Alabama Department of Agriculture and Industries (ADAI) Alabama Department of Environmental Management (ADEM)

Authorized Methods of Poultry Mortality Management

Updated October 15, 2010

- 1. ADEM approved incinerators.
- 2. Composters that meet Natural Resources Conservation Service (NRCS) technical standards and guidelines.
- 3. By ADAI permit (Form VS 1-27) to an ADEM permitted renderer or permitted landfill.
- 4. Freezers for poultry to be transported to an ADEM permitted renderer or permitted landfill.
- 5. Any other method approved by the ADAI State Veterinarian such as grinding & fermentation, alligators, etc., consistent with NRCS technical standards and guidelines and biosecurity requirements.
- 6. Other options approved by ADAI and ADEM as appropriate on a case-by-case basis in a disaster/emergency consistent with NRCS technical standards and guidelines such as utilizing neighbor producer equipment/facilities, temporary house/shed/barn composting, etc.
- 7. Burial by ADAI permit only, if no other alternative is available, for unavoidable catastrophic mass mortality due to a natural disaster (wind, flood, snow, etc.), disease/infection, fire, etc.
- 8. Burial by ADAI permit only, if no other alternative is available, for emergency mass mortality in significant excess of daily mortality due to unavoidable/unexpected failure of equipment or structures such as the heating system, cooling system, etc.
- 9. Poultry mortality must be composted, incinerated, placed in a freezer, or otherwise properly managed according to ADAI and ADEM requirements within 24-hours.
- 10. If possible, operator should pre-arrange with supply/repair contractor to be able to obtain expedited repairs or delivery of temporary freezer/incinerator/equipment for use during equipment failure or maintenance.
- 11. If possible, operator should have an emergency generator onsite, or readily available to operate equipment during power outages.
- 12. Effective July 1, 2000, ADAI required all existing poultry burial pits to be filled-in and permanently closed, and prohibited the use of existing and future poultry disposal pits and burial of daily poultry mortality.
- 13. ADEM CAFO rules require that all animal mortality management equipment, structures, and systems be maintained/repaired and properly operated at all times.
- 14. Contact NRCS for assistance to pre-select suitable emergency mortality burial sites and document in the facility's waste management system plan (WMSP).

Normal Incineration Operating Procedures

- 1. Incinerator must be approved by ADEM.
- 2. Homemade incinerators such as 55-gallon barrels are not acceptable.
- 3. Incinerator should be placed as far as possible from residences and neighbors.
- 4. Poultry must not be piled on ground at incinerator (allowing predators to feed on carcasses).
- 5. Poultry should be left inside control rooms or houses until you have space in incinerator.
- You should use enough burn time on controls to burn poultry and not to allow poultry to smolder and smoke. This is a good neighbor policy and necessary to meet ADEM odor minimization BMPs.
- 7. Incinerator must be placed on concrete slab, and should be placed under a shelter.
- 8. Incinerators must be regularly inspected and promptly maintained/repaired as needed.

Normal Composting Procedures

- 1. Composter must have a concrete floor in the primary and secondary bins and a roof over the entire structure/facility.
- 2. Start the first layer in composter with a 6-12" layer of litter.
- 3. Poultry carcasses must be placed side-by-side and not piled on top of each other.
- 4. Poultry carcasses must not be placed any closer than 6" from walls of composter.
- 5. The next layer should be 6" of litter completely covering all carcasses.
- 6. Continue layers until compost bin is capped off with a final 12" thick layer of litter.
- 7. A long-stem thermometer should be used to monitor compost temperature (should reach 125°-140°).
- 8. When the temperature goes down to 100-110° (after 15-21 days), the compost is ready to be aerated by moving to a secondary bin.
- 9. After moving compost material to secondary bin, you should recap with fresh litter allowing heat to rise again.
- 10. Predators must be kept out of a composter by a gate, boards, or wire (chicken wire works great).
- 11. Composters must be regularly inspected and promptly maintained/repaired as needed.
- 12. If all these steps are done correctly, when temperatures go down after rotating to secondary bin, material should be ready to spread.
- 13. If possible, allow the compost to "rest" in the composter at least 30-days before spreading to improve the compost product.

Space needed to Compost 4.2 lb Poultry				
Farm Capacity	Primary Bin Cubic Feet	Number of Primary Bins 5x5x10	South Alabama Cubic Feet of Secondary Bin	North Alabama Cubic Feet of Secondary Bin
20,000	250	1	250	500
40,000	500	2	500	1,000
60,000	750	3	750	1,500
80,000	1,000	4	1,000	2,000
100,000	1,250	5	1,250	2,500
120,000	1,500	6	1,500	3,000

Composted Material to be Moved from Farm of Origin

- 1. Material must be inspected by ADAI. Call Toll Free 1-800-642-7761. When voicemail begins, dial 7255 ext. 4 to reach Animal Industry staff. Give us your name, telephone number and farm name and location and we will send someone to inspect the composter within 2-4 days.
- 2. If the composted material is suitable for spreading, the inspector will complete a Form VS 1-27 and leave a copy for your records. If you are using a certified animal waste vendor, tell the inspector to leave two copies or make a copy for the certified vendor to have for his/her records.
- 3. If the composted material is not suitable for spreading, the inspector will instruct you on what is needed to be done to improve the quality of the compost.

Moving Poultry/Animals to Renderer, Landfill or Other Animal Mortality System

- 1. During transit to landfill, poultry must be enclosed or covered in disinfectable containers or vehicle.
- 2. Strict biosecurity methods must be followed at all times.
- 3. Grower must obtain an ADAI permit (Form VS 1-27).

Normal Freezers Operating Procedures

- 1. Place freezers a minimum of 150-feet from nearest poultry house.
- 2. Unless no other feasible option exists, do not plan for or allow company vehicles to pass between any poultry houses or within 150-feet of any poultry houses to get to freezer location.
- 3. Grower should minimize contact around the freezer area. It is preferably to have grower side closest to poultry houses where poultry are placed in freezer and the opposite side being company side for the pickup of carcasses.
- 4. Company truck driver should disinfect the carcass pick-up truck tires before entering road to poultry farm and again as truck is leaving farm (spray for at least two tire rotations).
- 5. When a disease condition is prevalent in the area, entire truck may need to be cleaned and disinfected between farms with a high-pressure hose.
- 6. Freezers must be regularly inspected and promptly maintained/repaired as needed.

Emergency Disposal of Poultry

- 1. Contact ADAI to determine if an ADAI permit is required.
- 2. Contact ADAI for a discussion of practicable alternatives and required ADAI permit.
- 3. If mortality is not a result of a natural disaster, fire, etc., contact ADEM for a discussion of practicable alternatives.
- 4. If possible, have poultry picked up by an ADEM permitted renderer or call and take them yourself (should be properly contained and covered).
- 5. If possible, arrange expedited delivery of additional freezers/incinerators.
- 6. If possible, arrange expedited repair of freezers, incinerators, or other equipment.
- 7. If possible, take to a local landfill.
- 8. Contact neighboring poultry operator to see if mortality can be temporarily disposed using neighbor's incinerator/freezer considering biosecurity requirements.
- 9. Temporarily compost in-house, or use an equipment shed, hay barn, or other roofed structure, consistent with NRCS technical standards and guidelines and biosecurity requirements.
- 10. Contact integrator as appropriate for assistance.
- 11. Other options approved by ADAI and ADEM as appropriate on a case-by-case basis consistent with NRCS technical standards and guidelines.
- 12. Retain records of all actions taken.
- 13. Burial on Farm with ADAI permit:
 - Pick out a suitable site with assistance from local NRCS office in accordance with ADEM requirements and consistent with NRCS technical standards and guidelines:
 - i) At least 150-feet down gradient from any water supply source.
 - ii) At least 100-feet from a wetland, sinkhole, stream, or other water body.
 - iii) No closer than 2-feet from bedrock or seasonal high water table.
 - iv) Locate in soils with a permeability of less than 2-in/hr or with an NRCS approved liner.
 - v) Locate in area with good surface drainage to prevent saturation/ponding.
 - vi) Locate up-gradient of the 100-year flood line.
- 14. To the extent possible and safe, ADEM Solid Waste Program regulations require that poultry mortality be separated from debris before burial, with the debris being transported to a local landfill.
- 15. Notify ADAI State Veterinarian's Office (334-240-7255 ext. 4) with the following info:
 - a) Date Lost
 - b) Grower Name
 - c) County Located In
 - d) Company and Complex Location
 - e) Number of Poultry Lost
 - f) Age of Poultry

- g) Method of Disposal
- h) Person Calling
- 16. An ADAI permit number will be assigned (Ex. 64-DB-001).
- 17. Burial Procedure:
 - a) Maximum size should not exceed 4,400 sq. ft. Multiple sites may be needed, separated by a minimum of 3-feet of undisturbed or compacted soil.
 - b) Place carcasses 1-foot thick layers, separated by 1-foot thick layers of soil.
 - c) Should be mounded and covered with at least 2-feet of soil.
 - d) Water should be diverted away from mound.
 - e) Large sites may need to be vented.