

NATURAL RESOURCES CONSERVATION SERVICE

DOCUMENTATION REQUIREMENTS

COMPOSTING FACILITY (317)

FIELD DATA

The following is a list of the minimum field data to be collected:

1. System plan sketch;
2. Sufficient survey to determine needed grading of the composting site. Topographic survey in sufficient detail to generate a contour plotting of the area showing building locations, outside runoff areas, and other features may be needed for larger or complex sites;
3. Location of existing resources, such as ponds, wells, streams, and wetlands;
4. Location of facility in relation to the 25-year and 100-year floodplain, and in relation to Zone I or Zone II protection areas as appropriate;
5. Location of soils test pits, dwellings and property line fences;
6. Soils investigation sufficient to determine the limitations of the site and lining requirements as described in Table 2 of the standard, including the soil permeability, depth to water table, and depth to bedrock. Depth of investigation is to be at least 5 feet for unlined or gravel lined facilities;
7. Operator data to determine the quantity and consistency of the manure and bedding generated, and available sources of carbon and bulking material to provide a proper mix. Also include the proposed equipment and methods of handling, mixing, turning, and hauling the materials to determine the facility type and size. This information is generally gathered to produce a waste management plan, which is required for all composting facilities.
2. Sizing calculations and grading requirements for the composting facility, including mixing, storage, and curing areas as needed;
3. Design of clean water exclusion practices according to individual practice standards;
4. For facilities with gravel paving, design of the subbase material, if needed, and design of the top coarse of gravel, including the thickness, gradation, and geotextile;
5. For facilities with concrete paving, design of the subbase, size and spacing of reinforcing steel, and expansion joint spacing;
6. Design of the compost mix to encourage aerobic microbial decomposition and avoids nuisance odors, including volumes of components, evaluation of the moisture level of the mix, the C:N ratio, pile shape, size, and orientation, turning requirements, composting period, and curing period;
7. Design of the facility runoff treatment or collection practice according to the appropriate practice standard;
8. Construction drawings shall include the following as a minimum:
 - Plan view including location map and all system components, location of existing structures and resources, test pits, property lines, and other important features. If a topographic survey was performed, include contour lines;
 - Layout of the composting facility, with size and location of composting piles, and locations of mixing, storage, and curing areas as needed;
 - Details of facility grading and paving in sufficient detail to construct as designed. Include specific requirements of concrete paving (size and spacing of reinforcement, joint spacing, and other cracking control features) on the plans and in the specifications, as appropriate. Include

DESIGN DATA

The following is a list of the minimum required design data:

1. Waste Management System Plan;

details of curbing to direct flow of water if needed;

- Details of all practice components according to the documentation requirements of the individual practices;
- Lime, fertilizer, and seeding requirements according to practice standard 342, Critical Area Planting (may be included as a specification instead);
- Details of fence, if needed;
- Quantities of materials;
- Critical Inspection Items;
- Utilities statement and Excavation Safety statement.

9. Construction and material specifications;

10. Written Operation and Maintenance (O&M) plan. This plan shall address the items found in the standard for properly operating the facility to produce the desirable compost product, and for maintaining the facility to be functional throughout its intended life span.

PRE-CONSTRUCTION & INSPECTION

1. Preconstruction Meeting With Landowner And Contractor. This is a meeting to explain the drawings and specifications, discuss requirements for construction and material certifications, level of staking needed, safety issues, utilities notification, and other topics. Document the following as a minimum:

- Time and date of meeting;
- Names of attendees;
- Items discussed and decisions made.

2. Layout And Staking Of Practices. Document:

- Survey notes showing layout of the practices, including date and who performed the staking;
- If the contractor provides staking, then document any reviews made to ensure proper placement of the practice.

3. Utilities Notification. Can use form ENG-5 and ENG-6 to assist in tracking utility notifications (See NEM §MA503). Document:

- Initial discussion with landowner about his or her responsibility to notify utilities;
- Information from landowner about existence and location of known utilities;

- Assurances that utility company has been notified, including staking by utilities.

4. Inspection During Construction. Document:

- All inspections made during construction, including all those identified on the drawings as critical inspection items;
- Include visual inspections and conclusions, surveys, tests and test results;
- Discussions with landowner and contractor;
- Photographs taken before and during construction;
- Approval by designer of any changes from the drawings or specifications before implementation of the change.

CONSTRUCTION CHECK

The following is a list of the minimum required data to support the as-built drawing:

1. Measurements to show the actual size and slopes of the facility, including all appurtenant devices and features;
2. Verification of adequate foundation conditions and preparation;
3. Documentation of proper installation of paving as shown on the drawings and specifications;
4. Materials documentation to certify quality as stated on drawings and specifications;
5. Adequacy of seeding and fencing according to their documentation requirements;
6. Refer to the documentation requirements for construction check of individual practice components installed.

CERTIFICATION

The following is a list of what must be certified by a person with the required approval authority for the installed practice:

1. Final quantities and documentation for quantity changes;
2. Statement on the as-built drawings that the installed practices meet or exceed the requirements of the NRCS practice standards;
3. Record in the case file the number of composting facilities installed;
4. Report in PRMS, as applicable.