

Building Your Cooling Tower System's Management and Maintenance Team

Managing your building's cooling tower requires a team of people who, together, can make sure that you are following New York City's cooling tower regulations (Chapter 8 in Title 24 of the Rules of the City of New York). These regulations were put in place to prevent the growth of *Legionella* bacteria — which, if inhaled, can cause Legionnaires' disease, a serious type of pneumonia that can sometimes be fatal. You can find more information about requirements for cooling tower registration and maintenance at www1.nyc.gov/site/doh/business/permits-and-licenses/cooling-towers.page.

Your cooling tower's management and maintenance team includes all individuals who have a role in meeting legal requirements. The regulations require, at a minimum, the following team members:

- **Owner:** any person or legal entity having a legal or equitable interest in the building
- **Qualified person:** an expert in water-quality management, planning and operations. Such a person may be a New York State–licensed professional engineer, a certified industrial hygienist, a certified water technologist or a certified environmental consultant with two years of experience in water-quality management
- **Responsible person:** a person capable of performing day-to-day monitoring, maintenance and operational tasks, including reporting to the qualified person, when necessary, any out-of-the ordinary system conditions
- **Biocide applicator:** a commercial pesticide applicator or technician who has been certified by New York State with a 7G license
- **Laboratory:** a laboratory certified by the Environmental Laboratory Approval Program (ELAP) of the New York State Department of Health to perform *Legionella* culture testing

In addition to a building's existing staff, the following types of vendors can perform these roles:

- **Consultant:** an individual or company that may provide expertise in water-quality management, mechanical systems, or other cooling tower–related services
- **Service company:** a company providing cleaning, disinfection, or mechanical services for a cooling tower system
- **Management company:** a company providing day-to-day oversight and management of a building, including its cooling tower system

Keeping Track of Your Team and Their Responsibilities: Completing the Matrix

As a building owner, you need the right team of individuals to properly manage, maintain and operate your building's cooling tower system. The following **Responsibility and Resource Checklist**, or matrix, will help you determine who makes up your cooling tower team and track

their responsibilities. The matrix is organized by task, team member and personnel resource. For each task you should put an X in at least one of the **Personnel Resources** columns. To complete some tasks, you may need more than one personnel resource. You need to have a “qualified person” assess your building and prepare a maintenance program and plan (MPP). This person must work with you to identify the personnel resources needed to maintain your cooling tower system and complete the matrix.

To identify a suitable qualified person, you should review other MPPs (or similar documents) the candidate has prepared to make sure that:

- All tasks or responsibilities in the checklist are assigned to an MPP-specific team member
- The MPP describes, in detail, procedures needed to comply with all regulations
- Plans include system-specific forms, checklists, conditions and corrective actions

Existing Maintenance Program and Plan Reviews

If your facility already has an MPP, you can use the checklist to review the completeness and quality of your plan. Your MPP should address all checklist items. If you have not assigned a task or responsibility in the checklist to a team member, then your MPP is incomplete. You should then reach out to your plan preparer to discuss revising the plan.

Finding and Choosing Vendors

Once the matrix outlining the team and responsibilities is complete, you will need to contract with outside vendors to perform some of the tasks or responsibilities required under the regulations. At this point, you can use the matrix to write a scope of services for requesting bids. Not all vendors offer the same set of services, and you need to make sure that each potential vendor can perform the tasks needed before accepting a bid. Vendors may excel at performing some tasks but not others. You may also decide that multiple vendors are needed to address all tasks or responsibilities laid out in the regulations and the cooling tower system’s MPP.

When finding help with any service, it can be difficult to determine the quality of vendors. Take the time to reach out to a vendor’s references, review examples of their past work and products, and interview them. Remember that in choosing a vendor, you are choosing a member of your cooling tower management and maintenance team. You should make sure the vendor:

- Can be available promptly when needed
- Is knowledgeable in the proposed service area

- Can provide written procedures for performing requested services, or is capable of following procedures described in the MPP
- Has a thorough understanding of the scope of services related to their role in the MPP

Building and maintaining a cooling tower system management and maintenance team takes time and effort. A good team not only minimizes expenses associated with regulatory compliance, but more importantly, limits the spread of *Legionella* bacteria.