READY TO INSPECT — FIELD CHECKLIST

Water treatment chemical feed system quarterly maintenance checklist

A quarterly chemical feed system round is short on purpose: it catches the wear items that fail between annual services. This checklist is sized for a tech with a phone. Every item says what to look at and the photo that proves the round happened. 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 tech or maintenance mechanic on the quarterly mechanical-room round. When: Every quarter with the cooling tower and closed-loop checks, since a dry drum or dead pump lets the loop drift untreated between visits.

Chemical supply

- [ ] SDS for each product read before handling
  Current SDS at the station for every product in use, its PPE and first aid read and that PPE put on before any drum, tubing or feeder is touched.
  No photo required
- [ ] Drum and day-tank level read
  Level checked against the reorder mark, product matches the label for this loop, no settled or separated chemical in the tank.
  2 photos required
- [ ] Tubing and containment checked
  Suction and discharge tubing free of air locks and kinks, secondary containment or drip tray dry, no crystallization at fittings.
  1 photo required
- [ ] Chemical storage labeled, capped and segregated
  In-use and spare drums capped and labeled with the product name, on containment, with acids, oxidizers and biocides kept apart as their SDS directs.
  1 photo required

Metering pump and injection

- [ ] Metering pump seen to draw and inject
  Pump stroking, drum level actually dropping over a timed count, discharge pressure building rather than the head just clicking dry.
  2 photos required
- [ ] Stroke and speed match the contractor's setting
  Stroke length and speed dials or the pump display read against the setting on the treatment contractor's last report; any difference recorded and raised, not reset by guess.
  1 photo required
- [ ] Injection point and check valve confirmed
  Injection quill and check valve passing product into the flow, no back-siphon, no scale or crystal buildup blocking the quill.
  1 photo required

Controller and area

- [ ] Controller reading and mode verified
  Conductivity or ORP probe reading in a sensible range, controller in auto and dosing on demand, not left in hand or alarmed.
  No photo required
- [ ] Eyewash and PPE present in the area
  Eyewash within reach and unobstructed, gloves and face protection stocked at the station; observed, not tested.
  1 photo required

Loop testing and close-up

- [ ] Loop tested with the kit against program targets
  Sample drawn and inhibitor, conductivity and the program's other parameters tested, each read against the treatment program's target range, not a remembered number.
  1 photo required
- [ ] Bypass feeder isolated and relieved before charging
  Where a pot feeder is fitted, inlet and outlet closed and pressure relieved at the drain before the cap is eased off, with face and hand PPE on.
  No photo required
- [ ] Station closed up and valves in service position
  Drum lids and pump covers back on, isolation and feeder valves open to flow, drips cleaned with absorbent and wastes bagged as the SDS directs.
  No photo required
- [ ] Readings logged for the treatment contractor
  Test kit results, drum levels, pump settings and any shot added logged where the treatment contractor reviews them, out-of-range results reported to the owner.
  No photo required