

**DOCUMENTING PLANNING, DESIGN, CONSTRUCTION AND CHECKOUT OF  
ENGINEERING CONSERVATION PRACTICES GUIDE**

**Animal Mortality Facility, Code 316**

**I. References**

A. Design Criteria

1. Alabama FOTG Section IV, conservation practice standard, Animal Mortality Facility, Code 316.

B. Design Procedures

1. Alabama Poultry Waste Management Workbook
2. AL-ENG-25F

B. Design/Layout Surveys

1. TR-62 Engineering Layout, Notes, Staking & Calculations.
2. NEFH Part 650, Chapter 1, Engineering Surveys.

C. Computer Software Design Aids.

1. Nutrient Budget Spreadsheet

**II. Documentation**

A. Preliminary Investigation

Make a preliminary investigation of the need and feasibility of an animal mortality facility. If freezers are used, there must be a state approved vendor available to pick up and process the animal mortality from the freezers.

B. Engineering Surveys

1. Only minimal survey is needed. The survey shall show the location of the proposed facility and verify that it will not be installed in a floodplain and to determine drainage patterns in the vicinity of the proposed facility. The proposed location of the animal mortality facility shall be referenced so that it can be staked in the field. The survey should show the location of existing buildings, etc., in the vicinity of the proposed facility.
2. Note the location of any utilities or utility markers.

C. Design

1. Several methods are available for disposing of mortality. Determine type of facility needed. Record design data on NRCS-ENG-523A (or equivalent).
2. Determine facility size. Facility shall be designed to accommodate the landowners operation, mortality data, or in the absence of landowner data, use data from similar facilities in the local area. In the case of freezers, vendor pickup schedule is a factor in determining facility size.
3. Determine number and size of facilities required.
4. Compute quantity of foundation material (earth fill, concrete, timbers, etc.) used for supporting the facility when used as a basis of payment.
5. Develop engineering plans and specifications. As a minimum the plans and specifications for buildings shall include:
  - a. Location of the facility on the conservation plan map or topographic map.

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- b. Pertinent elevations of the facility.
  - c. Location of electrical lines, gas lines, and requirements for burial and quality of materials.
  - d. Standard details when concrete or timber is used for the facility foundation.
  - e. Number, capacity, and quality of facility (ies).
  - f. Location of utilities and notification requirements.
  - g. Where a roof structure is used to protect the facility, include design data and building dimensions.
6. Develop a site specific O&M Plan for the practice.

### D. Construction Layout

Review the plans and specifications with the landowner and contractor prior to the start of construction. Ensure the landowner/contractor thoroughly understand their responsibilities including obtaining all permits, easements, etc.

Record all layout information in the engineering field book or in the electronic field book.

1. Stake the corners and elevation of the foundation support.
2. Stake the location of required facility appurtenances (e.g. electrical, gas, water, etc.).

### E. Construction

Adequate site visits and checks shall be made during construction to verify that the plans and specifications are followed.

Any changes in the design must be reviewed and concurred by the landowner and shall be approved by the designer and person with appropriate engineering design job approval authority.

### F. Construction Checkout

Record the following information on the plans and in the engineering field book and NRCS-ENG-523A (or equivalent).

#### Rotary Drum

1. Number and capacity of drums.
2. Rotary drum manufacturer and certification of operation.
3. Structural components.
  - a. Type and size of foundation used.
  - b. Location of electrical lines.
  - c. If a roof structure is used, record structural components including size and spacing of timbers, preservative treatment, height, depth of embedment of timber supports, type and spacing of trusses. Trusses must be certified by an Alabama licensed professional engineer.
  - d. Calculate the quantity of foundation material (earth fill, concrete, etc.) if used for supporting the facility.
  - e. Verify and document that all required warranties are on file.
4. If the practice meets NRCS standards and specifications, then the statement "This practice meets NRCS practice standards and specifications" shall be placed on the

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checkout document and signed and dated by the responsible person with appropriate level of engineering job approval authority.

### Incinerator

1. Number and capacity of incinerators.
2. Incinerator manufacturer and certification of operational temperatures.
3. Structural components.
  - a. Type and size of foundation used for the incinerator.
  - b. Location and type of gas service provided.
  - c. Location of electrical lines.
  - d. If a roof structure is used, record structural components including size and spacing of timbers, preservative treatment, height, depth of embedment of timber supports, type and spacing of trusses. Trusses must be certified by an Alabama licensed professional engineer.
  - e. Calculate the quantity of foundation material (earth fill, concrete, etc.) if used for supporting the facility.
  - f. Verify and document that all required warranties are on file.
4. If the practice meets NRCS standards and specifications, then the statement "This practice meets NRCS practice standards and specifications" shall be placed on the checkout document and signed and dated by the responsible person with appropriate level of engineering job approval authority.

### Freezer

1. Location and elevation of facility.
2. Number of facilities, dimensions, and capacity in cubic feet.
3. Facility components.
  - a. Visual screening if part of the design.
  - b. Location of electrical lines and components.
  - c. Foundation dimensions and type of material used for facility foundation.
  - d. Calculate the quantity of foundation material (earth fill, concrete, etc.) if used for supporting the facility.
  - e. Verify and document that all required warranties are on file.
4. Prepare as-built drawings showing final construction dimensions, details, etc.
5. If the practice meets NRCS standards and specifications, then the statement "This practice meets NRCS practice standards and specifications" shall be placed on the checkout document and signed and dated by the responsible person with appropriate level of engineering job approval authority.

### G. Reporting and/or Certifying

After it has been determined and documented that the practice meets NRCS plans and specifications, it can be reported and certified. The extent of the practice to be reported is the number of facilities installed. The extent of the practice certified is the quantities used as the basis of payment.