



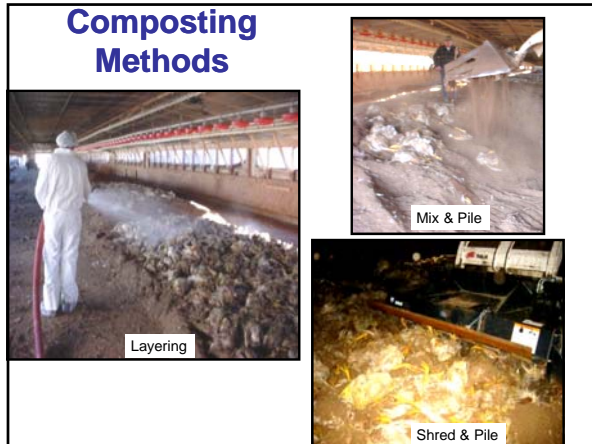
Major Causes of Catastrophic Losses

- 1. Heat/Suffocation**
- 2. Natural Disasters**
- 3. Disease**
- 4. Chemical Residues**

Composting Locations


<p>In-House</p>	<p>In-Shed</p>
<p>Outside</p>	<p>Commercial Site</p>

Composting Methods



The 'Composting Methods' section features three photographs. The first, labeled 'Layering', shows a person in a white protective suit standing in a long, narrow poultry house with rows of cages, spreading material on the floor. The second, labeled 'Mix & Pile', shows a person in a white suit working with a large pile of material in a similar setting. The third, labeled 'Shred & Pile', shows a pile of material being processed by a shredding machine.


In-House Composting



Potential Option IF:

- Complete death loss
- House repopulation schedule permits
- Advanced carcass decomposition
- Lack suitable site for outside composting
- Sensitive neighbor or environmental issues
- **Disease control**

Compost Plan : Mix and Pile



•Determine litter depth, house square footage and bird weight.
•Calculate litter/carbon requirement. Need 0.8 inch of litter/pound of meat/square foot (minimum).

Volume basis = 1 part carcass:2 parts litter (+ litter for base & cap)

Example of Calculating Litter Needed for In-House Composting

House situation: 40 foot x 500 foot house with 25,000 broilers weighing 4 pounds and 3 inch litter depth.

This would be 100,000 pounds of meat ÷ 20,000 square feet = 5 pounds meat/square foot. 5 pounds meat/square foot x 0.8 = 4 inches of litter required.

Need one additional inch of bulking agent or 1600 cubic feet [20,000 square feet x 0.08 (1 inch/12 inches)].



1. Scoop all litter and birds, place on 3-5 inch base in center of house, windrow width = ~12 feet.



2. Need a uniform mix of birds and litter.

Composting Basics



3. Cover all birds with 4 to 6 inches of litter or bulking agent (sawdust, shavings, compost, etc.)

Turning Options



Turn inside the house.

OR



Transfer to a manure shed or outside windrow.

Turning Guidelines:		
Body Wt.	First Turn	Removal
4 lbs.	10 days	20 days
10 lbs.	16 days	26 days

Outside Windrow Composting



- Option when in-house composting is not possible and a need to repopulate the house quickly.
- Locate windrows at an accessible and pre-approved site, preference is outside the production area!
- Requires loaders, trucks, bulking agent, cover and anchors.

Outside Windrow Composting (Mix and Pile Method)



1
Bulking agent base -12 ft wide, 6-12 in. thick.



3
Dump parallel rows on base layer.



2
Load birds and litter on truck, need 1 part carcass to 2 parts litter.



4
Condense windrow into conical shape.

Cover Outside Windrows



5
Cover carcasses with 6 in. of bulking agent.

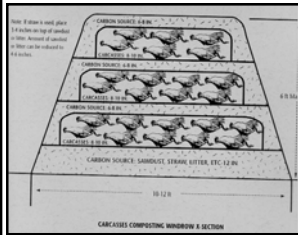


7
Turn pile at ~14 days, cover any tissue and re-install fleece or tarpaulin.



6
Protect windrow with compost fleece or tarpaulin, anchor the cover.

Outside Windrow Composting (Layering Method)



- 3-6 layers of birds and carbon/litter
- 300 lbs mortality/linear foot of windrow

Composting Inside Manure Sheds

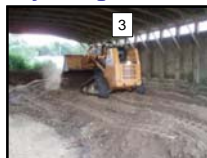


- Option when losses exceed the capacity of the routine disposal method.
- Can use the layering or mix and pile methods.

In-Shed Composting: Layering Method



Start with a 6-12 in. litter or bulking agent base.



Cover with 4-6 in. of litter or bulking agent.

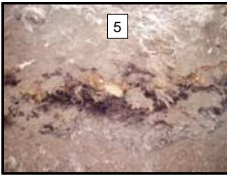


Layer carcasses 8-10 in. deep



Repeat layering of carcasses and litter until 6 ft maximum height.

In-Shed Composting: Layering Method



5



6

- Turn windrows at ~14 days and cover all exposed tissue.
- Can remove compost by 28 days or allow to age in until land application.

In-Shed Composting: Mix & Pile Method



1

Scoop birds and litter



2

Place birds and litter on base layer



3

Cover with litter or bulking agent

Composting Mortality from Flooded Houses



Takes days to weeks before access to flooded houses!!!



Need dry bulking agent



Track loaders



Summary

- Mass mortalities can be composted in-house, outside windrows, in-shed or commercial compost facility.
- Need to match the composting method and location with the farm situation.
- Must follow and implement basic principles for success.
- *Every farm needs a “plan” to deal with catastrophic mortality events!*
