Animal Burial Guidelines During A Declared Emergency

State Animal Response Team

Introduction
Hurricane Floyd on September 15, 1999 combined with the weather conditions before and immediately after this hurricane resulted in the most severe flooding and devastation in North Carolina history. The flooding caused an estimated $813 million in agricultural losses affecting 32,000 farmers. In addition to crop loss, there was significant loss of livestock including 2,860,827 poultry, 28,000 swine, and 619 cattle. Disposal of dead animals was a significant problem. Proper burial and disposal will prevent potential public health problems resulting from large numbers of dead and decaying animals including the spread of harmful pathogens, ground and surface water contamination, and pest control. In certain situations, burial of dead animals may be the best alternative for immediate disposal. These guidelines are designed to insure burial is done in a safe and effective manner.

Legal Authority
North Carolina General Statute 106-403 (NCGS) Disposition of dead domesticated animals states that it is the responsibility of the owner or person in charge of his domesticated animals to bury dead animals appropriately within 24 hours after knowledge of the death. It is the responsibility of the municipal or county government to designate appropriate persons to dispose of any domestic dead animals whose owner cannot be identified. (See attached copy of NCGS 106-403 and companion opinion from the Attorney General's Office dated June 8, 1984.)

The NC Department of Agriculture - Veterinary Division is the lead state agency to oversee animal disposal as regulated under existing Administrative Rules, specifically, Subchapter 52C - Control of Livestock Diseases: Miscellaneous Provisions, Section .0100 - Diseased and Dead Animals (See Attached)
The State Health Director and by extension the Local Health Director in each county is charged with preventing health risks and disease and promoting a safe and healthful environment according to NC GS 130A, Articles 1-20. To the extent that dead animals become a threat to human health, the State and Local Health Director has broad authority to investigate and act on matters to protect health.

The Environmental Management Commission protects the groundwater quality in the State of North Carolina through rules established in 15A NCAC Subchapter 2L -"Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina." These rules establish groundwater quality standards that may not be exceeded without a permit issued under the authority of the Commission. The Groundwater Section of the Division of Water Quality is responsible for the administration and enforcement of these rules. Any surface or subsurface activity that has the potential to cause groundwater standards to be exceeded is subject to the regulatory authority of the Commission.

Scope
While it is recognized that there are multiple types and degrees of emergencies that could create the need for dead animal burial, these guidelines focus on the most common cause and the most recent experience, flooding and electrical outages. For example, guidelines for managing dead animals during a foreign animal disease emergency may differ and would be managed through the State Veterinarian.
These guidelines are intended to address dead animal disposal during a declared emergency and therefore do not take the place of the dead animal disposal that occurs under the normal permitted operation of a farm. The Governor can declare a state of emergency in North Carolina with or without a federal declaration of the same.

Emergency Planning
Each farm operation shall make specific plans for animal disposal in the event of an emergency. When burial is determined to be the disposal method of choice, an attempt should be made first to bury the dead animals on the farm according to these guidelines. If proper burial is not possible on the farm then plans should be made for alternative sites.

Burial Standards
1. The bottom of the hole where dead animals are to be buried should be 3 feet above the seasonal high water table wherever possible and at least 12 inches above the seasonal high water table. (Farm owners may contact the local NRCS agency or the local health department for assistance in determining the seasonal high water table.)

2. Standing water in the hole does not preclude animal burial as long as the bottom of the hole is at least 12 inches above the seasonal high water table, not in an area of standing water, and the other conditions for proper burial are met.

3. There must be at least 3 feet of soil covering any buried animal. This can be interpreted to mean soil mounded over the animals above the adjacent ground level.

4. The burial site must be at least 300 feet from any existing stream or public body of water.

5. The burial site must be at least 300 feet from any existing public water supply well.

6. The burial site must be at least 100 feet from any other type of existing well.

7. The burial site cannot include any portion of a waste lagoon or lagoon wall.

8. In the case where the burial site is in a waste disposal spray field, the burial site is not available for subsequent waste spraying until a new viable crop is established on the site.

9. The burial site shall be located so as to minimize the effect of stormwater runoff.

10. Burial is not permitted in the tiled area of an underdrained field.

11. A record of the location of the approved site (GPS latitude and longitude coordinates if available), the burial history of each burial site to include the date, species, head count and age must be kept by the owner and reported to the Local Health Director who will in turn report this information to the appropriate State agency - DENR Division of Water Quality, Groundwater Section.

12. Farm owners and operators are encouraged to consider measures that could be taken prior to an imminent emergency that could reduce the impact on the farm and the environment.

Collective Burial Site
A collective burial site may be designated to serve one or more counties in the event of a large-scale emergency whereby individual farm sites are not available. The responsibility for disposal of dead animals remains with the owner, lessee, or person in charge of any land upon which any domesticated
animals die. The county or municipality should identify an appropriate burial site(s) with the capacity to bury up to 5% of the steady state live weight of livestock in that jurisdiction. The use of an existing county or municipal landfill as a dead animal burial site is legal and preferred.

**Burial Site Location**
Best farm practices suggest that burial sites with the capacity to handle the type and number of animals most likely to be needed during an emergency for each farm operation be identified prior to the emergency. It is recommended that the emergency burial plan be incorporated into the farm’s existing conservation plan.

**Contact Information**

- N.C. Department of Environment and Natural Resources
  Division of Water Quality/Groundwater Section
  Arthur Mulberry - Section Chief
  1636 Mail Service Center
  Raleigh, NC 27699-1636
  (919)733-3221

- N.C. Department of Health and Human Services
  Division of Public Health/Epidemiology and Communicable Disease Section
  Dr. Steve Cline - Section Chief
  1902 Mail Service Center
  Raleigh, NC 27699-1902
  (919)733-3421

- SART (State Animal Response Team)