



Preventing access to effluent storage and similar areas on farms

Agriculture Information Sheet No 9 (rev)

Introduction

Drowning or being injured because of a fall into slurry or liquid stores on farms is an obvious risk, and has resulted in many fatal injuries to children and other injuries to drivers of scraper tractors. Simple precautions, such as surrounding these areas with child deterrent fencing, gates or covers, or providing a tractor stop barrier on the scraping ramp, will control this risk on most farms.

This information sheet gives practical guidance on these precautions, including advice on:

- standards of fencing etc to deter access by unauthorised people - in particular, children - into areas used for storing slurry, other effluent or water on farms; and
- how to prevent vehicles entering slurry storage areas at scraping points.

It does not cover the precautions needed when entering confined spaces such as reception pits, pits under slatted floor livestock buildings, or below-ground stores.

Throughout the rest of this information sheet, areas such as lagoons, pits, tanks, weeping wall stores, blind ditches, sheep dips and man-made irrigation reservoirs are called 'stores'.

By following the guidance, farmers will help to ensure that they meet general duties under the Health and Safety at Work etc Act 1974 and the provisions of the Workplace (Health, Safety and Welfare) Regulations 1992.

Perimeter protection

Unauthorised people such as children should be deterred from accessing the store itself, for instance by surrounding the perimeter by a wall or fence. Access points such as gates or apertures for suction pipes should be protected to the same standard as the remainder of the fence or wall. You may wish to completely cover below-ground stores such as reception tanks or sheep dips when they are not in use (see 'Below-ground stores' below).

Check that fences:

- have been designed to deter access and are properly erected and maintained;
- are constructed of suitable material, such as rectangular wire mesh;
- have an overall minimum height of 1.3 m (see Figure 1), including at least two strands of barbed wire spaced 100 to 150 mm apart at the top. If you do not use barbed wire at the top, consider whether your fence should be 2 m high;
- will not be pushed up from the bottom by stock. Two strands of barbed wire at the bottom will help prevent this.

Check that access points such as gates, and including scraping points:

- provide a standard of deterrence equal to that provided by the fence if erected to the standard

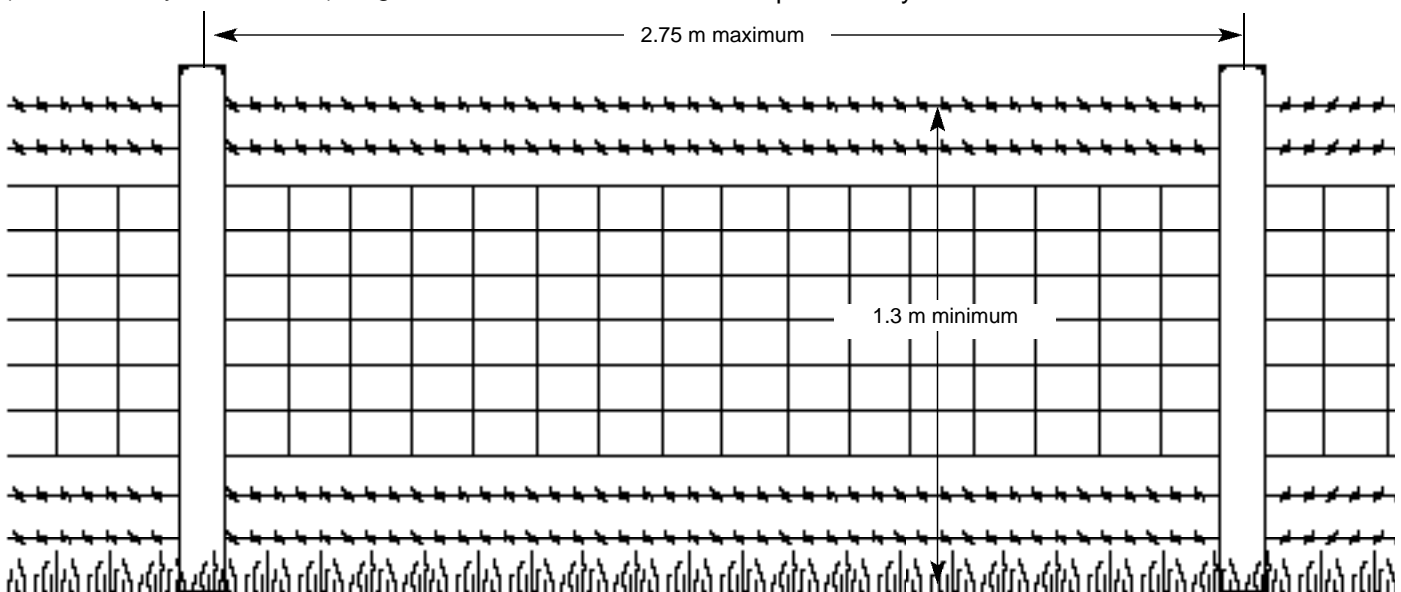


Figure 1

described above. For gates, this may be achieved by metal sheeting or otherwise cladding the outside to render them virtually unclimbable by children. Netting as shown in Figure 1 will not normally be suitable for gates;

- are topped by two strands of barbed wire;
- are designed to prevent unauthorised opening. This could involve chaining and padlocking; fitting with latches designed so that children will be unable to open them, eg placed on the inside of the gate; or otherwise protecting against opening to an equivalent standard.

If your store includes a scraping ramp, consider whether it is best in your circumstances to:

- extend the fencing to the bottom of the ramp and provide a sheeted gate across the ramp at that point; or
- provide swinging flaps attached to the tractor stop rail. These provide good protection if they are properly designed, constructed and maintained. However they are easily damaged, often fail to swing freely and need regular checking to ensure that adequate protection is provided.

Below-ground stores

If you decide to use a cover to protect your below-ground store, check that:

- the cover can withstand any foreseeable traffic loads, eg cattle, humans or a tractor;
- there are no any gaps greater than 75 mm, eg between slats or mesh or alongside pumps;
- extraction pipes cannot fall into the pit. Consider securing them in position;
- there are suitable 'no access for unauthorised persons' prohibitory signs on, or close to, covers.

If covers have removable sections, check that they are:

- large enough to allow access for rescue purposes (eg 600 mm square);
- hinged or otherwise attached so that they will not fall into the store;
- closed or replaced when access is not needed;
- heavy enough to prevent children from opening them, or fitted with a padlock or other locking device.

Maintenance

Your precautions should normally include:

- checking the integrity, including the tension, of the fencing and gates regularly;
- checking the bottom of the gate and fence to ensure there are no gaps through which a child might crawl;
- keeping gates securely closed with the child-resistant latch or lock in use except during scraping or emptying;
- not stacking materials against any fence, wall or above-ground storage tank in such a way that they provide a means of climbing over it;
- removing ladders giving access to storage tanks when not in use.

Scraping ramps

If you scrape manure over a ramp into the lagoon or pit, your ramp will normally need a barrier to stop tractors passing over the end. Check:

- whether your barrier is suitable. Suitable barriers, for a tractor of about one tonne weight and travelling at slow speed, would comprise vertical uprights of 150 mm x 75 mm rolled steel channel, with a horizontal barrier of similar material and size;
- the position of horizontal sections. Normally, they would be at a height to coincide with the top one third of the rear tyres of the tractor normally used for scraping;
- the security of uprights, particularly whether they are connected to the ramp reinforcement by, for instance, long mild steel fishtailed plates welded to each upright. Avoid fixing uprights at the end of the ramp as they may break it away if hit by the tractor.

Suitable barriers will not normally be made from wood.

Detailed advice on constructing ramps etc is available from the various agricultural advisory services.

HSE priced and free publications are available by mail order from HSE Books, PO Box 1999, Sudbury, Suffolk CO10 2WA Tel: 01787 881165 Fax: 01787 313995. Website: www.hsebooks.co.uk HSE priced publications are also available from good booksellers.

For other enquiries, ring HSE's InfoLine Tel: 0541 545500, or write to HSE's Information Centre, Broad Lane, Sheffield S3 7HQ. Website: www.hse.gov.uk

This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

This publication may be freely reproduced, except for advertising, endorsement or commercial purposes. The information it contains is current at 12/96. Please acknowledge the source as HSE.