



COLORADO

Solid & Hazardous
Waste Commission

Department of Public Health & Environment

NOTICE OF PROPOSED RULEMAKING HEARING BEFORE THE COLORADO SOLID AND HAZARDOUS WASTE COMMISSION

SUBJECT:

For consideration of the amendments to 6 CCR 1007-2, Part 1, Section 14, along with the accompanying Statement of Basis and Purpose, the following will be considered:

Amendment of 6 CCR 1007-2, Part 1, Section 14 - Regulations Pertaining to Solid Waste Sites and Facilities - Composting

These modifications are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in Section 30-20-109 C.R.S.

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

Any information that is incorporated by reference in these proposed rules is available for review at the Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division and any state publications depository library.

Pursuant to C.R.S. §24-4-103(3), a notice of proposed rulemaking was submitted to the Secretary of State on January 12, 2024. Copies of the proposed rulemaking will be mailed to all persons on the Solid and Hazardous Waste Commission's mailing list on or before the date of publication of the notice of proposed rulemaking in the Colorado Register on January 25, 2024.

The proposed rulemaking materials may also be accessed at <https://cdphe.colorado.gov/shwc-rulemaking-hearings>.

WRITTEN TESTIMONY

Any alternative proposals for rules or written comments relating to the proposed amendment of the regulation will be considered. The Solid and Hazardous Waste Commission will accept written testimony and materials regarding the proposed alternatives. **The commission strongly encourages interested parties to submit written testimony or materials to the**



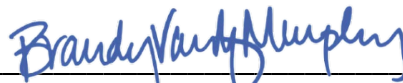
Solid and Hazardous Waste Commission Office, via email to cdphe.hwcrequests@state.co.us by Wednesday, February 7, 2024, at 11:59 p.m. Written materials submitted in advance will be distributed to the commission members prior to the day of the hearing. Submittal of written testimony and materials on the day of the hearing will be accepted, but is strongly discouraged.

HEARING SCHEDULE:

DATE: Tuesday, February 20, 2024
TIME: 9:00 a.m.
PLACE: This meeting will be held online only at:

<https://us02web.zoom.us/meeting/register/tZ0ldeyvqDktG9A80u-6CDaKszafa2dunsSD>

Oral testimony at the hearing regarding the proposed amendments may be limited.



Brandy Valdez Murphy, Administrator



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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11
12 **PART 1 REGULATIONS PERTAINING TO SOLID WASTE SITES AND FACILITIES**

13
14
15 **Section 14 Composting Regulations Amendments**

16
17
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**

22 *****

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 *****

34
35 *****

36
37
38
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 Section 14.~~

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

91
92 ~~1. A total volume of no greater than 5,000 cubic yards of source separated organics onsite at~~
93 ~~any one time (finished qualified product does not count toward this total); and~~

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

96
97 (C) Composts on agriculturally zoned property using only agricultural waste generated onsite together
98 with Type 1 materials, food residuals and food processing vegetative waste, together with other
99 compatible materials as defined in Section 1 of these regulations, with the following limits:

100
101 (1) A total volume of no greater than 5,000 cubic yards of source separated organics onsite at
102 any one time (finished qualified product does not count toward this total); and

103
104 (2) A composting area of two (2) acres in size or less; or

105
106 ~~(D)~~ Composts at the site of generation or on agriculturally zoned property owned by the generator using
107 only agricultural waste generated onsite together with other compatible materials as defined in Section 1
108 of these regulations and does not meet one of the general exemptions or conditional exemptions in
109 Sections 14.1.3 or 14.1.4.

110
111
112 **4) Section 14.2.3 (Class I Composting Facility Design Requirements) is being amended**
113 **by revising paragraphs (A)(2)(b)- (A)(2)(e) and paragraph (B) to read as follows:**

114
115
116 **SECTION 14.2 - CLASS I COMPOSTING FACILITIES**

117
118 *****

119
120 **14.2.3 Class I Composting Facility Design Requirements**

121
122 (A) **Surface Water Control:** The Composting Plan for Class I composting facility must describe how
123 the surface water control system features of the facility will be designed, constructed and maintained:

124
125 (1) Prevent negative impacts to surface water and groundwater;

126
127 (2) Control surface water, including:

128
129 (a) stormwater run on and run off control features with a slope of one (1) to six (6) percent, or
130 meeting other design criteria as approved by the department;

131
132 (b) features to ~~contain and~~ manage contact water, which may include a vegetated area as
133 long as it is of sufficient size and slope to prevent erosion and completely contain any
134 discharge of contact water;

135
136 (c) engineered features to prevent contact water from negatively impacting groundwater, as
137 determined by a Colorado licensed professional engineer or a professional geologist;

138
139 (d) engineered features to prevent ponding of stormwater and contact water within the
140 composting process area;

141
142 (e) engineered contact water ~~and~~ stormwater containment structures with a minimum of 2
143 feet of freeboard measured from the lowest elevation at any given time.

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

151 *****

152 *****

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

160 **SECTION 14.2 - CLASS I COMPOSTING FACILITIES**

161 *****

164 **14.2.4 Class I Composting Facility Operational Requirements**

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

169 *****

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

176 *****

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

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

188 *****

193 **6) Section 14.3.4 (Class II Composting Facility Design and Operations Plan: Design) is**
194 **being amended by revising paragraph (B)(5) to read as follows:**

195
196 **14.3.4 Class II Composting Facility Design and Operations Plan: Design**

197
198 *****

199
200 (B) **Feedstock Processing Areas:** The EDOP for a Class II composting facility must describe how
201 the areas where all mixing, tipping and composting occur will be designed and constructed to:

202
203 *****

204
205 (5) The Department may require a low permeability workpad area to manage contact water
206 generated from composting operations. Site-specific conditions, operational practices, feedstock,
207 bulking material and liquid wastes will be evaluated to determine the necessity for a low
208 ~~permability-permeability~~ workpad and low ~~permability-permeability~~ liquid mixing pad/basin.

209
210
211 **7) Section 14.3.5 (Class II Composting Facility Design and Operations Plan: Operations)**
212 **is being amended by revising paragraphs (B) - Financial Assurance and (K) - Personnel**
213 **Training to read as follows:**

214
215
216 **SECTION 14.3 - CLASS II COMPOSTING FACILITIES**

217
218 *****

219
220 **14.3.5 Class II Composting Facility Design and Operations Plan: Operations**

221
222 Class II composting facilities must comply with their Department-approved EDOP. The EDOP must
223 include the following operation requirements:

224
225 *****

226
227 (B) **Financial Assurance:** ~~The EDOP for a~~ Class II composting facility must ~~include~~have current
228 financial assurance estimates in accordance with Section 4 of these Solid Waste Regulations. A
229 Class II composting facility must maintain adequate financial assurance in accordance with its EDOP
230 and with Section 4 of these Solid Waste Regulations.

231
232 *****

233
234 (K) **Personnel Training:** A Class II composting facility must operate under the control of properly
235 trained individuals. Personnel must be trained to recognize prohibited materials, take action when
236 nuisance conditions occur, and implement emergency procedures when necessary. The EDOP for a
237 Class II composting facility must describe how the facility will comply with these requirements. Each
238 Class II compost facility must have at least one operator that has completed the following training:

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

243
244 *****

245
246
247 **8) Section 14.4.4 (Class III Composting Facility Design and Operations Plan: Design) is**
248 **being amended by revising paragraph (B)(5) to read as follows:**

249
250 **14.4.4 Class III Composting Facility Design and Operations Plan: Design**

251 *****

252
253
254 (B) **Feedstock Processing Areas:** The EDOP for a Class III composting facility must describe how
255 the areas where all mixing, tipping and composting occur will be designed and constructed to:

256 *****

257
258
259 (5) The Department may require a low permeability workpad area to manage contact water
260 generated from composting operations. Site-specific conditions, operational practices, feedstock,
261 bulking material and liquid wastes will be evaluated to determine the necessity for a low
262 permeability workpad and low ~~permeability~~permeability liquid mixing pad/basin.

263 *****

264
265
266
267 **9) Section 14.4.5 (Class III Composting Facility Design and Operations Plan: Operations)**
268 **is being amended by revising paragraphs (B) - Financial Assurance and (K) - Personnel**
269 **Training to read as follows:**

270
271
272 **SECTION 14.4 - CLASS III COMPOSTING FACILITIES**

273 *****

274
275
276 **14.4.5 Class III Composting Facility Design and Operations Plan: Operations**

277
278 Class III composting facilities must comply with their Department-approved EDOP. The EDOP must
279 include the following operation requirements:

280 *****

281
282
283 (B) **Financial Assurance:** ~~The EDOP for a~~ Class III composting facility must ~~include~~have current
284 financial assurance estimates in accordance with Section 4 of these Solid Waste Regulations. A
285 Class III composting facility must maintain adequate financial assurance in accordance with its EDOP
286 and with Section 4 of these Solid Waste Regulations.

287 *****

289
290 (K) **Personnel Training:** A Class III composting facility must operate under the control of properly
291 trained individuals. Personnel must be trained to recognize prohibited materials, take action when
292 nuisance conditions occur, and implement emergency procedures when necessary. The EDOP for a
293 Class III composting facility must describe how the facility will comply with these requirements. Each
294 Class III compost facility must have at least one operator that has completed the following training:

295
296 (1) **Certified operator training:** Completion of a nationally recognized or equivalent training on
297 compost facility operations. A facility shall go no longer than twelve (12) months without having
298 an operator on staff that has completed this training.

299
300 *****

301
302
303 **10) Section 14.6 (Sampling of Finished Compost and Soils Amendments) is being**
304 **amended by revising paragraphs (D) and (J) and adding a new paragraph (K) to read as**
305 **follows:**

306
307
308 **14.6 – SAMPLING OF FINISHED COMPOST AND SOILS AMENDMENTS**

309
310 *****

311
312 (D) The owner or operator of a composting facility must ensure that:

313
314 (1) The density of the fecal coliform present in the compost is less than 1000 Most Probable
315 Number per gram of total solids (dry weight basis); ~~or~~ and

316
317 (2) The density of Salmonella sp. bacteria in the compost is less than three (3) Most Probable
318 Number per four (4) grams of total solids (dry weight basis) at the time the compost is to be sold
319 or otherwise distributed for use; or

320
321 (3) An owner/operator of a composting facility may receive an approval from the Department and
322 local governing authority for alternate testing after demonstrating how the alternative testing is
323 protective of human health and the environment.

324
325 *****

326
327 (J) **Unrestricted Use:** Compost that satisfies the levels specified in Table 1 and all other parameters
328 identified by the Department per Section 14.6 is determined by these criteria to be finished compost
329 and acceptable for unrestricted use. The finished compost is considered to be a product not a waste,
330 and is no longer subject to these Solid Waste Regulations, except that storage of finished compost
331 may only occur in designated areas identified in a facility's operations plan. For those additional
332 constituents identified by the Department under Section 14.6 and not found on Table 1, the
333 Department will approve protective unrestricted use constituent concentrations.

334
335 (K) Soil amendments approved in accordance with Section 14.6(C) must meet the Department
336 approved criteria at the time of distribution. Storage of soil amendments that do not meet the
337 unrestricted use criteria must be stored in a manner that is protective of human health and the
338 environment and in accordance with the facility's operations plan. Storage of liquid soil amendments

339
340

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, food residuals and food processing vegetative waste from
51 offsite sources. Previously, this facility type could only process food waste that was
52 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, food residuals and food
57 processing vegetative waste from offsite, and composts them together with agricultural
58 materials generated onsite. This facility can have no more than 5,000 cubic yards of
59 source separated organics onsite and in-process at any given time, and must be
60 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 **Regulatory Alternatives**

125
126 No other regulatory alternatives were evaluated.
127

128 **Cost/Benefit Analysis**

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