



**City of Portland, Oregon**  
**Bureau of Development Services**  
**Office of the Director**  
FROM CONCEPT TO CONSTRUCTION

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**To:** Angel York & Darin Wick

**From:** **Alternative Technology Advisory Committee:**  
Joshua Klyber (chair)      Aron Faegre      Bob Sweeney  
Jeff Cordial      David Posada

**RE:** **Application #11-01, Residential Bucket Composting Toilet System–  
Final Recommendation**

**Date:** **November 2, 2018**

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**Summary of Proposal:** The applicant requests that the Alternative Technology Advisory Committee review a home-built bucket and bin style composting toilet system using the IAPMO We Stand (Water Efficiency and Sanitation Standard for the built environment) Section 403.0, “Composting Toilet and Urine Diversion,” and the attached applicant-created User’s Manual (see Attachment A). This proposal includes the compost processors, commode design, and plan for where compost will be deposited.

**Applicable Building Code Section(s):** Section 104.3.4 of the 2017 Oregon Plumbing Specialty Code (OPSC) allows the building official to approve an alternative material or method of construction if the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of the OPSC. OAR 918-770-0320 allows the use of composting toilets that meet NSF Standard No.41. Although the use of IAPMO WE Stand has not been approved by the State of Oregon, the BDS Building Official received oral approval from the State Plumbing Chief on October 2, 2018, to use the WE Stand provisions as an alternate method. The Committee reviewed the proposal using the 2017 WE Stand Section 403.3-403.8 design, construction, performance, alteration and repair of composting toilets. Please note that following the findings and recommendations of this Committee or the Bureau of Development Services Administrative Appeals Board does not waive any other state or federal requirements.

**Committee Findings:**

1. The commode will be located per the attached plans (see Attachment B)
2. The house will remain plumbed for a water closet
3. The containers will be stored and compost will be spread per the attached site plan (see Attachment C). Compost from the toilet system can be used around ornamental shrubs, flowers, trees, or fruit trees and shall be mixed with soil or mulch and covered with no less than 3 inches of cover material. Compost from the toilet system may not be deposited around any edible vegetables or vegetation.

4. A plumbing permit must be obtained for greywater and other plumbing installations in house
5. Spillage will be addressed based on the spillage plan information in the attached User's Manual
6. Carbonation level of compost will be adjusted per the attached User's Manual
7. Each step of the composting process outlined in the attached User's Manual must be followed
8. Minimum space requirements outlined in the User's Manual will be maintained
9. Dimensions of toilet/bucket including materials, cleaning, and replacement plan outlined in the User's Manual will be followed
10. Composting bins must be labeled and dated.
11. The house must remain owner-occupied or occupied by a long-term renter of no less than 6 months and may not be used as a short-term rental (short-term guests are fine). Testing of the finished compost must be done after the first batch any time there is a change of owners/agents/tenants. If the house is not owner-occupied, the renter must be trained by the owner, which training shall be documented in the log described in paragraph 16 below.
12. The buckets and the lids for collecting human waste in the bathroom and transferring the waste to the compost bins must be labeled to avoid being used for any other purposes
13. Only the type of buckets and lids (material, capacity, dimensions, examples of typical brand or product name) as outlined in the attached User's Manual may be used
14. Toilet seat height shall be consistent with the attached drawings
15. The typical quantity of "carbon-rich additives" to be added to the toilet collection chamber (bucket) after each person's use will be consistent with the attached User's Manual
16. The users of the system must maintain a log that documents the following: a) any change in ownership, owners' agent, or tenant; b) training of any new owner/owner's agent/tenant, including who conducted the training and the date of the training; c) new owner/owner's agent/tenant start and end dates; d) test results for each bin; e) spills or major issues with the system and how those issues were remediated; f) the date each bin was filled and changed; g) the date the bin was distributed; and h) the location where the compost from the bin was distributed.

### **Final Committee Recommendation:**

**Based on these findings, the Alternative Technology Advisory Committee recommends approval of the use of this technology for residential purposes.**

Please note: The Bureau of Development Services and the Administrative Appeal Board are not bound by the recommendations of the Committee. A favorable recommendation of a technology by the Committee does not guarantee approval of a building code appeal.

**Further instructions for the applicant:**

You may submit your plumbing code appeal to use this technology in a site-specific project at any time by following the instructions found on the BDS website. A plumbing code appeal must be approved by BDS to be able to use this technology in a project. Please submit a copy of this Committee recommendation with your appeal application. Please contact the Appeal Board Secretary at (503) 823-7335 if you have any additional questions about the appeal process.