Test Potable Water Lines: Pressure, Disinfect, Certify

Test potable water lines with an interactive checklist for pressure, disinfection, flushing, and certification; fully commentable and export as PDF/Excel with QR-secured sign-off.

Project:
Date:
Filled by:

Pre-Test Verification

1	Confirm test scope matches drawings; installation work excluded. Verify as-built alignment, thrust restraint status, and backfill cover per project. Evidence: marked-up plans and photos of end conditions.
2	Verify isolation of test section with end caps or blinds; close valves to unaffected areas; install backflow prevention. Evidence: photos of isolation points and valve tags.
3	Install calibrated pressure gauge(s) and data logger (range suitable for specified test kPa/MPa). Evidence: calibration certificates ($\leq$ 12 months) and serial numbers recorded.
4	Provide high-point air release and low-point drain connections; ensure vents are functional to remove entrained air. Evidence: photos of vent/drain arrangements.
5	Calculate test section volume from pipe DN, length, and appurtenances for dosing and flushing planning. Evidence: calculation sheet showing litres and assumptions.

Pressure Testing

6	Fill the line slowly with potable water, purging air at high points; record water temperature (°C). Acceptance: stable fill with no pressure surge. Evidence: fill log and photos.
7	Stabilize the pipe per approved project specifications (soak period if required). Acceptance: pressure drift stabilizes before formal test. Evidence: pre-test stabilization log.
8	Pressurize to specified test pressure per approved project specifications and authority requirements. Hold for the specified duration. Evidence: logged kPa readings at defined intervals.
9	Inspect all joints, fittings, and appurtenances for leaks during hold. Acceptance: no visible leakage or sweating. Evidence: close-up photos of representative joints.
10	If pressure loss exceeds allowable, locate leakage using acoustic, tracer, or sectional isolation methods; repair and repeat test. Evidence: defect log and retest results attached.
11	Depressurize slowly through drains while vents are open to avoid vacuum. Acceptance: controlled depressurization with no back-siphonage. Evidence: depressurization log.

Disinfection	
12	Prepare sodium hypochlorite solution and dose to achieve target free chlorine per approved project specifications. Evidence: chemical batch numbers, concentration, and dosing calculation in mg/L.
13	Introduce disinfectant and circulate to all extremities; verify free chlorine at remote points. Acceptance: target residual measured throughout. Evidence: field readings (mg/L) at sample points.
14	Maintain contact time per approved project specifications and authority requirements. Evidence: start/finish timestamps and residual checks during contact period.
15	Neutralize disinfectant at discharge if required using sodium thiosulfate or approved agent. Acceptance: residual at discharge within authority limits. Evidence: neutralization logs and test strip photos.
16	Handle chemicals with PPE (gloves, goggles, mask) and provide SDS on site. Evidence: PPE checklist and SDS copies attached.

Flushing and Water Quality	
17	Flush with potable water until water runs clear; achieve planned scouring flow per project method. Evidence: flow rate estimate and total litres flushed recorded.
18	Confirm residual chlorine is within service range per authority requirements before sampling. Evidence: residual readings (mg/L) at each planned sampling location.
19	Collect bacteriological samples aseptically at designated taps; label, seal, and complete chain-of-custody. Acceptance: samples delivered within required holding time. Evidence: custody forms and sample IDs.
20	Measure turbidity and pH at sampling; compare to specified acceptance. Evidence: field meter logs (NTU, pH) and instrument calibration status.
21	Review lab report for absence of coliforms/E. coli per authority requirements. Acceptance: pass result for all samples. Evidence: signed laboratory certificate attached.

Documentation and Certification	
22	Compile pressure logs, gauge certificates, chemical batch records, dosing calculations, flushing volumes, and lab reports. Acceptance: complete, legible, and consistent. Evidence: document index and file links.
23	Obtain digital sign-off from contractor, inspector, and authority representative. Evidence: dated signatures with names and roles captured.
24	Issue pressure test and disinfection certificates per approved project specifications and authority requirements; export with QR-secured package. Evidence: QR scan confirmation and distribution list.

Comments:

Filled by:

Signature:

Introduction	How to use this checklist
Test potable water lines with a rigorous, field-ready process that verifies performance and hygiene before service. This checklist guides hydrostatic testing, water main chlorination, controlled flushing, and certification of new or repaired potable pipelines. It excludes installation work, focusing solely on verification, cleaning, and documentation. By following these steps, teams avoid pressure-related failures, cross-contamination, and costly repeat work, while delivering auditable evidence for client and authority acceptance. You will plan isolation, select calibrated gauges, record kPa readings, manage chlorine dosing (NaOCl), and collect compliant bacteriological samples. The outcome is a safe, disinfected, and certified water main ready for commissioning, documented per approved project specifications and authority requirements. Use this interactive tool to assign tasks, attach photos, and capture approvals in real time. Start ticking items, add clarifying comments, and export results to PDF or Excel with a QR-secured link for fast verification.	1. Preparation: Gather drawings, isolation hardware, calibrated gauges/loggers, dosing equipment, PPE, and sampling kits. Confirm site access, authority notifications, and safe discharge arrangements. Open the checklist and assign roles and due dates. 2. Using the Interactive Checklist: Start interactive mode, tick items as completed, attach photos, logs, and certificates. Use comments to flag issues and tag reviewers. Track status and export progress snapshots to PDF/Excel anytime. 3. Sign-Off: When all items pass, capture digital signatures from contractor, inspector, and authority. Export the final, commentable package as PDF/Excel with a QR link for authenticity and archive it.

Introduction	How to use this checklist
Test potable water lines with a rigorous, field-ready process that verifies performance and hygiene before service. This checklist guides hydrostatic testing, water main chlorination, controlled flushing, and certification of new or repaired potable pipelines. It excludes installation work, focusing solely on verification, cleaning, and documentation. By following these steps, teams avoid pressure-related failures, cross-contamination, and costly repeat work, while delivering auditable evidence for client and authority acceptance. You will plan isolation, select calibrated gauges, record kPa readings, manage chlorine dosing (NaOCl), and collect compliant bacteriological samples. The outcome is a safe, disinfected, and certified water main ready for commissioning, documented per approved project specifications and authority requirements. Use this interactive tool to assign tasks, attach photos, and capture approvals in real time. Start ticking items, add clarifying comments, and export results to PDF or Excel with a QR-secured link for fast verification.	1. Preparation: Gather drawings, isolation hardware, calibrated gauges/loggers, dosing equipment, PPE, and sampling kits. Confirm site access, authority notifications, and safe discharge arrangements. Open the checklist and assign roles and due dates. 2. Using the Interactive Checklist: Start interactive mode, tick items as completed, attach photos, logs, and certificates. Use comments to flag issues and tag reviewers. Track status and export progress snapshots to PDF/Excel anytime. 3. Sign-Off: When all items pass, capture digital signatures from contractor, inspector, and authority. Export the final, commentable package as PDF/Excel with a QR link for authenticity and archive it.