

## Waste Storage Facility:

# Dry Stack Building for Poultry Litter

Alabama Job Sheet No. AL313B



### Definition

A pole-barn type structure used to temporarily store poultry litter in an environmentally safe manner.

### General Information

A dry stack building for poultry litter storage should be considered when:

- storage is for more than 120 days
- split applications of litter may be needed
- cleanout of the poultry houses must be done at a time when the litter cannot be land-applied

Storage for short periods of time can be accomplished with Waste Field Storage (see Alabama NRCS job sheet Waste Field Storage, AL 749). Dry stacks are often constructed in combination with a compost facility with both units under one roof (see Alabama NRCS job sheet Composting Poultry Mortality, AL 317).

It is highly recommended that a dry stack building be located:

- as close to the poultry operation as practicable
- at a well-drained site
- at least 330 ft. (new operation) or 165 ft. (expansion at an existing operation) from any public use area or non-owner dwelling
- at least 100 ft. from an up-gradient well
- at least 300 ft. from a down-gradient well
- at least 200 ft. from any natural water course or lake
- at least 100 ft. from any drainage ditch

Dry stack facilities are engineered to withstand snow and wind loads normally associated with Alabama weather. Design features such as post and timber size, post embedment depth, truss design, knee

racing, and structural connections are critical to the integrity of the building. The Construction Checklist, form AL-ENG-25K, should be reviewed prior to construction so that the landowner and contractor are aware of the required materials, fasteners, and connections.

The size of the dry stack building is dependent upon its management. Generally, a dry stack provides enough storage for  $\frac{1}{2}$  or less of the litter produced each year.

All structural wooden components below the roofline of the building and all wood in contact with litter should be pressure treated. Posts are specified to have a high level of preservative treatment and may require special order.

The floor of the dry stack can be compacted soil. However, experience has shown that a concrete floor provides the easiest management of the litter and is often preferred by most operations (NOTE: compost bins are required by state regulations to have a concrete floor).

### Operation and Maintenance

Fires can develop in stacked poultry litter through spontaneous combustion. Special precautions should be taken to prevent this from happening (see Alabama NRCS job sheet Preventing Fires in Litter Storage Structures, AL 313).

The building should be thoroughly inspected at least twice a year when empty. Any wooden parts, hardware, or other replaceable parts that are damaged or show excessive wear or decay should be replaced.

All disturbed areas around the structure, including spoil or borrow areas, should be vegetated or covered with gravel to prevent erosion.

## References

ADEM Administrative Code Chapter 335-6-7, as amended  
(AFO/CAFO rule).

Alabama NRCS Conservation Practice Standards  
[Waste Storage Facility, Code 313](#)  
[Composting Facility, Code 317](#)  
[Critical Area Planting, Code 342](#)

Alabama NRCS Job Sheets  
[Waste Field Storage, AL 749](#)  
[Preventing Fires in Litter Structures, AL 313](#)  
[Composting Poultry Mortality, AL 317](#)

Alabama NRCS Form [AL-ENG-25K](#)

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## Dry Stack Building for Poultry Litter Worksheet

Land User: \_\_\_\_\_ County: \_\_\_\_\_ Date: \_\_\_\_\_

Farm No.: \_\_\_\_\_ Tract No.: \_\_\_\_\_ Assisted By: \_\_\_\_\_

Size of dry stack: L \_\_\_\_\_ ft. W \_\_\_\_\_ ft. Side wall height \_\_\_\_\_ ft.

Floor surface of dry stack: Compacted soil \_\_\_\_\_ Concrete \_\_\_\_\_ Other \_\_\_\_\_

Will a composter be attached to the dry stack? Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, size of composter added: L \_\_\_\_\_ ft. W \_\_\_\_\_ ft. or area added \_\_\_\_\_ sf.

Distance from closest edge of dry stack/composter to the nearest: Public use area or non-owner dwelling \_\_\_\_\_ ft.

Property line \_\_\_\_\_ ft. Well \_\_\_\_\_ ft. Natural water course or lake \_\_\_\_\_ ft. Drainage ditch \_\_\_\_\_ ft.

Construction checklist (AL-ENG-25K) has been reviewed: Yes \_\_\_\_\_ No \_\_\_\_\_