

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Solid and Hazardous Waste Commission/Hazardous Materials and Waste Management Division

6 CCR 1007-2

STATEMENT OF BASIS AND PURPOSE AND SPECIFIC STATUTORY AUTHORITY FOR

Amendments to the Regulations Pertaining to Solid Waste Sites and Facilities (6 CCR 1007-2 Part 1) – Revision of Section 14 Solid Waste Composting Regulations

(Adopted by the Solid and Hazardous Waste Commission on November 18, 2008)

Basis and Purpose

The Hazardous Materials and Waste Management Division (HMWMD) of the Colorado Department of Public Health and Environment (the Department) has prepared revisions to Section 14 of the Colorado Solid Waste Regulations, 6 CCR 1007-2, Regulations Pertaining to Solid Waste Sites and Facilities. These amendments address the regulation of composting facilities. The Division is proposing to repeal the existing Section 14 composting regulations, and replace them in their entirety with a new re-written and restructured version. The major amendments being proposed at this time include:

- 1) Clarifying the applicability of the Section 14 regulations, and specifying the types of composting operations that are exempt from these regulations;
- 2) Adding compliance schedules for compliance with these Section 14 regulations;
- 3) Better defining the classification of composting facilities based upon the types of feedstocks received by the facility and the nature of the operation;
- 4) Adding a new composting facility classification (Class V);
- 5) Specifying the general requirements that apply to all classifications of composting facilities;
- 6) Adding class-specific requirements for composting facilities;
- 7) Modifying the requirements for sampling of finished compost;
- 8) Modifying the closure and post-closure care and maintenance requirements for compost facilities;
- 9) Adding composting plan requirements for Class IV and Class V composting facilities; and
- 10) Modifying the requirements for pilot projects.

The purposes of the revisions to Section 14 are fourfold. First, the composting industry has changed significantly since the promulgation of Section 14 in the year 2000. These revisions to the regulations reflect the current state of practice of this industry. Second, the regulatory exemption language for agricultural waste generators who compost their own agricultural waste and import solid waste required modification to ensure protection of public health and the environment. Third, the addition of a new composting facility classification, Class V, will provide a regulatory framework for agricultural producers to compost their own waste, import other compatible solid waste in types and quantities for effective composting, and sell or distribute compost to the public. Finally, in an effort to promote composting, reduce staff time to review plans, and provide a balanced regulatory structure, Class IV and V composting facilities will not be required to submit a design and operations plan. Instead, these facilities will be required to operate under the standards set forth in Section 14.11. A written Composting Plan that describes procedures and practices for compliance with the requirements in Section 14.11 must be maintained onsite, reviewed and understood by site personnel, and made available for review to

the Department during routine inspections or when a complaint is received regarding the composting operations.

Statutory Authority

The Solid Waste Act, Title 30, Article 20, Sections 100 to 122, CRS (“the Act”) requires the Department, through the HMWMD, to provide regulatory oversight of solid waste management within the State. The Act, at § 30-20-101.5(2), requires the HMWMD to develop, implement and continuously improve, as necessary, policies and procedures for carrying out its statutory responsibilities. The Solid Waste Regulations and these amendments to the Solid Waste Regulations have been promulgated pursuant to the HMWMD’s authority under the Act.

The Act defines solid waste as “any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial or commercial operations or from community activities” (§ 30-20-101(6)(a), C.R.S.). The Act exempts several categories of waste from the definition of solid waste – the most relevant to these regulations being agricultural waste (§ 30-20-101(6)(b), C.R.S.).

Because compost feedstocks or bulking materials may include a variety of solid wastes, including sludges and other discarded materials, the Act requires the HMWMD to regulate composting facilities as solid waste disposal sites and facilities performing solid waste disposal. Under the solid waste regulations, composting is considered processing of solid waste where a waste is intentionally manipulated under controlled conditions resulting in a product that is no longer considered a waste.

Summary of Issues Encountered During Stakeholder Process

The HMWMD initiated a stakeholder process in July 2008. A total of four meetings were held between July and September 2008. The composting industry, agricultural producers, industry consultants, local governments and the Colorado Department of Agriculture (CDA) participated in these meetings. In addition, a workgroup meeting occurred with staff of HMWMD and the CDA in August 2008. Also, in September 2008, HMWMD staff participated in a site tour of several dairy farms that compost agricultural waste to better understand concerns expressed by the agricultural producers. The HMWMD accommodated those located in outlying areas of the state by making it possible to participate in these meetings by conference call. Stakeholders were encouraged to send comments via email. Significant issues arising from the stakeholder process are outlined below.

Agricultural Exemption

The Act exempts “agricultural waste” from the definition of “solid waste.” Therefore, a facility that manages only agricultural waste is not a solid waste site and facility and is not subject to the Solid Waste Regulations. This exemption has been known as the “agricultural exemption,” and has allowed individuals to compost waste resulting from the raising of crops and animals on agriculturally zoned land at the location of generation without having to comply with the regulatory requirements regarding design and operations plans, closure and post-closure plans, financial assurance, monitoring composting process, and testing finished product. Compost produced by owners or operators under this agricultural exemption can be sold or distributed as finished compost to the public.

The livestock industry expressed concern that agricultural waste generated by their producers was deficient in carbon and that many facilities that wish to compost their agricultural waste therefore need to import solid waste as a carbon source and as bulking material for their composting recipe. Under the Act, if a facility were to import solid waste, that facility would lose its agricultural exemption and become a solid waste site and facility. The owner and operator would then be required to submit a design and operations plan, closure and post-closure plan and establish financial assurance.

HMWMD recognizes the burden this would place on agricultural composters and that this burden would most likely create an impediment to future composting under the agricultural exemption. Therefore, HMWMD has revised the Regulations to allow, pursuant to certain requirements, a facility that composts agricultural waste to maintain the agricultural exemption even when that facility imports limited types and quantities of solid waste. First, imported solid waste must consist only of wood chips and branches to provide the carbon material necessary for composting of agricultural waste produced onsite. In addition, these materials may only be stockpiled onsite for up to nine months. Non-contaminated wood waste generated during emergency cleanups (e.g. tornados) could be stockpiled longer than nine months if approved by HMWMD and the local governing authority. An agricultural composter using imported bulking material in accordance with the above requirements must also limit distribution of finished product to agricultural-zoned land in order to maintain the agricultural exemption.

Colorado Department of Agriculture

House Bill 08-1231 was approved during the 2008 Colorado legislative session. HB-1231, in part, provides authority to CDA to require composting facilities not regulated by HMWMD to register with CDA. Also, HB-1231 provides CDA a roadmap to implement a sampling and testing program for finished compost from facilities not regulated by HMWMD. In addition, CDA has authority under their statute to test any compost product for compliance with their minimum standards. This includes compost that originates from facilities that are regulated by HMWMD.

Several permitted commercial composters expressed concern that exempt agricultural composters, those that do not import solid waste, are not required to monitor or document the composting process, which is critical for pathogen reduction. In addition, these commenters stated that, when process controls are not implemented, there is no assurance that the finished product sold to the public is "compost," and may, in fact, be only aged manure. These commenters believe that limited product testing alone is not adequate to ensure pathogen reduction and a finished product that is compost. However, HMWMD does not regulate the composting operation or finished product from exempt agricultural composting facilities that do not compost solid waste. Therefore, this concern needs to be addressed by CDA.

CDA believes exempt agricultural composters should be allowed to sell their finished product to the public. CDA considers their testing program for finished product to be adequate and that it would provide representative data to ensure product safety. However, HMWMD believes CDA's testing program is inadequate for two reasons: 1) the testing would not be statistically representative of the potential volume of compost sold by agricultural producers, and 2) CDA's program does not include a provision for monitoring or documenting the composting process to ensure pathogen reduction is occurring. For these reasons, Section 14.1.2(D)(2) prohibits agriculturally-exempt composters, who utilize wood chips or tree branches as composting material, from selling or distributing finished compost to the public.

Regulatory Proposal

Class IV and V Composting Operations

CRS 30-20-102(8) allows the Solid and Hazardous Waste Commission to specify criteria under which certain classes of composting facilities would be able to operate without obtaining a Certificate of Designation. HMWMD believes that, because Class IV and V facilities accept materials that present a relatively low threat for harm, generate waste onsite and compost onsite, they should not be required to obtain a certificate of designation.

Specific requirements for Class IV and V composters are defined in Section 14.11.

Class IV: Owners or operators would not be required to submit a design and operations plan. Instead, Class IV facilities must operate under the standards and criteria set forth in Section 14.11. Further, proposed language would require all finished product to be tested prior to distribution. This is a change from the current composting regulation, which allows a Class IV facility to distribute up to 500 cubic yards of compost off site without conducting analysis.

Although the waste types, i.e. green waste, food and manure, are relatively benign, they can present a health risk if pathogens are not destroyed. Process monitoring, documentation of operations and testing of finished product will provide assurance that the compost is safe for distribution. Lastly, the HMWMD is requiring Class IV facilities to establish financial assurance for the facility. While financial assurance was previously not required for Class IV facilities because of the restricted facility size, the type of facility that this class describes, and the waste stream to be composted, the HMWMD believes that there is a potential impact to public health and the environment if an owner or operator of a Class IV facility were to abandon the site. By requiring financial assurance of Class IV facilities, the financial assurance mechanism would provide funding to close the composting facility and provide post-closure care in the event the owner or operator was to abandon the site. In addition, financial assurance is a statutory requirement.

Class V: A Class V composting facility is structured for agricultural producers to compost their own agricultural waste, import other compatible solid waste in types and quantities for effective composting, monitor the composting process, test their finished product, and sell or distribute compost to the public. Owners or operators would not be required to submit a design and operations plan to the Department for review. Instead, Class V facilities must operate under the standards and criteria set forth in Section 14.11. A written Composting Plan that describes procedures and practices for compliance with the requirements in Section 14.11 must be on-site, understood by site personnel, and made available for review to the Department during routine inspections or when a complaint is received regarding the composting operations. Class V owners or operators may voluntarily submit their Composting Plan to the Department for review. The requirement to establish financial assurance is being proposed for Class V composting facilities. As with Class IV composting facilities, the potential exists for a Class V composting facility to impact public health and the environment if its owner or operator were to abandon the site without satisfying all of the closure and post closure care responsibilities found in the Regulations. In that event, the State could use the funding from the financial assurance mechanism to close a composting facility and provide post-closure care. For the aforementioned reasons, and that financial assurance is a statutory requirement, HMWMD has proposed language requiring financial assurance for Class V composting facilities.

The composting classification matrix has been removed from Section 14 and placed here in the statement of basis and purpose to provide guidance for applicants to quickly identify sections of the regulations that would apply to their composting operation.

COMPOST FACILITY CLASSIFICATIONS AND REQUIREMENTS

REQUIREMENT	COMPOST FACILITY CLASSIFICATION					
	Class I	Class II	Class III	Class IV	Pilot Project (Section 14.10)	Class V (Agricultural)
Facility Classification (Section 14.2)						
General Requirements (Section 14.3)	Yes	Yes	Yes	No (See § 14.11)	No (See § 14.10)	No (See § 14.11)
Certificate of Designation (CD) (Section 1.6)	Yes	Yes	No	No	No	No
Feedstocks (Section 14.1.4) Identify source of feedstocks including liquid waste	Types 1, 2 & 3	Types 1 & 2	Type 1	Type 1 and/or food waste	specified by the pilot project	Type 1 Generator waste only, and "other compatible materials" as approved
Facility Restrictions	defined by CD	defined by CD	<50,000 cy	< 2 acres and <5,000cy all materials except finished product	1 year period <5,000cy all materials	Composting occurs at site of generation
Design and Operations (D&O) Plan (Section 14.4)	Yes	Yes	Yes	No (See Composting Plan requirements in Section 14.11)	Yes	No (See Composting Plan Requirements in Section 14.11)
Annual Report (Section 14.7.3)	Yes	Yes	Yes	Yes	summary report due at end of pilot	Yes
Financial Assurance (Section 1.8)	Yes	Yes	Yes	Yes	Yes	Yes

(cy) = cubic yard