



WQL22 - Montana Supplement – REVISED 2/22/11

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

This enhancement may not be contracted with the following enhancements:

For cropland: ANM21, ANM22, SOE02

For pasture: AANM23, WQL14

Eligible Land

Crop and pasture

Applicable Acres

Acres of annually cropped lands, pasture, or hayland.

Example (System)

- Manure – Dairy or Beef 1,000 pound Cow (6.5 pounds of dry weight of carbon per day required), Finishing Steer or Heifer, 1,000 pound animal (4.3 pounds of dry weight of carbon per day required)
- Dead animals – 2,000 pounds of ground straw required per 1,000 pound animal

The applicant has 5 1,000 pound dead animals a year to compost. This would require 10,000 pounds of straw. A dry land spring wheat crop yields 80 pounds of residue per bushel. 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 applicable. Only 50 percent of the residue can be removed from the field and the participant needs to ensure that the remaining 50 percent residue is sufficient to maintain their Food Security Act compliance plan requirements. With 1,200 pounds per acre available and 10,000 pounds needed a total of 9 acres would be needed.

The applicant has 1000 acres of dry land cropland. He chooses to utilize the small grain residue off of 9 acres for this enhancement. 1000 is the applicable acres and 9 is the planned amount.

	Year 1	Year 2	Year 3	Year 4	Year 5
WQL22	0	9 ac	9 ac	9 ac	9 ac

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