

State Minimum Standards Training
2009 Composting Field Exercises Worksheet
Station B: How Big Is That Pile?

These materials were developed under the auspices of the Board for specific field exercises and are posted as reference documents for the local government staff who attended this training. They are not intended to stand alone as informational or training materials. If you require assistance in obtaining access to the exercise, call the Public Affairs Office at (916) 341-6300 or Jeff Watson at (916) 341-6368.

Background

Having an accurate assessment of an accumulation of compostable material is necessary for regulatory compliance. There are several regulatory milestones regarding material accumulations that must be assessed to determine the applicability of particular regulatory requirements. For example, several “excluded activities” have regulatory thresholds based on the amount of on-site compostable materials:

14 CCR §17855.(a)(4) Handling of green material, feedstock, additives, amendments, compost, or chipped and ground material is an excluded activity if 500 cubic yards or less is on-site at any one time, the compostable materials are generated on-site and if no more than 1,000 cubic yards of materials are either sold or given away annually. The compostable material may also include up to 10 percent food material by volume.

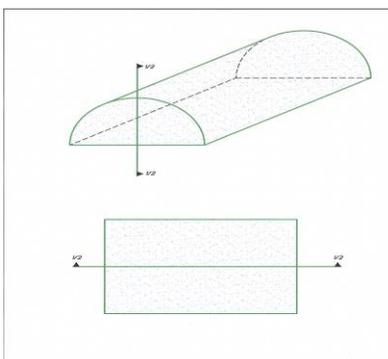
Or identify the appropriate “regulatory tier”:

14 CCR §17857.1.(c) A green material composting facility that has more than 12,500 cubic yards of feedstock, compost, or chipped and ground material on-site at any one time shall obtain a Compostable Materials Handling Facility Permit pursuant to the requirements of Title 27, California Code of Regulations, Division 2, Subdivision 1, Chapter 4, Subchapter 1 and Subchapter 3, Articles 1, 2, 3, and 3.1 (commencing with section 21450) prior to commencing operations.

Additionally, changes in the size of material accumulations reveal valuable information about compostable materials operations over time. Growing accumulations of unprocessed materials may indicate serious deficiencies in equipment, personnel, marketing efforts, or product quality which have direct effects on an operation’s ability to comply with minimum standards pertaining to fire prevention and impact minimization; or may just be part of a regular seasonal variation reflective of agricultural application.

Exercise Instructions

This exercise is intended provide participants with instruction and practice in the following measuring methods: (1) pacing or stepping-off, (2) use of an optical range finder, (3) a measuring wheel, and/or (4) a hip-chain. Additionally, participants will adjust the volume formula and resulting calculations to increase the accuracy of their results.



Using each method, measure the size of the designated accumulations of compostable materials.

Make a sketch of the windrow and the pile. Label the sketch, document the location of the accumulation on the site, and add dimensions to the sketch.

Calculate the size of the pile in cubic yards. For typical windrow calculations, use the formula:

$$\text{Length(feet)} \times \text{Width(feet)} \times \text{Height(feet)} \times 0.5 \times 0.037(\text{cubic yards/cubic feet}) = ?(\text{cubic yards})$$

[1 cubic yard is equal to 27 cubic feet, so it follows that $1/27 = 0.037$, for converting cubic feet to cubic yards]

Apply adjustments to or modify the formula, if appropriate, for use when calculating irregularities.

State Minimum Standards Training
2009 Composting Field Exercises Worksheet
Station B: How Big Is That Pile?
(Continued)

Use the space below to indicate the materials' location on the site; record your measurements from each accumulation by (1) pacing, (2) using of an optical range finder, (3) a measuring wheel, and/or (4) a hip-chain; and show your calculations for each method:

Exercise Questions

1. What measuring method was the most appropriate for these accumulations of compostable materials? Why?
2. Which was the least effective regulatory tool?
3. If the measured **windrow** was located in at a neighborhood school, would it be subject to 14 CCR Chapter 3.1? Would the pile be subject to 14 CCR Chapter 3.1?