

STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE WATER PERMITTING AND ENFORCEMENT DIVISION (860) 424-3018

COMPREHENSIVE NUTRIENT MANAGEMENT PLANS FOR ON-FARM COMPOSTING

Development and implementation of a Comprehensive Nutrient Management Plan (CNMP) is required for on-farm composting operations. The CNMP is a document that outlines the best management practices to be implemented to minimize the transport of pollutants and protect the waters of the state. It includes background information and documents the operation, maintenance, and management of the composting facility. The CNMP must address the nutrient balance of the composting operation from sources to uses (land application, sales). On-farm composting must be an integral part of the farming operation.

The Comprehensive Nutrient Management Plan must incorporate the following criteria in the design of the composting facility:

- Quantities of source materials to be composted;
- Origin of source materials to be composted;
- Target carbon-nitrogen ratio;
- Target moisture content;
- Mix ratios of source materials;
- Method for mixing materials;
- Equipment used in all phases of composting;
- Turning schedule;
- Temperature monitoring;
- Composting and curing times;
- Odor control;
- Area requirements; and
- End market for compost product.

The CNMP must be developed by a qualified professional. The Natural Resources Conservation Service (NRCS) can develop CNMPs for on-farm composting if the farm qualifies for their programs. Please see the NRCS <u>CNMP fact sheet</u> for a description of the assistance they can provide. CNMPs can also be developed by a <u>Technical Service Provider</u> or other certified nutrient management planner. A DEEP representative must visit the proposed site prior to submittal of the CNMP for review and approval.

When evaluating proposed composting sites consider the following setbacks. These setbacks are guidelines used for planning purposes, not regulations.

From Neighboring Residences and Businesses	300 feet
From property lines	100 feet
From watercourses	200 feet
From private wells	200 feet
From public wells	500 feet

Comprehensive Nutrient Management Plan (CNMP) Content

1.0 Description of the site

Site location, property size, property ownership, a location map, a narrative of the proposed activities

2.0 History of Site

3.0 Current Site Conditions

Soils, groundwater, bedrock

Goundwater and surfacewater classification

Identify Watershed

Mapping: Soils map, USGS Topography, Aerial Photo

Location of Wells

4.0 Composting Operations

Source Materials: Quantities, Origin, Characteristics

Composting Process: Shape and size of windrows, Target carbon-nitrogen ratio, Target moisture content, Mix ratios, Methods of mixing, Equipment used, Turning schedule, Temperature monitoring, Temperature monitoring, Odor control, Area requirements

Sketch or aerial photo indicating location of loading, unloading, mixing, windrows, curing

Best Management Practices to minimize runoff

5.0 End Use or market for compost

Nutrient Management Plan

6.0 Record Keeping

Annual Reporting

NRCS CNMP Fact Sheet: http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1166381.pdf

NRCS Technical Service Provider Registry:

 $\underline{http://techreg.sc.egov.usda.gov/CustLookupTSP.aspx?fips=09000\&categoryid=\&categorytext=\&serviceid=\&service$

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