

>> PEACE OF MIND

A partnership to help
you **comply with**
evolving regulations

NALCO Water
An Ecolab Company

NALCO WATER'S WATER SAFETY PROTOCOL

For Cooling Towers



With recent *Legionella* outbreaks being linked directly to COOLING TOWERS,

it is essential that you understand the industry best practices on managing a cooling tower to a HEALTH and PERFORMANCE standard. With increased regulations, cooling tower owners are challenged to find the right solution to achieve compliance, manage their risk and ensure safe operation of their cooling tower(s).

As the GLOBAL LEADER in water safety

across industries from Hospitals to Commercial Buildings to Manufacturing, **Nalco Water's expertise, solutions and service provide the proven performance you need.** We deliver a comprehensive health-and performance-based cooling tower program that meets – and often exceeds – current state regulations and various industry standards.

From *Legionella* testing, inspection of cooling towers to cleaning & disinfecting and the certification supporting a cooling tower water management plan, Nalco Water's Water Safety Protocol provides a **complete water safety solution.**

1 *Legionella* TESTING

Nalco Water conducts more *Legionella* analysis than any other organization in the world. We are global experts in water safety with over 25 years of experience.

SAMPLE
analysis:
4X/year

Rigorous testing:

Aligned with the International Organization of Standardization ISO method 11731



Lab certification:
CDC ELITE proficient & ISO 9001



80,000 tests/year globally



**CERTIFICATE
PROVIDED
post cleaning
& disinfection**

2 ONLINE TOWER DISINFECTION

Highly trained and certified Nalco Water service engineers will disinfect the operating cooling water system over a six-hour period, and then safely return the system to normal operating conditions.

1X
/year

Proactive Service:
Chemistry adjustments
to ensure disinfection

DATA: Summary
report documenting
oxidant levels

Safety focus: Service technician training

» proper use
of **PPE**

» **fall**
protection

» **confined**
space entry

» **lock-out-**
tag-out

fit tested for
respiration
protection

Strength in numbers: 12,000 U.S. employees
to deliver local service

3 OFFLINE TOWER CLEANING & DISINFECTION

Certified Nalco Water service engineers complete a full physical cleaning of the tower decks, fan housing area, distribution nozzles, tower fill and water sump.

2X
/year

Comprehensive approach:
pre- & post-disinfection of cooling
water system

DATA:
Summary
report



Safety focus: All Service technicians trained per OSHA
guidelines in all relevant safety practices

4 INSPECTION & CERTIFICATION

Nalco Water certified according to guidelines published in the
OSHA Technical Manual (Section III: Chapter 7, Legionnaires' Disease).



5 COOLING TOWER WATER MANAGEMENT PLAN

Having developed and implemented over 10,000 cooling tower water management plans globally, we can help you develop a water management plan tailored to your operation and compliant with ASHRAE Standard 188.

Your Cooling Tower Water Management Plan includes:

- Program team
- Cooling Tower Survey
- Control measures
- Monitoring & corrective actions
- Confirmation (verification & validation)
- Documentation/Communication procedures

Nalco Water has
**DEVELOPED
& IMPLEMENTED**

OVER **10,000**
**WATER
SAFETY
PLANS
GLOBALLY**

GLOBAL
EXPERTS
in Water Safety **25+**
years experience



NALCO WATER'S MARKET-LEADING WATER SAFETY APPROACH

LEADERSHIP IN WATER SAFETY

For more than 25 years, Nalco Water has been the global leader in Water Safety. We've partnered with building owners, facility managers, environmental risk managers and infection prevention specialists to develop more than 10,000 Water Safety Management programs, each customized for specific operations.

Nalco Water is the only company that uses in-house, certified professionals to deliver all of the components of a water safety program, including remediation services. Backed by unparalleled technical resources, we have provided our scientific expertise and experience to governments, regulatory bodies and industry associations around the world.



RISK MANAGEMENT

- Water Safety Plans
- Data Analytics
 - Web-Based Data Management & Exception Reporting
- AQUAPATH Sensing
 - Online 24/7 Water Quality Monitoring
- Consulting & Support
 - Plan Design, Implementation & Training
 - Verification & Validation

LONG-TERM CONTROL STRATEGIES

- NSF Certified Secondary Disinfection
 - Liquid Chlorine Feed & Control Systems
 - Electrolytic Chlorine Generation Systems
 - Electrolytic Chlorine Dioxide Generation Systems
 - EPA Regulatory Guidance per SDWA
- Point-of-Use Water Filters
 - A Barrier for Waterborne Pathogens
 - Validated Up to 31-Days or 62-Days per ASTM F838-05 for 0.2 µm Sterilizing Grade Filters

SHORT-TERM REMEDiation

- Remedial Cleaning & Disinfection Services
 - Cooling Tower Water Systems
 - Potable Water Storage Systems
 - Potable Water Distribution Systems
 - Decorative Water Features & Fountains
 - Fire Suppression Storage Tanks
- Emergency Remediation Services
 - Hyperchlorination Protocols

PATHOGEN ANALYTICAL

- *Legionella* Culture Testing per ISO11731
- Certified CDC-ELITE Proficient for *Legionella*
- Interpretation & Consulting
- Testing Plans for Program Confirmation
- Other Waterborne Pathogen Testing
 - *Pseudomonas aeruginosa*
 - *Acinetobacter* spp.
 - *Mycobacterium*

Expertise and solutions that make the world cleaner, safer and healthier

NALCO Water
An Ecolab Company

Nalco Water, an Ecolab Company

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