Examples of Generator ID Methods

Employee-based Generator ID Tool

While CalRecycle created a <u>Generator ID Tool</u> based upon employee data using 2014 Waste Characterization Study, some stakeholders also proposed that they have the ability to use a service level approach.

Disposal-based Service Level Generator ID Tool

Therefore, CalRecycle developed a second <u>Generator ID Tool</u> that is based upon service level of individual business group organic waste generation.

Examples of Other Service Level Approaches developed outside of CalRecycle

While CalRecycle considers that using employee and waste characterization data to be more accurate, CalRecycle also recognizes that a service level approach based upon disposal service level may be sufficient in some situations. **The following are examples of some jurisdictions' approaches.**

These disposal based approaches entail using the jurisdiction's commercial customer information to estimate which businesses may be generating 8 cubic yards or more in 2016 (or 4 cubic yards in 2017) of organic waste. The following is a list of different approaches. Also, included are issues you need to consider when you use a service level approach. Jurisdictions using this approach should be aware that this approach does not account for all diversion and thus may underestimate total generation for individual businesses.

Reminder: Jurisdictions will be asked to report on the approach that they used for identifying generators, including any conversion factors used, calculation method, etc., in the Electronic Annual Report commencing in August, 2017.

Issues jurisdictions need to consider when using a service level approach:

- Some businesses such as a chain grocery store or large food manufacturer may be already
 recycling their organic waste on their own by back hauling/donation etc. and may fall off from
 the initial cut off identified by the following approach. Therefore, the jurisdiction should followup with businesses to assess if they are already diverting organics and report that it has
 identified as meeting the threshold.
- If jurisdictions do not have an access to customer service levels, e.g., not able to get the data because it is an open system, then this approach would not be feasible.
- This approach does not account for all diversion and thus may underestimate total generation of an individual business.

Example 1 (Service Level disposal based approach)

Step 1:

Obtain a complete list of the service subscription level from the hauler(s). The information should contain the following):

- Customer name
- Physical Address
- Size of the container(s) for trash/recycling/organic in cubic yards
- Frequency of the pick-

Using the information about the size of the containers and frequency of the pickup, calculate the total weekly volume of the service subscription.

For example, if restaurant A has the following subscription level:

- Trash: one 2 cubic yard bin picked up 4 times/week
- Recycling: one 4 cubic yard bin picked up 2 times/week
- Then its total volume = (2x4) + (4x2) = 16 cubic yard/week

Step 3:

• After calculating the total weekly volume, sort the list by descending order.

Apply the estimated commercial organic waste generation ratio (36%)* from 2014 Waste Characterization Study to the total volume for each generator to identify the businesses that generate 8 cubic yard/wk of organic. *This includes the materials defined in AB1826.

Step 4 – After identifying generators, it is recommended that the jurisdiction use their own and its hauler's knowledge and experience to assess whether there are known generators that may meet the threshold, who may have been missed through this service level exercise.

Note: Bins are not always full, so using service level can over-estimate how much a business is generating and may cause the business to fall under mandatory organics recycling thresholds, the 8 or 4cy/week of organics thresholds, when it doesn't really need to. See Step 4 regarding using the estimation tool and overlaying that with the jurisdiction/hauler's knowledge/experience, as well as the need to contact the businesses.

Example 2 (Service level disposal-based approach)

Perform Step 1 and 2 above

Step 3:

- After calculating the total weekly volume, sort the list by descending order.
- According to CalRecycle's service level generation based tool, the minimum service level for 8
 cubic yard organic generation per week is 18 cubic yards of disposal. Using this threshold,
 target the outreach/education/monitoring activities to those businesses that subscribe 18
 cubic yards or more of disposal per week.
- Jurisdictions could refine the list using the CalRecycle's employee based Generator ID Tool, Service Level Tool, available business data, and/or local knowledge of the businesses.
- Note: If the business' disposal service level is less than 18 cubic yards, before eliminating it you
 will still need to assess if it is diverting the waste in some other manner, such as back-hauling,
 and thus the amount of material is not fully reflected in the service levels.

Example 3 (Food related businesses only service level disposal-based approach)

The following disposal based approach was developed specifically for identifying Food Service Establishments in Orange County using the pilot data. The detail explanation is found in this Food Related Business Service Level method document.

The Orange County approach for generator identification uses a combination of three data sources to estimate organics volume generation:

- Data provided by the Orange County Health Department to identify restaurant size
- Hauler account listings to identify weekly MSW and food scrap generation volume
- Food scrap density data obtained from ongoing pilot food scrap programs to cross check and verify the amount of organic scraps generated by different sizes and types of restaurants.

Step 1

Use Orange County Health Department database and the data obtained from the pilot program to identify all food facilities that fall within 'Program/Element' categories that have been found to generate 8 CY or more of organics per week.

Step 2

Once restaurants that generate 8 CY or more per week are identified, review hauler service account listings to locate weekly cubic yards of trash service for each restaurant.

Step 3

Multiply the cubic yards of trash per week by 66% for full service restaurants and by 51% for fast food restaurants to determine the expected volume of organics being generated by the restaurant. Remove restaurants from the targeted list that have fewer than 12 cubic yards of trash on service.

Step 4

For food facilities that do not have their own trash account, conduct site audit to assess organics generation.

Verify reasonableness of identification by checking that density of food scraps (volume on service and weights collected) is within a range of 150 to 300 lbs. per full 65 gallon cart.