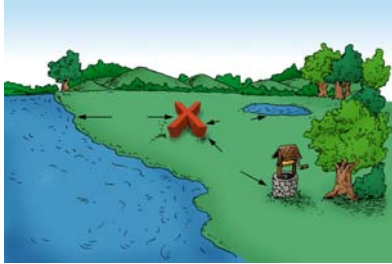


Natural Rendering: Composting Poultry Mortality

The Emergency Response to Disease Control



Select Site

1. Select a site that is well drained and not subject to flooding. Keep piles away from homes and businesses and from water courses, sinkholes, seasonal seeps or other landscape features that indicate the area is hydrologically sensitive.

2. When implementing in-house composting, the poultry house will be vented naturally, but mechanical ventilation should be turned off.

Good Housekeeping

3. Site cleanliness is an important aspect of composting; it deters scavengers, helps control odors and keeps good neighbor relations.

Prepare Base

4. Push litter and feed off to the side of the barn. Lay an 18 inch deep bed of coarse wood chips, 8-12 feet wide (depending upon structure and equipment constraints) and as long as space permits.



Build Pile

5. Add a 12-15 inch layer of litter and birds, then cover with a 12-15 inch layer of wood chips or other carbon sources.

6. Add another layer of litter and birds until the windrow is two or three layers high and as long as needed.

7. If your birds and litter are not separate, put a carbon base down (as in step 4), add birds mixed with litter and bedding to 4-5 feet high and continue as follows.

Cover Well

8. Cover with 2 feet of wood chips or other carbon sources to create a bio-filer. The finished section should be 5-7 feet high.

9. Make sure all mortalities are well-covered to keep odors down, generate heat and keep vermin or unwanted animals out of the windrow.

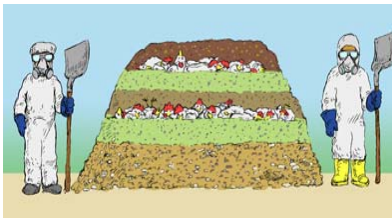
Check Temperatures

10. Monitoring is the only activity that will occur. Temperature probes will be used to record temperatures and should range from 131°-150°F or 55°-65°C during most of this time period.

11. The primary process in-house, where it reaches thermophilic temperatures, will take 10-14 days. During this time, no turning, agitating or active aeration should occur.



MOISTURE NOTE: If litter is very dry, add moisture to the layers as you are building them. The compost feedstock should be at 30-40% moisture.



NOTE: If there is a disease outbreak, make sure on and off-farm workers wear personal protective equipment and are properly sanitized when done. Workers should be vaccinated if applicable.



Windrows moved outside for the curing process.

12. After the required time/temperature duration, windrows can be moved outside the buildings for the curing process. If composting for disease outbreak, then testing for the presence of the disease will be required.

Let Sit for 4 to 6 Months

13. Let sit for 4-6 months.

Reuse the Material

14. Reuse the material as a bed for additional carcass compost piles.

Benefits of Composting

- ♦ Pathogen kill occurs in thermophilic composts-helps control pathogens, viruses and spore forming organisms in disease outbreaks.
- ♦ Can be done any time of the year, even when the ground is frozen.
- ♦ Can be done with equipment available on most farms.
- ♦ Relatively odor-free.
- ♦ All sizes of animals can be composted.
- ♦ Egg waste and hatching waste can be composted.
- ♦ Relatively low requirements for labor and management.
- ♦ Economical.



With an Avian Influenza outbreak, the birds should be moved as little as possible to ensure disease containment; litter and other organic material should be composted with the birds for disinfection. Poultry houses will be out of production for at least 10 to 14 days so that the first active stage of composting can be completed. After the compost is removed from the building and placed in curing piles, the building can then be totally disinfected. If it is not feasible to compost in-house, composting should occur as close as possible to the site of operation.

For additional information see: *Natural Rendering: Composting Poultry Mortality* web site: <http://cwmi.css.cornell.edu/ai.htm>

