# California Carpet Stewardship Program

# **Errata – Gross Collections** 2019-2023 Data Correction

**Submitted to CalRecycle July 31, 2025** 



# Re: Gross Collection Calculation Error, Impacts, Path Forward

CARE submits this errata memorandum and accompanying appendices as written notification (originally submitted to CalRecycle on February 19, 2025). At that time CARE self-identified, historical reporting inaccuracies contained in previously-issued California Carpet Stewardship Program Annual Reports – the most recent of which was the 2023 Annual Report submitted to CalRecycle on September 1, 2024. This errata memorandum includes a summary regarding: (1) background information to provide context; (2) details of the issue; (3) impacts of the issue; (4) correction of the issue; and (5) a proposed resolution of the issue.

### 1. Background

CARE, through the support of a contracted, independent third-party consulting firm (Aprio LLP), has implemented and utilizes a robust system for data collection, consolidation, analysis and reporting related to the performance of our stakeholders – including recyclers, mills, and the CARE organization itself. In order to provide the depth and breadth of performance metrics and insights as disclosed in CARE's annual reporting to CalRecycle, especially in an ever-growing and ever-evolving carpet recycling landscape, the people, processes and technology supporting the reporting system require a high-degree of sophistication and quality control.

CARE's reporting system is inclusive of all necessary people, processes and technology. While the ultimate responsibility of reporting to CalRecycle lies with the CARE organization itself, the foundation of CARE's reporting system's people and processes is our third-party consulting firm, Aprio. The foundation of CARE's reporting system's technology is the web-based Planful reporting software. Aprio has been contracted by CARE since 2011, and Aprio implemented the Planful reporting software in 2018 for recycling activity, and 2024 for mill activity, as an initiative to better automate and improve speed, accuracy and insights of all CARE reporting.

CARE utilizes the Planful system for data collection, consolidation, analysis, and reporting related to performance of recyclers, mills, and the CARE organization itself (e.g., program and administrative expenses, fund balance, etc.). Planful is also used for calculation of stewardship fees owed by mills and the subsidy payments due to recyclers, based on the data input by the mills and recyclers, respectively. Aprio provides CARE with monthly, quarterly, annual, and other as needed reporting packages, which are used by CARE for internal historical performance assessments, ongoing operational functions (e.g., recycler subsidy payments), and meeting external stakeholder reporting requirements.

All reporting packages are prepared and reviewed by several qualified and experienced Aprio personnel, as well as reviewed by CARE. Due to the extensive volume and complexity of reporting, heavy reliance is placed on the Planful system to consistently and accurately perform the appropriate calculations for key performance indicators, goal tracking, stewardship fees, recycler subsidies, and many other key metrics. There are

many checks and balances in place – both automated in the system as well as manually performed – in order to prevent and detect any errors. In addition, CARE and Aprio look at monthly and quarterly trends, inventory triggers (both absolute pounds and percentage changes), and inconsistencies to identify potential concerns.

One of these key metrics is **gross collections** and is the focus of this memorandum. Gross collections refer to the total amount of post-consumer carpet, both broadloom and tile, that is collected by collector/sorter entrepreneurs (CSEs) for recycling before any processing steps occur. It is a fundamental indicator of how much carpet is being diverted from the landfills and introduced into the recycling system.

#### 2. Issue Identified

On October 11, 2024, CARE requested a review by Aprio of the Planful system to assess whether the automated calculation of gross collections was double counting any PCC pounds. After an extensive review by Aprio, we realized at the end of October 2024 that during the data consolidation process, gross collections were being calculated incorrectly via double-counting of certain pounds in the Planful system. Hence, any related key metrics using gross collections in those calculations were also miscalculated, including Recycling Efficiency Rate (or Yield) and Collection Rate. In addition, a quarterly chart used to report the percentage of carpet collected plus process waste being sent to landfill was also impacted (this is a non-goal calculation).

However, it is critically important to note that the issue identified is isolated to only impacting **reported gross collections-related metrics** and **does not** impact recycler subsidy calculations or mill stewardship fee calculations. This issue also **does not** impact any data at the individual recycler level; but rather, this is strictly a calculation issue during the *consolidation* process of this data.

To better understand how the issue of consolidated gross collections double-counting occurred, it is important to first understand the historical process of how it was calculated in the Planful system (i.e., the "who", "where", "when", "what", and "how"). Refer to Appendix A and Appendix B for helpful graphical representations of this process.

#### Who Reports Gross Collections?

Gross collections are reported by recyclers who are: (1) only Collector/Sorter Entrepreneurs (CSEs), (2) both a CSE and a Processor, or (3) only a Processor.

## Where is this Information Reported?

Each recycler inputs amounts collected on their individual forms within the Planful system. CSE's report on a Planful form specifically for CSE activity, Processors report on a Planful form specifically for Processor activity, and for those recyclers who are both CSEs and Processors, they will input information on both forms.

### When is this Information Reported?

Recyclers are required to report on a monthly basis.

### What Collections Information is Reported?

Because the concept of gross collections represents the inputs into a recycler's operations, all inputs of their operations have to be accounted for on each recycler's forms so that the amount of their reported recycled outputs and any changes in inventory all balance out (i.e., the "mass balance" concept). This is done on an individual recycler basis during monthly reporting.

CSEs: For those recyclers who are CSEs, they will report the number of pounds
they collected, such as from private collection sites and CARE public drop-off sites,
for both broadloom and tile for the respective month. In addition, they will report
where those collections went – either shipped off for recycling, sold/donated for
reuse, sent back to landfill, or remains in inventory.

It is critically important to note, however, that CSEs typically do not weigh or track weights of collected carpet; but rather, only weigh carpet at the time it is shipped for recycling or reuse. Thus, any collection data is typically an estimate and could vary from the actual amount by up to 10%. We will reference this important note again in section 3 of this memorandum.

Processors: For those recyclers who are Processors, they report both: (1) the
number of pounds of broadloom and tile they collected if they also act in a CSE
capacity; and (2) the number of pounds of broadloom and tile received from other
recyclers who already collected and sorted the carpet. This is because, as stated
above, all inputs must be accounted so that their resulting recycled output or
remaining inventory balances out.

# How are Consolidated Gross Collections Calculated based on Individual Recycler Reported Data?

In order to ensure all collection activity (i.e., inputs to the overall recycling process) is captured during the consolidation process of gross collections, the Planful system was programmed to pull respective collection data from both the CSE forms and the Processor forms.

Double-counting during consolidation of collection data can occur in two ways. First, processors may report the number of pounds of broadloom and tile received **from other recyclers** who already reported it after collecting and sorting the carpet. Second, if a processor decides not to process their own collected carpet, but rather **ships it to another processor** to process, that transferred volume (also called "transshipments") is also reported as collected by that recycler because, as previously stated, each individual recycler's inputs must balance with that recycler's outputs and changes in inventory.

For example, if Processor A, who collects PCC themselves in a CSE capacity then ships some or all of the carpet to Processor B to be processed rather than Processor A processing it themselves, then Processor B will input those pounds as received from Processor A. This results in a heretofore unrecognized double-counting of PCC pounds being collected when consolidating Processor A and B's collection data. (See Appendix B.)

The Planful reporting system (people, processes and technology), as programmed by Aprio, did not previously identify that this was causing double-counting in the consolidation process.

### 3. Impact

A comprehensive and detailed analysis was performed for the period of 2019 through 2024 to quantify the amount of double counting within the reported gross collections amount. The details of this impact analysis can be found at Appendix C and Appendix D, including the impacts to official CARE goals and other performance metrics.

To further substantiate and provide an appropriate confidence level of both the occurrence of the issue and its impact, Aprio was asked to perform additional analyses. More specifically, and as alluded to previously in this memorandum, because the total amounts of all reported outputs and changes in inventory levels must equal the total amounts of inputs, a consolidated mass balance analysis was performed for 2019 through 2024. This supplemental analysis allowed for an estimation of a probable gross collections amount that was then compared to that which was historically reported and also compared to that which has been corrected via removing the double-counted amounts. Refer to details at Appendix E, Appendix F, and Appendix G.

As shown at Appendix G, the mass balance-calculated gross collections estimate (black line with triangle shaped markers) for each period of analysis maintains a variance to the corrected gross collections amount (blue line with square shaped markers) of less than 10%, with significant improvement in 2024. As stated previously in section 2 of this memorandum, as collected amounts are not weighed by recyclers, it is expected that there could easily be up to a 10% variance between reported and actual amounts, and thus CARE has a high degree of confidence in the corrected gross collections amounts (blue line) as reinforced by the independent mass balance (black line) calculation. Refer to details at Appendix G.

#### 4. Correction of the Issue

Upon identification of the issue, CARE immediately took the following steps:

- Alerted CalRecycle via phone that an issue was identified, and further analysis was commencing;
- Performed an in depth analysis to identify all instances of double-counting starting for the year 2019;
- Held multiple update meetings with the SPC;

- Hired additional, highly experienced consultants for additional levels of review and analysis;
- Held a virtual meeting with CalRecycle to present a comprehensive presentation of the issue and proposed resolution steps to obtain feedback for our formal memorandum to CalRecycle;
- Implemented Planful system corrections and enhancements for future reporting that will eliminate the possibility of gross collections double-counting by now consolidating only collections as reported at the time of initial collection on the collector/sorter entrepreneurs' CSE forms and not consolidate data from processor forms. Refer to Appendix H for details;
- Required more detailed collection source information;
- Implement a separate mass balance check monthly;

### 5. Guidance on Proposed Full Resolution of the Issue

The occurrence of any reporting errors is extremely unfortunate, and we are committed to ensuring that we continue to address the risk of reporting inaccuracies and promptly communicate corrected information by appropriate means in consideration of both the magnitude and impact of the error. Hence, in addition to the already-implemented future corrections and control enhancements as stated above, CARE proposes the following steps to be taken to achieve full resolution of the gross collections reporting errors:

- Historical Gross Collections Correction we propose that we publish one
  memorandum with corrected gross collections and gross collections-related
  CalRecycle goals/metrics as previously reported in the annual reports for the years
  2019 to 2023. A draft will be presented to CalRecycle for review. Timing to be set by
  mutual agreement.
- Modification to the 2023 2027 Carpet Stewardship Plan we propose that we will develop modified goals for the 2023 2027 Carpet Stewardship Plan for those goals impacted by gross collections. A draft will be presented to CalRecycle for feedback, review by the Carpet Advisory Committee as required by statute, and submission of a Plan Amendment. Timing to be set by mutual agreement.

In conclusion, CARE's reporting system, including the people, processes and technology involved, continue to improve and provide comprehensive and insightful reporting and control to further advance the mission of CARE and ensure compliance with applicable California law. We are proud of the many accomplishments made by not just our own organization, but more importantly those made by our recycler members as shown in the growing volume and innovation of recycled outputs to promote a strong circular economy. While errors occurred in the reporting of the various and complex inputs into the carpet recycling ecosystem, our primary focus remains to ensure the maximum recycling of carpet in California in an ever-evolving environmental landscape. If an error in reporting occurs despite our best efforts, CARE will promptly notify

CalRecycle. We then will work with you to correct the problem and learn from any breakdowns in our systems.

We appreciate our partnership with CalRecycle and look forward to working with you for a resolution to this issue.

Sincerely,

Kahut Leoples

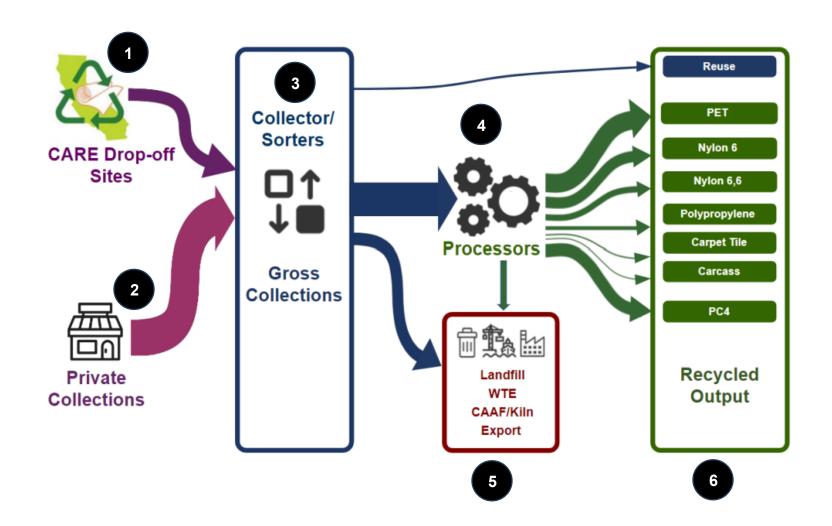
Robert Peoples, Ph.D.

**CARE Executive Director** 

cc: Stewardship Plan Committee

# Appendix A

Visual Representation of Collections and Recycled Output



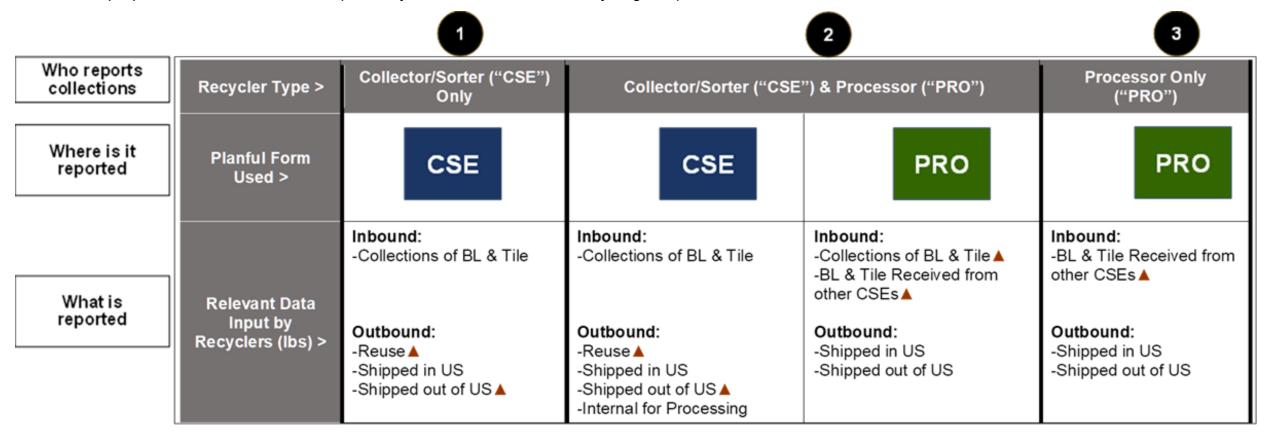
- **1.** Post-consumer carpet (PCC) is collected at public drop-off sites which are primarily located at permitted solid waste & recycling facilities as well as carpet retailers and flooring installers.
- **2.** Private collection, including onsite pick-up service, is offered by Collector/Sorters (CSEs) and independent collectors to retailers, disposal sites, and other sites.
- **3.** PCC, including broadloom and tile, is sorted by fiber type by a CSE in preparation to sell/transfer to Processors or is sold/donated for reuse.
- **4**. Processors receive sorted PCC from CSEs for conversion into Tier 1 processed recycled material.
- **5.** Material from the sorting process and/or processing process found to be not eligible for recycling due to contamination, mixed components, non-carpet materials, etc. is reported separately.
- **6.** Both the Tier 1 processed recycled PCC as well as PCC sold/donated for reuse is classified as Recycled Output. Tier 1 processed material then continues along the recycling lifecycle via use by Tier 2 manufacturers in the manufacturing of a variety of end-user products using recycled materials.

**Note:** Please refer to the latest CARE Annual Report and Carpet Stewardship Plan for further details around each component of this process.

# Appendix B

Historical Gross Collections Reporting Process

**Broadloom (BL) & tile collections** can be reported by 3 different variations of recycling companies:



**Gross Collections** was officially calculated in Planful by summing amounts above denoted with the following symbol: ▲

**Note:** The program initially began with just Processors and then expanded to include companies acting only in a CSE capacity. To capture only the incremental collections by the CSEs not already accounted for on the Processor forms, "Reuse" and "Shipped out of the US" from the CSE forms were added to the original Gross Collections calculation on the Processor forms.

# Appendix B Graphic: Table B.1

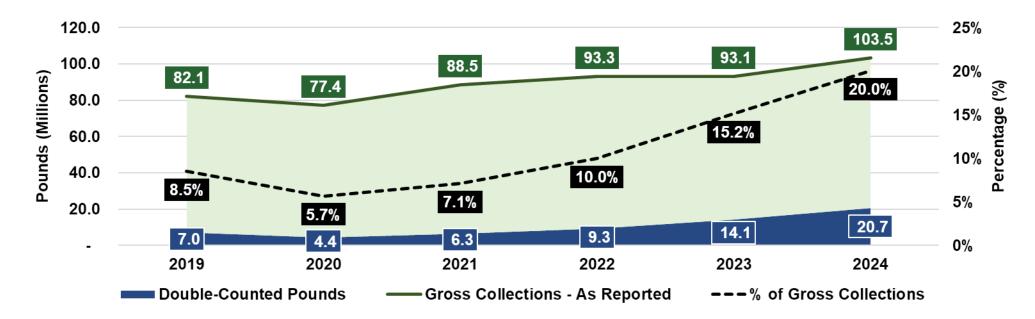
Recycler Type (Who Reports)	Planful Form Used (to Report)	Relevant Data Input by Recyclers (lbs.) (What is reported)
Collector/Sorter ("CSE") Only	CSE	Inbound: Collections of BL & Tile Outbound: Reuse ▲ Shipped in U.S. Shipped out of U.S. ▲
Processor ("PRO") Only	PRO	Inbound: -Collections of BL & Tile ▲ -BL & Tile Received from other CSEs ▲ Outbound: -Shipped in U.SShipped out of U.S.
Combo: Collector/Sorter ("CSE") & Processor ("PRO"): CSE Activities	CSE	Inbound: Collections of BL & Tile Outbound: Reuse ▲ Shipped in U.S. Shipped out of U.S. ▲ Internal for Processing
Combo: Collector/Sorter ("CSE") & Processor ("PRO"): PRO Activities	PRO	Inbound: Collections of BL & Tile ▲ BL & Tile Received from other CSEs ▲ Outbound: Shipped in U.S. Shipped out of U.S.

# **Appendix C**

Impact – Gross Collections Double-Counting Amount

Except where reported as a percentage, all amounts represent millions of pounds.

A detailed 6-year analysis of transshipped broadloom and tile resulted in the following amounts of double-counting in relation to gross collections, as reported (in millions of pounds):



Data Table C.1

Metric	2019	2020	2021	2022	2023	2024
Double-Counted Pounds	7.0	4.4	6.3	9.3	14.1	20.7
Gross Collections - As Reported	2.1	77.4	88.5	93.3	93.1	103.5
% of Gross Collections	8.5%	5.7%	7.1%	10.0%	15.2%	20.0%

# **Appendix D**

Impact – Gross Collections Metrics

## What it impacts:

- Results in a decrease in Gross Collections. (Goal #7)
- Results in an increase in the Recycling efficiency Rate calculation. (Goal #2)
- Results in a decrease in the Collection Rate. (Goal #3)
- Results in an increase in landfill as a % of gross collections (not a goal).

### What it does not impact:

- Subsidy calculations
- Any data at the recycler level (i.e., this is strictly a calculation issue during the consolidation process)
- Mill reporting (e.g., square yards sold and stewardship fee remittances)
- Any other reporting metrics not related to Gross Collections at the consolidated level
- Assessments calculated or paid

Reference Metrics	2019	2020	2021	2022	2023	2024
Identified Double-Counting	7.0	4.4	6.3	9.3	14.1	20.7
Recycled Output	58.0	52.6	67.6	73.6	66.1	74.9
Discards	303.8	251.5	242.8	217.2	188.7	194.6
Landfill	16.0	9.7	8.9	9.2	6.8	6.0

GC Metrics – As Reported	2019	2020	2021	2022	2023	2024
Gross Collections	82.1	77.4	88.5	93.3	93.1	103.5
Yield (RO/GC)	70.6%	68.0%	76.4%	79.0%	71.0%	72.4%
Collection Rate (GC/Discards)	27.0%	30.8%	36.4%	42.9%	49.3%	53.2%
Landfill as % of GC	19.4%	12.6%	10.1%	9.9%	7.3%	5.8%

GC Metrics – As Reported Less 2x Counting	2019	2020	2021	2022	2023	2024
Gross Collections	75.1	73.0	82.2	84.0	79.0	82.7
Yield (RO/GC)	77.2%	72.1%	82.3%	87.7%	83.7%	90.5%
Collection Rate (GC/Discards)	24.7%	29.0%	33.8%	38.7%	41.8%	42.5%
Landfill as % of GC	21.2%	13.3%	10.9%	11.0%	8.6%	7.2%

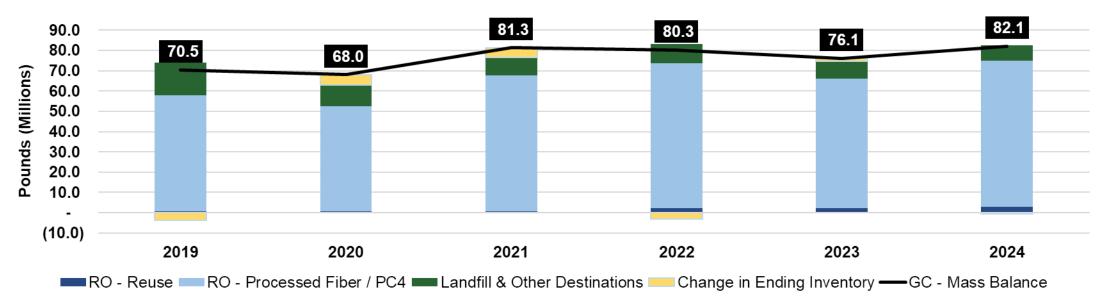
**Note 1:** Except where reported as a percentage, all amounts represent millions of pounds.

Note 2: "RO" stands for Recycled Output. "GC" stands for Gross Collections.

# Appendix E

Supplemental Mass Balance Analysis All amounts represent millions of pounds.

Mass Balance Analysis Results - What a probable amount of Gross Collections (GC) should be expected:



Data Table E.1

Metric (Millions of Pounds)	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
RO - Reuse	0.7	8.0	0.8	2.2	2.4	2.9
RO - Processed Fiber / PC4	57.3	51.9	66.8	71.5	63.7	72.0
Landfill & Other Destinations	16.1	10.3	9.0	9.7	8.4	7.7
Change in Ending Inventory	(3.6)	5.1	4.7	(3.0)	1.6	(0.5)
GC - Mass Balance	70.5	68.0	81.3	80.3	76.1	82.1

Note 1: "RO" stands for Recycled Output. "GC" stands for Gross Collections.

**Note 2:** Mass balance analyses are approximations and rely heavily on the accuracy of recycler-reported information (which may contain estimates), as well as due to timing differences between reporting of shipments/receipts between recyclers, among many other variables.

**Appendix F**Supplemental Mass Balance Analysis – Comparison
Except where reported as a percentage, all amounts represent millions of pounds.

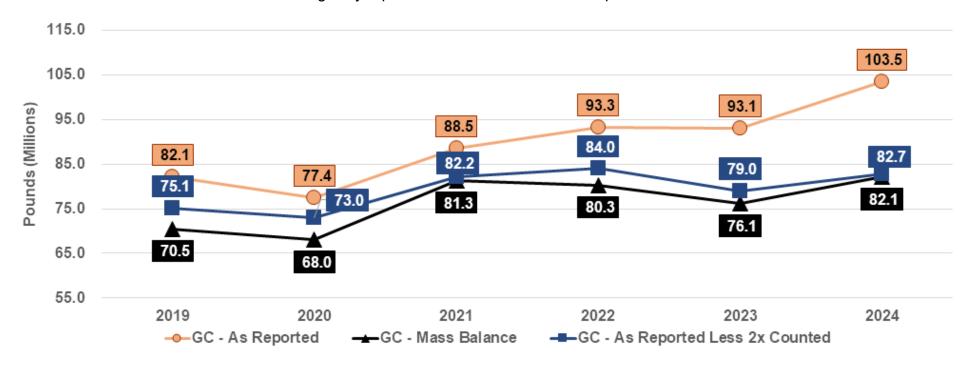
Reference Metrics	2019	2020	2021	2022	2023	2024	Q1 2024	Q2 2024	Q3 2024	Q4 2024
Identified Double-Counting	7.0	4.4	6.3	9.3	14.1	20.7	4.6	5.2	5.4	5.6
Recycled Output	58.0	52.6	67.6	73.6	66.1	74.9	18.9	18.3	19.7	18.0
Discards	303.8	251.5	242.8	217.2	188.7	194.6	45.6	50.3	53.2	45.6
Landfill	16.0	9.7	8.9	9.2	6.8	6.0	1.4	1.5	1.5	1.6
GC Metrics – As Reported	2019	2020	2021	2022	2023	2024	Q1 2024	Q2 2024	Q3 2024	Q4 2024
Gross Collections	82.1	77.4	88.5	93.3	93.1	103.5	22.5	25.5	28.5	26.9
Yield (RO/GC)	70.6%	68.0%	76.4%	79.0%	71.0%	72.4%	84.0%	71.7%	69.2%	66.7%
Collection Rate (GC/Discards)	27.0%	30.8%	36.4%	42.9%	49.3%	53.2%	49.5%	50.8%	53.6%	59.1%
Landfill as % of GC	19.4%	12.6%	10.1%	9.9%	7.3%	5.8%	6.4%	6.1%	5.3%	6.0%
GC Metrics – As Reported Less 2x Counting	2019	2020	2021	2022	2023	2024	Q1 2024	Q2 2024	Q3 2024	Q4 2024
Gross Collections	75.1	73.0	82.2	84.0	79.0	82.7	18.0	20.4	23.1	21.3
Yield (RO/GC)	77.2%	72.1%	82.3%	87.7%	83.7%	90.5%	105.3%	89.8%	85.3%	84.4%
Collection Rate (GC/Discards)	24.7%	29.0%	33.8%	38.7%	41.8%	42.5%	39.4%	40.5%	43.5%	46.7%
Landfill as % of GC	21.2%	13.3%	10.9%	11.0%	8.6%	7.2%	8.0%	7.6%	6.6%	7.5%
GC Metrics – Mass Balance	2019	2020	2021	2022	2023	2024	Q1 2024	Q2 2024	Q3 2024	Q4 2024
Gross Collections	70.5	68.0	81.3	80.3	76.1	82.1	18.7	20.3	23.1	20.0
Yield (RO/GC)	82.3%	77.4%	83.2%	91.7%	86.9%	91.2%	101.1%	90.4%	85.4%	89.7%
Collection Rate (GC/Discards)	23.2%	27.0%	33.5%	37.0%	40.3%	42.2%	41.1%	40.3%	43.4%	43.9%
Landfill as % of GC	22.6%	14.3%	11.0%	11.5%	8.9%	7.3%	7.7%	7.6%	6.6%	8.0%

**Note:** "RO" stands for Recycled Output. "GC" stands for Gross Collections.

# Appendix G

Supplemental Mass Balance Analysis – Comparison *All amounts represent millions of pounds.* 

We compared the mass balance calculations to what was originally reported as well as the amount reported less that which was identified as double-counting:



Data Table G.1

Metric	2019	2020	2021	2022	2023	2024
GC – As Reported	82.1	77.4	88.5	93.3	93.1	103.5
GC – Mass Balance	75.1	73.0	82.2	84.0	79.0	82.7
GC – As Reported Less 2x Counted	70.5	68.0	81.3	80.3	76.1	82.1

Note: "GC" stands for Gross Collections.

**Appendix H**Planful System Gross Collections Calculation Correction

		0		2	3
Who reports collections	Recycler Type >	Collector/Sorter ("CSE") Only	Collector/Sorter ("CS	SE") & Processor ("PRO")	Processor Only ("PRO")
Where is it reported	Planful Form Used >	CSE	CSE	PRO	PRO
What is reported	Relevant Data Input by Recyclers (lbs) >	Inbound: -Collections of BL & Tile  Outbound: -Reuse -Shipped in US -Shipped out of US	Inbound: -Collections of BL & Tile  Outbound: -Reuse -Shipped in US -Shipped out of US -Internal for Processing	Inbound: -Collections of BL & Tile -BL & Tile Received from other CSEs  Outbound: -Shipped in US -Shipped out of US	Inbound: -BL & Tile Received from other CSEs  Outbound: -Shipped in US -Shipped out of US
From	Counted Towards Gross Collections >	Outbound: -Reuse -Shipped out of US	Outbound: -Reuse -Shipped out of US	Inbound: -Collections of BL & Tile -BL & Tile Received from other CSEs	Inbound: -BL & Tile Received from other CSEs
То	Counted Towards Gross Collections >	Inbound: -Collections of BL & Tile	Inbound: -Collections of BL & Tile	Inbound: -Receipts of BL & Tile from Non-Reporting CSEs	Inbound: -Receipts of BL & Tile from Non-Reporting CSEs

Note: "BL" stands for broadloom.

# Appendix H Graphic: Table H.1

Recycler Type (Who Reports)	Planful Form Used (to Report	Relevant Data Input by Recyclers (lbs.) (What is Reported)	Counted Towards Gross Collections (pre-correction)	Counted Towards Gross Collections (post-correction)
Collector/Sorter ("CSE") Only	CSE	Inbound: Collections of BL & Tile. Outbound: Reuse, Shipped in U.S., Shipped out of U.S.	Outbound: Reuse, Shipped out of U.S.	Inbound: Collections of BL & Tile
Processor ("PRO") Only	PRO	Inbound: BL & Tile Received from other CSEs. Outbound: Shipped in U.S., Shipped out of U.S.	Inbound: BL & Tile Received from other CSEs	Inbound: Receipts of BL & Tile from Non-Reporting CSEs
Combo: Collector/Sorter ("CSE") & Processor ("PRO"):  CSE Activities	CSE	Inbound: Collections of BL & Tile. Outbound: Reuse, Shipped in U.S., Shipped out of U.S., Internal for Processing	Outbound: Reuse, Shipped out of U.S.	Inbound: Collections of BL & Tile
Combo: Collector/Sorter ("CSE") & Processor ("PRO"):  PRO Activities	PRO	Inbound: Collections of BL & Tile, BL & Tile Received from other CSEs. Outbound: Shipped in U.S., Shipped out of U.S.	Inbound: Collections of BL & Tile, BL & Tile Received from other CSEs	Inbound: Receipts of BL & Tile from Non-Reporting CSEs