

**Water Quality Enhancement Activity – WQL22 - On farm composting of farm organic waste**



**Enhancement Description**

This enhancement consists of the on farm composting of organic waste from agricultural operations. Composted products must be reused on the farm. This includes **ALL** animal manures, livestock mortality (where state or local laws allow), vegetable culls removed from the field and waste from on farm processing of agricultural products. It does not include any household waste, any hazardous waste products or bio-hazard waste products. Yard waste such as grass clippings and leaves can be included but are not required.

**Land Use Applicability**

Cropland, Pastureland

**Benefits**

Composting reduces the volume of waste, kills pathogens, reduces odors and improves the cycling of nutrients. The reuse of the compost products on the farm where they were produced improves soil quality and reduces the need to bring additional nutrients on to the farm.

**Conditions Where Enhancement Applies**

This enhancement applies to farms that produce livestock manure, vegetable waste and/or other organic waste from on farm processing facilities.

**Criteria**

**All** waste products produced on the farm must be composted. This includes:

- a. Animal manures from confined areas
- b. Livestock mortality (where state or local laws allow)
- c. Vegetable culls
- d. Waste from on farm processing of agricultural products

It does not include:

- a. Household waste
- b. Hazardous waste products
- c. Bio-hazard waste products
- d. Crop residue

Follow a composting plan that includes:

- 1. Balancing Carbon/Nitrogen ratio based on materials being composted



2. Management of composting temperatures
3. Mixing and compost time requirements based on materials being composted

#### Compost site and environmental considerations

1. Size the composting area according to the organic material being generated
2. Divert runoff away from the composting pad
3. Runoff from compost pad must be directed through a grass buffer strip or other means to prevent water quality impairment
4. Select a method (i.e., aerobic composting, anaerobic composting, or vermicomposting) that is compatible with the waste product.

Conduct composting operations in accordance with NRCS Conservation Practice Standards *Composting Facility, 317* and *Animal Mortality Facility, 316*, as appropriate. Assistance with conservation practice standards is available at your local NRCS Field Office. Use all compost produced on the farm as a soil amendment on the farm. Apply the compost according to a nutrient management plan that considers the crop needs, timing and rate of application.

#### **Adoption Requirements**

This enhancement is considered adopted when the participant has established composting facilities for all of the organic waste on the farm and has actually begun composting.

#### **Documentation Requirements**

1. An inventory of waste products produced on the farm,
2. An estimate of the annual quantities of compost to be produced,
3. A location map showing the location of the composting facility(s),
4. A nutrient management plan for the land application of the compost,
5. A composting plan, and
6. Photographs of the composting facility.

## Michigan Supplement

### WQL22

Follow Natural Resource Conservation Service (NRCS) Michigan conservation practice standard Composting Facility (317) for both composting of livestock mortality and for composting of organic wastes such as animal manure.

#### Criteria for livestock mortality composting

1. Composting of livestock mortality shall accommodate only normal daily natural mortality under common ownership.
2. Any composting of livestock mortality shall be in accordance with the Michigan Animal Tissue Composting Operational Standard, dated October 11, 2007.  
<https://www.msu.edu/~rozeboom/catrn.html>

#### Documentation Required

1. Recordkeeping of livestock mortality composting operations require
  - a. Start date of each compost batch.
  - b. Quantity of dead animals or afterbirth added each time an addition is made and dates the tissue is added to new compost batches.
  - c. Temperature recordings based on type of composting system used.
  - d. Date compost material is aerated if done with a loader or turning equipment
  - e. The final disposition of the finished compost, including method, location, date, and volume for the batch.

An example recordkeeping form: <https://www.msu.edu/~rozeboom/catrn.html>