Guidelines for Burial of Major Poultry Die-off

Handling Major Poultry Mortality By Burial

DEALING WITH POULTRY MORTALITY
Mortality is a normal part of poultry operations. Daily mortality should be addressed with composters, incinerators or other approved carcass disposal methods as stated in Section 335.25, Handling, Storing, Processing, Transporting, and disposal of Poultry Carcasses, of Title 30, Texas Administrative Code, Chapter 335, Industrial Solid Waste and Municipal Hazardous Waste. For assistance in dealing with daily mortality, contact your local NRCS or Conservation District office. For further information on regulations pertaining to mortality management contact the Texas Natural Resources Conservation Commission (TNRCC). Proper disposal of carcasses is important to prevent disease transmission, avoid nuisance problems, and to protect air and water quality.

BACKGROUND
State legislators passed SB 1910 during the 75th Texas Legislative Session (1997). This bill amended Chapter 26 of the Water Code by adding Subchapter H, Poultry Operations, to establish a regulatory scheme for ensuring that poultry facilities have an adequate means to handle and dispose of poultry carcasses. SB 1910 applies to any facility where chickens or ducks are raised or kept for profit on any premises in the state, including commercial hatcheries for producing chicks or ducklings.

In accordance with the SB 1910, the rules prohibit on-site burial of poultry carcasses, except in the event of a major die-off, which is defined as a mortality rate of 0.3% or more per day of the total poultry inventory. Only the die-off that exceeds the capacity of the normal means of mortality management may be buried. However, the storage of the carcasses is allowed on site for no more than 72 hours, provided that storage is in a varmint-proof receptacle to prevent odor, leakage, or spillage. Storage beyond 72 hours must be in a freezer or refrigerator at 40 degrees Fahrenheit or less.

Disposal of Major Die-off by Burial
Burial of dead birds requires a backhoe or other trenching machine for construction of a pit in preparation of receiving dead birds.

General considerations for using a burial pits

- Do not locate the burial pit occasionally or frequently flooded soils.
- Do not locate the burial pit within 150 feet of private wells, springs, streams, creek, pond, lake, river, neighboring residences, public areas, or within 500 feet of a public well.
- Do not place burial pit closer than 50 ft. from an adjacent property line.
- Do not locate the burial pit where surface water could enter the pit.

Each local NRCS office maintains a listing of suitability for burial by soil map unit. Each soil that is mapped in the county will fall into one of the following categories:

- **Suited** – Soils are adequate for burial. These are the preferred areas for locating burial pits.
- **Suited with Limitations** – Soils may be used for burial, as long as the limitations shown in Table 1 are addressed.
- **Moderately Suited with Limitations** – Soils may be used for burial, but the limitations are such that they are much more difficult to use than soils that are suited. Pit may need to be much shallower than on suited soils due to depth to bedrock or high water tables. Digging may be difficult due to rock fragments.
- **Poorly Suited with Limitations** - Soils are not suited for burial pits without overcoming major limitations. These locations are not recommended for burial without additional consultation.
- **Very Poorly Suited with Limitations** – Soils are not adequate for burial. No burial pits may be constructed in these soils. Alternative methods of disposal will be required if these are the only available soils on the farm.
Site selection of burial pits, based on NRCS interpretations, will be made by the producer with assistance from NRCS, State Soil and Water Conservation Board personnel, or other qualified agricultural professional. **You must notify TNRCC Industrial and Hazardous Waste Permits Section MC-130, phone (512)239-6595, fax (512)239-6383 before burial of mortality.**

### Procedures for using burial pits

1. Dig a trench at least three feet wide to a depth of 4 to 6 feet.
2. Begin placing birds in one end of the pit.
3. Cover with a minimum of 2 feet of compacted soil.
4. As the birds begin to decay, it may be necessary to place additional soil material in areas that subside.
5. Vegetate the fill areas or allow to revegetate naturally.

**Table 1 – Considerations for Burial Pits located in Soils that are Suited with Restrictions**

<table>
<thead>
<tr>
<th>Limitation</th>
<th>Method to Overcome Limitation</th>
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</thead>
<tbody>
<tr>
<td>Slope</td>
<td>Runoff from the area up slope from the pit must be diverted away from the burial pit.</td>
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<tr>
<td>Depth to Rock</td>
<td>Bottom of pit must be at least 2 feet above bedrock. If addition depth of pit is needed it must be created by “mounding” of sidewalls above original ground elevation. Cover over the birds must consist of a minimum of one foot of compacted soil.</td>
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<tr>
<td>Flooding</td>
<td>Rarely flooded areas are not to be used during periods of high flooding probability (see soil survey for dates likely to flood). Areas of more frequent flooding are not suited.</td>
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<tr>
<td>Fragments or Stones</td>
<td>The main problem with these soils is difficulty in mechanical excavation of pit. Implements suited to working in rocky soil should be used. Soils with high percentages of fragments and stones are not suitable.</td>
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<tr>
<td>Perched Water Table</td>
<td>These soils may only be used during dry periods when the perched water table is absent (see soil survey for normal dates when perched water table is present).</td>
</tr>
<tr>
<td>Apparent Water Table</td>
<td>Bottom of pit must be at least 2 feet above apparent water table (see soil survey for apparent water table depth). If addition depth of pit is needed it must be created by “mounding” of sidewalls above original ground elevation. Cover over the birds must consist of a minimum of 2 feet of compacted soil.</td>
</tr>
</tbody>
</table>

See TNRCC Waste Permits Division Regulatory Guidance RG-326, *How to dispose of Carcasses from Commercial Chicken or Duck Operations*, for additional information.