

# Landowner's Guide to Managing Livestock Mortality



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It happens every day: a cow or horse dies unexpectedly. Owners of these animals need to know that there are sound and appropriate ways to dispose of the carcasses.

Improper disposal of animal carcasses can pollute groundwater and surface water, and can jeopardize the health of livestock, wildlife, and pets.

Carcass disposal must be safe for animals and the environment, and people must comply with state law. Some counties also have their own disposal-related ordinances.

*Animal carcasses within 1/2-mile of any dwelling or within 1/4-mile of any running stream of water must be disposed of as soon as possible, but no later than 15 hours after the time of death or discovery (ORS 601.140).*

## **BURIAL**

### **Requirements:**

Burial must protect surface water and groundwater. The bottom of the burial hole must be dry.

Burial is regulated by the Oregon Department of Agriculture's (ODA) Water Quality Program under Oregon Revised Statute (ORS) 468B.025: "... no person shall: (a) Cause pollution of any waters of the state or place or cause to be placed any wastes in a location where such wastes are likely to escape or be carried into the waters of the state by any means."

In some cases, burial can also be regulated by Oregon Department of Environmental Quality (DEQ) because carcasses are considered solid waste (ORS 459.005). Burial is illegal for disposal of commercial butcher waste.

Burying more than 4,200 pounds requires a Catastrophic Animal Mortality Management Plan (CAMMP) approved by ODA or a solid waste permit approved by DEQ (ORS 459.205). The state veterinarian also oversees implementation of a CAMMP in the event of a reportable livestock disease outbreak. Burial of many carcasses on permitted Confined Animal Feeding Operations (CAFO) requires both a CAMMP and a description in the ODA-approved Animal Waste Management Plan (AWMP). If carcasses are brought to your farm from other locations, you may be subject to additional regulations from ODA, DEQ, or your local land-use planning agency.

### **Recommendations:**

- Do not bury carcasses in areas with saturated soil, ponded water, seasonal flooding, or floodplains.
- Bury carcasses at least 500 feet from surface waters or wells; they can be closer if downhill of wells or if soils have high clay content below the top soil. In all cases, a minimum of 100 feet from wells and surface water is recommended.
- To avoid complaints from neighbors, bury carcasses:
  - » 1) More than 300 feet from any nearby residence that is not owned by the owner of the property where the burial is to take place, and
    - » 2) More than 50 feet from any property line between parcels under different ownership.
  - Burial should be on relatively flat land with a slope of less than 2 percent.



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## **BURIAL (CONTINUED)**

- Groundwater should be at least 25 feet below the depth of burial. Contact the ODA Water Quality Program if you have questions about groundwater.
- Place lime below the carcass in the burial hole, and dust top of carcass with lime. Lime helps reduce odors and manage leaking liquids.
- Place sod and manure around the carcass to help with decomposition.
- Cover carcass with 3 to 4 feet of soil to allow for settling as the carcass decomposes. Add more soil over time, if needed.
- Do not bury more than 1,000 pounds of animal carcass at a single site. A single large animal heavier than 1,000 pounds can be buried if conditions are appropriate.

## **COMPOSTING**

Composting dead animals and byproducts allows you to recycle the nutrients in the carcasses and, if done properly, is a sound environmental practice.

### **Requirements:**

Livestock operations composting mortalities or slaughter/butcher waste need to apply for a composting permit from DEQ (ORS 459.205) and operate in compliance with that permit, except for the following exceptions:

1. Permitted CAFOs must describe composting activities in an ODA-approved Nutrient Management Plan. ODA oversees mortality composting on all permitted CAFOs.

2. Other livestock operations composting mortalities:
  - » Generated by their operation, and
  - » In amounts not to exceed 20 tons/year of mortality and 100 tons/year of crop/vegetative residue or manure. This exemption is maintained as long as the composting activity does not impair surface water or groundwater or create nuisances for neighbors.

### **Recommendations:**

The On-Farm Composting Handbook issued by Cornell University is available online.

## **NATURAL DISPOSAL**

On a large, rural farm or ranch, it may be appropriate to leave the carcasses on the ground for scavengers.

### **Requirements:**

- You must place the carcass at least 1/2-mile from any dwelling and at least 1/4-mile from any open waterway (ORS 601.140).
- Natural disposal is illegal for commercial butcher waste (ORS 459.005, 459.205).
- It is illegal to leave carcasses on public lands (43 CFR 8365.1-1).

### **Recommendations:**

- Do not naturally dispose of chemically euthanized animals to prevent harm to predators.
- Do not dispose of multiple carcasses by natural disposal at one time or in one location.

## **LANDFILL**

Certain landfills are allowed to take carcasses and butchering waste. Call your local landfill to find out if it can accept animal carcasses or see ODA's list at <https://oda.direct/AnimalCarcassesLandfills>. If the landfill does not, DEQ may grant an exception to allow the landfill to accept the carcass(es).

When hauling dead livestock to the landfill, Oregon law requires that the carcasses be covered (ORS 601.100(3)). If you need to use a hauling service, see the list of haulers licensed in Oregon at <https://oda.direct/AnimalDisposalHaulers>. If you have a high number of mortalities and are unable to make disposal arrangements with your local landfill or hauling service, contact ODA at 503.986.4550.

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## **OPEN BURNING**

Animal carcasses and byproducts cannot be openly burned (Oregon Administrative Rules 340-264-0060).

## **INCINERATION/ OTHER METHODS**

Animal mortalities and byproducts can be incinerated in an incinerator or cremation unit operating with an approved DEQ Air Quality Permit. However, this option is not commonly available and may be expensive.

### ***Anaerobic Digestion or other Controlled Chemical Decomposition***

Animal mortalities can be processed with anaerobic digestion and other chemical decomposition methods. These options require considerable infrastructure and operational permitting from DEQ or from ODA in the case of permitted CAFOs. Contact DEQ or ODA to pursue these options.



## **MORTALITY MANAGEMENT FOR OPERATIONS WITH CAFO PERMITS**

Permitted CAFOs need to follow their specific AWMP. If they are unable to follow the AWMP, they need to contact their ODA inspector to work on modifying the AWMP to include additional methods for mortality management/disposal. In most cases, ODA should be able to amend the mortality management section of an AWMP via a phone conversation with the permittee.

### ***Oregon Department of Agriculture***

#### **Natural Resources Program Area – Salem**

**Online:** <https://oda.direct/AboutNR>

**Water Quality:** 503.986.4700

**CAFO:** 503.986.4699

#### **Animal Health Program – Salem**

**Online:** <https://oda.direct/AboutAHID>

503.986.4680

### ***Oregon Department of Environmental Quality***

**Online:** <https://oda.fyi/composting>,  
<https://oda.fyi/DisposalPermits>

**Eastern Region:** 541.298.7255, Ext. 221

**Counties:** Baker, Crook, Deschutes, Gilliam, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Malheur, Morrow, Sherman, Umatilla (including Milton-Freewater), Union, Wallowa, Wasco, and Wheeler

**Northwest Region:** 503.229.5263

**Counties:** Clackamas, Clatsop, Columbia, Multnomah, Tillamook, and Washington

**Western Region:** 541.687.7465

**Counties:** Benton, Coos, Curry, Douglas, Jackson, Josephine, Lane, Lincoln, Linn, Marion, Polk, and Yamhill