READY TO INSPECT — FIELD CHECKLIST

Sewage lift station annual maintenance checklist

The annual lift station 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 IPC / UPC plumbing codes, manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The plumbing service crew on the annual visit, with a hoist and a confined-space permit where entry is authorized. When: Once a year. Pumps are lifted on the guide rails from grade; any entry into the wet well runs under an authorized confined-space permit, not as a routine step.

Notice and isolation

- [ ] Operator and alarm receiver told the station is coming down
  Owner's operator and whoever answers the alarm told before pumps come out, and inflow held or a bypass pump or vacuum truck set up so the well can't overflow.
  No photo required

- [ ] Each pump locked out and tagged before it is pulled
  Power and control feeds, taken downstream of any transfer switch, locked, tagged and proven dead. To run it: pump seated, grate on, crew clear, own locks off, run, re-locked before hands go back in.
  1 photo required

- [ ] Gas monitor kept at the hatch for the whole pull
  Beyond the quarterly spot reading, the monitor stays at the open hatch with forced air where the plan calls for it, and work stops on any hydrogen sulfide or low-oxygen alarm.
  1 photo required

- [ ] Anyone below the hatch goes on a confined-space permit
  Permit issued before anyone enters, with the air tested, ventilation running, an attendant at grade, retrieval gear rigged and rescue arranged.
  No photo required

Pump removal and rails

- [ ] Pumps lifted on the guide rails and inspected
  Each pump raised on its rail from grade, impeller and seal checked, cutter or vortex clear of rags, reseated tight on the discharge base.
  2 photos required

- [ ] Guide rails and lifting chains sound
  Rails, brackets, chain and shackles checked for corrosion and wear, chain rated and not stretched, so a pump can be pulled without a fight.
  1 photo required

- [ ] Voltage and current per phase read on each reseated pump
  Beyond the quarterly amp check, every phase read under the energized-work procedure during the temporary release, imbalance noted, and each pump set against last year.
  1 photo required

- [ ] Pump-down rate timed against the station's baseline
  Each pump timed drawing the well between two marked levels with inflow noted, set against commissioning or last year's time to show impeller wear or a throttled valve.
  No photo required

Valves

- [ ] Check valves service and seat clean
  Each check valve opened and inspected, flapper or ball seats fully so the well doesn't backfill, no debris holding it open.
  2 photos required

- [ ] Isolation valves exercised and hold
  Each isolation valve fully stroked, not seized, so either pump can be isolated for service while the other stays in duty.
  1 photo required

Wet well

- [ ] Wet well cleaned out and floats cleared
  Grease cap and settled solids removed, floats and transducer cleaned and re-hung, done from grade or under an authorized entry permit.
  1 photo required

- [ ] Wet-well walls, benching and hatch frame inspected
  Concrete or liner seen from the hatch with a light for gas corrosion, exposed rebar, infiltration or broken benching, and the hatch hinges, hold-open and grate sound.
  1 photo required

Return to service

- [ ] Locks cleared and pumps back in auto
  Locks and tags removed by whoever hung them, grate and hatch closed, selectors in auto, and a full cycle run on each pump with the check valve holding.
  1 photo required

- [ ] Pumps proven to start on backup power where provided
  Coordinated with whoever runs the generator or transfer test, both pumps seen restarting and carrying the well on the standby source, then back on utility power.
  No photo required

- [ ] Alarm receiver told the station is back with readings logged
  Owner's operator and alarm receiver told the station is back in service, and amps, voltages, pump-down times and wet-well findings logged as next year's baseline.
  No photo required