Safety considerations when trenching to bury carcasses

Purpose

The purpose of this fact sheet is to provide basic safety guidance on minimising the risk of injury from trench collapse for workers involved in the burial of animal carcasses. For further guidance the advice of a geotechnical engineer should be obtained.

Background

The burial of animal carcasses in trenches that are deep enough to suitably control health risks can potentially create risks to workers from trench collapse. For example, trenches for carcass disposal typically include steep sides, and in some cases the sides may collapse during the disposal activity. Benching of the trench is generally not a practical alternative as the carcasses cannot fall to the bottom of the trench when they are pushed in by the earthmoving plant and adequate cover over the carcasses cannot be maintained.

As a general safety principal, to avoid trench collapse mobile plant should remain outside of the zone of influence of an un-shored trench. The zone of influence is typically a zone on either side of the trench that is at least equal to the depth of a trench (e.g. for a five metre deep trench the zone of influence can extend for five metres either side of the trench). An additional safety distance of one metre on the outside of the zone of influence may also be applied to prevent collapse (refer Diagram 1).

When disposing of carcasses, the plant pushing the carcasses into the trench (e.g. a dozer) physically enters the zone of influence. The risk of collapse can therefore be high while the plant is in this zone.
Safety principles

1. A documented work procedure should be developed with the knowledge that an un-shored trench with near vertical sides could collapse at any time. The risk of collapse will increase as mobile plant or carcasses move into the zone of influence.

2. Carcass disposal should always be carried out by suitable earthmoving plant with the operator remaining in the cabin. Workers should not walk near the carcasses nor within the zone of influence of open excavations. Workers should also should stay away from mobile plant.

3. Deep trenches should ideally be dug with earthmoving plant where the operator’s cabin remains above ground level so that, in the event of trench collapse, the operator’s cabin will not be buried. For example, an excavator with a long boom and dipper arm will be better than a loader or dozer to dig a trench. If a loader or dozer is entering a deep trench (i.e. the entire machine is below ground level) during the digging, battering should be used on the trench sides.

4. Cabins on earthmoving plant should be provided with a ROPS (roll over protective structure).

5. A dozer or loader will generally be the safest mobile plant to push the carcasses into the trench. When carcasses are being pushed into the trench, the mobile plant should approach the trench at right angles to the trench (i.e. at 90 degrees) so that the plant will not roll if the trench collapses. If the trench collapses, the operator should then be able to attempt to reverse the plant away from the trench. Provided the operator remains in the plant cabin, there should be minimal risk of injury.

6. When pushing carcasses into a trench, the plant should not approach closer than necessary for the carcasses to fall into the trench (e.g. once the blade or bucket reaches the edge of the trench the machine should start to reverse).

Refer to the Excavation work Code of Practice (PDF, 2.6MB).