

# Legionella On-line Disinfection Checklist for Cooling Towers

*(ASHRAE Guideline 12-Based; section 8.2.9.2 On-Line Disinfection)*

This tool may be used as part of the system start-up protocol or a routine system maintenance and operation schedule as called for in the water management program. The decision to use on-line disinfection may also be determined by microbial test results.

## ◇ 1. Preparation

- ☐ **Review Water Management Plan (WMP)**  
Confirm that online disinfection is appropriate for current conditions.
- ☐ **Ensure Proper PPE**  
Respirators (N95 or higher), gloves, goggles, and protective clothing for personnel.

## ◇ 2. System Assessment

- ☐ **Inspect Cooling Tower for Visible Contamination**  
Ensure no heavy biofilm, debris, or slime on the fill pack or drift eliminators. *If present, switch to offline disinfection.*
- ☐ **Verify System is in Normal Operation**  
Fans, pumps, and chemical feed systems should be functioning.

## ◇ 3. Disinfection Procedure

- ☐ **Circulate Water Continuously**
  - Ensure disinfectants reach all parts of the system including bypass or standby components.
- ☐ **Add oxidizing biocide sufficient to achieve a biocide residual of at least**
  - 5ppm free available oxidant, maintain that level for a minimum of 5 hours
- ☐ **Retest according to your waste management program**