

Water treatment chemical feed system annual maintenance checklist

The annual chemical feed system service is the deep pass: the measurements, cleanings and tests a quarterly round doesn't reach. This checklist keeps the full service on record with the photos that make it defensible later. Work is commonly verified against manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The water treatment service contractor on the annual service, when the loop can be sampled and the controller taken through its ranges. When: Once a year, timed with the closed-loop and condenser-water annual so probe drift and pump output get corrected against a real sample.

Pump calibration

- ☐ **Metering pump output verified by draw-down**
Pump timed against a calibration column or measured draw-down, actual output compared to the setting and corrected, not read off the dial. 2 photos required
- ☐ **Diaphragm and valves inspected**
Pump head opened where due, diaphragm and suction/discharge valves inspected for swelling or crystallization, seals replaced per the service kit. 1 photo required

Controller and probes

- ☐ **Probe cleaned and checked against reference**
Conductivity or ORP probe pulled, cleaned of scale and film, then checked against a known reference solution and calibrated to it. 2 photos required
- ☐ **Setpoints and alarms exercised**
Controller taken through its dosing and bleed setpoints, low-level and no-flow alarms confirmed to interrupt feed as intended. 1 photo required

Injection and delivery

- ☐ **Injection quill pulled and cleared**
Quill removed from the line, scale and crystallization cleared, check valve reseating cleanly, quill reinstalled to the correct depth in the flow. 2 photos required
- ☐ **Tubing runs replaced where degraded**
Suction and discharge tubing checked end to end for hardening and cracking, sections replaced where degraded, containment cleaned out. 1 photo required