



## CONTAINER CONTAMINATION MONITORING PROTOCOL

### 1.0 OVERVIEW:

This document was developed to provide guidance on a Senate Bill (SB) 1383-compliant container contamination monitoring protocol. The goal of the protocol is to comply with the requirements of Section **18984.5** of the SB 1383 regulations, which requires that an adequate number of accounts on every collection route must be reviewed annually. The protocol outlines how RecycleSmart will conduct these route reviews through visual inspections of the three service streams (commingled organics, single stream recycling, and landfill) for each residential and commercial route, including the tracking and reporting of findings. For commercial accounts, inspectors shall distinguish between generators who use the commingled organics program and those on the Food Recycling Project. Multifamily complexes are serviced as part of the commercial routes. Inspections shall be conducted annually. Reporting shall be completed before August 1 annually so that findings can be included in, the Electronic Annual Report (EAR), which is due August 1 of each year.

This protocol will be used to serve the entire RecycleSmart service area.

### 2.0 CONTAINER CONTAMINATION ASSESSMENTS

The following sections describe the methodology that shall be used to conduct the container contamination assessments/route reviews, including coordination with the Authority's franchised hauler, and tracking and reporting.

#### 2.1 ROUTE SELECTION

RecycleSmart evaluated three different methods for establishing an adequate number of accounts on every collection route that must be reviewed annually. The methods included looking at 8% of the accounts for each route review, looking at 2% of the accounts for each route review, and looking at containers at 25 accounts per route. Of the three different methods considered, RecycleSmart decided to inspect 25 accounts on each route. (See **Appendix A** for a complete list of routes.) **Table 1** shows the 69 routes by commodity type and the number of containers (e.g., 1,725) required for the full protocol.

Table 1. Number of Routes per Sector and Route Reviews

Type of Route	# of Landfill Routes	# of Recycling Routes	# of Organics Routes	Total # Routes Reviewed	# Containers Reviewed (includes all 3 streams) Per Year
Residential	16	16	17	49	1,225
Commercial	9	8	3	20	500

For this protocol, a “Route” is defined as a unique route number, which is serviced five days per week for both commercial and residential sectors. For example, commercial route 502, includes 1502 (Monday service), 2502 (Tuesday service), 3502 (Wednesday service), 4502 (Thursday service), and 5502 (Friday service). RecycleSmart will perform route reviews on 25 accounts (75 inspections or “lid flips” for all three commodities) for route 502 and will review that route randomly once during the week.

### 2.1.1 ACCOUNT SELECTION

In addition to the accounts per route metric, to equitably represent each member agency, population shall also be taken into consideration when selecting the location of accounts for inspection. Table 2 reflects the percentage of the total population of each agency, and the target number of accounts that should be selected from each member agency’s service area to achieve an equitable representation of each member agency. To meet the target number of accounts reviewed per service area listed in Table 2, it may be necessary to review more than 25 accounts on a route. Routes requiring extra accounts to be reviewed will be identified during the account selection process and will be verified with the franchised hauler.

Table 2. Jurisdiction Equability

Member Agency	Population % of Service Area	Target # of accounts per member agency
Danville	18.81%	324
Contra Costa County (Alamo, Blackhawk and Diablo, other pockets)	24.38%	421
Lafayette	10.87%	188
Moraga	7.21%	124
Orinda	8.17%	141
Walnut Creek	30.56%	527
<b>Total</b>	<b>100.00%</b>	<b>1,725</b>

Recyclist is not designed to track residential accounts; however, if using Recyclist, the selected residential accounts to be reviewed shall be uploaded into the Recyclist software and the Recyclist Mobile App exclusively for the purpose of this protocol. RecycleSmart may pilot other software programs (such as Zabble) to assess the efficacy of alternative field and data management software. Regardless of the field software, the findings shall ultimately be uploaded into the Recyclist record for each commercial and multifamily account to preserve a complete record of all outreach provided to commercial and multifamily generators. Completed single family accounts will be uploaded into Recyclist for storage; Recyclist stores residential route review data within the “All Inspected

Containers” section rather than within individual generator records. RecycleSmart staff or its contractor will work closely with the franchised hauler to review the route information (e.g., contact information, service level data) associated with the selected accounts on each route. Field staff will use the Recyclist App or the selected alternative software to input all the information necessary for the annual reporting as defined in **Section 18984.6, 18994.2 and 18995.1** of the SB 1383 regulations.

Account selection is based on the landfill routes and includes inspection of the recycling and organics containers at the same time for all accounts, even though for the commercial routes, the recycling and organics service days may be different. A list of residential and commercial landfill accounts will be obtained from the franchised hauler. The list of accounts will be divided among the field staff for each day that staff will be in the field.

Since commercial accounts are likely to receive service on multiple service days that differ depending on the stream (e.g., single stream recycling, commingled organics or food scraps), the field staff will note how many recycling and organics containers were available to be inspected in addition to the landfill container. If the route review includes a multifamily complex, the inspector will review all containers in one enclosure at that location regardless of how many enclosures there are.

## 2.2 PREPARATION

In advance of the fieldwork, RecycleSmart will notify the franchised hauler’s customer service team, the relevant police departments, and any others who may receive an inquiry regarding the fieldwork. Field staff will carry a letter from RecycleSmart (**Appendix B**) explaining the project and including RecycleSmart contact information. The field staff lead will contact the franchised hauler directly when the assessments begin and end each day so drivers are aware and do not attempt to service containers until the field staff is no longer in the neighborhood.

All outreach information will be gathered, protocols reviewed, and a meeting with the field staff will be conducted prior to heading into the field.

## 2.3 PROJECT ACTIONS

- Confirm all contractors conducting field work meet insurance requirements and provisions and provide a valid certificate of insurance and the required endorsements.
- Confirm contamination oops tags and good job tags are printed and available for use.
- The franchised hauler to email Recyclist or other selected software vendor with selected residential account information for upload into the Recyclist database or other selected software.
- The residential and commercial accounts shall be uploaded to the selected field software including the date of the route review.
- The franchised hauler shall provide field staff lead with residential and commercial routes, addresses, service levels and service days for the selected accounts.
- The franchised hauler shall provide field staff with universal keys.

- RecycleSmart to notify the franchised hauler’s customer service team, all Member Agency police departments and liaisons, and any others who may receive an inquiry about the field work.
- Field staff lead to collect materials for outreach: safety vest, clip board, flashlights/head lamps, oops tags and twist ties.
- Field staff lead to supply Personal Protective Equipment (PPE) for field staff including gloves, mask, and safety glasses (optional).
- Field Staff lead to confirm that route maps and start/ending locations are clearly outlined for field staff.
- Field Staff lead to print the field letter from RecycleSmart addressed to generators regarding the inspections,
- Field Staff lead to print tracking sheets for each day in field (as a back-up in case the field software is not working).

### 3.0 FIELD WORK

Field staff will arrive at their designated neighborhood(s) an hour or two prior to the collection truck. For the commercial accounts, field staff will strive to view containers the day before service since the commercial routes start as early as 3:30am. Field staff will have the appropriate PPE, flashlights/head lamps, clipboards, and other potential field supplies. They will also have in hand the universal key from Republic Services, printed copies of the “oops tags” and “good job tags” (including twist ties), list of residential and commercial route information, the RecycleSmart route review letter, and printed tracking sheets as a back-up.

The field staff will conduct container contamination assessments of all three streams (landfill, recycling, and organics) to observe prohibited and non-prohibited materials, which are outlined below. Field staff will perform a hybrid approach for contamination observation looking at all containers to see if there is prohibited material, but also identifying specific items that RecycleSmart and franchised hauler may be concerned about, such as hazardous materials (batteries, diapers, etc.). The route reviews will be conducted on the following dates and on the following routes:

- **Insert date/week**
  - Commercial route number xx (Monday) in the city of xx
  - Commercial route number xx (Tuesday) in the city of xx
  - Commercial route number xx (Wednesday) in the city of xx
  - Commercial route number xx (Thursday) in the city of xx
  - Commercial route number xx (Friday) in the city of xx
  
  - Residential route number xx (Monday) in the city of xx
  - Residential route number xx (Tuesday) in the city of xx
  - Residential route number xx (Wednesday) in the city of xx
  - Residential route number xx (Thursday) in the city of xx
  - Residential route number xx (Friday) in the city of xx

**Table 3** highlights the estimated number of accounts and container contamination assessments that will be performed.

Table 3. Estimated Accounts and Inspections/Lid Flips

Location	# of Routes	Number of Accounts Assessed for each Sector (25 accounts each route)	Number of Container Contamination Assessments Per Day (all 3 commodities - Landfill, Recycling and Organics)	Total Number of Days for Container Contamination Assessments
Residential	49	1,225	4 routes per day (100 accounts) All 3 commodities (300 total lid flips)	4
Commercial	20	500	4 routes per day (100 accounts) All 3 commodities (300 total lid flips)	2
<b>Total</b>	<b>69</b>	<b>1,725</b>		<b>6</b>

During the inspection, field staff will record the following information for each account for each stream in the field software app.

- Name on account
- Address of residence or commercial account
- Route number
- The date of route review
- Number of containers, container sizes and container types on the curb
- If there is unusual or extreme contamination in a container, the hauler will be contacted.
- Record if the container has prohibited contaminants, no prohibited contaminants, is empty, or not set out.
- Field staff shall distinguish between commercial commingled organics collection accounts and Food Recycling Project accounts and characterize contamination accordingly.
- Record if an oops or good job tag is left for up to three containers per set out.
- Acceptable materials include:
  - **Commingled Organics:** fruit and pits, vegetables, cooked and raw meat, bones, cooked food/leftovers, grains/nuts, dairy, eggshells, coffee grounds and paper filters, tea bags and leaves, food-soiled paper (e.g. pizza boxes, paper towels, uncoated paper plates), bamboo and chop sticks, grass, weeds, leaves, hay and straw, plant and flower trimmings, wood chips, cacti, small branches, clean wood – small pieces of natural (unpainted/treated/no metal) wood, woody shrubs (all wood must be 4 feet or less in length and 6 inches in diameter), and BPI-certified compostable bags.

- **Food Scraps to EBMUD:** fruit and pits, vegetables, cooked and raw meat, bones, cooked food/leftovers, grains/nuts, dairy, eggshells, coffee grounds and paper filters, tea bags, food soiled napkins, food soiled paper towels, and BPI-certified compostable bags or clear plastic bags.
  - **Single Stream Recyclables:** paperback books, telephone books, paper bags, tissue paper (gift type), paper gift wrap (nonmetallic or glitter), paper tubes, glossy paper, clean cardboard, paper boxes, clean office paper, newspaper, catalogs, clean paper egg cartons, paper envelopes (window ok), shredded paper contained in clear or paper bag, glass bottles/containers, clean aluminum and empty aerosol cans, clean pots and pans, cookie sheets, pie pans, metal pet food cans, plastic containers #1-#7, water bottles, bottles and jugs, bundled plastic bags, plastic 5-gallon buckets, plastic laundry hampers and small solid plastic toys (no mix of materials).
  - **Landfill:** Black bags, paper milk cartons, paper ice cream cartons, Tetra Pak cartons, coated food-related paper containers, ALL “Compostable” and “Biodegradable” plastics (except BPI-certified compostable bags, which can go in organics), to-go drink cups and lid, paper coffee cups, juice pouches, soft plastic packaging (e.g. chip bags and snack packaging), plastic envelopes, padded envelopes, Polystyrene, meat trays, peanuts, tempered glass – windows, mirrors, stone dishware, binders, animal waste, contaminated paper, diapers, feminine products, fireplace ash, hoses, drip/irrigation tubing, wrappers, “crunchy” plastic bags, laminated items, leather, textiles, rope, photos, straws, all single use utensils, most toys, toy packaging with mixed materials
  - **Special Handling (should not be in any container):** treated wood waste, batteries (all types), e-materials, fluorescent lamps, paint and other hazardous materials, obvious C&D materials including dirt, concrete, rock, insulation, etc. Medications, sharps (needles), usable textiles, bulky and large items, furniture, large scrap metal and wood pallets.
- If the container contains **any** prohibited items, an oops tag will be left such that up to three oops tags per account may be left.
  - If a container contains bagged materials, field staff will not open bags but will do their best to accurately identify acceptable and non-acceptable materials. Staff will only look at the top portion of the container and will not sift through the container, remove any contents, or take pictures of anything in residential containers.
    - In the case that 100% of materials in any given cart available for review are bagged, field staff will carefully open the top bag to assess container contents.
  - For commercial and multifamily accounts, follow up will include phone or email communication to the account contact, as oops tags left on containers may not reach the individuals who can influence upstream behavior.

### 3.1 MEASURING CONTAMINATION

**Section 18984.6** (recordkeeping requirements for container contamination minimization) requires a description of the jurisdiction's process for determining the level of container contamination. RecycleSmart and its contractors will follow the outlined process below to determine the level of contamination in the container.

Field staff will note the presence of prohibited contaminants in the container by quadrant (i.e., looking from the top down and visually separating the container contents in four sections), and then assess all the material that can be observed. Staff will assume that the material in the bottom of the container that cannot be seen is the same as the representative material at the top. Field staff will use the designated software application to note the percentage of prohibited contaminants by material type (e.g., food, recycling, other organics, landfill).

According to **Article 1 (Section 18982 Definitions)**, prohibited container contaminants means any of the following.

- (A) Non-organic waste placed in a green container that is part of an organic waste collection service provided pursuant to Section 18984.1, 18984.2 and 18984.3.
- (B) Organic wastes that are, carpet, hazardous wood waste, or non-compostable paper placed in the green container that is part of an organic waste collection service provided pursuant to Section 18984.1 or 18984.2.
- (C) Organic wastes, placed in a gray [or black] container (in the RecycleSmart service area, landfill carts are black, landfill dumpsters are gray), that pursuant to Section 18984.1 or 18984.2 were intended to be collected separately in the green container or blue container.
- (D) Organic scraps placed in the blue container shall be considered prohibited container contaminants when those wastes were specifically identified in this chapter or through a local ordinance for collection in the green container for recovery. Paper products, printing and writing paper, wood, and dry lumber<sup>1</sup> may be considered acceptable and not considered prohibited container contaminants if they are placed in the blue container.

The above will be used when identifying prohibited contaminants in the containers. Please refer to **Appendix C**, which describes the franchised hauler contamination protocol; their contamination observations and actions are independent of this protocol.

#### Education Feedback

1. **Field staff will leave an oops tag if any container contains any prohibited contaminants**, or if specific items identified on the oops tag are observed.
2. For commercial and multifamily accounts, field staff will also use phone and email follow-up or face to face visits to communicate contamination found while monitoring.

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<sup>1</sup> Wood and dry lumber are not accepted in blue container in this service area.

## 3.2 REPORTING

The data gathered from each residential and commercial container contamination assessment will be uploaded to the selected field software by field staff. The software application shall allow users to enter the specific details listed in Section 3.0 above as well as additional notes. This data will be used in the program analysis and included in the final report, which will be prepared by the contractor. Additionally, this information will become part of the Implementation Record and be used for annual reporting to CalRecycle.

The contractor will run a report after container contamination assessments are complete to highlight the number of accounts reviewed, the outcome from these assessments (e.g., number of accounts that received oops tags) and other details highlighted in Section 2.4 for RecycleSmart to include in the Implementation Record. Details can be found in **Appendix D** for the Implementation Record Report.



## Appendix A

### RecycleSmart Routes

Sector	Collection Truck Type	Commodity	# Routes	# Stops/day	Number of collection days per week	# Stops / week per route	# Stops / week for all routes	% of stops per week	Performance Evaluation SB 1383 Measurements - Number of conter reviews for all routes	Performance Evaluation SB 1383 Measurement per route
<b>Residential</b>										
Residential	Side-Load / Curatto	Trash	13	1100	5	5500	71500	96%	325	25
Residential	Burro	Trash	3	200	5	1000	3000	4%	75	25
Subtotal Residential Trash			16				74500		400	50
Residential	Side-Load / Curatto	Recycle	13	1100	5	5500	71500	96%	325	25
Residential	Burro	Recycle	3	200	5	1000	3000	4%	75	25
Subtotal Residential Recycle			16				74500		400	50
Residential	Side-Load / Curatto	Organics	14	1100	5	5500	77000	96%	350	25
Residential	Burro	Organics	3	200	5	1000	3000	4%	75	25
Subtotal Residential Organics			17				80000		425	50
<b>Commercial</b>										
Commercial	Cart / RL / Combo	Trash	2	400	6	2400	4800	48%	50	25
Commercial	Front-Load	Trash	7	125	6	750	5250	52%	175	25
Subtotal Commercial Trash			9				10050		225	50
Commercial	Cart / RL / Combo	Recycle	2	1100	6	6600	13200	75%	50	25
Commercial	Front-Load	Recycle	6	125	6	750	4500	25%	150	25
Subtotal Commercial Recycle			8				17700		200	50
Commercial	Cart / RL / Combo	Organics	1	200	5	1000	1000	44%	25	25
Commercial	Cart / RL / Combo	Food Waste	2	125	5	625	1250	56%	50	25
Subtotal Commercial Organics			3				2250		75	50
<b>Total</b>			<b>69</b>				<b>259000</b>		<b>1725</b>	<b>300</b>

## Appendix B - Field Letter



October 2024

RecycleSmart is in your neighborhood today performing “lid-flips” and visually inspecting carts for proper sorting as required by state law.<sup>2</sup>

### *Who is RecycleSmart?*

RecycleSmart is a government Joint Powers Authority (JPA) whose Member Agencies include the Cities and Towns of Orinda, Lafayette, Moraga, Walnut Creek, Danville and certain communities in unincorporated Central Contra Costa County (Alamo, Blackhawk, and Diablo). RecycleSmart manages the Franchise Agreement with Republic Services for the collection of residential, multi-family, and commercial organics, recycling, and landfill materials, and with Mt. Diablo Resource Recovery for the processing of recyclable materials. For more information about RecycleSmart visit [recyclesmart.org](https://recyclesmart.org).

### *Who is SCS Engineers?*

SCS Engineers is helping RecycleSmart conduct the inspections.

### *Why is RecycleSmart looking in my carts?*

A new state law Senate Bill (SB) 1383 requires that every city, town, and county conduct annual route audits to monitor contamination, including the proper sorting of organics (food scraps, yard trimmings, and uncoated food-soiled paper) from landfill, and provide education and outreach to residents. Organics make up over half of the material going to local landfills and contribute to climate change. For more information about SB 1383 visit [RecycleSmart.org/1383](https://RecycleSmart.org/1383).

### *What will happen if I put something in the wrong cart?*

If you put something in the wrong cart, our team will leave a “cart tag” explaining what materials or contamination was discovered, and tips for proper sorting. Note: *Republic Services does not have to service contaminated carts. If your cart is not serviced due to contamination found by a Republic Services driver, call Republic Services at (925) 685-4711.*

### *Whom should I contact with additional questions?*

Visit RecycleSmart at [RecycleSmart.org](https://RecycleSmart.org) or call (925) 906-1801.

If your cart(s) were not serviced due to contamination observed by Republic Services, please contact them directly at (925) 685-4711 to arrange a solution.

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<sup>2</sup> Your city or town Police Department are aware that RecycleSmart is conducting these lid-flips as required by state law.

## Appendix C

# Republic Services Contamination Monitoring Protocol

Republic Services requires their drivers to report severe contamination in the recycling or green waste containers before or after serviced as appropriate. The following protocol is used when identifying contamination in the bins and is performed on a daily basis.

1. If driver sees 25% or greater of contamination in container before they empty the container, they will place a yellow oops tag with the issue on the appropriate container (may use a twist tie to keep it on container).
2. The driver will take a photo with their phone and send picture to dispatch. Dispatch uploads picture to the customer account in InfoPro. For commercial/MFD accounts, Republic Services customer service will send a picture to the customer if necessary. If it is a repeat customer, dispatch will try to call customer, especially if commercial.
3. If contamination is seen after the bin has been tipped into the truck, Republic Services will let dispatch know, and they will put note on the account. If it is a regular driver who knows the account and can confirm it is a problem customer, the driver will leave a tag on the bin, even after the material has been dumped.
4. The customer has two options when Republic Services has left a contaminated bin unserviced: (A) the customer can remove the contamination and have Republic Services service the container the following week at no cost, or (B) the customer can remove the contamination and request for Republic Services to come back for a fee.
5. If a Republic Services driver has disposed of material from an account due to observing prohibited contaminants in the container (e.g. recycling that is landfilled due to contaminants), Republic Service will need to document and provide information to RecycleSmart for reporting purposes.

## Appendix D

### Implementation Form

Implementation Record Requirements	Description or Data	File Location	Regulatory Reference
A description of the jurisdiction's process for determining the level of container contamination.			14 CCR Section 18995.2 (f)(4) 14 CCR Section 18984.6 (a)(1)
If applicable, documentation of waste evaluations performed, including information on targeted route reviews conducted as a result of the studies. The documentation shall at a minimum include dates of the studies, the location of the solid waste facility where the study was performed, routes, source sector (e.g. commercial or residential), number of samples, weights and ratio of prohibited container contaminants and total sample size.			14 CCR Section 18995.2 (f)(4) 14 CCR Section 18984.6 (a)(3)
Copies of all notices issued to generators with prohibited container contaminants.			14 CCR Section 18995.2 (f)(4) 14 CCR Section 18984.6 (a)(4)
Documentation of the number of containers where the contents were disposed due to observation of prohibited container contaminants.			14 CCR Section 18995.2 (f)(4) 14 CCR Section 18984.6
Copies of all documentation of route reviews.			14 CCR Section 18995.2 (f)(4) 14 CCR Section 18984.6 (a)(5) 14 CCR Section 18995.1 (d)
Copies of all enforcement actions (related to route reviews) required by 14 CCR Section 18995.4 of this chapter, including Notices of Violation and penalty orders.			14 CCR Section 18995.2 (f)(4) 14 CCR 18995.1 (d)(2)
A list of the date(s) that the jurisdiction determined an entity complied with a Notice of Violation and the evidence that supports that compliance determination.			14 CCR Section 18995.2 (f)(4) 14 CCR 18995.1 (d)(3)
Copies of notices and educational material provided as required by this section.			14 CCR Section 18995.2 (f)(4) 14 CCR 18995.1 (d)(4)

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Instructions and Guidance	
A jurisdiction may use all, certain, or no jurisdictional requirements by conducting local reviews. This optional assistance tab contains guidance on local review occurrence.	
Provide or indicate the location of the jurisdiction's local review records. The jurisdiction may indicate the location of the records in the "Location" cell or provide information in the "Description of Data" cell.	
14 CFR Section 3084.5 contains additional information on an audit review.	
Jurisdictions may consider creating a separate local workbook to address the <i>Local Review</i> .	

Route Review Requirements	Regulatory References
<p>A route auditor will generate a written or determined route for each inspection route review. Each compliance review is conducted pursuant to the criteria. Each record must include, at a minimum, the following information:</p> <ul style="list-style-type: none"> <li>(1) Identifying information for the subject or subjects of the inspection, route review or compliance review, such as, but not limited to:               <ul style="list-style-type: none"> <li>(a) name or model/plate of each piece of utility</li> <li>(b) the date or dates the inspection route review or compliance review was conducted</li> <li>(c) the person or persons who conducted the action</li> <li>(d) the physical device findings regarding compliance with the device, including any findings of violations or occupational materials not in compliance</li> <li>(e) any observed evidence supporting the findings of device, such as, but not limited to, photographs and written notes</li> </ul> </li> <li>(2) Route review record must also include a description of all the locations of the route reviewer in the workplace where prohibited conditions or violations are found. If any</li> </ul>	<p>14.00 C.F.R. 18006-1 (c)</p>

Assistance Section (OPTIONAL)		
(Provided below are optional tables to organize recordkeeping details and are not required to be maintained in the Implementation Record.)		
Route Review Documentation	Description or Data	File Location
Header Name		
Is this a Targeted Route Review in relation to Container Contamination? (Yes/No)		
Person(s) Conducting Route Review		
Defect(s) Review Conducted		
Use or non-use of outer route		
Draw a map of Route Barrier Location(s)		
Number of Containers Damaged due to Presence of Container Contamination		
Findings regarding non-compliance, including any notices of violation or additional measures that were issued		
Any relevant evidence supporting the findings, narrative, but not limited to, a strong opinion and account records.		

[illegible]

End of this worksheet