

The Azure Planet Solutions, Water Treatment Management Program Service Inspections

- compared to conventional treatment.

Program Feature	Azure	Others
Makeup & System Water Sampling	Yes - Perform basic water chemistry comparison. Tests for corrosion control supplements. (If required, rare).	Yes - Plus tests for corrosion control additives; possible test for oxidizing chemical strength; testing for biocide residuals (rare).
Water Management Controls Inspections	Yes - Conductivity controller sensor maintenance, set-point programming, blowdown valve check	Yes, same
Treatment Unit/ Treatment Chemicals	Yes - Routine inspection of electronic-treatment unit status lights; secondary verification through system chemistry and microbiological tests. Signal propagation or other test as required by a device manufacturer.	Yes - Inspect and programming of chemical application equipment. Installation/ replenishment of consumable chemical products.
Microbiological Inspections	Yes - Bacteriological dip-slide & Biofilm Detection Service each visit (photographically documented). Tactile inspection of cooling tower sump (with access). Other site-specific testing such as Legionella, ATP, etc. as required by the customer.	Varies - Possible dip-slide. Other tests are typically non-routine or as are specified by the customer.
Biofilm Detection Services	Basic Service included. Advanced Service - Fee based; on-request (utilizes independent laboratory)	Rare, typically expensive.
Water-Use Efficiency	Yes - Avoiding waste and achieving Saturation is essential for effective corrosion- and bio-control.	Typically "yes" but sub-optimal efficiency helps to avoid scaling forming conditions and supports the sale of additional chemicals.
Scaling Index Evaluation (Scale vs. corrosion tendency)	Yes - Service app calculates the PSI and LSI automatically. Technician bases onsite adjustments accordingly.	? - Typically rare or infrequent manual calculation performed.
Water Savings	Yes - as compared to conventional treatment. NCD treatment is typically 10 - 20% higher.	No - is the basis of comparison.

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Water Treatment Management Program

Service Checks continued.

Program Feature	Azure	Others
Powder Generation vs. Scaling	Proactive. Calculated powder generation affirms Saturation in the cooling water. Technician adjusts conductivity control point to support water use-efficiency, good corrosion control & tower cleanliness.	Reactive. Loss of dissolved calcium or carbonate alkalinity is the cause of suspected scale formation. Scaling is typically reported by the operator and responded to by the technician.
Graphic Trending	Future feature.	Infrequent, possible for large commercial and industrial customers.
Control Equipment & Degree of Water Use-Optimization, as % Deviations	Yes - Featured in the Report: A.) Difference between conductivity controller display & hand-held meter. - Alerts the technician to clean the sensor and maintain calibration B.) Difference between control point & system water conductivity. - Alerts technician & customer to potential water-loss, abnormal conditions, or equipment failure.	No. Assessment is subject to technician discretion and is highly subjective.
Energy Savings/ Greenhouse Gas (GHG) Emission Avoidance	Yes - The US Green Building Council recognizes that NCD treatment avoids mineral scaling & associated energy waste. EPA data is used to support calculations included in each report.	No.
Equipment Logging	Yes- Operating temperature (to calculate PSI, LSI at minimum), filtration unit pressure/ status, other equipment condition/ pressure/ temperature as required. Customer defined entries can be added.	?
Report Photographs	Yes- Cell-phone based service app allows documentation of pertinent conditions and equipment status.	?
Automatic Service Reporting	Cell phone app-based logging & performance calculations - immediate auto-email PDF's reports upon completion of site inspections	No - Typically paper or laptop-based reports cause delays in completion, distribution, and inspection of operating equipment