



WQL22 - Montana Supplement

On Farm Composting of Farm Organic Waste – (Water Quality Enhancement Activity)

Montana Clarification

Composting requires a carbon/nitrogen ratio between 25:1 to 40:1 on a dry weight basis. A dependable source of carbonaceous material with high carbon to nitrogen ratio (C:N), such as sawdust, small grain residue, or grass or leaf clippings shall be stored and available to mix with nitrogen rich waste.

Montana Specifications

Maintain moisture levels at 40-65% during composting period. The compost shall maintain a temperature greater than 130 degrees Fahrenheit for a minimum of 5 days.

Incompatible Enhancements

Some enhancements are not compatible with other enhancements. If you have a question, contact your local NRCS office.

Eligible Land

Crop and pasture

Applicable Acres

Applies to farms that produce livestock manure, vegetable waste and/or other organic wastes from ON farm processing facilities.

Requirements:

- **Manure** - 1,000 pound Dairy Cow, minimum 21 pounds of dry sawdust/straw per 1000lb per day required, (Dairy cow manure requires more carbon due to their diet)
- **Manure** - 1,000 pound Beef Cow, minimum 10 pounds of dry sawdust/straw per 1000lb per day required
- **Manure** - 1,000 pound Finishing Steer or Heifer, minimum 10 pounds of dry sawdust/per 1000lb per day required
- **Dead animals** – 250 pounds of dry sawdust/straw per 1,000 pound animal mortality
- A dry land spring wheat crop yields 80 pounds of residue per bushel
- **NOTE:** If using crop residues for composting manure or dead animals, this residue needs to be harvested and stacked in the fall for a year's worth of material. The information above can be used to give you the pounds of crop residue and acres of residue needed to meet the requirements of this enhancement.

Example;

The applicant has (5) 1,000 pound dead animals a year to compost. This would require 1,250 pounds of sawdust/straw. If the applicant has a 30 bushel yield there is 2,400 pounds of residue produced per acre. If a crop fallow cropping system is used, only 50 percent of the acres are available for baling crop residue. Only **50 percent** of the residue

can be removed from the field in order to assure that soil surfaces are protected from erosion. With 1,200 pounds per acre available and 1,250 pounds needed a total of about 1 acre would be needed.

Documentation Requirements

1. Document the temperature, number of turnings, and moisture levels, with dates of each recording.
2. An inventory of waste products produced on the farm or animal mortality on the farm.
3. An estimate of the annual quantities of compost to be produced.
4. A location map showing the location of the composting facility.
5. A nutrient management plan for the land application of the compost.
6. Composting plan

I acknowledge that I have read and understand all that is required for the implementation of this CSP Enhancement Activity.

Contract participant

Date