



Demobilize Instrumentation: Seal, Archive, Handover

Demobilize instrumentation with a structured, interactive checklist for sealing wells, archiving data, and handing over logs; fully commentable and easy to export as PDF/Excel.

Project:
Date:
Filled by:

Pre-Demobilization Verification

1	Obtain written authorization to abandon wells and seal casings from the client and authorities; confirm scope per approved project specifications and authority requirements.
2	Reconcile instrument register against as-builts; tag each location with ID, coordinates (± 3 m), and elevation reference (± 0.01 m); photograph current condition.
3	Issue notifications and barricade a 5 m radius work zone; place signage; complete utility scan to 1.5 m depth; record permit-to-work and scan report.
4	Isolate power/data: disconnect mains, batteries, and solar; apply lockout–tagout; verify zero energy with multimeter; capture LOTO photo and tester reading.

Seal Casings and Wells

5	Remove sensors, cables, and anchors using hand tools; coil and bag components; inventory by serial/lot numbers; photograph empty casing prior to sealing.
6	Prepare bentonite–cement grout (w/c 0.4–0.6; 3–5% bentonite by mass). Record batch tickets, temperature (5–35 °C), and density 1.8–2.0 g/cm ³ .
7	Install tremie pipe to base; place grout bottom-up without interruption; maintain positive head ≥ 0.5 m; log depth profile and total volume within $\pm 10\%$ theoretical.
8	Trim casing 0.30 m below finished grade; fit corrosion-resistant cap/plug; achieve flush finish; photo evidence showing scale and depth measurement.
9	For penetrations in slabs/pavements, patch with non-shrink grout (≥ 35 MPa at 28 days); trowel flush; cure per datasheet; record batch/lot and cure start time.
10	For unpaved areas, reinstate surface with compacted fill in 150 mm lifts; achieve $\geq 95\%$ MDD; verify with density test; capture location-stamped photos.

Data Archiving and Backup

11	Consolidate raw data (CSV, TXT), processed files, and reports (PDF/A); standardize filenames: Project_Location_ID_Date_UTC; include units in headers (SI only).
12	Embed metadata: coordinates (EPSG code), elevation datum, sensor model/SN, calibration dates, timebase (UTC), and responsible person; export metadata as JSON and PDF.
13	Generate checksums (SHA-256) for all deliverables; verify post-copy integrity; store checksum manifest alongside the dataset; screenshot verification results.
14	Create two backups: primary cloud repository with access control and offline encrypted drive (AES-256); record locations, revision, and restore test screenshot.

Logs and Handover Documentation	
15	Compile instrument lifecycle log: install/removal dates, maintenance events, alarms handled, and reasons for decommissioning; include signatures and supporting photos.
16	Complete well sealing record: casing ID, depths, grout mix, placement start/finish times, volumes, ambient temperature, and acceptance; attach depth log and photos.
17	Update drawings/GIS: mark each point “abandoned and sealed,” note cut-off depth 0.30 m, and reference sealing record ID; issue Rev number and date.
18	Compile waste manifests: e-waste for loggers/batteries, scrap metals, cables; list masses (kg), carriers, and disposal facilities; attach receipts and photos.

Site Restoration and Disposal	
19	Restore pavements: saw-cut square, place asphalt or concrete patch matching thickness; compact to ≥95% MDD (asphalt) or cure concrete; record density/cure data.
20	Remove temporary posts, bollards, and barriers; ensure no protrusions >5 mm above surface; sweep area; capture before/after geotagged photos.

Closeout and Sign-Off	
21	Assemble digital handover pack: checklist PDF, sealing records, drawings, manifests, calibration certificates, and meeting minutes; generate QR link to master archive.
22	Conduct client handover meeting; walk through records; obtain digital approvals; issue closeout letter per approved project specifications and authority requirements.

Comments:

Filled by:

Signature:

Introduction	How to use this checklist
<p>Demobilize instrumentation with a disciplined, auditable approach that seals casings and wells, archives all monitoring datasets, and hands over complete logs. This instrumentation demobilization checklist focuses on well abandonment, borehole casing sealing, data archiving, and documentation transfer, while explicitly excluding ongoing monitoring during the superstructure phase. By following clear methods and acceptance cues, teams prevent groundwater cross-contamination, eliminate trip hazards, and preserve data integrity for future reference and regulatory audits. Field crews and engineers will find practical instructions for grout selection, tremie placement, cap installation, and surface reinstatement, alongside robust data management steps like file normalization, checksum validation, and multi-location backups. Deliverables include signed sealing records, updated as-builts, calibrated reports, and a consolidated, searchable archive ready for client acceptance. Use this interactive checklist to tick tasks, add comments with photos, and export as PDF/Excel. Authenticate deliverables with a QR code so stakeholders can verify the latest approved revision instantly.</p>	<ol style="list-style-type: none"> 1. Preparation: gather grout pump, tremie pipes, cutting tools, caps, repair mortar, density/testing gear, GPS device, camera, PPE (gloves, goggles, respirator), utility scan equipment, permits, and lockout devices. 2. Open the checklist, select the project, and preload the instrument register and drawing references so each location can be tagged with IDs and coordinates. 3. Start interactive mode onsite; tick tasks as completed, add comments with photos, depths, volumes, and test readings; geotag entries for location assurance. 4. Attach batch tickets, calibration certificates, manifests, and meeting minutes directly to relevant items; use standardized filenames and metadata fields. 5. Export the evolving record to PDF/Excel for briefings; share the QR link with stakeholders so they can view the latest revision. 6. Sign-Off: collect digital signatures from contractor, consultant, and client; lock the checklist to create an immutable, QR-verifiable closeout package. 7. Archive: store the signed package in cloud and offline locations; restrict access per approved project specifications and authority requirements.