

Water Treatment Guidance for Cooling Tower Systems

Owners and operators of buildings with cooling tower systems are required to treat the water when the system is operating. This document provides guidance about treating water in cooling tower systems, as described in Chapter 8 of Title 24 of the Rules of the City of New York.

- What treatment is required for water in cooling tower systems?
 Chemicals and biocides must be applied to control the presence of Legionella, minimize fouling (slime, mold, fungi, algae, biofilm, plant and other organic materials), and prevent scaling and corrosion that may promote microbial growth. Water treatment must include an oxidizing biocide that is registered with the New York State Department of Environmental Conservation (NYSDEC). The NYS Pesticide Administrative Database lists the registration status of biocides. The water treatment schedule must be included in the maintenance program and plan (MPP).
- 2. How must water treatment be applied? Water must be treated using automated feed methods that control chemical and biocide additions. Manual feed is only allowed if it is demonstrated to be effective at Legionella control. The manual application process must be specified in the MPP. It is required that water be continuously recirculated for the duration of chemical and biocide feeds, and for one hour after or longer.
- 3. Who can treat the water in my cooling tower system?

 Any person who applies biocides to a cooling tower system must be a commercial pesticide applicator or pesticide technician certified by NYSDEC in Category 7G cooling towers, or a pesticide apprentice (working under the supervision of a certified pesticide applicator). You can search an online list of registered pesticide businesses and licensees that are qualified.
- 4. What treatment records are required by Chapter 8?

 Operational records are required as proof that you are implementing water treatment. You must keep records for all chemicals and biocides added, including the purpose of their use, manufacturer's name, brand name, date and time of each addition, amount added, and the safety data sheet for each product as required by Chapter 8 in Title 24 of the Rules of the City of New York, Section 5c [24 RCNY §8-05(c)].
- 5. During an inspection, what do health inspectors look for in the treatment room? Health inspectors will check that the application method, biocides/chemicals added, and water treatment records are consistent with the MPP and Chapter 8. You are required to keep all records pertaining to cooling tower operations on site and provide them to health inspectors when requested.