures.

§ 22. Table 8-1 set forth in section 8-05 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

Table 8-1. Corrective actions required for *Legionella* culture results.

Level	<i>Legionella</i> Culture Result ^[1]	Process Triggered by <i>Legionella</i> Culture Results
1	<10 CFU/ml	[Maintain] <u>If not detected, maintain</u> water chemistry and biocide levels. <u>If <i>Legionella</i> is detected but < 10 CFU/ml, review water treatment program and adjust water chemistry and biocide levels, if needed.</u>
2	≥10 CFU/ml to <100 CFU/ml	Initiate [immediate] disinfection by increasing biocide concentration or using a different biocide within 24 hours; review treatment program; and retest water within 3 - 7 days. Subsequent test results must be interpreted in accordance with this Table until level 1 is reached.
3	≥ 100 CFU/ml to <1,000 CFU/ml	Initiate [immediate] disinfection by increasing biocide concentration or using a different biocide [()within 24 hours()], reviewing treatment program, performing visual inspection to evaluate need to perform cleaning and further disinfection. Retest water within 3 - 7 days. Subsequent test results must be interpreted in accordance with this Table until level 1 is reached.
4	≥ 1,000 CFU/ml	Initiate [immediate] disinfection by increasing biocides within 24 hours. Within 48 hours perform full remediation of the tower by hyperhalogenating ^[2] , draining, cleaning, and flushing. Review treatment program, retest water within 3 - 7 days. Subsequent test results must be interpreted in accordance with this Table until level 1 is reached. For <i>Legionella</i> results at this level, notify <u>the Department</u> within 24 hours of receiving test [result] <u>results</u> . ^[3]

[1. Performed by a CDC ELITE Laboratory, or NYSDOH Wadsworth Laboratory, or another laboratory approved by the Department.

Combine all species of *Legionella* detected.

2. At a minimum, dose the cooling water system with 5 to 10 ppm Free Halogen Residual for at least 1 hour; pH 7.0 to 7.6.

3. In a manner as specified on the Department's website.]

§ 23. Table 8-2 set forth in section 8-05 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

Table 8-2. Corrective actions required for bacteriological indicator results.

Level	Heterotrophic Plate Count ^[1] and Dip Slide Result	Process Triggered by Test Results
1	<10,000 CFU/ml	Maintain water chemistry and biocide levels.
2	≥10,000 CFU/ml [to <100,000 CFU/ml]	<p>[Initiate immediate disinfection by increasing biocide concentration or using a different biocide within 24 hours,] <u>The management and maintenance team must initiate monitoring of disinfectant residual three times per day until water treatment achieves target biocide residuals for a minimum of 24 hours. If this is not achieved within three days, collect a <i>Legionella</i> sample and continue to adjust water treatment program.</u></p> <p><u>Conduct a quality control review of the water treatment program and make modifications to dosing, chemicals and biocides, bleed off or other process controls to achieve bacteriological control. [retest] Retest water [within 3 - 7 days] for bacteriological indicators 48 hours after achieving target biocide residual.</u> Subsequent test results must be interpreted in accordance with this Table until level 1 is reached.</p>
[3]	[≥100,000 CFU/ml to <1,000,000 CFU/ml]	[Initiate immediate disinfection by increasing biocide concentration or using a different biocide within 24 hours, reviewing treatment program, performing visual inspection to evaluate need to perform cleaning and further disinfection. Retest water within 3 - 7 days. Subsequent test results must be interpreted in accordance with this Table until level 1 is reached.]
[4]	[≥1,000,000 CFU/ml]	[Initiate immediate disinfection by increasing biocides within 24 hours. Within 48 hours perform remediation of the tower by hyperhalogenating ² , cleaning, and flushing. Review treatment program, retest water within 3 - 7 days. Subsequent test results must be interpreted in accordance with this Table until level 1 is reached.]

- [1. Performed by an appropriately accredited Laboratory (e.g. NELAP, AALA
- 2. At a minimum, dose the cooling water system with 5 to 10 ppm Free Halogen Residual for at least 1 hour; pH 7.0 to 7.6.]

§ 24. The title of Section 8-06 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

§8-06 System shutdown and [start-up] startup; commissioning and decommissioning cooling towers.

§ 25. Section 8-06 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

All records required pursuant to this section must be retained and produced in accordance with subdivision (a) of section 8-07.

(a) *Full system shutdown.* Procedures to shut down a cooling tower system must be supervised by a qualified person and conform to the manufacturers' recommendations. When shut down, the cooling tower system must be completely drained of all water from anywhere in the cooling tower system and be protected from offline contamination. The owner of a cooling tower must notify the Department electronically, in a manner specified by the Department, within 5 days of any cooling tower system shutdown.

(b) [*Full system*] *System startup.* A startup includes a systematic and progressive process of putting any part of a cooling tower system into operation. At a minimum, before cooling tower system [start-up] startup, an owner must clean and disinfect a cooling tower that has been shut down [or idle for more than five days, in accordance with §17-194.1 of the Administrative Code. Cleaning and disinfection must be done no later than] within the 15 days before [the first seasonal use of such tower] operation. Cleaning and disinfection are also required prior to operation after any period of no circulation lasting 5 days or more in any part of the cooling tower system in accordance with §17-194.1 of the Administrative Code. The owner of a cooling tower must notify the Department electronically, in a manner specified by the Department, within 5 days of any cooling tower system startup. The maintenance program and plan must include detailed [seasonal and idle period] startup procedures that are supervised by a qualified person and [that] include, at a minimum:

(1) [Either fully] Identification of the detergents, dispersants, and compatible biocides to be used and the circulation times for the [clean and disinfect, drain to waste and disinfect, or sufficiently hyperhalogenate the recirculated water before startup] cleaning and disinfection; and

(2) [Before the startup of a cooling tower system after an extended shutdown of five or more days,] Procedures to collect samples for *Legionella* culture within 3 to 14 days of startup and take actions required by Table 8-1 when results are received; and

(3) [Before seasonal startup of a system that has been fully shut down, perform] Performance of a pre-startup inspection by a qualified person[.]; and

(4) Once there is water in any part of the cooling tower system, the system is in operation. Procedures to recirculate the water in the cooling tower in accordance with §8-05(b) once startup cleaning and disinfection are done; and

(5) Established adjustments to water treatment program to accommodate added system volume and cooling load if additional cooling tower component(s) are brought online or operating configuration is changed during operation.

(c) [*Commissioning*] *Installation and commissioning of new cooling towers.* Installation occurs when a physical connection of cooling tower equipment is made to a water supply and power supply. Newly installed cooling tower systems must be [cleaned and disinfected prior to operation according to this section and the maintenance program and plan, and be] registered with the Department of Buildings cooling tower registration system in accordance with § 28-317.3 of the Administrative Code. Newly commissioned cooling towers must be cleaned and disinfected prior to operation according to this section and the maintenance program and plan. Once cleaning and disinfection are complete, the cooling tower system is in operation and must comply with the requirements of this Chapter, including for process control measures and water treatment.

(d) *Removal or permanently discontinuing use and decommissioning of cooling towers.* The owner of a cooling tower must notify the Department of Buildings of decommissioning electronically within 30 days

after removing or permanently discontinuing use of a cooling tower in accordance with § 28-317.3.1 of the Administrative Code. Such notice must include a statement that the cooling tower has been drained and sanitized in accordance with this section. Decommissioning includes removal of all water, permanent disconnection of water supply to the cooling tower system, and permanent disconnection of the power supply for the cooling tower equipment. If the cooling tower equipment has not been physically removed, a sign or plate must be posted that is conspicuously visible and constructed of a durable, weather resistant material indicating that the cooling tower equipment is not registered with NYC and must not be filled with water or put into operation.

(e) Operation Period. The owner of a cooling tower must notify the Department electronically, in a manner specified by the Department, of the operation period as defined in § 8-02.

§ 26. The title of section 8-07 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

§8-07 [Records] Administrative Requirements.

§ 27. Subdivision (a) of section 8-07 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

(a) [Records] Record retention and production. An owner must keep [for at least three (3) years in the building where a cooling tower is located or in an adjacent building or structure on the same campus, complex, lot, mall or on-site central engineering division a record] records of any maintenance, inspection, deficiency, corrective action, water treatment, test result, cleaning or disinfection performed on [the] any cooling tower. Such records include but are not limited to maintenance program and plans, and all checklists, reports, notes, documentations, declarations, evaluations, measurements, test results and notices explicitly required by the provisions of this chapter. Such records must be retained and produced as follows:

(1) Retention period. The owner must keep records for each cooling tower for at least 3 years.

(2) Provision upon request.

(A) The owner must provide all records required by this chapter to the Department for inspection upon request.

(B) Failure to provide required records to the Department upon request shall be considered prima facie evidence that such required records do not exist and that the corresponding requirements were not satisfied.

(3) Electronic records. If records are kept electronically, any such record requested by the Department at the time of inspection must be displayed on a digital device (e.g., computer or tablet) provided by the owner. Copies of such electronic records must be available in a format that is used by the Department and is generally commercially available, such as PDF, and must be submitted to the Department in a manner specified by the Department upon request.

§ 28. Section 8-08 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

§8-08 Modification by Department.

[The Commissioner or designee may grant a modification when] When the Department determines that strict application of any provision of this Chapter presents practical difficulties [or unusual hardships.

The] the Commissioner or their designee in a specific instance may modify the application of such provision consistent with the general purpose of this Chapter [and in compliance with Administrative Code §17-194.1] and upon such conditions as[, in his or her opinion, are necessary to protect the health or safety of the public] the Department deems necessary to protect life and health. Failure to comply with the terms of the modification may result in enforcement by the Department. The denial of a request for modification by the Commissioner shall be deemed a final agency determination.

§ 29. The table set forth in section 8-09 of chapter 8 of Title 24 of the Rules of the City of New York is amended to read as follows:

Section of Law	Description	Penalty: First violation	Repeat violation(s)
24 RCNY §8-03	No maintenance program and plan	[\$1000] <u>\$2000</u>	[\$2000] <u>\$4000</u>
24 RCNY §8-03	Maintenance program and plan incomplete [or not on premises]	[\$500] <u>\$1000</u>	[\$1000] <u>\$2000</u>
<u>24 RCNY §8-03(e)</u>	<u>Failure to produce annual plan preparer certification of maintenance program and plan</u>	<u>\$2000</u>	<u>\$4000</u>
24 RCNY §8-04(a)	Routine monitoring not conducted, documented at least once a week when tower is in use	[\$500] <u>\$1000</u>	[\$1000] <u>\$2000</u>
24 RCNY§8-04(b)	Compliance inspections not conducted, documented at least once every 90 days when the tower is in use	[\$500] <u>\$1000</u>	[\$1000] <u>\$2000</u>
24 RCNY §8-04(c)	Routine maintenance according to maintenance program and plan not conducted or documented	[\$500] <u>\$1000</u>	[\$1000] <u>\$2000</u>
24 RCNY§8-04(d)	Twice yearly or other required cleaning not conducted or documented	[\$500] <u>\$1000</u>	[\$1000] <u>\$2000</u>
24 RCNY §8-04(e)	Aerosol control does not meet manufacturer's design specifications or drift loss reduction requirements in new or existing towers when required	[\$1000] <u>\$2000</u>	[\$2000] <u>\$4000</u>

24 RCNY §8-04(f)	Failure to submit declaration of a hyperhalogenation performed at least once each year between July 1 and August 31	[\$500] \$1000	[\$1000] \$2000
[24 RCNY§8-05(a)]	[Daily automatic or approved alternative water treatment plan not provided]	[\$500]	[\$1000]
24 RCNY§8-05	<u>Improper water treatment when the cooling tower system is in operation</u>	\$1000	\$2000
[24 RCNY§8-05(b)]	[Cooling water system not continually recirculated and no acceptable alternative]	[\$500]	[\$1000]
24 RCNY §8-05(c)(1)	Use of an unqualified biocide applicator <u>or technician</u>	[\$500] \$1000	[\$1000] \$2000
24 RCNY §8-05(c)(2)	Use of an unregistered biocide product	[\$500] \$1000	[\$1000] \$2000
24 RCNY §8-05(c)(3)	No records of all chemicals and biocides added	[\$500] \$1000	[\$1000] \$2000
24 RCNY §8-05(c)(4)	Sufficient quantities and combinations of chemicals not added as specified in the maintenance program and plan	[\$500] \$1000	[\$1000] \$2000
[24 RCNY §8-05(d)]	[Using unacceptable alternative non-chemical water treatment device]	[\$500]	[\$1000]
24 RCNY §8-05(e)	Use of [captured rainwater or recycled water] <u>nonpotable water source</u> as makeup water not in accordance with <u>an approved alternative water source plan</u>	[\$1000] \$2000	[\$2000] \$4000
24 RCNY §8-05(f)(1)	Minimum daily water quality measurements not taken or recorded	[\$500] \$1000	[\$1000] \$2000
24 RCNY §8-05(f)(2)	Failure to collect, analyze or record weekly biological process control indicators	[\$500] \$1000	[\$1000] \$2000

24 RCNY §8-05(f)(3)	Legionella samples not collected or analyzed, or results not recorded or reported to the Department as required	[\$1000] \$2000	[\$2000] \$4000
24 RCNY §8-05(f)(4)	Failure to monitor and sample from representative locations and times	[\$500] \$1000	[\$1000] \$2000
24 RCNY §8-05(f)(5)	Required corrective actions not taken based on bacteriological results	[\$1000] \$2000	[\$2000] \$4000
24 RCNY §8-06(a)	Improper or inadequate shutdown procedures	[\$500] \$1000	[\$1000] \$2000
24 RCNY §8-06(a)	Failure to report shutdown date within 5 days	\$500	\$1000
24 RCNY §8-06(b)	Failure to report startup date within 5 days	\$500	\$1000
24 RCNY §8-06(b)(1)	Improper or inadequate [start-up] <u>startup</u> procedures	[\$500] \$1000	[\$1000] \$2000
24 RCNY §8-06(b)(2)	Legionella samples not collected, analyzed [before] <u>within 3 to 14 days of system startup</u> [start-up]	[\$500] \$1000	[\$1000] \$2000
24 RCNY §8-06(c)	New cooling tower not or inadequately cleaned and disinfected prior to operating	[\$500] \$1000	[\$1000] \$2000
24 RCNY §8-06(e)	Failure to report operation period to the Department	\$500	\$1000
24 RCNY §8-07(a)	Failure to [document] <u>retain records of all maintenance, inspections, deficiencies, corrective actions, water treatment, [tests] test results, cleaning, and disinfection [in accordance with the maintenance program and plan]</u>	[\$500] \$1000	[\$1000] \$2000
24 RCNY §8-07(a)	Failure to retain records for at least 3 years	[\$500] \$1000	[\$1000] \$2000

24 RCNY §8-07(a)	Required records not kept at the cooling tower premises	[\$500] \$1000	[\$1000] \$2000
24 RCNY §8-07[d](a)(2)	[Records not made immediately available] <u>Failure to provide records</u> to Department upon request	[\$500] \$1000	[\$1000] \$2000
24 RCNY §8-07(c)	Department of Buildings Cooling Tower Registration Number not posted as required	[\$500] \$1000	[\$1000] \$2000
<u>Admin Code 17-194.1(f)</u>	<u>Failure to report Legionella sample test date within 5 days</u>	\$500	\$1000
<u>Admin Code 17-194.1(f)</u>	<u>Failure to report Legionella sample test date</u>	\$1000	\$2000
State Sanitary Code Part 4	Miscellaneous provisions	\$250	\$250