TITLE 22a. Environmental Protection

# Agency Department of Environmental Protection

Subject Composting of Leaves

Section
§ 22a-208i(a)-1

# CONTENTS

Sec. 22a-208i(a)-1. Composting of leaves

TITLE 22a. Environmental Protection

Department of Environmental Protection

§22a-208i(a)-1

## **Composting of Leaves**

## Sec. 22a-208i(a)-1. Composting of leaves

## (a) Applicability

(1) This section applies to any person who owns or operates a leaf composting facility.

(2) No person shall be exempt by virtue of compliance with this section from applicable local, state and federal laws.

## (b) **Definitions**

As used in this section:

(1) "Compost pad" means a cleared, graded surface within a leaf composting facility upon which windrows are placed for composting.

(2) "Existing leaf composting facility" means a leaf composting facility at which leaf composting took place before the effective date of this regulation.

(3) "Home composting" means the accelerated aerobic biodegradation and stabilization of vegetative organic solid waste generated by a homeowner or tenant of a single or multi-family residential unit when composting occurs at such residence.

(4) "Leaf" or "leaves" means the foliage of trees.

(5) "Leaf composting" or "composting of leaves" means the accelerated aerobic biodegradation and stabilization of leaves under controlled conditions.

(6) "Leaf composting facility" means land, including structures and appurtenances thereon, other than home composting areas, where leaf composting takes place.

(7) "Leaf compost" means the product of leaf composting.

(8) "New leaf composting facility" means a leaf composting facility at which leaf composting did not take place prior to the effective date of this section.

(9) "Operator" means the person with ultimate responsibility for managing a leaf composting facility.

(10) "Owner" means a person that owns a leaf composting facility.

(11) "Sheet leaf composting" means the application of leaves to land for use as a soil amendment or mulch.

(12) "Surface water" means "surface water" as defined in section 22a-430-3 (a) of the Regulations of Connecticut State Agencies.

(13) "Windrow" means an elongated pile of leaves formed for the purpose of composting.

(14) The definitions of the following terms shall be the same as the definitions in section 22a-2 of the Connecticut General Statutes: "Commissioner," "Department," "person."

(15) The definition of the following term shall be the same as the definition in section 12-412 (63) of the Connecticut General Statutes: "agricultural production."

# (c) Registration

(1) (A) Before commencing leaf composting, an owner or operator of a new leaf composting facility shall register such facility with the Commissioner and obtain from the Commissioner a notice that such registration is complete. An owner or operator of an existing leaf composting facility shall register such facility with the Commissioner within

§22a-208i(a)-1

Department of Environmental Protection

ninety days after the effective date of this section.

(B) Notwithstanding the provisions of subparagraph (A) of this subdivision, an owner or operator of a leaf composting facility shall be considered in compliance with this subsection if, by the effective date of this regulation, (i) such owner or operator has submitted to the Commissioner the information set out in subparagraph (A) through (J) of subdivision (2) of this section, and such owner or operator does not receive written notice from the Commissioner that the information so submitted is incomplete, or (ii) the Commissioner has issued to such owner or operator a permit pursuant to Section 22a-208a of the General Statutes and such permit was in effect on the effective date of this section. An owner or operator to whom or to which the Commissioner has issued such a permit shall register such facility with the Commissioner within ninety days after the expiration of the permit.

(2) A registration for a leaf composting facility shall include the following information with respect to such facility:

(A) Name, business address, and business telephone number of the facility's owner and the operator and of the owner of the land on which the facility is located;

(B) Location of the facility;

(C) Acreage of the property on which the facility is located;

(D) Volume of leaves composted or expected to be composted annually;

(E) acreage of area used or to be used for a compost pad, leaf processing activities, and storage of leaf compost;

(F) Individual to be the primary contact with the Department;

(G) Name, business address, and business telephone number of any engineer or other consultant employed or retained to design and/or oversee construction of and/or operate the facility;

(H) A detailed site plan and supporting maps showing, but not necessarily limited to: the boundaries of the property at which the facility is located; the existing and proposed contours and contour intervals of the property at which the facility is located and of the properties adjacent to the property at which the facility is located; all occupied buildings within 250 feet of the perimeter of the compost pad; all drinking water supply wells, monitor wells, reservoirs, and sources of water for irrigation or industrial purposes within 1000 feet of the perimeter of the compost pad; archeological or historical landmarks, wetlands, watercourses, and publicly or privately owned land conservation areas on the property at which the facility is located and within 1000 feet of the boundaries of said property; soil series description and delineation as specified by the United States Department of Agriculture Soil Conservation Service County Soil Survey of all soils on the property at which the facility is located and within 1000 feet of the boundaries of said property; any buffers, and the nature of such buffers, between the facility and adjacent properties; any means, and the nature of such means, utilized to visually screen the facility from its surroundings; all paved and unpaved access roads to the facility; all paved and unpaved roads on the property at which the facility is located; all fencing and gates on the said

### TITLE 22a. Environmental Protection

## Department of Environmental Protection

property; depiction of the composting operations; all structures related to the facility; source of water for the facility; any means for control of erosion, sedimentation, and stormwater; location, depth, and elevation of any soil borings, test pits, or monitor wells on the said property; elevation of seasonal high groundwater table on the said property; and direction of groundwater flow on the said property.

(I) An operation and maintenance plan setting forth, but not necessarily limited to, a description of any agreements affecting the control, use or operation of the facility; procedures for collection and delivery of leaves to the facility; procedures and processes for leaf composting; methods and procedures for fire prevention and fire control; a design for erosion, sedimentation and stormwater controls; end uses or markets for leaf compost generated at the facility; and provisions for bi-weekly record-keeping of weather conditions, wind direction, ambient air temperature, odor, dust, condition of compost pad, windrow monitoring, and corrective actions needed and taken.

(J) Such additional information relevant to the facility as the Commissioner deems appropriate.

(3) A registration, including any attachments thereto, shall be certified by the registrant and by the individual or individuals responsible for actually preparing the registration, each of whom shall state in writing:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157 of the General Statutes, and in accordance with any other applicable statute."

The registration and one copy thereof shall be delivered personally or by mail and, unless the Commissioner requires differently, shall be directed to the Department's Bureau of Waste Management Planning and Standards Division.

(4) Each owner or operator of a registered leaf composting facility shall re-register such facility with the Commissioner, in accordance with provisions of subdivisions (3) and (4) of this subsection, if any of the following occurs:

(A) The annual volume of leaves to be composted at the facility increases by twenty per cent of the annual volume indicated in the current registration;

(B) The design of the facility, or procedures or processes for leaf composting, are modified;

(C) There is a change in the identity of the facility's owner or operator.

(5) The Commissioner may revoke or suspend a registration in accordance with applicable law.

(d) Siting

(1) No leaf composting facility shall be operated at any location unless at such location:

#### TITLE 22a. Environmental Protection

§22a-208i(a)-1

Department of Environmental Protection

(A) There are at least 100 feet between the staging, processing, curing, and storage areas of the facility and any surface water;

(B) There are at least 100 feet between the staging, processing, curing, and storage areas of the facility and the boundaries of the property at which the facility is located;

(C) There are at least 250 feet between the staging, processing, curing, and storage areas of the facility and any occupied building other than an owner occupied building on the property at which the facility is located;

(D) There are at least five feet between the ground surface of the property at which the facility is located and the seasonal high groundwater table;

(E) There are at least five feet between the ground surface of the property at which the facility is located and the bedrock;

(F) There are at least 250 feet between the staging, processing, curing, and storage areas of the facility and any drinking water supply well;

(G) Leaf composting facilities which are located on top of solid waste disposal areas closed in accordance with Sections 22a-209-1 through 13 of the Regulations of Connecticut State Agencies and Title 40 Code of Federal Regulations Part 258.60 shall be conducted on a pad to prevent disruption of the landfill cap and underlying waste. The pad shall be constructed of well compacted, well drained soil. It shall be no less than 2 feet thick and sloped at 2-5% to promote surface drainage. The pad shall be constructed in addition to the minimum 2 feet of final cover soil required at all closed solid waste disposal areas.

(2) Notwithstanding the provisions of subdivision (1) of this subsection, a leaf composting facility may be operated at a location which does not meet the requirements of such subdivision if the owner or operator demonstrates in writing to the Commissioner's satisfaction, and the Commissioner finds in writing, that operation of the facility at such location will not adversely affect public health, safety, welfare, or the environment.

#### (e) **Operation**

Each owner or operator of a leaf composting facility shall assure that:

(1) The facility is operated in accordance with the information provided in the current registration submitted under this section.

(2) If the facility is located on a solid waste disposal area, the facility is operated so as not to interfere with operations of such area or to disturb the cover of such solid waste disposal area.

(3) The facility is operated so as to prevent adverse impacts to public health, safety, welfare, and the environment.

(4) All composting takes place on a compost pad having a slope of between 2% and 5% and graded to minimize ponding.

(5) Leaves in plastic bags are de-bagged within two (2) weeks after arrival at the facility and empty plastic bags are promptly removed from the facility and lawfully disposed.

(6) Leaves are stockpiled at the facility for no longer than two weeks before the leaves are watered, processed and formed into actively composting windrows.

(7) Windrows are constructed on the compost pad perpendicular to the contours of the

TITLE 22a. Environmental Protection

Department of Environmental Protection

§22a-208i(a)-1

ground surface.

(8) Windrow layout allows access for heavy equipment.

(9) Windrow height and width is such that the leaves may be easily and thoroughly mixed by the windrow turning equipment used. In no case shall windrows exceed twelve (12) feet in height and twenty (20) feet in width at their base unless a specialized windrow turning machine is used to mix them and manufacturer specifications recommend specific size windrows.

(10) Windrows are turned as often as necessary, and at least once per month, to maintain aerobic composting conditions, prevent foul odors, and produce a compost product.

(11) Internal temperature of the windrows is measured and recorded at least once every 14 days at 50-foot intervals along the windrows. The thermometer shall be inserted into the center of the windrow when internal temperature is being measured.

(12) Adequate measures are implemented to minimize dust and fungal spore migration during operation of the facility, including during windrow turning.

(13) The following parameters are recorded at least once every two weeks and during windrow turning: weather conditions, wind direction, ambient air temperature, presence of odor or dust, compost pad condition, windrow moisture, corrective actions needed, and corrective actions taken.

(14) All appropriate sedimentation and erosion control measures are implemented and designed in accordance with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, published by the Soil and Water Conservation Council established pursuant to section 22a-328 of the Connecticut General Statutes.

(15) All drainage ditches, evaporation ponds, sedimentation ponds and swales are a sufficient distance from the windrows to prevent absorption of water by leaves or leaf compost.

(16) All interceptor berms, ditches and swales are installed upgradient of the compost pad when the compost pad is located down gradient of a slope, and surface drainage is diverted away from the compost pad.

(17) Drainage control measures are implemented to prevent run-off from the compost pad from entering surface water.

(18) Access to the facility is maintained so as to permit orderly entrance and egress at all times, including during periods of peak usage and inclement weather.

(19) Security measures are adequate to prevent unauthorized dumping and vandalism.

(20) The facility be maintained in such a manner as to prevent the creation of litter and the harboring, feeding or breeding of vectors.

# (f) Reporting

The owner or operator of a leaf composting facility shall comply with the reporting requirements for recycling facilities pursuant to Section 22a-208e (c) of the Connecticut General Statutes.

# (g) Sheet leaf composting

(1) Each person that practices sheet leaf composting is exempt from the requirements of

TITLE 22a. Environmental Protection

§22a-208i(a)-1		
SZZu-ZUOIIUI-I		
,		

Department of Environmental Protection

subsections (c), (d), and (e) of this section, provided that such person:

(A) Has been issued an Agricultural Sales Tax Exemption Permit pursuant to chapter 219 of the Connecticut General Statutes.

(B) Complies with the reporting requirements for recycling facilities pursuant to section 22a-208e (c) of the Connecticut General Statutes.

(C) Notifies the Commissioner on a form prescribed by the Commissioner within 30 days before accepting leaves for sheet leaf composting.

(2) Any person that practices sheet leaf composting on land which he leases to another person for purposes of agricultural production shall be exempt from the requirements of subsections (c), (d), and (e) of this section if such other person satisfies the criteria of subparagraphs (A), (B), and (C) of subdivision (1) of this subsection.

(3) Each person that practices sheet leaf composting shall assure that:

(A) No material other than leaves is used for sheet leaf composting.

(B) Sheet leaf composting is conducted only at land actively devoted to agricultural production.

(C) Leaves to be used for sheet leaf composting are delivered to the subject land unbagged.

(D) Prior to application of leaves to land, any non-leaf material intermixed with the leaves is removed and properly disposed.

(E) Leaves to be utilized for sheet leaf composting are applied to land within fourteen (14) days of delivery and are spread in a layer no higher than six inches.

(F) No land receives, as a result of sheet leaf composting, more than six inches of leaves within any 12 months.

(G) All leaves applied to land are incorporated into the soil no later than the tillage season following the time the leaves were applied, unless the leaves are intended as a ground mulch.

(Effective February 16, 1994)