

1                   DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

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5                   **Solid and Hazardous Waste Commission/Hazardous Materials and**  
6                   **Waste Management Division**

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9   6 CCR 1007-2

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12           **PART 1 REGULATIONS PERTAINING TO SOLID WASTE SITES AND FACILITIES**

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15           **Section 14 Composting Regulations Amendments**

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18           **1) Section 14.1.4 (Conditional Exemptions) is being amended by revising paragraph (A)**  
19           **to read as follows:**

20  
21                   **SECTION 14.1 GENERAL PROVISIONS**

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23  
24  
25                   **14.1.4 Conditional Exemptions**

26  
27                   (A) Conditionally Exempt Small Quantity Composting Operations: Any composting facility with up  
28                   to: (1) 100 cubic yards of Type 1 feedstock onsite or in process; (2) 100 cubic yards of Type 1  
29                   feedstock and up to 205 cubic yards of Type 2 feedstock onsite or in process; ~~or (3) 100 cubic~~  
30                   ~~yards of Type 1 and up to 10 cubic yards of Type 2 feedstock on site or in process when~~  
31                   ~~composted in vessel~~, that complies with the following conditions is exempt from the balance of  
32                   this Section 14:

33   \*\*\*\*\*

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35                   \*\*\*\*\*

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39           **2) Section 14.1.5 (Compliance Schedule) is being amended by revising paragraphs (A)**  
40           **and (B) and deleting paragraph (C) to read as follows:**

41                   **SECTION 14.1 GENERAL PROVISIONS**

42                   \*\*\*\*\*

46 **14.1.5 Compliance Schedule**

47  
48 ~~(A) Class II and Class III composting facilities that do not have an EDOP approved after the~~  
49 ~~November 18, 2008 revisions of this Section 14, Solid Waste Composting Regulations, must~~  
50 ~~submit to the Department and the local governing authority, for review and approval, a revised~~  
51 ~~EDOP within eighteen (18) months of the effective date of this Section 14. Within twelve (12)~~  
52 ~~months of the effective date of these Section 14 amendments, all facilities must comply with the~~  
53 ~~certified compost operator training as specified in Sections 14.2.4(K)(1), 14.3.5(K)(1), and~~  
54 ~~14.4.5(K)(1), as applicable.~~

55  
56 ~~(B) Within six (6) months of the effective date of this Section 14, facilities that cannot meet the~~  
57 ~~compliance schedule specified in 14.1.5(A) must make a demonstration to the Department~~  
58 ~~showing why this compliance schedule cannot be met, and must request an alternate schedule~~  
59 ~~for coming into compliance with this Section 14. Such extension shall be subject to Department~~  
60 ~~approval, but the deadline for coming into compliance may be extended no longer than eighteen~~  
61 ~~(18) months after the effective date of this Section 14. The requirement to sample for both~~  
62 ~~biological constituents in Section 14.6(D) must begin immediately. Facilities with an EDOP must~~  
63 ~~update their sampling plans to reflect this change within twelve (12) months of the effective date~~  
64 ~~of this THESE Section 14 AMENDMENTS.~~

65  
66 ~~(C) Within twelve (12) months of the effective date of this Section 14, any Class I composting~~  
67 ~~facility must have onsite a completed Composting Plan that complies with Section 14.2.~~

68  
69  
70 **3) Section 14.2.1 (Scope and Applicability) is being amended by revising paragraph (B),**  
71 **renumbering the existing paragraph (C) as paragraph (D), and adding a new paragraph**  
72 **(C) to read as follows:**

73  
74  
75 **SECTION 14.2 - CLASS I COMPOSTING FACILITIES**

76  
77 **14.2.1 Scope and Applicability**

78  
79 \*\*\*\*\*

80  
81 Section 14.2 applies to any persons, local governing authorities, and municipalities who owns or operates  
82 a Class I composting facility. A Class I composting facility is a facility that:

83  
84 (A) Composts only Type 1 feedstocks, and who has less than 50,000 cubic yards of feedstocks and  
85 in-process material onsite at any one time (finished compost does not count toward this total); or

86  
87 (B) Composts Type 1 feedstocks, SOURCE SEPARATED ORGANICS, food residuals and food processing  
88 vegetative waste, and has no more than 5,000 cubic yards of feedstocks and in-process materials  
89 onsite at any one time; or Composts only source separated organics and/or food residuals generated  
90 onsite together with other compatible materials as defined in Section 1 of these regulations, with the  
91 following limits:

92  
93 ~~1. A total volume of no greater than 5,000 cubic yards of source separated organics onsite at~~  
94 ~~any one time (finished qualified product does not count toward this total); and~~

95  
96 ~~2. A composting area of two (2) acres in size or less; or~~

97  
98 (C) Composts on agriculturally zoned property using only agricultural waste generated onsite together  
99 with Type 1 materials, SOURCE SEPARATED ORGANICS, food residuals and food processing vegetative  
100 waste, together with other compatible materials as defined in Section 1 of these regulations, with the  
101 following limits:

102  
103 (1) A total volume of no greater than 5,000 cubic yards of source separated organics onsite at  
104 any one time (finished qualified product does not count toward this total); and

105  
106 (2) A composting area of two (2) acres in size or less; or

107  
108 ~~(D)~~ Composts at the site of generation or on agriculturally zoned property owned by the generator using  
109 only agricultural waste generated onsite together with other compatible materials as defined in Section 1  
110 of these regulations and does not meet one of the general exemptions or conditional exemptions in  
111 Sections 14.1.3 or 14.1.4.

112  
113  
114 **4) Section 14.2.3 (Class I Composting Facility Design Requirements) is being amended**  
115 **by revising paragraphs (A)(2)(b)- (A)(2)(e) and paragraph (B) to read as follows:**

116  
117  
118 **SECTION 14.2 - CLASS I COMPOSTING FACILITIES**

119  
120 \*\*\*\*\*

121  
122 **14.2.3 Class I Composting Facility Design Requirements**

123  
124 (A) **Surface Water Control:** The Composting Plan for Class I composting facility must describe how  
125 the surface water control system features of the facility will be designed, constructed and maintained:

126  
127 (1) Prevent negative impacts to surface water and groundwater;

128  
129 (2) Control surface water, including:

130  
131 (a) stormwater run on and run off control features with a slope of one (1) to six (6) percent, or  
132 meeting other design criteria as approved by the department;

133  
134 (b) features to ~~contain and~~ manage contact water, which may include a vegetated area as  
135 long as it is of sufficient size and slope to prevent erosion and completely contain any  
136 discharge of contact water;

137  
138 (c) engineered features to prevent contact water from negatively impacting groundwater, ~~as~~  
139 ~~determined by a Colorado licensed professional engineer or a professional geologist;~~

140  
141 (d) engineered features to prevent ponding of stormwater and contact water within the  
142 composting process area;

144 (e) engineered contact water ~~/ and~~ stormwater containment structures with a minimum of 2  
145 feet of freeboard measured from the lowest elevation at any given time.  
146

147 (B) **Surface Water Control for Class I Composting Facilities Composting Manure, Animal**  
148 **Mortalities and/or ~~Source Separated Organics~~Animal Materials:** In addition to the surface water  
149 management requirements in 14.2.3(A), the owner/operator of a Class I composting facility  
150 composting manure, animal mortalities and/or ~~source separated organics~~animal materials must  
151 design, construct and maintain stormwater and contact water controls that meet the following  
152 requirements:  
153

154 \*\*\*\*\*

155 \*\*\*\*\*

156  
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158  
159 **5) Section 14.2.4 (Class I Composting Facility Operational Requirements) is being**  
160 **amended by revising paragraphs (C) and (K) to read as follows:**

161  
162 **SECTION 14.2 - CLASS I COMPOSTING FACILITIES**

163 \*\*\*\*\*

164  
165  
166 **14.2.4 Class I Composting Facility Operational Requirements**  
167

168 The owner/operator of a Class I composting facility must operate the facility in accordance with their  
169 Department-approved registration, with their Composting Plan, and with the following operational  
170 requirements:

171 \*\*\*\*\*

172  
173  
174 (C) **Material Acceptance:** The owner/operator of a Class I composting facility may only accept Type  
175 1 and Type 2 feedstocks, ~~or other compatible materials if the composting facility is operating as~~  
176 allowed under the provisions of Section 14.2.1(B) ~~or Section 14.2.1(C)~~ and as specified in the  
177 approved registration.  
178

179 \*\*\*\*\*

180  
181 (K) **Personnel Training:** Class I composting facilities must operate under the control of properly  
182 trained individuals. Personnel must be trained to recognize prohibited materials, take action when  
183 nuisance conditions occur, and implement emergency procedures when necessary. Each Class I  
184 compost facility operating under Section 14.2.1(B) and 14.2.1(C) must have at least one operator that  
185 has completed the following training:  
186

187 (1) Certified operator training: Completion of a nationally recognized or equivalent training on  
188 compost facility operations. A facility shall go no longer than twelve (12) months without having  
189 an operator on staff that has completed this training.  
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**6) Section 14.3.4 (Class II Composting Facility Design and Operations Plan: Design) is being amended by revising paragraph (B)(5) to read as follows:**

**14.3.4 Class II Composting Facility Design and Operations Plan: Design**

\*\*\*\*\*

(B) **Feedstock Processing Areas:** The EDOP for a Class II composting facility must describe how the areas where all mixing, tipping and composting occur will be designed and constructed to:

\*\*\*\*\*

(5) The Department may require a low permeability workpad area to manage contact water generated from composting operations. Site-specific conditions, operational practices, feedstock, bulking material and liquid wastes will be evaluated to determine the necessity for a low ~~permability-permeability~~ workpad and low ~~permability-permeability~~ liquid mixing pad/basin.

**7) Section 14.3.5 (Class II Composting Facility Design and Operations Plan: Operations) is being amended by revising paragraphs (B) - Financial Assurance and (K) - Personnel Training to read as follows:**

**SECTION 14.3 - CLASS II COMPOSTING FACILITIES**

\*\*\*\*\*

**14.3.5 Class II Composting Facility Design and Operations Plan: Operations**

Class II composting facilities must comply with their Department-approved EDOP. The EDOP must include the following operation requirements:

\*\*\*\*\*

(B) **Financial Assurance:** ~~The EDOP for a~~ Class II composting facility must ~~include~~have current financial assurance estimates in accordance with Section 4 of these Solid Waste Regulations. A Class II composting facility must maintain adequate financial assurance in accordance with its EDOP and with Section 4 of these Solid Waste Regulations.

\*\*\*\*\*

(K) **Personnel Training:** A Class II composting facility must operate under the control of properly trained individuals. Personnel must be trained to recognize prohibited materials, take action when nuisance conditions occur, and implement emergency procedures when necessary. The EDOP for a Class II composting facility must describe how the facility will comply with these requirements. Each Class II compost facility must have at least one operator that has completed the following training:

242 (1) Certified operator training: Completion of a nationally recognized or equivalent training on  
243 compost facility operations. A facility shall go no longer than twelve (12) months without having  
244 an operator on staff that has completed this training.

245 \*\*\*\*\*

246  
247  
248  
249 **8) Section 14.4.4 (Class III Composting Facility Design and Operations Plan: Design) is**  
250 **being amended by revising paragraph (B)(5) to read as follows:**

251 **14.4.4 Class III Composting Facility Design and Operations Plan: Design**

252 \*\*\*\*\*

253  
254  
255  
256 (B) **Feedstock Processing Areas:** The EDOP for a Class III composting facility must describe how  
257 the areas where all mixing, tipping and composting occur will be designed and constructed to:

258 \*\*\*\*\*

259  
260  
261 (5) The Department may require a low permeability workpad area to manage contact water  
262 generated from composting operations. Site-specific conditions, operational practices, feedstock,  
263 bulking material and liquid wastes will be evaluated to determine the necessity for a low  
264 permeability workpad and low ~~permeability~~permeability liquid mixing pad/basin.

265 \*\*\*\*\*

266  
267  
268  
269 **9) Section 14.4.5 (Class III Composting Facility Design and Operations Plan: Operations)**  
270 **is being amended by revising paragraphs (B) - Financial Assurance and (K) - Personnel**  
271 **Training to read as follows:**

272  
273  
274 **SECTION 14.4 - CLASS III COMPOSTING FACILITIES**

275 \*\*\*\*\*

276  
277  
278 **14.4.5 Class III Composting Facility Design and Operations Plan: Operations**

279  
280 Class III composting facilities must comply with their Department-approved EDOP. The EDOP must  
281 include the following operation requirements:

282 \*\*\*\*\*

283  
284  
285 (B) **Financial Assurance:** ~~The EDOP for a~~ Class III composting facility must ~~include~~have current  
286 financial assurance estimates in accordance with Section 4 of these Solid Waste Regulations. A  
287 Class III composting facility must maintain adequate financial assurance in accordance with its EDOP  
288 and with Section 4 of these Solid Waste Regulations.

289 \*\*\*\*\*

291  
292 (K) **Personnel Training:** A Class III composting facility must operate under the control of properly  
293 trained individuals. Personnel must be trained to recognize prohibited materials, take action when  
294 nuisance conditions occur, and implement emergency procedures when necessary. The EDOP for a  
295 Class III composting facility must describe how the facility will comply with these requirements. Each  
296 Class III compost facility must have at least one operator that has completed the following training:

297  
298 (1) **Certified operator training:** Completion of a nationally recognized or equivalent training on  
299 compost facility operations. A facility shall go no longer than twelve (12) months without having  
300 an operator on staff that has completed this training.

301  
302 \*\*\*\*\*

303  
304  
305 **10) Section 14.6 (Sampling of Finished Compost and Soils Amendments) is being**  
306 **amended by revising paragraphs (D) and (J) and adding a new paragraph (K) to read as**  
307 **follows:**

308  
309  
310 **14.6 – SAMPLING OF FINISHED COMPOST AND SOILS AMENDMENTS**

311  
312 \*\*\*\*\*

313  
314 (D) The owner or operator of a composting facility must ensure that:

315  
316 (1) The density of the fecal coliform present in the compost is less than 1000 Most Probable  
317 Number per gram of total solids (dry weight basis); ~~or~~ and

318  
319 (2) The density of Salmonella sp. bacteria in the compost is less than three (3) Most Probable  
320 Number per four (4) grams of total solids (dry weight basis) at the time the compost is to be sold  
321 or otherwise distributed for use; or

322  
323 (3) An owner/operator of a composting facility may receive an approval from the Department and  
324 local governing authority for alternate testing after demonstrating how the alternative testing is  
325 protective of human health and the environment.

326  
327 \*\*\*\*\*

328  
329 (J) **Unrestricted Use:** Compost that satisfies the levels specified in Table 1 and all other parameters  
330 identified by the Department per Section 14.6 is determined by these criteria to be finished compost  
331 and acceptable for unrestricted use. The finished compost is considered to be a product not a waste,  
332 and is no longer subject to these Solid Waste Regulations, except that storage of finished compost  
333 may only occur in designated areas identified in a facility's operations plan. For those additional  
334 constituents identified by the Department under Section 14.6 and not found on Table 1, the  
335 Department will approve protective unrestricted use constituent concentrations.

336  
337 (K) **Soil amendments approved in accordance with Section 14.6(C) must meet the Department**  
338 approved criteria at the time of distribution. Storage of soil amendments that do not meet the  
339 unrestricted use criteria must be stored in a manner that is protective of human health and the  
340 environment and in accordance with the facility's operations plan. Storage of liquid soil amendments

341  
342

on the ground is subject to Section 9 of these regulations. The Department may require additional engineering controls for soil amendments.



1 DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

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4 Solid and Hazardous Waste Commission

5 Hazardous Materials and Waste Management Division

6 6 CCR 1007-2  
7

8 STATEMENT OF BASIS AND PURPOSE  
9 AND SPECIFIC STATUTORY AUTHORITY FOR  
10

11 Amendment to the Regulations Pertaining to Solid Waste Sites and Facilities (6 CCR 1007-  
12 2, Part 1) – Section 14.  
13

14 **Basis and Purpose**

15  
16 I. Statutory Authority  
17

18 Section 30-20-109 C.R.S. gives the Solid and Hazardous Waste Commission (the  
19 Commission) the authority to promulgate solid waste regulations in order to implement and  
20 enforce Section 30, Article 20, Part 1, C.R.S. In addition, Section 30- 20-109(2)(d) gives the  
21 Commission the authority to establish criteria by rule as to when a certificate of designation is  
22 not required for composting site and facilities.  
23

24 II. Purpose of revised regulations:  
25

26 The purpose of these revisions to Section 14 of 6 CCR 1007-2 Part 1 (the Regulations) is to  
27 increase food waste diversion opportunities by increasing allowable Type 2 feedstock volumes  
28 for Conditionally Exempt Small Quantity facilities, and allowing certain Class I facilities to  
29 accept food waste from offsite locations. A standard operator training requirement is included  
30 for Class I, II, and III facilities. The requirements for sampling, storage, and use of finished  
31 compost and soil amendments have also been updated to be more protective of human health  
32 and the environment.  
33

34 **Discussion of Regulatory Proposal**  
35

36 In Section 14.1.4(A) the volume of Type 2 feedstocks for Conditionally Exempt Small Quantity  
37 Composting Operations is increasing to 20 cubic yards, and the distinction for in-vessel  
38 composting is being removed.

39 In Section 14.1.5 the existing compliance schedule is being replaced to reflect the changes  
40 proposed by this revision. Compliance is required within twelve months of the effective date of this  
41 revision for the operator training requirements in Sections 14.2.4(K)(1), 14.3.5(K)(1), and  
42 14.4.5(K)(1). Additionally, facilities with an EDOP must update their sampling plans to reflect the  
43 changes within 14.6(D) within 12 months of the effective date of this revision.  
44

45 In Section 14.2.1, which applies to Class I Compost Facilities, the following changes are being  
46 proposed:  
47

48 14.2.1(B)

49 Under the proposed revisions, a Class I compost facility may accept up to 5,000 cubic  
50 yards of Type 1 feedstocks, source separated organics, food residuals and food processing  
51 vegetative waste from offsite sources. Previously, this facility type could only process food  
52 waste that was generated onsite.  
53

54 14.2.1(C)

55 This section is being modified to include as a Class I compost facility any agriculturally  
56 zoned compost facility that accepts Type 1 feedstocks, source separated organics, food  
57 residuals and food processing vegetative waste from offsite, and composts them together  
58 with agricultural materials generated onsite. This facility can have no more than 5,000  
59 cubic yards of source separated organics onsite and in-process at any given time, and  
60 must be composted in an area of two acres or less.  
61

62 14.2.1(D)

63 The section pertaining to an agriculturally zoned composting operation, formerly in  
64 14.2.1(C), has moved here.  
65

66 Section 14.2.3 addresses Class I Composting Facility Design Requirements. Under the proposed  
67 changes, surface water controls 14.2.3(A)(2)(b) have been modified to allow for alternate contact  
68 water management systems, and clarifications in sections 14.2.3(A)(2)(c), 14.2.3(A)(2)(d), and  
69 14.2.3(A)(2)(e) have been made as to which features are considered engineered. Subsection  
70 14.2.3(B) has been modified to only apply to facilities accepting manure, mortalities, and animal  
71 materials. These changes are intended to allow for more diverse management of contact water,  
72 while still being protective of ground and surface water.  
73

74 Section 14.2.4(C) has been changed to allow certain Class I composting facilities to accept Type  
75 2 feedstocks, which corresponds to the addition of food residuals and food processing vegetative  
76 waste to the list of acceptable materials for facilities under 14.2.1(B) and 14.2.1(C).  
77

78 Section 14.2.4(K), which covers personnel training, now requires that the new operations  
79 allowed under Section 14.2.1(B) and 14.2.1(C) have a certified operator. This modification is  
80 important to ensure operators are familiar with the various technical requirements for properly  
81 operating a composting facility. Proper training will help prepare operators respond to issues in  
82 a timely and effective manner, which will ensure better protection of human health and the  
83 environment.  
84

85 In Section 14.3.5(B) (Financial Assurance) the language has been changed so that Class II  
86 composting facilities are not required to include financial assurance cost estimates in the EDOP,  
87 and can instead be submitted under separate cover. Cost estimates are not typically required until  
88 the closure plan, a component of the EDOP, has been approved. Because of this, it is preferred  
89 that they not be included within the EDOP.

90 Section 14.3.5(K) (Personnel Training) requires that all Class II operations have a certified  
91 operator.  
92

93  
94 In Section 14.4.5(B) (Financial Assurance) the language has been changed so that Class III  
95 composting facilities are not required to include financial assurance cost estimates in the EDOP,  
96 and can instead be submitted under separated cover.  
97

98 Section 14.4.5(K) (Personnel Training) requires that all Class III operations have a certified  
99 operator.  
100

101 The Section 14.6 (Sampling of Finished Compost and Soils Amendments) are as follows:  
102

103 14.6(D) – Finished compost must now be sampled for both fecal coliform and  
104 Salmonella. Sampling has revealed that some compost may pass one of the indicators,  
105 but fail for the other. Testing for both standard pathogens ensures that the material has  
106 been properly and effectively composted and will ensure the protection of human health  
107 and the environment.  
108

109 14.6(J) – Finished compost may only be stored in areas identified in the facility's operations  
110 plan. This ensures that finished compost is not potentially being stored in a manner where  
111 it might be contaminated by unprocessed or unfinished materials.  
112

113 14.6(K) – Soil amendments may not be distributed without meeting Section 14.6(C)  
114 requirements, and if they have not met unrestricted use criteria, they must be stored in a  
115 manner that is protective of human health and the environment and complies with facility  
116 operations plans. Liquid soil amendment storage on the ground is subject to Section 9 of  
117 the regulations, which applies to liquid storage of solid waste. Additional engineering  
118 controls may be required by the Department.  
119

### 120 **Issues Encountered During Stakeholder Process:**

121 ~~A virtual stakeholder meeting was held on September 25, 2023 to discuss the proposed~~  
122 ~~regulations. No issues were encountered during the stakeholder process.~~  
123

124 One stakeholder meeting was held on September 25, 2023, and comments from the public were  
125 accepted until October 31, 2023. The only comments suggesting any changes are as follows:  
126

127 1) The United States Compost Council, which recommended that the operator training  
128 requirement be increased to specifically require operator's to obtain the United State  
129 Compost Council's Certified Compost Operation Manager credential.  
130

131 2) Bob Yost from A1 Organics recommended that the requirement to test for both  
132 pathogens be reevaluated once the EPA changes the 503 testing requirements for  
133 biosolids, which is the basis for Colorado's finished compost testing requirements.  
134

135 While these comments were considered, no changes to the proposed rules were made.  
136

### 137 **Regulatory Alternatives**

138  
139 No other regulatory alternatives were evaluated.  
140

141 **Cost/Benefit Analysis**

142 A cost-benefit analysis will be performed if requested by the Colorado Department of Regulatory  
143 Agencies.