

Concrete Pump Line Water Cleanout JHA

Worked instructional example

Work and worksite

A specialist pump operator and assigned helpers will carry out routine manufacturer-permitted water cleanout of a ground-level concrete delivery pipeline after a completed building pour. A controlled receiving arrangement contains the discharge; the actual equipment procedure governs all pressure and isolation actions. This fictional learning example describes planned controls; it records no actual inspection or work authorization.

- The pump, line, fittings, supports, cleaning method and receiving equipment must be compatible under current manufacturer instructions.
- This is a planning example for a known, unobstructed line; it provides no valve sequence, pressure setting or cleaning-device recipe.
- It covers part of concrete pump cleanout. Compressed-air cleaning, blockage removal, high-rise risers, hopper entry and equipment repair are excluded.

Questions before work

- Does the actual pump/line procedure permit this water method with the available receiving equipment?
- Who controls every pressure source and verifies the safe condition before a connection is touched?
- How will the discharge exclusion area, containment capacity and operator-helper communication be maintained?

Task Hazard Control

1 Release the routine cleanout method

Hazard: An unsuitable cleaning arrangement can separate fittings or discharge material unexpectedly.

Control: Pump operator checks the current manufacturer procedure, line condition and compatible cleanout/receiving components. Confirm the operation is routine cleaning, not suspected blockage removal; stop if equipment or method suitability is unresolved.

Verification: Operator and site lead confirm the written method and scope before setup.

Reasoning: Water cleaning still needs an equipment-specific pressure and discharge plan.

2 Establish the receiving boundary

Hazard: Concrete, water or a cleaning device can strike a person or overflow into a travel route.

Control: Site lead provides the prescribed receiving/catching arrangement and adequate contained capacity. Close the discharge and line-of-fire area to workers and other trades; select protected observation and helper positions outside potential discharge paths.

Verification: Lead checks receiving equipment, capacity and boundaries with the operator before connection work.

Reasoning: A water method does not remove the hazard at the line outlet.

3 Verify isolation for setup

Hazard: Residual or reintroduced pressure can eject a coupling or drive unexpected equipment movement.

Control: Operator controls all identified energy/pressure sources using the actual procedure. Verify the specified safe condition before any connection or guard is disturbed; keep helpers clear and do not treat a single gauge indication as complete verification.

Verification: Operator confirms the verified condition and authority to approach each connection.

Reasoning: A stopped pump and a safely depressurized line are different states.

Complete the work and hand over

4 Assemble and check the arrangement

Hazard: Wrong connectors, insecure supports or bypassed restraint can let the line or outlet move.

Control: Assigned personnel assemble only the manufacturer-permitted components after isolation verification. Check connection compatibility, locks, line supports, restraint and discharge capture against instructions; do not improvise caps or fittings.

Verification: Operator checks the complete arrangement and clears helpers before initiating cleaning.

Reasoning: Compatible parts and a contained outlet must function as one system.

5 Conduct cleaning under operator control

Hazard: Unexpected movement, interrupted discharge or changed pressure can expose helpers to hose whip or material release.

Control: Operator follows the approved water-cleanout procedure while maintaining communication and the exclusion area. Observe from designated positions; stop and return to the prescribed safe state for abnormal response. Do not use compressed air to force a stalled cleanout.

Verification: Operator and boundary attendant monitor line response, receiving capacity and continued separation.

Reasoning: An abnormal response ends this routine scenario; it does not authorize blockage clearing.

6 Verify safe closeout and hand over

Hazard: Opening a connection too early can release retained pressure; contaminated residue can expose cleanup workers.

Control: Use the actual shutdown, pressure-release and verification procedure before disassembly. Keep discharge restrictions until the safe condition is established, contain residue and hand remaining defects or cleanup restrictions to the site lead.

Verification: Operator records safe-state verification and unresolved defects; lead accepts the contained waste area.

Reasoning: Closeout must verify the line's condition before another person approaches.

Pause and reassess

- No discharge, unexpected movement or another abnormal line response.
- Receiving equipment, capacity, connection security or exclusion boundary becomes unsuitable.
- A pressure source, verification method or communication arrangement cannot be controlled.

Improve the controls

Needs improvement: Water is safer, so flush it out.

More useful: Operator first verifies a permitted method, compatible components, controlled receiving equipment and an exclusion area; cleaning remains under model-specific instructions.

Needs improvement: The motor is stopped; undo the coupling.

More useful: Operator isolates identified sources and verifies the prescribed safe pressure condition before any helper touches the connection.

Decisions that change the analysis

May the operator use air when water cleanout stalls?

This example excludes compressed-air cleaning and blockage removal. A stalled or abnormal response requires stopping, establishing the prescribed safe state and obtaining specialist review under the applicable procedure; it does not justify an improvised method.

What must the crew record for actual use?

Record pump and line identity, the procedure revision, compatible cleanout/receiving components, discharge boundaries, responsible operator/helpers, actual safe-state findings, abnormal observations and waste handover. This JHA supplies no equipment-operating sequence.

Training needs

- Model-specific water-cleanout, pressure verification, isolation and emergency instruction for the operator and assigned helpers.
- Crew instruction in hose/line-of-fire boundaries, controlled receiving arrangements and wet-concrete exposure response.

Confirm applicable qualifications and actual training evidence for the people assigned. Related toolbox talks support discussion; they do not establish competence.

References and adaptation

OSHA 1926.702 Concrete equipment and tools

<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.702>

WorkSafe Queensland Concrete pump hose-whip alert

<https://www.worksafe.qld.gov.au/news-and-events/alerts/workplace-health-and-safety-alerts/2011/hose-whip-on-concrete-pumps>

US EPA Concrete washout best management practice

https://www.epa.gov/sites/default/files/2015-11/documents/concretewashout_0.pdf

References reviewed October 9, 2026. Use actual equipment and product instructions, project design and site requirements. This instructional example supplies no actual inspection results, signatures or work approval.