

SOAKAWAYS AND INFILTRATION CRATES

ACTIVITY RAMS — ADAPT TO SITE BEFORE USE

Infiltration test pits · deep excavations · crate modules · pumps and silty water

KD-RA-EX-003 Rev A0

Statutory basis: CDM 2015 regs 22(4) and 24 for inspection of excavations and reg 25(4) for underground services, with regs 13 and 15; HSE HSG47 (3rd edition, 2014) for avoiding underground services; Environmental Permitting (England and Wales) Regulations 2016 for discharges of pumped water in England and Wales — confirm the rules that apply elsewhere in the UK; Manual Handling Operations Regulations 1992. This document is the recorded safe system of work required by HSWA 1974 s.2(2)(a) and MHSWR 1999 regs 3 and 5.

1 DOCUMENT AND PROJECT IDENTIFICATION

RAMS REFERENCE	PROJECT / SITE REF	SITE NAME AND ADDRESS	DATE PREPARED	NEXT REVIEW DATE
CLIENT / PRINCIPAL CONTRACTOR	PLANNED START	DURATION	OPERATIVES	SUPERVISING THE WORK

2 SCOPE OF WORKS

Construction of soakaways and geocellular infiltration or attenuation tanks in external works: infiltration testing in trial pits, excavation to formation, laying geotextile or membrane, placing crate modules, connecting inlets and outlets, backfilling, and managing water and silt during the works.

This document does not cover: excavation and support generally (KD-RAMS-GW-001), pipe runs and chambers (KD-RAMS-GW-003), recovering an excavation flooded by rain, a burst or groundwater (KD-RA-GW-005), groundwater lowering (KD-RAMS-PS-005), and the drainage design and infiltration test criteria (the designer's).

SITE-SPECIFIC SCOPE, LOCATIONS AND LIMITATIONS

3 RISK ASSESSMENT — SCORE EACH RISK FOR THIS SITE, THEN ADD WHAT IS MISSING

The hazards and controls below are the starting point for this activity, written by a working main contractor. They are not complete for your site until a competent person has scored each risk, added the site-specific hazards, and struck out anything that does not apply. Rate risks High / Medium / Low before and after controls.

1. Collapse of the excavation sides

At risk: Operatives

Controls: Excavations battered or supported to the temporary works design; nobody enters an unsupported excavation; inspected by a competent person at the start of each shift, after any event likely to affect stability and after any fall of material, with the inspection recorded (CDM 2015 regs 22(4) and 24); spoil and crate stacks kept back from the edge by the distance the design states.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

2. Falls into excavations and test pits, and no safe way in or out

At risk: Operatives, public, children

Controls: Edge protection or barriers round every excavation; secured ladders or stair towers for access, extending above the edge and kept clear; infiltration test pits fenced and covered whenever unattended and never left full of water where anyone could get in; site boundary secured out of hours.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

3. Drowning, silt and pump fumes at formation

At risk: Operatives

Controls: Standing water pumped out before anyone enters; engine-driven pumps kept at ground level, never in the excavation; submersible pumps on 110 V or protected by an RCD; soft spots and silt probed from the edge before anyone steps down; work stops in heavy rain and the excavation is re-inspected before re-entry.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

4. Striking buried services

At risk: Operatives

Controls: Service drawings and CAT and genny survey before ground is broken; hand-dug trial holes to prove services near the dig; HSE HSG47 (3rd edition, 2014) safe digging practice under the permit to dig.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

5. Machine and operatives working in the same excavation

At risk: Operatives

Controls: Nobody in the excavation while the machine digs or places; banksman controls every approach with agreed signals; operatives climb out before the bucket moves over the dig.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

6. Crate modules and geotextile — handling, stacking and standing on part-built layers

At risk: Operatives

Controls: Pallets of modules and heavy geotextile rolls moved by machine; single modules handled within their packed weight and by two where awkward; the stack built to the manufacturer's pattern and clips; operatives stand on completed layers only where the manufacturer permits; sheets weighted as laid and laying stopped when wind lifts them.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

7. Tank crushed by backfill or plant, or lifted by groundwater*At risk: Operatives, plant operators*

Controls: Backfill placed and compacted in layers to the cover and loading limits the manufacturer and designer state; no plant crosses the tank until the minimum cover is in place; stop blocks for dumpers tipping backfill at the edge; where groundwater could rise, flotation of the empty tank is guarded against as the designer directs.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

8. Silty water pumped to drains or watercourses*At risk: The environment*

Controls: Pumped water passed through a settlement tank or silt bag; no discharge to a watercourse or surface water drain without the permit or consent in place (Environmental Permitting (England and Wales) Regulations 2016 in England and Wales; elsewhere, the rules that apply); discharge point checked whenever pumping starts, and discoloured water stops the pump.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

Site-specific hazards not listed above — every site has at least one:

HAZARD	WHO IS AT RISK	CONTROLS	INITIAL H/...	RESIDUAL...	ACTION OWNER	BY WHEN

4 METHOD — SEQUENCE OF WORK

- Obtain the drainage design, the temporary works design for the excavation, service drawings and the agreed discharge arrangement; brief them.
- Locate and prove services; issue the permit to dig.
- For infiltration testing, dig test pits to the designer's depth, fence them, fill from a bowser, and read water levels from outside the pit; nobody enters a flooded pit; backfill or cover it as soon as the test ends.
- Excavate to formation with the support or batter the design specifies, keeping spoil and materials back from the edge; set ladders or stair towers.
- Competent person inspects before first entry each shift and after any event affecting stability; record the inspection.
- Pump out standing water through the silt control to the agreed discharge point before anyone enters, with engine pumps at ground level.
- Prepare formation and have it approved; lay the geotextile or membrane.
- Place crate modules to the manufacturer's pattern with clips; wrap and seal the geotextile or membrane.
- Connect inlets, outlets, silt traps and vents as designed.
- Backfill in layers to the cover and compaction the design states, with stop blocks for tipping; no plant over the tank until the minimum cover is placed.
- Stop work on any sign of collapse, rising water or tank movement, a service not on the drawings, or heavy rain; re-inspect before restarting.
- Remove edge protection only as backfill closes the excavation; keep the area barriered until surfaced.

SITE-SPECIFIC AMENDMENTS TO THE SEQUENCE**5 PLANT, EQUIPMENT AND MATERIALS**

- | | |
|---|--|
| Excavator with banksman | Pump with settlement tank or silt bag; 110 V or RCD-protected submersibles |
| Trench support or battering to the temporary works design | Crate modules, clips and geotextile or membrane |
| Edge protection, barriers, ladders or stair towers | Compaction plant and stop blocks |
| Water bowser for infiltration testing | CAT and genny |

INSPECTION / THOROUGH EXAMINATION REFS**COSHH ASSESSMENT REFS****6 PPE — THE LAST LINE OF CONTROL, NOT THE FIRST**

- | | | |
|-----------------|---------------------|--------------------|
| Head protection | High visibility | Eye protection |
| Safety footwear | Gloves — task-rated | Hearing protection |

RPE TYPE, FACE-FIT STATUS, AND ANY OTHER PPE REQUIRED

7 PERMITS REQUIRED BEFORE THIS WORK STARTS

A permit authorises this work in that place, on that day. It extends the safe system of work in this document — it does not replace it (HSE HSG250). The site issues the permit; record its number before work starts.

KD-PTW-EX-005 — Excavation & Permit to Dig
For every excavation and infiltration test pit.

PERMIT NUMBER

KD-PTW-WW-034 — Work Over or Near Water Permit
Where operatives work beside a flooded excavation or settlement pond with a drowning risk.

PERMIT NUMBER

8 EMERGENCY ARRANGEMENTS — COMPLETE FOR THIS SITE

FIRST AIDER AND LOCATION	NEAREST A&E	ASSEMBLY POINT
HOW THE ALARM IS RAISED	EMERGENCY ACCESS FOR THIS WORK AREA	SPILL / ENVIRONMENTAL RESPONSE

9 BRIEFING RECORD — EVERYONE WORKING UNDER THIS RAMS SIGNS BEFORE STARTING

By signing you confirm the contents of this RAMS have been explained to you, you understand the hazards and controls, and you will work to the sequence stated. Tell the supervisor if the work or the site does not match this document — work stops until it does.

NAME	COMPANY	SIGNATURE	DATE

10 PREPARED AND ACCEPTED

Prepared / adapted for this site by — I confirm I have adapted this document to the site, scored the risks, and that it describes how the work will actually be done.

PRINTED NAME	ROLE / COMPETENCE	COMPANY	SIGNATURE	DATE	TIME

Accepted for the site by — principal contractor or site manager review.

PRINTED NAME	ROLE	COMPANY	SIGNATURE	DATE	TIME

Review this RAMS if the work, the site or the law changes, and at least before each new phase of the works. Flatten the completed PDF before filing so the record cannot be silently edited.

R REVISION HISTORY

Every revision of this document, and every review that found nothing to change. The revision on the front of this sheet is the one you are holding — check kubitdocs.com for the current one before use.

Rev	Date	Class	What changed	Authorised by
D0	2026-09-11	first-issue	First issue.	— not yet approved —
A0	2026-09-11	review	Approved for issue by the author. Content unchanged from the reviewed draft; the draft status strip is removed. No independent third-party review has been carried out.	Author — director, UK principal contractor, SMSTS. Not an independent review.

Class: first-issue · material (the law, a control, a field or the scope changed — past buyers are notified) · editorial (wording or layout only) · review (checked, nothing changed) · withdrawal. Revision prefix D = draft, not approved and not for sale; A = approved for issue by the person named, on the date shown.