STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT DIVISION OF AGRICULTURE

Rules and Regulations for AGRICULTURAL COMPOSTING



May 1998

AUTHORITY: These regulations are adopted pursuant to Chapters 42-35, 42-17.1 and 2-22 of the Rhode Island General Laws of 1956, as amended.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT DIVISION OF AGRICULTURE

RULES AND REGULATIONS FOR AGRICULTURAL COMPOSTING

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STATE OF RHODE ISLAND PROVIDENCE PLANTATIONS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT DIVISION OF AGRICULTURE

RULES AND REGULATIONS FOR AGRICULTURAL COMPOSTING

RULE 1. PURPOSERULE 1. PURPOSE

The purpose of these regulations is to encourage and promote composting by agricultural units while minimizing negative environmental impacts.

RULE 2. AUTHORITYRULE 2. AUTHORITY

These Rules and Regulations are promulgated pursuant to the requirements and provisions of Chapter 42-17.1, Department of Environmental Management, Chapter 2-22, Rhode Island Soil Amendment Law, and in accordance with the provisions of Chapter 42-35, Administrative Procedures Act, of the Rhode Island General Laws of 1956 as amended.

RULE 3. APPLICATION RULE 3. APPLICATION

The terms and provisions of these Rules and Regulations shall be liberally construed to permit the Department of Environmental Management (the "Department") to effectuate the purposes of state law, goals and policies. These Rules and Regulations shall apply only to agricultural units, as defined herein.

RULE 4. DEFINITIONSRULE 4. DEFINITIONS

- (A) "Agricultural Composting" means the composting of agricultural by-products and other organic materials on an agricultural unit resulting in compost products for agricultural and horticultural uses.
- (B) "Agricultural Composting Facility" means that part of an agricultural unit upon which agricultural composting takes place. Permitting for agricultural composting facilities is done through the Division of Agriculture in DEM/Office of Natural Resource Services.
- (C) "Agricultural Unit" means farmland as designated under R.I. Gen. Laws '44-27-2 upon which agricultural operations as defined in R.I. Gen. Laws '2-23-4 are undertaken by a farmer.
- (D) "Agricultural By-Product" means discarded organic materials produced from the raising of plants and animals as part of agronomic, horticultural or silvicultural operations, including but not limited to animal manure, bedding materials, plant stalks, leaves, other vegetative matter and discarded by-products from the on-farm processing of fruits and vegetables.
- (E) "Compost" means a soil amending material resulting from the aerobic thermophilic, microbial processing of organic materials

- (F) "Commonly Accepted Best Management Practice" means the ability to produce the desired quality of compost in the shortest possible time with a minimum of odors, environmental impacts and other process-related problems, as stated in the On-Farm Composting Handbook distributed by the Northeast Regional Agricultural Engineering Service.
 - (G) "Disposal" means the abandonment, discard or final disposition of waste.
- (H) "Farmer" means an individual, partnership or corporation who operates a farm, as defined by R.I. Gen. Laws '2-1 *et seg.* and meets the requirements of R.I. Gen. Laws '2-1-22 (j).
- (I) "Mixed Solid Waste" means heterogeneous and commingled solid waste, which may include readily biodegradable organic wastes, as well as other organic wastes which are not readily biodegradable and may also contain inorganic, non-compostable wastes.
- (J) "Organic Material" means materials that contain carbon-to-carbon bonds and are biodegradable, such as paper, wood, food waste, leaves and yard waste.
- (K) "Physical Contaminants" means any non-biodegradable material such as plastic, metal, glass, stones or masonry debris.
- (L) "Putrescible Waste" means solid waste, including but not limited to, fish waste and other food wastes, which contains organic matter capable of being decomposed by microorganisms and that has a tendency to form foul-smelling by-products during decomposition, and may provide food for vectors or birds.
- (M) "Solid Waste" means garbage, refuse and other discarded solid materials generated by residential, institutional, commercial, industrial and agricultural sources but does not include solids or dissolved material in domestic sewage sludge, nor does it include hazardous waste as defined in the Rhode Island Hazardous Waste Management Act, R.I. Gen. Laws '23-19.1 *et seq.*, nor does it include used asphalt, concrete, Portland concrete cement or tree stumps.

RULE 5. AGRICULTURAL COMPOSTING FACILITYRULE 5. AGRICULTURAL COMPOSTING FACILITY

(A) Agricultural Composting: Any farmer engaging in agricultural composting shall be required to maintain registration and operating records in a format and on forms as designated by the Department of Environmental Management.

- (1) The following operations on agricultural units do not require the registration or maintenance of operating records provided the operation incorporates commonly accepted management practice and is carried out in a manner that prevents an unpermitted discharge of pollutants to air, water or other natural resources of the State of Rhode Island:
 - (a) composting of tree stumps and brush at an agricultural unit where such wood wastes are generated and composted within the boundaries of such agricultural unit;
 - (b) composting and the use or application of agricultural manures in farming operations;
 - (c) composting of agricultural by-products, when located at an agricultural unit.
- (2) A composting operation, when located on an agricultural unit, which, in addition to agricultural by-products, utilizes one or more of the following materials, must be registered and maintain operating records with the Division of Agriculture, Department of Environmental Management and follow commonly accepted best management practices.
 - (a) leaf and yard waste generated off the agricultural unit:
 - (b) wood wastes, including brush, stumps, lumber ends and trimmings, wood pallets, bark, wood chips, shavings, slash and other clean wood, provided that it is not mixed with other solid wastes, for processing. Wood containing or likely to contain asbestos, glues, or chemical preservatives such as creosote, pentachlorophenol, paints, stains or other coatings shall not be considered wood wastes under these Rules and Regulations and is prohibited from being processed;
 - (c) clean paper, newspaper or cardboard;
 - (d) clean shells and bones;
 - (e) non-agricultural sources of manures and animal bedding materials such as zoo waste;

- (f) not more than ten tons per day of compostable material composed of generator pre-sorted produce, and/or generator pre-sorted vegetative residues from food or beverage processing that consists solely of materials from plants, (e.g., husks, leaves, skins, sediments and roots) and other plant by-products from fruit or vegetable canning, freezing or preserving operations;
- (g) not more than one ton per day of pre-sorted kitchen, restaurant and source separated institutional or municipal food by-products; and/or
- (h) not more than one half ton per day of unprocessed meat and fish wastes.

NOTE: See Rule 5(B)(1) through and including Rule 5(B)(3) for additional clarification and requirements.

- (3) Any agricultural composting facility, when located on an agricultural unit that utilizes compostable material as set forth in Rule 5(A)(2), shall be considered by the Department to be in compliance if within sixty (60) days of the receipt of a registration package, such owner or operator has submitted to the Department a completed registration application and the Department has determined that such registration application is acceptable. Until a completed registration application is received and accepted by the Department, the farmer shall be subject to the provisions set forth in Solid Waste Regulation No. 8.
 - (a) The registration application submitted to the Department of Environmental Management, Division of Agriculture shall include the following;
 - (i) all necessary permits or approvals required by federal, state and local laws and regulations.
 - (ii) a detailed site plan and supporting maps showing, but not necessarily limited to:
 - (aa) The boundaries of the property at which the agricultural composting facility is located;
 - (bb) The existing and proposed contours and contour intervals of the property at which the agricultural composting facility is located showing slope and drainage pattern of the agricultural composting facility;
 - (cc) All occupied buildings within two-hundred fifty (250)

feet of the perimeter of the compost pad;

- (dd) All public drinking water supply wells, monitoring wells, reservoirs, and sources of water for irrigation or industrial purposes within five hundred (500) feet of the perimeter of the agricultural composting facility and all private wells within one hundred (100) feet of the perimeter of the agricultural composting facility;
- (ee) All wetlands, water courses, and publicly or privately owned land conservation areas on the property at which the agricultural composting facility is located and within two hundred (200) feet of the boundaries of the agricultural composting facility;
- (ff) Soil series description(s) and delineation(s) of all soils on the property at which the agricultural composting facility is located and within two hundred (200) feet of the boundaries of said agricultural composting facility, as referenced in the "Soil Survey of Rhode Island" by the United States Department of Agriculture Soil Conservation Service Soil Survey (now the Natural Resources Conservation Service);
- (gg) Any buffers, and the nature of such buffers, between the agricultural composting facility and adjacent properties and that are used to screen the agricultural composting facility from the surroundings;
- (hh) All paved and unpaved access roads to the agricultural composting facility;
- (ii) All fencing and gates on the said property;
- (jj) Depiction of the composting operations;
- (kk) All structures related to the agricultural composting facility;
- (II) Sources of water for the agricultural composting facility;

- (mm) Any means for control of erosion, sedimentation, and rainwater;
- (nn) Location, depth, and elevation of any soil borings, test pits, or monitoring wells on the said property; and
- (oo) Elevation of seasonal high groundwater table on the said property from soil survey maps, or on-site investigation;
- (iii) An operation and maintenance plan setting forth, but not necessarily limited to:
 - (aa) A description of any agreements affecting the control, use or operation of the agricultural composting facility;
 - (bb) Procedures for collection and delivery of compostable materials to the agricultural composting facility;
 - (cc) Procedures and processes for the composting;
 - (dd) Methods and procedures for fire prevention and fire control;
 - (ee) A design for erosion, sedimentation and rainwater controls;
 - (ff) End uses or markets for compost generated at the agricultural composting facility; and
 - (gg) Such additional information relevant to the agricultural composting facility as the Division of Agriculture deems appropriate.
- (b) The registration package and one copy thereof shall be delivered to the Department of Environmental Management, Division of Agriculture within sixty (60) days of receipt of the registration package by the applicant. The farmer must register each identified compost product as per Rhode Island General Law 2-22-5.

- (c) If one or more of the following events occur, each owner or operator of a registered agricultural composting facility shall be required to renew the registration of the agricultural composting facility with the Division of Agriculture:
 - (i) The annual volume of materials to be composted at the agricultural composting facility increases by twenty (20) percent of the annual volume indicated in the current registration;
 - (ii) The design of the agricultural composting facility, or procedure, or processes for the composting, are modified or changed; or
 - (iii) There is a change in the identity of the agricultural operation's owner or operator.
- (B) A composting operation, when located on an agricultural unit, which composts any of the following must register with the Division of Agriculture and comply with the provisions of Rule 5(A) as well as comply with the terms of the Putrescible Waste Composting facilities operating standards as stated in the Rule 8.4.00 of Solid Waste Regulation No. 8, "Rhode Island Solid Waste Composting Facility":
 - (1) More than one half (1/2) ton per day unprocessed meat and fish wastes;
 - (2) More than one (1) ton per day of pre-sorted kitchen, restaurant, and source segregated institutional or municipal food by-products;
 - (3) More than ten (10) tons per day of compostable material composed of generator pre-sorted produce; and/or more than ten (10) tons per day of generator pre-sorted vegetative residues from food or beverage processing that consists solely of materials from plants,(e.g., husks, leaves, skins, sediments, and roots) and other plant by-products from fruit or vegetable canning, freezing, or preserving operations.
- (C) Mixed solid waste composting on an agricultural unit does not qualify as agricultural composting shall be subject to Solid Waste Regulation No. 8 "Rhode Island Solid Waste Composting Facility".

RULE 6. AGRICULTURAL COMPOSTING - OPERATING STANDARDSRULE 6. AGRICULTURAL COMPOSTING - OPERATING STANDARDS

(A) Agricultural composting facilities shall prohibit and prevent the illegal dumping of waste materials at such agricultural composting facility.

- (B) Composting operations shall comply with all state and local regulations governing agricultural composting including those which relate to siting requirements and the Department of Environmental Management's current Best Management Agricultural Compost Guidelines, which have been adopted by the Division of Agriculture.
- (C) The operating of the agricultural composting facility must be done in a manner to minimize odors, noise, drift of materials, and risk to humans or the environment.
- (D) If an agricultural compost operator produces compost for marketing as a soil amendment, this operation shall be subject to the Rhode Island Fertilizer Law, R.I. Gen. Laws ¹2-7 *et seq.* and Rhode Island Soil Amendment Law, R.I. Gen. Laws ¹2-22 *et seq.*
- (E) Only clean uncontaminated, source separated, organic materials as listed in RULE 5 (A)(1), 5(A)(2) or 5(B) may be composted on an agricultural composting facility. Materials such as sewage sludge, and/or construction and demolition debris are prohibited from being composted at an agricultural composting facility and any utilization of these materials on an agricultural unit must be approved by the Office of Water Resources and/or the Office of Waste Management.
- (F) On-farm composting operators who accept off-farm compostable material and who are determined by the Division of Agriculture not to be using best management practices at their agricultural composting facility as stated in the ON-FARM COMPOSTING HANDBOOK, shall not be permitted to register their agricultural composting facility with the Division of Agriculture. These Agricultural Composting operators must come into compliance and establish that they are using best management practices at their agricultural composting facility within sixty (60) days of notification that they are not using best management practices. Any person who fails to come into compliance within the sixty (60) days will be referred to the appropriate Department Office for action.
- (G) No agricultural composting facility shall be larger than 20% of the total land mass of the agricultural unit that is in agricultural production.
- (H) Agricultural composting facilities that compost putrescible wastes may only accept putrescible waste from October 1 through March 31. If it is determined by the Division of Agriculture that the operator of an agricultural composting facility has at least 3 years of experience of successful composting of putrescible waste, the operator may request approval from the Division of Agriculture to extend the period for accepting putrescible waste, provided that the operator is able to take preventative measures to mitigate off-farm odors from the composting operation.

- (I) An agricultural composting facility operator who accepts off-farm putrescible waste must have and implement a stormwater run-off plan as well as develop and utilize a drainage system to prevent sediment or run-off water from migrating off-site. The plan must be in effect before accepting any putrescible waste. The storm water run-off plan must be in accordance with planning standards that achieve local, state and federal water-quality criteria. This runoff plan can contain one or more component "best management practices" which are part of the overall plan. These component practices must be in accordance with NRCS (Natural Resources Conservation Service) practice standards.
- (J) All agricultural composting facilities shall comply with their operation and maintenance plan.

RULE 7. AGRICULTURAL COMPOSTING - EVALUATIONRULE 7. AGRICULTURAL COMPOSTING - EVALUATION

- (A) The Department shall consider the following criteria in evaluating and determining whether to accept a registration application for and register an agricultural composting facility:
 - (1) The potential for adverse impacts, taking into account the compostable materials, project location, design and operating controls, management practices and operator experience;
 - (2) The ability of the applicant to appropriately use or dispose of all project materials; and
 - (3) The applicant demonstrates knowledge and capability to conduct the agricultural composting operation in compliance with the regulations and to produce a stabilized compost product.

RULE 8. PROHIBITIONSRULE 8. PROHIBITIONS

Wood containing or likely to contain asbestos, glues, or chemical preservatives such as creosote, pentachlorophenol, paints, stains or other coatings shall not be considered wood wastes under these Rules and Regulations and are prohibited from being processed. An agricultural unit which processes the woods described in this Rule shall not be considered to be conducting agricultural composting and shall be subject to Solid Waste Regulation No. 8.

RULE 9. REVOCATION/SUSPENSIONRULE 9. REVOCATION/SUSPENSION

(A) The Division of Agriculture may revoke or suspend a registration for failure to comply with rules and regulations of the Department of Environmental Management.

RULE 10. SEVERABILITYRULE 10. SEVERABILITY

(A) If any provision of these Rules and Regulations, or the application thereof to any person

or circumstances, is held invalid by a court or competent jurisdiction, the validity of the remainder of the Rules and Regulations shall not be affected thereby.

RULE 11. EFFECTIVE DATERULE 11. EFFECTIVE DATE

(A) The foregoing "Rules and Regulations for Agricultural Composting", after due notice, are hereby adopted and filed with the Secretary of State this 13th day of April, 1998 to become effective twenty (20) days thereafter, in accordance with the provisions of Chapters 2-22, 42-35, 42-17.1 of the General Laws of Rhode Island of 1956, as amended.

ANDREW McLEOD, Director Department of Environmental Management

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