

SHEEP DIP HANDLING FACILITIES AND DRAINAGE YARDS

Prepared by ADAS National Building Design Team.
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Note: Splash guards removed in both photographs for clarity

Site Suitability

- Consult with the Environment Agency and the Local Planning Authority on site location and suitability.
- Avoid sites in a flood plain and with a high water table.
- A trial pit dug adjacent to the proposed site will provide information about the nature of the subsoil.
- Observe the trial hole over a period of time to see if ground water is a problem.
- Locate more than 10 metres away from any watercourse or drain, and more than 50 metres from any spring, well or borehole. This also applies to mobile dips and when using sprays and pour-on products.
- Avoid improperly filled ground or other unsuitable ground conditions such as peat, soft ground or ground liable to subsidence.

Specification

- Design and build to prevent water pollution. Refer to the Water Code, the Green Code and the Environment Agency Guidelines (See References 1, 2 & 3).
- Conform to Health and Safety Executive guidelines on chemical stores and washing facilities. (See Reference 4 & 5).
- Accommodating the sheep dip and pens within a properly designed building will eliminate rainfall and potential overflow problems.
- Do not fully enclose all sides of the building. Provide extremely good ventilation to minimise the risk of breathing in aerosols. Site the dip bath adjacent to an open side. A high roof will also help ventilation.
- If a sheep dip is not roofed avoid filling if rain is expected. Rain covers should be available. A below ground watertight tank may be needed to collect and store excess contaminated run-off water.
- Design and construct the building to conform to BS 5502 Parts 22 & 41 (See Reference 4).
- Design pens and barriers to meet the welfare standards for sheep (See Reference 4).
- Make draining/shedding pens large enough to hold each group for up to 10 minutes after dipping. Drainage from pen areas should be directed back into the dip-bath.

- Provide a race to guide the sheep to the dip.
- Construct impermeable concrete floors with watertight sealed joints to the dip area and the draining pens. Use an RC40 mix concrete to BS 5328 and joint sealants to BS 6213. (See References 6 & 7).
- Contour the floors so that spillage is collected and drained back into the dip-bath. Collection channels must be watertight.
- The dip-bath must not have a drainage hole.
- The dip should have an entry slope to help reduce splashes.
- Fix screens at entry points and other places where operators could be splashed.
- Provide a piped water supply for top up, decontamination and rinsing. Make sure the dip chemicals cannot siphon back into the pipe.
- The dip-bath must be impermeable. Use a proprietary manufactured bath that conforms to BS 5502 and is guaranteed to remain impermeable for up to 20 years. Circular and rectangular dips are available in composite concrete or glass reinforced plastics. Consult the manufacturer about the need to surround with concrete below ground level to give additional strength, especially if heavy tractors or tankers are likely to be used adjacent to the dip. Loading conditions for similar tanks are given in BS 5502 Part 50 (See Reference 4).
- Do not attempt to construct the actual dip-bath yourself; it is better to use a factory-manufactured bath. Watertight construction is a specialist job.

Construction

- It is recommended that an experienced building contractor be employed to erect the building and to construct the dip and ancillary works.
- Advice on building contracts is given in the associated leaflet No CGN 100.

Repair and Maintenance

- Repairing a leak in an older defective dip built of brick or concrete is extremely difficult. It is usually cheaper to install a new proprietary type bath rather than attempt repairs.
- Ask the manufacturer and installer of the dip to provide information on the correct operation and maintenance procedures.
- Carry out inspections of the dip and adjacent floor areas well before dipping starts.
- Inspect the dip carefully for any signs of cracks or other defect that may cause it to leak. If necessary fill the dip with water, leave overnight and compare levels for losses.
- Rectify cracks and defective joints well before use. Properly clean out the defective cracks and joints, prepare and reseal using a sealant to BS 6213 (See Reference 7).
- Refer to CIRIA Reports 126 and 164 for detailed advice on the repair of structural materials (See Reference 8 & 9).

References

- 1 The Code of Good Agricultural Practice for Water; MAFF (Free publication)
- 2 Code of practice for the safe use of pesticides on farms (Green Code) MAFF Free Publication
- 3 Environment Agency Pollution Prevention Guidelines
- 4 British Standard 5502: Buildings and structures for agriculture; British Standards Institution
- 5 Health and Safety Executive: Sheep dipping
- 6 British Standard 5328: Concrete specifications and procedures; British Standards Institution
- 7 British Standard 6213: Selection of construction sealants; British Standards Institution
- 8 CIRIA Report No 126: Farm waste storage- Guidelines for construction
- 9 CIRIA Report No 164: Design of containment facilities for the prevention of water pollution

