On-farm disposal of animal carcasses

Updated February 2016¹

EPA 682/16: This information sheet explains how to dispose of animal carcasses on farms, and does not apply for carcasses from intensive livestock operations such as poultry (broiler or egg) farms, piggeries, cattle and sheep feedlots.

Introduction

This document has been prepared jointly between the Environment Protection Authority (EPA) and Primary Industries and Regions SA (PIRSA) and is based on the methodologies written in the <u>AUSVETPLAN Disposal Manual 2015</u> to assist farmers, land-owners and emergency services in the safe and appropriate disposal of animal carcasses.

The disposal methods do not apply to carcasses from intensive livestock operations such as poultry (broiler or egg) farms, piggeries, cattle and sheep feedlots.

Selecting a disposal method

The disposal method required will depend on the size of the animals. The number and size (weight and volume) of carcasses need to be established before deciding on a disposal method.

As a guide, adopt the information based on the type of animal, then modify the volume using observed dimensions occupied by the first carcasses disposed:

- 1.5 m³ per mature cow or horse (2 animals/3 m³)
- 0.3 m³ per mature pig, goat or sheep (3–4 animals/m³)
- 0.005 m³ per poultry (200 birds/m³).

Leave in situ: Isolated carcasses located throughout a property in the order of one per hectare (1/ha) can be left to decompose naturally on site. However it may be preferable to shallow bury or cover carcasses with soil to reduce flies, odour and scavenging.

Shallow burial: Shallow burial involves burying carcasses in a single layer about 30–45 cm deep and incorporating some organic matter (hay, straw, wood chips or manure) into the trench and re-covering with soil. The addition of organic matter has been shown to speed up the decomposition process. The area can be returned to normal use after several months.

Trench burial: This is a viable option if machinery is available to dig trenches. Trench width and depth will depend on the type of machinery used and the safety requirements of machinery operators. Carcasses should be only piled 2 m deep

¹ This information sheet replaces an earlier version titled *On-farm disposal of fire- and drought-affected carcasses*.



and 2 m of soil placed on top of the carcasses. Surplus soil should be heaped over the trenches to allow for subsidence. Multiple trenches of these dimensions should be more than 10 m apart.

Composting: The successful composting of animal carcasses by commercial composting companies, abattoirs and saleyards in South Australia is well established. If you are considering onsite composting as a disposal option consult an expert in the field to ensure compost piles are constructed properly including an adequate carbon—to—nitrogen (C:N) ratio. Alternatively carcasses may be transported to a commercial composting site if they are available in your area.

Selecting a shallow, trench burial or composting disposal site

The following requirements should be considered before selecting a burial or composting disposal site:

- Soils with clay subsoil are most suitable for burial trenches or composting areas. Soils with high leaching properties (sand, gravelly or rocky soils) are to be avoided where possible.
- Disposal sites should be at least 250 m from defined depressions, watercourses and surface water catchments (such as streams, rivers, creek beds and wetlands).
- The base of the trench should be at least 2 m above the water table.
- The site should be at least 250 m from the nearest bore and neighbouring residential building.

If burial within these requirements is not possible, lining the trench may be an option (please seek <u>further advice</u> from the EPA)

Marking a disposal site

Sites should be marked on a map or recorded using GPS, and their location should be retained by the site owner to inform future decision making.

Other factors

When digging burial trenches the following factors should also be taken into consideration:

- For safety reasons, people should not work in trenches over 1.5 m deep unless the sides are battered (slope of 2:1) or shored up.
- The site should be free of underground services (pipelines, power and telephone lines) and should not interfere with access to roads.
- The site should be accessible to earthmoving plant, stock and operators. Soils must be stable enough to take the
 weight of equipment used to construct and fill trenches.
- Rather than opening abdomens, surplus soil should also be heaped over the trenches to allow for subsidence.
- Disposal trenches should be inspected regularly during the months after closure to check for subsidence and seepage. Please <u>contact the EPA</u> for advice only if seepage occurs.

Further information

Legislation

Online legislation is freely available. Copies of legislation are available for purchase from:

Service SA Government Legislation Outlet Adelaide Service SA Centre 108 North Terrace Adelaide SA 5000 Telephone: 13 23 24 Facsimile: (08) 8204 1909

Website: < shop.service.sa.gov.au >

Email: <<u>ServiceSAcustomerservice@sa.gov.au</u>>

General information

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