Overview of the Annual Procurement Requirements for Recovered Organic Waste Products in SB 1383

Since January 1, 2022, cities and counties in California ("affected jurisdictions") have been required to procure a minimum amount of products made from recycled organic waste each year. Affected jurisdictions can meet the requirement by procuring products for their use or to give away. They can also meet this requirement through direct service providers. Special districts are not affected, but need to comply with SB 1383 recycled content paper purchasing requirements.

The procurement target is based on 0.08 tons of organic waste per jurisdiction resident. For example, a city of 100,000 people would have an organics procurement target of 8,000 tons. With the passage of AB 1985 in 2022, the target will be phased in as follows: 30% in 2023, 65% in 2024, and 100% in 2025. The conversion factors used to calculate how much of a given product is needed to equal 'one ton of organic waste' are listed below.

Affected jurisdictions can meet their procurement target from any combination of the following materials:

Compost

Compost must be produced at a permitted composting facility. Digestate, biosolids, manure, and mulch are not compost.

1 ton organics = 1.45 cubic yards (CY) of compost. To meet the 8,000-ton organics target, a city of 100,000 would need to procure 11,600 CY of compost.

This would cover:[1]

- 127 sports fields, twice a year,
- 67 acres of new landscape construction, or
- 8.3 acres of new stormwater biotreatment area.

Mulch

Eligible mulch must be derived from organic materials and be produced at a permitted transfer station, landfill, or composting facility. Examples include pallet mulch, arbor mulch, and composted mulch.

The following materials are NOT eligible to meet procurement target: Material from a chip and grind facility, tree trimmings dumped at or generated by the affected jurisdictions, bark mulch, and mulch created from non-organic material, such as tires.

1 ton organics = 1 ton of mulch. In our example city, 8,000 tons of mulch could be used for:[2]

- 133 acres of landscape maintenance and new construction, or
- 110 miles of street medians.

Additional Note on Compost & Mulch: In addition to procurement requirements, SB 1383 also requires cities and counties to enforce the compost- and mulch-related measures in the Water Efficient Landscape Ordinance (WELO). Tracking and reporting is required, with penalties for non-compliance.

Biomass Electricity

Eligible biomass electricity must be produced by a facility that receives feedstock directly from a transfer station, landfill, and/or composting facility. This excludes electricity from biomass from forestry or agriculture sources.

1 ton of organics = 650 kWh of electricity.

Challenge: Availability of biomass electricity is limited. East Bay Community Energy (EBCE) includes <1% eligible biomass in its lowest tier (Bright Choice); however, for their own operations, member agencies have opted for a greener tier with a cleaner power mix, which includes zero electricity from biomass.

Based on energy use by operations for member agencies, a city of 100,000 enrolled in Bright Choice could achieve 30-120 tons of organics toward their 8,000-ton target.[3]

Renewable Gas (RNG)

Eligible uses are fuel for transportation, electricity, or heating applications.

RNG must be derived from organic waste that has been diverted from a landfill and processed at a permitted in-vessel digestion facility. This excludes landfill gas, gas generated from wastewater, natural gas, dairy methane, and renewable diesel.

1 ton organics is equivalent to the following:

- Transportation fuel: 21 diesel gallon equivalents (DGE)
- Electricity: 242 kWh
- Heating: 22 therms

Challenge: RNG production in California is very limited, with about a dozen facilities in operation.

Statewide, about 270,000 tons of organics – less than 5% of the total amount processed — are processed using anaerobic digestion, and most of the gas/electricity produced is already used or sold.[4]

1. Assumes top-dressing field with 1/2 inch (67 CY/ac), twice per year; 1 football field = 1.36 ac. Assumes 4 CY/1,000 sf (174 CY/ac), per Water Efficient Landscape Ordinance requirements. Assumes 40% compost mix in 18-inch deep biotreatment soil mix, or 0.6 cf/sf or 968 CY/ac.
2. Assumes 3-inch layer of mulch applied at install, plus every two years for ongoing maintenance. Assumes bulk density of 600 lb/CY.
3. Based on 2019 aggregated data from East Bay Community Energy.
4. Based on CalRecycle's 2019 Infrastructure and Markets Analysis.

What should affected jurisdictions do to comply?

Inventory current uses of eligible products. Affected jurisdictions should engage relevant staff, including public works, parks and recreation, procurement, and fleet managers, as well as recycling and energy staff. Examples of questions to ask are:

- Is there a giveback requirement in the existing franchise or composting facility contract?
- How much compost and mulch does the jurisdiction currently use for landscape maintenance and construction?
- Is compost/mulch use currently required by contracts and included in bid specifications?
- Do fleets use RNG and/or electricity?

Identify opportunities for additional use of eligible products. Many jurisdictions are already using compost and mulch, but could be using more. It will be important to inventory the potential demand among the jurisdiction and potential partners.

- How much landscape area is available for compost and mulch application in the jurisdiction?
- Does the jurisdiction have a landscape master plan that identifies existing and planned landscape projects?
- Who are potential direct service providers who could help meet the target? Examples include park districts, school districts, water districts, private golf courses, mass transit, etc.

Ensure that the jurisdiction has access to quality compost, and avoids contaminated compost. While there is not currently enough compost and mulch to meet the demand created by procurement, more will become available as an additional 12-14M tons of organics will need to be diverted to meet SB 1383 goals. However, more food waste entering the organics stream means that the amount of glass, plastic, and other physical contaminants in compost will increase. In the short term, while compost supplies are limited, affected jurisdictions can take steps to ensure quality compost is available to their jurisdiction, including:

- Entering into agreements with haulers, composters, and/or vendors to provide a minimum amount of quality compost to the jurisdiction.
- Requiring haulers to charge contamination fees and refuse contaminated material.
- Training buyers and users how to specify and insist upon quality compost and mulch.

For long-term availability of quality compost, jurisdictions should reduce contamination upstream by:

- Continuing to support the Reusable Bag Ordinance in order to help reduce the amount of film plastic in the organics stream.
- Adopting StopWaste's model Disposable Food Service Ware Reduction and Reuse Ordinance to reduce waste and contamination caused from disposable foodware. Single-use plastic foodware and film are not readily recyclable or compostable, and are the most common and most problematic contaminants in compost. These contaminants can only be removed by screening finished compost, removing over half the final product along with it. Limiting single-use disposables by replacing them with reusables is the best way to keep compost clean.

Keeping the organics stream clean not only creates cleaner compost, but also makes more compost available for cities.

How can StopWaste help?

- **Providing implementation tools:** Examples include a procurement calculator, model MOU template for direct service providers, model bid specifications, and trainings. Visit our Resources for Public Agencies to find our most commonly requested items. If there is something you are looking for, but don't see it, let us know.
- **Educating member agency staff:** Through June 2024, StopWaste will provide individual training to member agencies on the use of compost and mulch for SB 1383 compliance, as well as technical assistance on specifications and landscape maintenance using compost.
- **Developing innovative solutions and strategies:** Examples include supporting member agencies in developing inventories of landscape areas, working with the Alameda County Resource Conservation District to create a compost subsidy and donation program for Alameda County farmers and ranchers, and facilitating partnerships with urban farms and gardens to streamline giveaways through compost distribution hubs.
- **Advocating at the state level on behalf of member agencies:** StopWaste continues to communicate with CalRecycle to gain clarity on eligible strategies and partnerships, and to advocate for changes to the procurement targets to address the mature compost markets for Alameda County compost.

FAQs:

- **How much will this cost?**
  It depends. Based on information from member agencies, landscape contractors, and StopWaste procurement for carbon farming, unit costs for compost range from $35-100 per CY for material, delivery and labor to install. If a city of 100,000 people were to meet the procurement requirements entirely by using compost, it would range from about $400,000 to $1.2M per year. To meet the target with mulch, it would cost more for that city—about $930k to $2.7M per year.
    - **Why does mulch cost more?** Because mulch costs about the same as compost, but weighs less, so it takes more mulch to meet the weight-based target.
    - **Why is the cost range so broad?** The main factors are freight costs (both distance and size/type of trucks), and if material is installed by city staff or by contractors (especially at prevailing wage). Materials costs also vary, depending on both the feedstock (e.g., green waste vs biosolids) as well as the intended application—the same compost is roughly half the cost per ton for agriculture than it would be for landscape work.
- **Does a jurisdiction have to use the products from the organics it generates?**
  No. Feedstock can come from anywhere in California. For example, a city in Alameda County could use electricity from biomass generated in Santa Clara County processed by a conversion facility located in Stockton.
- **Does a jurisdiction have to use the materials within the jurisdiction?**
  No. Products can be used anywhere in California. For example, a city in Alameda County could contract with a compost broker or composter to subsidize the purchase of compost by farms in the central valley.
- **Do the organics products have to be in addition to what a jurisdiction is already using?**
  No. For example, if a city of 100,000 people started doing an annual compost giveaway of 600 CY in 2003, and the city continues to do that giveaway in 2022, that giveaway will count toward the procurement target for 2022. However, a city cannot retroactively attribute material from previous years to the current year, so the 11,400 CY of compost given away from 2003 to 2021 cannot be applied to the 2022 target.
- **Is there enough compost and mulch to meet this new demand?**
  Currently, the total compost and mulch produced in the state is not enough to meet total statewide procurement targets, but the situation varies regionally. In areas without existing organics collection programs, organics processing infrastructure is needed to create compost and other products; there is a lot of potential for growth, but little compost available now. However, places like Alameda County face a different challenge: these jurisdictions have been diverting organics and creating compost and mulch for decades. As a result, most compost is already sold to existing markets, leaving less available for jurisdictions. Further, successful organics programs leave less organics in the garbage, so the potential to make new compost is less.
- **What is a direct service provider?**
  A direct service provider is a person, company, agency, district, or other entity that provides a service or services to a jurisdiction, pursuant to a contract or other written agreement. Examples include waste haulers, landscape contractors, school districts, and anyone with a written agreement to procure compost and/or other products on behalf of an affected jurisdiction.
- **What does a jurisdiction need to do to meet these requirements through a direct service provider?**
  Affected jurisdictions will need to require, through a written contract or agreement, that the direct service provider procure recovered organic waste products and provide written documentation of such procurement to the jurisdictions. To count toward a jurisdiction's procurement requirement, direct service provider agreements must be executed in advance of the procuring of the product.
- **Does SB 1383 prevent jurisdictions from using on-site generated tree trimmings as mulch?**
  No. Cities can (and should!) use locally generated mulch. At this time, however, this type of mulch cannot be attributed to procurement targets.
- **What if a jurisdiction falls short of meeting its procurement target?**
  For every day a jurisdiction falls short, CalRecycle can assess a penalty of $500-10,000 per day. This is calculated by dividing the amount of the shortfall by the total target and multiplying by 365 to get the total number of days a jurisdiction was out of compliance. For example, consider the city of 100,000 people with an 8,000 ton procurement target. If the city procured 5,000 tons, the shortfall would be 3,000 tons.

  Example: (3,000 tons / 8,000 tons) * 365 = 137 days out of compliance

  The penalty amount would range from $68,500 to $1,370,000. The amount would be determined by CalRecycle Staff, based on the severity of the violation.