

### **ASHRAE 188 AND LEGIONELLA**

- The governing federal guideline that is the basis for the New York State and New York City Legionella laws is ASHRAE 188 which was ratified and presented in June 2015.
- Subsequent to the deaths in New York city which were caused by Legionella the state and city first put out emergency orders from their respective Health Departments which were then converted into law.





- Register all cooling towers with the DOH- in NYC as well as NY State
- 2. Have a Water Management Plan (WMP) or Maintenance Program (MPP) on-site for each tower.
- 3. This document provides information regarding the system, its risk and hazards and actions to be taken to treat for the prevention of Legionella and the corrective action should legionella be found.





- 4. Tower must be physically cleaned and disinfected at least 2x per year and first cleaning and disinfection is prior to the seasonal startup of the tower.
- 5. Tower must be visually inspected at least every 90 days while tower is in operation.
- 6. Legionella tests must be taken at the startup of the cooling tower and every 90 days while the tower is in operation.





- 7. The tower is to be tested 3x/week for pH, conductivity, free chlorine and temperature and recorded. This to be done by onsite responsible person as noted in the WMP/MPP.
- 8. A bacteria dipslide and a visual inspection is to be performed weekly by on-sire personnel and recorded. If results are not within guidelines of Chapter 8 of Title 24 DOH then corrective action must be taken and noted as per WMP/MPP.





- 9. An Annual cooling tower certification (supplied by OCS) must be filed via the website with the state and city by November 1, 2016 and every year thereafter.
- 10. Retain all records, tests, disinfections, service reports etc. onsite for 3 years.
- 11. All towers must be treated via an automatic system





# IN NYS OUTSIDE OF THE CITY, YOU ARE REQUIRED TO:

- 1. Register all cooling towers with the DOH- NY State
- 2. Have a Water Management Plan (WMP) or Maintenance Program (MPP) on-site for each tower.
- 3. This document provides information regarding the system, its risk and hazards and actions to be taken to treat for the prevention of Legionella and the corrective action should legionella be found.





# IN NYS OUTSIDE OF THE CITY, YOU ARE REQUIRED TO:

- 4. Tower must be visually inspected at least every 90 days while tower is in operation.
- 5. Legionella tests must be taken at the startup of the cooling tower and every 90 days while the tower is in operation.
- 6. An Annual cooling tower certification (supplied by OCS) must be filed via the website with the state and city by November 1, 2016 and every year thereafter.





# IN NYS OUTSIDE OF THE CITY, YOU ARE REQUIRED TO:

- 7. Retain all records, tests, disinfections, service reports etc. onsite for 3 years
  - 7. 7A- the State website must be updated every 90 days with several rehired item while tower is in operation.
- 8. All towers must be treated via an automatic system \*\*\*\*





#### **ASHRAE 188 FUNDAMENTALS:**

- PROGRAM TEAM Identify persons responsible for Program development and implementation.
- DESCRIBE WATER SYSTEMS/FLOW DIAGRAMS Describe the potable and non potable water systems within the building and on the building site and develop water –system schematics.
- ANALYSIS OF BUILDING WATER SYSTEMS Evaluate where hazardous conditions may occur in the water systems and determine where control measures can be applied.





#### **ASHRAE 188 FUNDAMENTALS:**

- CONTROL MEASURES Determine locations where control measures must be applied and maintained in order to stay within established control limits.
- MONITORING/<u>CORRECTIVE ACTIONS</u> Establish procedures for monitoring whether control measures are operating within established limits and, if not, take corrective actions.
- CONFIRMATION Establish procedures to confirm that:
  - the Program is being implemented as designed (verification), and
  - the Program effectively controls the hazardous conditions throughout the building water systems (validation)
- DOCUMENTATION Establish documentation and communication procedures for all activities of the Program.





# Expect more.... OCS Chemical Engineering Company Industrial Water Treatment Specialists





