POULTRY MORTALITY

MISSISSIPPI BOARD OF ANIMAL HEALTH
AGENCIES INVOLVED

- MBAH
- DEQ
- NRCS
MISSISSIPPI BOARD OF ANIMAL HEALTH
REGULATION 13.V

- DISPOSAL OF DEAD POULTRY

  NO DEAD POULTRY, CARCASSES, OFFAL OR ANY PARTS OF ANY DEAD POULTRY SHALL BE DISPOSED OF BY THROWING OR LEAVING ALONG PUBLIC ROADS, IN FIELDS OR WOODS OR IN ANY PLACE; BUT MUST BE PROPERLY DISPOSED OF IN AN APPROVED INCINERATOR OR COMPOST SYSTEM.
On and after October 1, 1998, no pits will be dug for the normal disposal of dead commercial poultry in Mississippi.
DISPOSAL PERMITS

- Both Incinerators and Composters will be permitted thru the MBAH and each farm will be given a permit tag shown in the picture to the right with an individual number recorded for that farm.
POULTRY REGULATION 13

The premises of each person growing poultry for himself or others, including turkeys, commercial eggs, hatching eggs and broilers for commercial purposes is hereby quarantined upon the placing of any dead poultry carcass (when death results from other than in connection with the slaughter thereof) in other than a, incinerator and or compost unit approved by the Mississippi Board of Animal Health. Such quarantine shall not be applicable to any person growing poultry who provides and maintains a method of disposal of dead poultry carcasses that has been approved by the Mississippi Board of Animal Health as satisfactory to him to prevent the spread of disease.
Example of Illegal Disposal
LEGAL MEANS OF POULTRY DISPOSAL

- COMPOSTING
- INCINERATION
- BURIAL (EMERGENCY PITS ONLY)

EMERGENCY PITS ARE GIVEN ON AN INDIVIDUAL BASIS ACCORDING TO THE CIRCUMSTANCES ON THE FARM. AN EMERGENCY PIT IS ONLY LEGAL WHEN PERMISSION IS GRANTED FROM THE MISSISSIPPI BOARD OF ANIMAL HEALTH PRIOR TO EXCAVATION.
WHY COMPOST

- COST EFFECTIVE
- ENVIRONMENTALLY SOUND
- DESTROYS PATHOGENS
- EASY TO ACCOMPLISH
DEFINITIONS

- COMPOSTING
  - It is the biological decomposition of organic material under controlled conditions to a state where storage, handling, and land application can be achieved without adversely affecting the environment.

- DEAD POULTRY COMPOSTING
  - Proper composting is all about giving microorganisms the environment they need to grow. An environment consisting of oxygen, moisture and a food source.
COMPOSTER OPERATION AND MANAGEMENT

- The requirements for proper and complete decomposition of dead carcasses are reasonably simple and inexpensive.

- The materials needed (dead birds, litter, alternative carbon sources, water) are readily available on every poultry farm.

- Careful attention to proper management is essential for successful composting and to minimize odorous situations that attracts flies, scavengers, and other vermin to the site.

- Orderly loading of ingredients is necessary for efficient compost activity.
COMPOSTING

- Place an initial layer of 8 to 12 inches of fresh litter on the floor. This litter will supply bacteria to start the process and will also help absorb carcass fluids.

- Next add a thin layer of bulking material (carbon sources) such as peanut hulls, shavings, straw, etc.

- Now add a layer of bird carcasses. Arrange in single layer touching each other. Keep carcasses 6 inches from the walls of the composter, Placing them closer can result in odorous liquids to seep from the compost pile.
Composting continued

- A small amount of water may be needed after each carcass layer. Wetting the carcasses will add sufficient water to the mix to achieve the needed moisture level.

- Next, add a layer of litter. This layer should be twice as thick as the layer of carcasses (6 to 10 inches). If only a partial of layer is needed you must still cover the carcasses then use the remaining space at a later time.

- After completing the initial layer, add subsequent layers of carcasses, bulky ingredient and litter until a height not exceeding 5 to 6 feet is reached.

- The last layer will be a cap of 8 to 10 inches of litter. Your optimum compost temperatures should reach at least 140 degrees but you don’t want them to exceed 160 degrees F and increase the chance of spontaneous combustion.
TROUBLESHOOTING GUIDE FOR CARCASS COMPOSTING

- IMPROPER TEMPERATURE
  - TOO DRY – ADD WATER
  - TOO WET – ADD BULKING MATERIAL AND TURN PILE
  - IMPROPER C : N RATIO – EVALUATE BULKING MATERIAL AND ADJUST
  - IMPROPER LAYERING
FAILURE TO DECOMPOSE

- IMPROPER C : N RATIO - Evaluate bulking material and adjust.

- CARCASSES LAYERED TOO THICKLY - Single layer the carcasses.

- CARCASSES ON OUTSIDE EDGES - Maintain 6 – 10 inches between carcasses and edges.
ODOR

- TOO WET – Add bulking material and turn.

- TOO LOW C : N RATIO – Evaluate bulking material and adjust.

- INADEQUATE COVER OVER CARCASSES – Cover with 10 – 12 inches of bulking material.
FLIES

- INADEQUATE COVER OVER CARCASSES – Cover with 10 – 12 inches of bulking material.

- POOR SANITATION CONDITIONS – Avoid leaking from pile.

- TOO WET – Turn pile and add bulking material.

- FAILURE TO REACH PROPER TEMPERATURE – Assess C : N ratio, layering.
SCAVENGING ANIMALS

- INADEQUATE COVER OVER CARCASSSES – Maintain 10 – 12 inch cover. Avoid entry with barrier if necessary.
IMPROPER COMPOSTING
Incinerators

- **Incineration** is a waste treatment process that involves the combustion of organic substances contained in waste materials.

- **Advantages** - Producer convenience. (A properly sized incinerator can reduce daily mortalities to a small amount of ash in a few hours). It also provides a higher level of bio-security than other mortality options.

- **Disadvantages** – Cost to the producer.
CATASTROPHIC LOSS

- WITH SPECIAL PERMISSION FROM THE MISSISSIPPI BOARD OF ANIMAL HEALTH A EMERGENCY DISPOSAL PIT PERMIT CAN BE ISSUED FOR MASS BURIAL. THE PERMIT MUST BE ISSUED PRIOR TO ANY ACTION.
DISPOSAL PERMIT PROCESS

- **DEQ APPROVED** – “Incinerator Design”
  - Air quality permit from an approved list of incinerators.

- **NRCS APPROVED** – “COST SHARE”
  - For both composters and Incinerators

- **MBAH APPROVED** – “SELF BUILT”
  - Composter Design approval prior to being built
  - Modify existing design-larger birds etc.
  - Incinerator quantity for size of farm and if modifying occurs.
THANK YOU