3-3-2011

W258 Burying Large Animal Mortalities in Tennessee

Shawn Haskins
Forbes Walker

Follow this and additional works at: http://trace.tennessee.edu/utk_agexani

Part of the Dairy Science Commons

Recommended Citation

The publications in this collection represent the historical publishing record of the UT Agricultural Experiment Station and do not necessarily reflect current scientific knowledge or recommendations. Current information about UT Ag Research can be found at the UT Ag Research website. This Beef Cattle is brought to you for free and open access by the UT Extension Publications at Trace: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Animals/Livestock by an authorized administrator of Trace: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.
Burying Large Animal Mortalities in Tennessee

Shawn Hawkins, Assistant Professor, and Forbes Walker, Associate Professor
Biosystems Engineering and Soil Science

State regulations (Rules of the Department of Environment and Conservation, 1200-1-7) and most local ordinances allow on-farm burial of dead livestock without a permit if:

1. The dead livestock originate on the farm where burial will take place.

2. The aerial extent of the burial site is less than one acre when complete.

Burying large animal mortalities can be a safe, inexpensive and convenient disposal method, particularly if excavating equipment is owned and acceptable burial sites are readily available. Site selection is critically important to protect ground and surface water from contaminating fluids that drain from and through a decomposing carcass. Thus, it is wise to locate appropriate burial sites before you need them. For a site to be acceptable, the bottom of the burial pit should be 2 feet above the seasonal high water table or bedrock and allow the carcass to be covered by 2 feet of soil. Any area that is consistently wet or that has a shallow depth to the water table should be avoided, because the decomposing carcass may directly contaminate groundwater (soil in these areas often has a grayish, mottled appearance). Also, rocky, sandy or cherty areas should be avoided, because rainfall can rapidly penetrate the burial site and carry contaminants from the decomposing carcass into underlying groundwater. Where deep, appropriate soils are present, it is possible to bury up to two carcasses in the same opening so long as they can separated by 2 feet of soil (use a safe excavation slope of 1.5H:1V). Finally, the site should be graded to shed rainfall and divert rainfall runoff.

The burial site must also be located well away from sensitive areas to further protect them:

- 300 feet from wellheads (150 feet if the burial site is clearly up-gradient).
- 165 feet from property lines (the burial site should be discretely located).
- 100 feet from surface water (wetlands, streams and ponds).

These guidelines are summarized in Figure 1. If an acceptable burial site can’t be found, consider landfilling or composting the carcass:
http://wastemgmt.ag.utk.edu/.
Figure 1. An illustration showing proper burial technique for large animal mortalities.

Leave 2 feet of undisturbed soil between the bottom of the carcass and the seasonal high water table (or bedrock if a water table isn’t present). Cover the carcass with at least 2 feet of soil sloped to shed rainwater and divert runoff. Proper setback distances from sensitive areas are illustrated.