

## Manure Composting Facility

### Definition/Purpose

Composting is an aerobic biological process in which microorganisms and temperature convert manure and other organic matter (carbon) into a soil-like material with reduced pathogen content called compost. Compost can be applied as a soil amendment to improve soil health and plant growth. A composting facility is a facility for the biological treatment, stabilization and environmentally safe storage of organic waste material only (such as manure from poultry and livestock, not to include mortalities) to minimize water quality impacts and to produce a material that can be recycled as a soil amendment and fertilizer substitute. (DIP)

### Policies

1. If a composter is approved, an Operation and Maintenance Plan must be developed to guide the user in the proper management of the composting facility. It should address carbon-nitrogen ratios of feedstocks, moisture management, pile configuration, composting period, temperature monitoring, pile aeration, insect, odor and scavenger management, curing and storage, and testing of finished compost.
2. A Waste Management Plan is required and should take into account the collection, treatment, storage, and end use of the compost. The Waste Management Plan shall address the storage and waste needs of the entire confined animal facility utilizing the composter and not just the acreage associated with the composted waste product. The plan will be completed for the entire animal operation and not just the acreage associated with the composter and compost. If compost is land applied ~~by the cooperator~~ on any land under his/hers/their control (owned, rented, etc.), then a detailed site location map delineating the fields used should be in the Waste Management Plan. If a third-party applicator is used to move compost off the site, then an agreement, including the name and address, must be maintained for the life of the practice. Pursuant to 15A NCAC 13B .1402, a permit from the NC Department of Environmental Quality, Solid Waste Section, may be required if the compost is offered for commercial or retail sale.
3. A composter must be covered with a roof meeting the NRCS Roofs and Covers (367) standard to prevent nutrient runoff from the processing, treatment, or storage of compost materials. Runoff from the composter system must be collected and disposed of properly according to NRCS Waste Transfer (634) standard ~~#634 waste transfer~~.
4. A composter shared by landowners is eligible for cost share if agreements are in place for the cost-shared landowner when he/she is under contract to receive compost from other landowners. The agreement should be attached to the contract. This agreement must be signed and dated by all landowners sharing the facility and must state that the facility may be used by each landowner for a minimum period of ten (10) years. To prevent the spread of disease in animal health emergency situations, the mixing of material from multiple operations should be suspended.

Agriculture Cost Share Program

5. Payment will be made for the minimum volume required using NRCS design criteria for primary and secondary treatment, and/or storage of composted material in one structure. Storage volume is equal to a maximum of four (4) times the primary volume. Additional volume needed to accommodate the producer’s equipment and/or desires will be at the producer’s expense and must be stipulated on the design. Secondary uses related to agriculture may be temporarily permitted provided they do not prevent the structure from being used for its primary purpose.
6. Pursuant to 15A NCAC 02T regulations, waste storage structures must be located at least 100 feet from streams and groundwater wells. NRCS standards require all waste structures to be a minimum of 50 feet from wells, streams or other water features. This setback requirement also pertains to compost facilities.
7. All NRCS and NC Agriculture Cost Share Program standards and policies relative to vegetation of critical areas must be followed, if applicable.
- 7.8. During emergency mortality events, the structure may be utilized for mortality management following all NCDA&CS Veterinary Division requirements. No waste or composted material shall be stored outside the structure.

<b>MANURE COMPOSTING FACILITY</b>	
<b>Maintenance Period</b>	10 years
<b>BMP Units</b>	EACH
<b>Required Effects</b>	ACRES_AFFECTED ANIMAL TYPE ANIMAL UNITS N and P Waste Managed
<b>JAA/NRCS standards unless otherwise noted</b>	<u>Professional Engineer</u>  <u>Or</u>  <u>NRCS – ENG – 317 – Composting Facility</u> <u>NRCS – ENG – 367 – Roofs and Covers</u> <u>NRCS – ENG – 634 – Waste Transfer</u> <u>NRCS – ENG – 561 – Heavy Use Area Protection</u>  <u>ECS – 590 – Nutrient Management</u> <u>During animal health emergency situations, NC GS 106-403 “Disposition of dead domesticated animals”. Administrative code 02 NCAC 52C .0102 “Disposal of Dead Animals” and NRCS Standard #368 (Emergency Animal Mortality Management) should be reviewed in order for this BMP to be used for disposal of animals.</u>
<b><u>NRCS Standards and Reference Materials</u></b>	<u>NRCS - ENG - 317 - Composting Facility</u> <u>NRCS – ENG – 367 – Roofs and Covers</u>

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	<p><a href="#">NRCS - ECS - 590 - Nutrient Management</a>  <a href="#">NRCS – ENG – 561 – Heavy Use Area Protection</a></p> <p><a href="#">NC Department of Agriculture &amp; Consumer Services Veterinary Division’s Poultry &amp; Swine Composter Approval Guidelines</a></p> <p><a href="#">NC NRCS CPS – 368 Emergency Animal Mortality Management</a>  <a href="#">NC GS 106-403 “Disposition of dead domesticated animals”.</a>  <a href="#">Administrative code 02 NCAC 52C .0102 “Disposal of Dead Animals”.</a></p>
<b>CS2 Reference Materials</b>	<p>NC-ACSP-11 Signature Page  Map with BMP location, fields, and roads  <del>NC-ACSP-WMP Form</del> <a href="#">Waste Management Plan</a>  NC-ACSP-OMP Form</p>
<b>Additional Spot-check Requirements</b>	<p>All waste management systems for operations not permitted by the Division of Water Resources must be spot-checked annually for five years following implementation.</p>