

Company Name: _____

Maintenance Forms & Logs

Date: _____

Log ID: _____

Version: 1.0

Cooling Tower Daily Water Treatment And Conductivity Testing Log

1.0 Form Objective & Asset Scope

This daily log is used to track water treatment parameters and conductivity readings for the facility's cooling tower(s). Proper water chemistry control prevents scale formation, corrosion, and microbiological fouling, extending equipment life and maintaining heat transfer efficiency.

This log applies to all evaporative cooling towers, closed-circuit coolers, and associated recirculating water systems. Compliance with this log supports OEM warranty requirements and reduces unplanned downtime.

2.0 Administrative & Asset Details

Date: _____

Technician Name: _____

Cooling Tower ID / Asset Tag: _____

System Operating Hours (Hour Meter): _____

Ambient Temperature (°C): _____

Water Flow Rate (GPM / L/s): _____

3.0 Inspection / Parameter Checklist

- ☐ Pass ☐ Fail - Visually inspect basin water for clarity, foam, oil sheen, or debris.
- ☐ Pass ☐ Fail - Measure and record conductivity ($\mu\text{S}/\text{cm}$) using calibrated handheld meter.
- ☐ Pass ☐ Fail - Measure and record pH level using calibrated probe or test strips.
- ☐ Pass ☐ Fail - Measure and record water temperature at basin outlet (°C).
- ☐ Pass ☐ Fail - Check chemical feed pump operation and verify chemical drum levels.
- ☐ Pass ☐ Fail - Verify biocide residual (e.g., free chlorine, bromine, or non-oxidizing biocide) within target range.
- ☐ Pass ☐ Fail - Inspect bleed/ blowdown valve operation and confirm proper cycling.
- ☐ Pass ☐ Fail - Check make-up water meter reading and record totalizer value.
- ☐ Pass ☐ Fail - Inspect drift eliminators for damage or blockage.
- ☐ Pass ☐ Fail - Verify conductivity controller setpoint and alarm functionality.
- ☐ Pass ☐ Fail - Record any water treatment chemical additions (type, amount, time).
- ☐ Pass ☐ Fail - Check for visible leaks at pumps, valves, and tower basin.

4.0 Deficiencies & Work Order Generation

Issue Description: _____

Affected Component / Location: _____

Corrective Action Taken: _____

Parts Required: _____

Work Order Number (if created): _____

5.0 Sign-off & Return to Operations

Maintenance Technician Signature: _____ Date: _____

Water Treatment Specialist Review (if applicable): _____ Date: _____

Reliability Manager Review: _____ Date: _____

Regulatory Disclaimer: This maintenance log is a generic template. The end-user assumes all liability for validating all inspection parameters, PM frequencies, and tolerances against specific OEM machinery manuals before active shop floor deployment.