

Seasonal Startup and Cleaning the Cooling Towers

Plan Ahead to Avoid Unexpected Delays and Costs



Coordinate Early with Your Water Management Team

Qualified person: Perform an annual review of the Maintenance Program and Plan (MPP) and update the risk assessment. Evaluate startup procedures, create an early plan of action and address planned operating conditions.

Water treatment vendor: Schedule well ahead for cleanings and disinfection, routine water treatment, visits, and summertime hyperhalogenation. See [Summertime Disinfection FAQ](#).

Mechanical contractor: Review mechanical conditions, performance of the cooling tower system, and routine maintenance in preparation for startup or cleaning.

Building management: Keep facility personnel informed about startup scheduling.



Adapt to Specific Conditions For Your Cooling Tower System

Each system is unique: Cleaning and disinfection procedures must be tailored to your specific system and reflect the findings of your risk assessment. Well planned cleaning and disinfection at start up reduces risk, labor costs, and saves energy.

Rapid Seasonal Weather Changes: Weather changes during the shoulder seasons may result in premature system startup followed by reduced operation. Monitor the weather, and plan ahead for possible early startup or temporary operation and adjust your operations accordingly.

Partial Or Temporary Operation: Always maintain adequate circulation and treatment while in operation. Standing water, low flow and improperly cleaned system components contribute to *Legionella* growth and rapid proliferation. Pay attention to system components such as backup pumps, chillers, and cooling tower cells, that may not operate at all times or are under automated control (e.g. BMS). These components should be drained after use and cleaned and/or disinfected before placing them back into operation.



Critical Elements for an Effective Cleaning and Disinfection

Cleaning must be systemic: Biofilms or sediments in parts of your system besides the cooling tower may harbor *Legionella*. Be sure to clean and disinfect all piping and equipment including heat exchangers, chillers, other heat transfer devices, offline equipment and seldom used pipe runs. Review the manufacturers' recommendations and your MPP for the cleaning frequency and procedures for each system component.

Fully drain to rid the system of contaminants: Cleaning and disinfection dislodges material that will stay in your system unless all water is drained.

Make NYC safer with effective implementation of a startup plan based on your specific risks

For additional information, see [§8-06\(b\) of Chapter 8 of Title 24 of the Rules of the City of New York \(Chapter 8\)](#) and [Cooling Tower Startup Procedures](#)