An Emergency Regulation became effective on August 17, 2015 to protect against outbreaks of Legionnaires’ Disease associated with cooling towers. If cooling towers are not operated and maintained properly, bacteria such as Legionella can grow and be dispersed into the air in tiny water droplets or mist. People can get Legionnaires’ Disease by breathing the droplets or mist. This brochure is part of the Department’s efforts to facilitate regulatory compliance through outreach and education. More information about the disease can be found at http://www.health.ny.gov/diseases/communicable/legionellosis/fact_sheet.htm.

The regulation requires that all owners register their cooling towers with New York State. Additional requirements for cooling towers include: regular inspection; annual certification; obtaining and implementing a maintenance plan; record keeping; reporting of certain information; and sample collection and culture testing. The Emergency Regulation is posted on the New York State Department of Health website at http://www.health.ny.gov/regulations/emergency/docs/protection_against_legionella.pdf. Please refer to the Emergency Regulation for complete details regarding what is required to comply.

**REGISTRATION:**

**What is a cooling tower?**

The term “cooling tower” 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. It can be located on or off the building.

**How do I register a cooling tower?**

Register your cooling tower on the NYS Department of Health website at http://ct.doh.ny.gov/. All cooling towers in New York State, including New York City, must be registered in the NYS system.
What information is needed to register?
In addition to the building address, you will need to know the owner(s) name, address, phone number, and email address. Note that a property manager is considered an “owner” for the purposes of the regulation. For the equipment, you will need to know the manufacturer, model, serial number (if available), capacity (tonnage), basin capacity, method of systematic disinfection, who will be inspecting and certifying the cooling tower, and the commissioning date of the cooling tower. Once you have all the information, it should take about ten minutes to register each building and cooling tower. Multiple cooling towers owned by one person can be entered under one account.

CULTURE SAMPLING, TESTING, and DISINFECTION:
What type of sampling must be done?
Bacteriological culture sample collection must be performed using dip slides or heterotrophic plate counts or may be a culture specific for legionella bacteria. Immediate and appropriate action must be taken in response to test results. Dip slides and heterotrophic plate counts should be interpreted per industry standards and Legionella culture results according to Appendix 4-A of the regulation. Until a maintenance program and plan is in place, sampling must be performed every 90 days while the tower is in use.

How do I find a laboratory to analyze those samples?
- For dip slides, your cooling tower service provider can perform this test and may also be able to complete the analysis.
- For heterotrophic plate counts (or standard plate count) send to a NYS Environmental Laboratory Approval Program (ELAP) certified laboratory. Here is the link to the ELAP certified laboratories: http://www.wadsworth.org/labcert/elap/comm.html. Use laboratories that are certified for non-potable water.
- For Legionella cultures, a list of the CDC ELITE certified laboratories can be found at: https://wwwn.cdc.gov/elite/public/memberlist.aspx

Who can disinfect a cooling tower?
Disinfection must be done by a commercial pesticide applicator, pesticide technician, or a pesticide apprentice under the supervision of a certified applicator who is qualified and certified to apply biocide in a cooling tower. A biocide is considered a pesticide. The NYS Department of Environmental Conservation maintains a list of qualified pesticide professionals: http://www.dec.ny.gov/nyspad/. Any questions can be directed to the Bureau of Pest Management at 518-402-8748.

INSPECTION AND CERTIFICATION:
When should inspections be done?
Initial inspections must be performed at intervals no longer than every 90 days while the tower is in use.

Who may perform inspections?
Inspections must be performed by a New York State licensed professional engineer, certified industrial hygienist, certified water technologist, or environmental consultant with training and experience performing inspection in accordance with current standard industry protocols. See the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) website at www.ashrae.org to purchase the 188-2015 standards.
When should cooling towers be certified and how often?

*Cooling towers must be certified by November 1, 2016 and each year after that. The certification must state that the cooling tower was inspected, tested, cleaned, and disinfected in compliance with the regulation. The qualifications for issuing certifications are the same as for performing inspections.*

**MAINTENANCE, REPORTING AND RECORD KEEPING:**

When should maintenance plans be developed?

* A maintenance program and plan for each cooling tower needs to be in place by March 1, 2016. The maintenance program and plan should include:
  - A schedule for routine bacteriological sampling and analysis
  - A plan for emergency sample collection and analysis for Legionella culture testing, when needed
  - A plan for immediate action in response to bacteriological culture test results

What kind of records must be maintained?

*The maintenance program and plan, along with records of inspection findings, deficiencies, corrective actions, cleaning, disinfection, tests and certification must be kept in electronic or hard copy on the premises where the cooling tower is located so they will be readily available for inspection by the State or local health department. Records must be maintained for at least three (3) years.*

Questions? E-mail [cooling.tower@health.ny.gov](mailto:cooling.tower@health.ny.gov) or call 518-402-7650.