

Measuring Organic Waste Sent to Disposal from Compostable Material Handling Facilities & Operations and In-Vessel Digestion Facilities & Operations

This guidance summarizes the measurements used to determine the percentage of organic waste in materials sent to disposal from the source separated organic stream. Utilize the infographic to visualize the following measurements requirements.

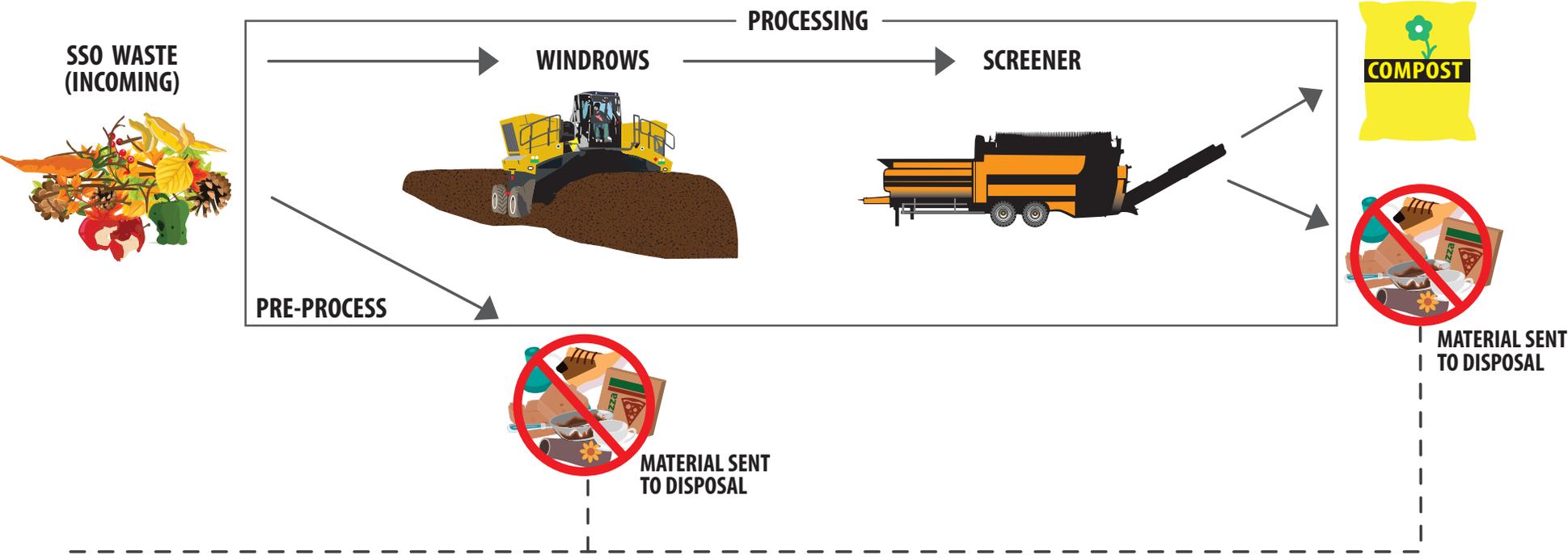
These measurements and associated calculations are taken and made after the processing of organics and prior to sending the material to disposal within the 10 consecutive operating day period.

These measurement requirements are described in Title 14 California Code of Regulations (14 CCR), Sections 17867(a)(16) (for compostable material handling facilities and operations) and 17896.44.1 (for in-vessel digestion facilities and operations).

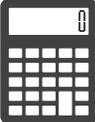
Measurements are taken for each operating day that material is sent to disposal within the 10 consecutive operating day period and will be used to determine the quarterly percentage for the reporting period. The methods are the same for compostable material handling facilities and operations and for in-vessel digestion facilities and operations.

If there is any inadvertent inconsistency found between this guidance and the regulations, deference must be given to the regulations.

Measuring Organic Waste in Materials Sent for Disposal at an Organic Waste Recovery Activity



Section 17867 (a)(16) [Compost] & Section 17896.44.1 [In-vessel digestion]—Measure organic waste in material sent to disposal after processing. Measurements are conducted over 10 consecutive operating days.

| | | | | | | |
|--|---|---|--|--|--|---|
| <p>Step 1</p>  <p>A Determine Total Weight of Material Destined for Disposal.</p> | <p>Step 2</p>  <p>B Collect and Weigh Composite Sample (200 lbs. or more).</p> | <p>Step 3</p>  <p>C Remove the Non-organic Material and Weigh Organics.</p> | <p>Step 4</p> $\left(\frac{C \text{ lbs}}{B \text{ lbs}} \right) \times A \text{ tons} = D \text{ tons}$ <p>D Calculate Total Tons of Organic Waste Sent to Disposal.</p> | <p>Step 5</p>  <p>Determine Sum of Organic Waste Sent to Disposal.</p> | <p>Final Step</p>  <p>Calculate Percentage of Organic Waste Sent for Disposal.</p> | <p>Record and Report</p>  <p>Record and Report the Quarterly Percentage of Organic Waste Sent for Disposal.</p> |
|--|---|---|--|--|--|---|

Measuring Organic Waste Sent to Disposal (see Sections [17867\(a\)\(16\)\[Compost\]](#) and [17896.44.1\[In-vessel digestion\]](#))

Measure organic waste in material to be sent for disposal after processing and prior to sending the material to disposal within the 10 consecutive operating day period. Measurements are conducted for each of the four quarters per calendar year as follows:

Step 1: Determine Total Weight Material e to be sent to Disposal.



- Determine the total weight of the material that will be sent to disposal.
- Record the weight = **A**.

Step 2: Collect and Weigh Composite Sample



- Collect a random selected and representative, composite sample of at least 200 pounds.
- Record the weight of the composite sample = **B**.

Step 3: Remove the non-organic material and Weigh the Organic Waste



- For each sample, remove any non-organic material and weigh the remaining organic material in the sample. Textiles, carpet, hazardous wood waste, non-compostable paper, human or pet waste, and material subject to a quarantine on movement issued by a county agricultural commissioner, is not required to be measured as organic waste.
- Record the weight of organic waste (with non-organics removed) in the sample = **C**

Step 4: Calculate Total Weight of Organic Waste to be Sent to Disposal (**D**).

Use the weight recorded in the steps above to calculate the total weight of organic waste in to be sent to disposal for that day.

Formula:

$$\left(\frac{\mathbf{C \text{ lbs.}}}{\mathbf{B \text{ lbs.}}} \right) \times \mathbf{A \text{ Tons}} = \mathbf{D \text{ Tons of Organic Waste Disposed}}$$

Repeat steps 1 through 4 for each measurement completed over the ten consecutive operating days.

Step 5: Determine Sum of Organic Waste in sampled loads that were Sent to Disposal.

Add the weights from step 4 for each of the 10 consecutive operating days that measurements were conducted during the reporting period.

Step 6: Determine the Sum of Material sent to Disposal.

Add the weights from step 1 for each of the 10 consecutive operating days that measurements were conducted during the reporting period.

Final Step: Calculate Quarterly Percentage of Organic Waste sent to Disposal.

Use the sums recorded in steps 5 and 6 to calculate the quarterly percent of organic waste sent to disposal.

This calculation will represent the percentage of organic waste sent to disposal for the quarter (reporting period).

Formula:

$$\left(\frac{\text{The Sum from Step 5}}{\text{The Sum from Step 6}} \right) \times 100 = \text{Percentage of Organic Waste Disposed}$$

Record and Report Results to CalRecycle [see Sections [17869](#) (Compost) and [17896.45](#) (In-Vessel Digestion)]

The operator shall maintain a record of the quarterly percentage of organic waste in material sent to disposal and make them available for review by the Enforcement Agency [Section 17869 (compost) and Section 17896.45 (In-vessel digestion)].

As required in Section 18815.7, operators must report the quarterly percentage of organic waste in material sent to disposal to CalRecycle.

Measurement Frequency at Compostable Material Handling Facilities & Operations and In-Vessel Digestion Facilities & Operations

What are the requirements for facilities open fewer than 10 consecutive days (e.g., 2 times a week)?

The requirement is for the operator to perform measurements during 10 consecutive operating days per reporting period, and there are four reporting periods per year (one per quarter). If the facility were open two days a week, then the reporting period would span five weeks. In addition, the regulations allow the operator to propose an alternate sampling frequency to the EA for approval, with concurrence by the Department, provided that it will be as accurate as the requirements.

What is the measurement frequency for facilities that don't send out material every day?

Facilities and operations should only perform a measurement on the day material is sent out within the 10 consecutive operating day period. The organic ratio of the sample is determined and then applied to the total amount of material sent out for that operating day.

Table 1 (below) illustrates the sampling frequency of a compost facility that does not send material to disposal every day. In this example, the facility sends material to disposal on the first, third, fifth, eighth and tenth day of their measurement period for a total of five measurements.

Table 1: Example of Sampling Frequency at a Compost Facility

| Day in Measurement Period | Material Sent for Disposal and Measurement Taken |
|---------------------------|--|
| 1 (Wed) | X |
| 2 (Thu) | |
| 3 (Fri) | X |
| Sat (Closed) | |
| Sun (Closed) | |
| 4 (Mon) | |
| 5 (Tue) | X |
| 6 (Wed) | |
| 7 (Thu) | |
| 8 (Fri) | X |
| Sat (Closed) | |
| Sun (Closed) | |
| 9 (Mon) | |
| 10(Tue) | X |