

## Cooling Tower Startup Procedures

*When cooling towers are started up for the cooling season or after a shutdown period, you must comply with startup requirements as described in §8-06(b) of Chapter 8 of Title 24 of the Rules of the City of New York.*



### 1. Clean and disinfect the cooling tower

**Clean the cooling tower no later than 15 days before operation (see Step 3)** through power washing or scrubbing to remove biofilm, scale or other debris. Once cleaned, disinfect with an approved biocide(s) to kill pathogens, such as *Legionella*. Cleaning and disinfection must follow industry guidance and procedures detailed by the qualified person in the maintenance program and plan (MPP). During disinfection, monitor pH and halogen residuals at two locations within the cooling tower system to verify that the target biocide residual is achieved.

### 2. Conduct a pre-startup inspection

Enlist your qualified person to conduct and document the pre-startup inspection. The required inspection includes visually assessing the cooling tower system; inspecting all components for the presence of contaminants and other adverse conditions; checking that the water treatment equipment is working properly; and ensuring that records are complete.

### 3. Fill system and circulate water

Once disinfected, fill the cooling tower system with water and begin circulating biocides and chemicals, as specified in the MPP. **At this point, the system is in operation and must meet all New York City requirements.**

### 4. Take a *Legionella* culture sample

**Collect and analyze a water sample for the presence of *Legionella* within 14 days of startup operation.** The sample must be analyzed by a laboratory certified by the Environmental Laboratory Approval Program from the NYS Department of Health. The results must then be interpreted, and action taken, as described in Table 8-1 of Chapter 8.

### 5. Document procedures

**Keep detailed records of all procedures and actions performed in your operation records.** Startup records should include cooling tower system ID; system startup date; individual cooling tower startup date (if different than the system startup date); and dates and procedures for startup cleaning and disinfection, including the service provider, pre-startup inspection, *Legionella* sampling and test results, disinfection dose and circulation time, water monitoring and treatment logs.

Startup procedures must be performed on a cooling tower system any time it has been shut down, idling (water not circulating) or left untreated for five (5) or more days. It is recommended that water be continuously recirculated with treatment any time the cooling tower is in operation.



# Legionella Sample Reporting Requirements and Summertime Hyperhalogenation

This is a courtesy reminder of ongoing actions required for your cooling tower system.

Legionella Sample Reporting by the Qualified Person Every 90 Days	
Owners of buildings with cooling towers must collect a <i>Legionella</i> sample at least once every 90 days while the cooling tower system is operating. <b>A building’s qualified person must report online the dates when this sampling occurs.</b>	
How does a qualified person access the online portal for <i>Legionella</i> sample reporting?	Is there a reporting deadline?
For each cooling tower system, a qualified person is invited to create a user account by the building owner or owner’s representative through the <a href="#">NYC Cooling Tower Registration Portal</a> . Once invited, the qualified person must verify their credentials as defined in <a href="#">Chapter 8</a> .	Yes! A building’s qualified person must report the date when <i>Legionella</i> sampling occurred <b>within five days of collecting the sample</b> through the online platform.
For more information and step-by-step instructions for online reporting, sign in to your <a href="#">NYC Cooling Tower Registration Portal</a> user account and click on “Help FAQ” on the top menu.	

Prepare for Hyperhalogenation this Summer
In 2020, Chapter 8 of Title 24 of the Rules of the City of New York was amended to require an annual summertime hyperhalogenation for every cooling tower system. This includes an application of higher-than-normal level of chlorine- or bromine-based biocide between <u>July 1 and August 31</u> aimed at preventing the growth of <i>Legionella</i> bacteria.
For more information see the <i>Summertime Disinfection Requirement FAQ</i> at <a href="https://www1.nyc.gov/assets/doh/downloads/pdf/cd/summertime-disinfectant-faq.pdf">https://www1.nyc.gov/assets/doh/downloads/pdf/cd/summertime-disinfectant-faq.pdf</a>