

Chapter 0 Report

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Submitted by:

Carpet America Recovery Effort (CARE)

Robert Peoples, Ph.D., Executive Director
100 South Hamilton Street
Dalton, Georgia 30722



Submitted to:

California Department of Resources Recycling and Recovery

Scott Smithline, Director
1001 I Street
Sacramento, California 95814

Chapter 0 Update 9-01-19

NOTE: This is CARE's official response document to the CalRecycle Conditional Approval requirements of October 16, 2018. The original Chapter 0 included in the approved Plan is being used as the template for the responses since it includes CARE's approved path for compliance with the conditions. The format CARE will use will be to insert the current results in **bold green** after each condition outlined.

BEGIN ORIGINAL APPROVED CHAPTER 0

This "Chapter 0" has been created at the direction of CalRecycle to explicitly address all conditions outlined in CalRecycle's October 16, 2018, Request for Approval document (RFA) conditionally approving this CARE Carpet Stewardship Plan. Each condition of the RFA is reproduced below in its original format and highlighted in gray for easy reference. CARE responses immediately follow each item and are *italicized*. This Chapter 0 also incorporates responses to Advisory Committee recommendations resulting from their November 27th meeting.

Concepts addressed in this Chapter 0 are discussed in further detail throughout the Plan. In the event of any conflict between the information contained in Chapter 0 and the remainder of the Plan, Chapter 0 will control. By agreement with CalRecycle, Chapter 0 has been inserted in the front of the Plan for easy access and to simplify the resubmission process. All page numbers for this new chapter are preceded by a "0" to signify Chapter 0. The Table of Contents, page numbers, and references remain unchanged in the original Plan as submitted on August 17, 2018.

At CalRecycle's request, a revised version of Attachment 9 has been inserted in this version of the 5-Year Plan. The basic content of Attachment 9 has not changed. However, at the request of CalRecycle more detailed explanations of the models were added for clarity. Essentially Attachment 9 was updated to provide further descriptive narrative about the Economic Model, Financial Model, and Conversion Cost Model. Additionally, included in Attachment 9B, under the description of the Economic Model, two screenshot examples have been provided, which show a summary view of all 5 years of the Plan as well as a more detailed example view for the last three months of 2019 and year-end.

I. Include commitments to accomplish all of the following and describe how it will fulfill these commitments by 9/1/19

- a. Conduct and provide to CalRecycle an independent, detailed economic analysis to validate the Subsidy Justification and Conversion Cost Models that justifies the assessment based on actual costs of program participants, (and provide an aggregated version of the analysis to be included into the Plan). This must include a summary of the range of costs for collecting, processing, and recycling different materials, along with other programmatic expenditures, that is sufficient to estimate how much overall funding and therefore what assessment level is needed to achieve the goal of a 24 percent recycling rate by January 1, 2020 and 26 percent by 2022; and**

CARE has actively engaged a number of knowledgeable stakeholders in the development of the existing models, which continue to evolve. CARE created a Modeling Team to focus on this on-going work. As stated in the Plan, these models are complex and require an intimate working knowledge in order to understand their use and output. Ongoing efforts continue on the refinement of the models, which have been discussed with CalRecycle on several occasions.

As part of our ongoing efforts to develop these complex models, CARE will hire an independent firm to conduct an analysis of CARE's Conversion Cost Model (CCM) and Subsidy Justification Model (SJM) to validate accuracy including the costs of collecting/sorting, processing, and recycling post-consumer carpet (PCC). A statistical analysis will be included as part of the independent work. Finally, the independent firm will evaluate the sufficiency of the assessment to meet or exceed the 2020 24% recycling goal. By the time this analysis is complete and submitted, it likely will be unable to inform an analysis of the sufficiency of the assessment to meet or exceed the 2020 24% recycling goal. However, the analysis will help guide CARE's decision-making about assessment-setting for 2020 and beyond.

CARE will work with CalRecycle during the analysis process to provide a sufficient level of detail while protecting the confidential business information of the recycling community participants. The firm will be selected via a Request for Proposals (RFP) process to be completed by the end of Q1 2019, with a report delivered to CalRecycle no later than September 1, 2019. The RFP will include a specific call-out for conflicts of interest and the protection of all confidential business information (CBI) provided by the recycling community. Finally, CARE will formalize its existing internal controls for handling CBI.

As discussed with CalRecycle, it is important to recognize no two post-consumer carpet recycling processing or manufacturing operations are alike. Variations are dramatic due to fundamentally different approaches to disassembly/deconstruction, purity requirements of market outlets targeted, and the myriad of product applications. The unique market dynamics, complexity, and variability of post-consumer carpet recycling versus other products, as well as the continuing emergence of new products and recycling processes, mean that recycling costs necessarily will remain non-uniform and dynamic. CARE's economic analyses will continue to utilize the best information available, both commercially and via recycler feedback. CARE will work to include a description of the range of costs for collecting, sorting, processing and other program expenditure costs while balancing CBI considerations.

Once these additional analyses are completed, CARE will share this information with CalRecycle and CARE will incorporate the modified information into its Plan as appropriate.

CARE issued an RFP and after consideration and reference checks, engaged Crowe, LLP (Crowe) to complete both the independent cost analysis for recycling and the independent validation of CARE's models. The process itself took much longer than anticipated for a number of reasons including: major confidentially concerns by most recyclers, need to negotiate individual NDA's, other higher priority work demanding the attention of the recyclers and in a few cases, intra-industry and stakeholder political positioning, and ultimate refusal to share information. After dialog with CalRecycle, CARE did not feel it had the authority under the current statute, regulations or member-in-good standing requirements to either demand participation or suggest future subsidies would be terminated for failure to participate. These delays cost many months of lost time. CARE did note a concern that possible/likely loss of recycler participation could result in select cases by mandating participation.

The detailed independent analysis by Crowe is documented in two separate reports (independent cost study and model validation) that are incorporated by reference into this document (reports delivered to CalRecycle).

Crowe has issued a number of recommendations associated with each report. Following is CARE's initial response to summary comments and each recommendation:

- CARE is gratified that Crowe confirmed CARE's current approach in determining that subsidy levels are reasonable. Crowe also confirmed CARE's SJM and CCM, in particular, adequately consider the variability of costs to project for subsidy coverage.
 - 1) Utilize Crowe's cost category results to establish baseline cost breakdown percentages within the CCM to project for PCC costs.
 - a. CARE will work to map and incorporate cost categories to further enhance the CCM, in collaboration with Crowe.
 - 2) Prepare and plan for likely increases to the minimum wage in California.
 - a. CARE has already incorporated wage increase considerations into the 5-year financial model in terms of staff and contractors. However, CARE recognizes and will incorporate the analysis of wage increase impacts on future subsidy considerations via use of the models.
 - 3) Develop a reporting dashboard that summarizes the results of the four primary models in order to demonstrate traceability of financial results to external stakeholders.
 - a. CARE developed and recognizes the benefit of dashboard results viewing and agrees with this recommendation. CARE consciously chose to delay dashboard development until the results of the independent models analysis was completed. Thus, enabling the development of a more efficient and robust dashboard. CARE looks forward to working with Crowe on such implementation and will work to have a first pass dashboard operational by Q3 2020
 - 4) Focus on the collection of whole carpet in order to increase the recycling rate; at a minimum, the amount of whole carpet collected must reach approximately 120 M lbs., a 29% increase over 2018 quantities.
 - a. CARE recognizes and agrees that we will need to see an increase in PCC collection, commensurate with demand, in order to achieve and exceed the 24% recycling rate.
 - b. CARE calculates based upon the following assumptions:

Based on forecasted 2019 sales of 84M yds² x 4.5lbs/yd² x 85% replacement rate x 1.015 demo/deselection rate = 326M lbs. of discards

326M lbs. x 24% = 78M lbs. of Recycled Output needed

Lbs of PCC collected requires:

78M lbs. divided 65% yield = 120 M lbs. PCC

- 5) Educate and incentivize installers to use collection networks.
 - a. CARE agrees with the Crowe recommendation and the results of our Convenient Collection Study that installers play a key role in the ability of the program to grow collections. CARE has a number of activities underway pertaining to installers, such as: retailer outreach for their related installers, existing on-line videos in English and Spanish, educating installers through in-person outreach via supply house tablings and deployment of a new apprentice/journey level installers training program in conjunction with flooring union members – as required by AB 1158.
 - b. The recommendation also speaks to installer incentives. This is not a novel idea and CARE will revisit possibilities for such incentives. Concerns do exist for the large number of installers (approximately 5,000 statewide) and the potential for fraud along with logistics concerns.
- 6) Focus on assisting Processors and Manufacturers to expand their capacity.
 - a. CARE agrees with this recommendation and is aggressively working with recyclers via our ongoing consulting, technical assistance, products and market development activities including our new procurement (Ecomedes) and DoubleGreen™ initiatives, academic projects to better understand and guide expanded options that involve in-/on-ground applications and the well-established robust grants program.
- 7) Expand the definition of “highest recyclability” and incentivize recycling where it is most needed; this could result in higher subsidies for CSEs and non-nylon carpet. Building on the SJM, CCM, CARE’s ongoing work and this cost analysis, consider where increases in subsidies (or shifting subsidies) will be most effective in supporting higher PCC recycling rates over time. Building on the assumptions in CARE’s Financial Model, the program could support a 10% increase in subsidies starting in 2020 and still maintain a \$5 million fund balance at the end of 2022. This indicates that the current \$0.35 assessment is

adequate to support the program over the next several years.

- a. CARE is in agreement with this recommendation as it is consistent with current efforts to refine the definition of HR to recognize efforts that close the loop for any polymer for the production of basic building blocks derived from post-consumer carpet and which replaces virgin chemical building blocks in those applications. Subsidies associated with HR in the future may differ based on economic considerations. The review of HR is under active discussion at this time.

It should be noted there remain serious confidentiality concerns due to the small universe of participants in each segment of the value chain and the implications of geographic distinctions. As a result, Crowe was unable to provide quantitative information and geographically specific financial details given the very limited number of recyclers available and willingness to participate in the survey. However, while the confidentiality constraints and NDA provisions prevented Crowe from providing numerical results for CSEs, Processors, and Manufacturers, Crowe was able to present relative costs and cost ranges. Following are the sections in the Crowe study reflecting cost ranges across the following sectors: Drop-off Sites – Section 3; CSEs/Processors/Manufacturers – Section 4.

From a CSE or Drop-off Site perspective, there were no discernable differences noted in the Crowe report relating to the cost of handling different types of PCC materials or fiber types. In a post-report follow-up email communication with Crowe for additional clarification, the following statement was noted, “For PCC, yes, the differences would be in the PCC revenue by fiber type – N66 is worth more, for example, but cost to handle are basically the same across fiber types, and the differential between costs and revenue is what would potentially drive the incentive (subsidy) needed. However, revenue was not part of this analysis.”

As stated previously, with regard to Processors and Manufacturers, due to the very small pool of participants and distinctly different types of processing platforms and manufacturing processes, actual price ranges were not possible to present without compromising CBI.

Crowe further states in the report (page 5-6) “While we have documented significant differences in average wages, rents and utility costs between regions, within the current population of recyclers, other factors, such as throughput, processing methods and manufactured end-products outweighed any potential regional differences.”

CARE has issued a formal Communications Policy, including a legal review, effective August 2019 that addresses CBI and CARE sensitive information.

- b. Update the Subsidy Justification Model and the Conversion Cost Model by 9/1/19, and every six months thereafter; review changes to the models with CalRecycle staff, and present recommended changes to subsidies to CalRecycle for approval; and**

CARE commits to update the CCM and SJM by September 1, 2019, and semiannually thereafter; review any recommended changes to the models with CalRecycle; and present any recommended changes to subsidies to CalRecycle for approval. Any such updates will take into account the information in Item I.a above.

CARE has completed the review and updated all models. At this time, based upon Crowe’s analysis and CARE’s recent update using current market conditions, CARE does not see justification to make immediate changes to the current subsidies. However, CARE is currently in the process of evaluating pilot incentive subsidies to increase collection in support of expanding processor needs and additional subsidy or incentive ideas to ensure accomplishing the 24 and 26% diversion goals.

CARE is very aware that the ongoing drop in carpet sales could impact funds to support the program going forward. Currently financial analysis indicates that the excess funds in the account will adequately offset revenue drops from sales. Carpet sales, assessment revenues, subsidy and program expenses are examined on a monthly basis and should the forecast analysis suggest otherwise, CARE will take appropriate steps to address any funding concerns. Thus, unless an explicit or urgent need for subsidy changes is denoted, CARE, given the 12-month notification requirement for subsidy reductions, prefers to evaluate pilot subsidy approaches first.

No explicit changes in any of the models were made in terms of the mechanics, however, current market information was used to

conduct the status analysis. A separate report (transmitted to CalRecycle) has been created by the Modeling Team and is incorporated by reference into this document. Initially CARE did not wish to implement significant systemic model changes until feedback from the Crowe analysis was completed. Initial review of the Crowe draft report on model validation indicates a number of recommendations which provide good builds and are worthy of consideration (e.g. incorporating transportation more explicitly and/or level of depreciation). As there were no major flaws or concerns reported, during the next 6-month model review period the Modeling Team will re-evaluate all recommendations made in the Crowe Model Analysis report and determine if and how they may be incorporated. Following are examples of select recommendations.

1) **Economic Model (EM):** As noted, “the Economic Model is quite robust and accounts for the major economic factors and costs involved with the pricing of post-industrial fibers.”
Recommendation: Consider making the model more predictive. CARE agrees and built this model specifically to be predictive and will work to enhance that capability during the next analysis period.

2) **Cost Conversion Model (CCM):** As noted, “...the CCM does a good job of utilizing assumptions made by CARE’s carpet recycling experts. The model works well for a processor...As the model is under an iterative process, improvements are expected, and the current version provides a solid foundation.”

Recommendation: Consider breaking revenue and costs apart (e.g., separate out transportation rather than reflecting as discounted material revenue rate) expanding from an operational cash cost model by incorporating depreciation. CARE agrees with these improvement areas. Recent developments in the PET chemical recycling area are also under evaluation for modified subsidy consideration especially as it relates to densified PET feedstocks.

3) **Financial Model (FM):** As noted, “the FM meets the intended purpose of tracking the Plan budget in regard to industry trends, revenue/expense data, as well as assessment fees received. The model also provides insight to support planning over the lifespan of the Plan given current market environments.”

Recommendation: Continue to utilize and evolve the FM as a working tool for the Program (e.g., develop different scenarios to evaluate subsidies, fund balance, and assessment levels based on varying assumptions). CARE is in full agreement and has been using the FM in this capacity for the last several years looking at a very large range of scenarios.

- 4) Subsidy Justification Model: As noted, “the SJM meets the intended purpose...by providing a straightforward, logical, and transparent series of calculations that illustrate an appropriate subsidy level for each eight PCC recycling outputs.”**

Recommendations:

- 1. Conduct ongoing sensitivity analyses by varying a reasonable range of SJM inputs and assumptions to evaluate the impact on the subsidies required. CARE will, as part of the Model integration process, expand its use of the CCM and SJM in evaluating market-based scenarios in evaluating subsidy requirements to support Program success. CARE anticipates that this may be done in conjunction with Crowe as a part of our continuing Model efforts.**
- 2. Prepare separate versions of the model for processors and manufacturers. CARE fully agrees with this recommendation and will work to establish a manufacturer centric model to compliment the processor model.**
- 3. Creation of a materials flow analysis model. CARE fully agrees with this recommendation and as noted in the separate Model Team report, will work to develop such a model in 2020.**
- 4. Create a single predictive model rather than use four stand-alone models to derive the subsidy cost. At this time, while CARE agrees in principal, initial feedback from the Modeling Team suggests this is a much more complex undertaking and will require careful analysis before a commitment to undertake such a project is made. CARE currently feels that this is a lower priority objective.**

- c. Demonstrate CARE’s Subsidy Justification and Conversion Cost Models use California-specific data and account for regional cost differences. A commitment to demonstrate to what extent its economic analysis accounts for regional differences in cost data (by 9/1/19)**

During analysis of the SJM and CCM, CARE will look at California versus non-California costs along with regional costs within the state.

This review will be sensitive to protection of confidential business information. Consideration of any program recommendations for model or Plan adjustments based on regional differences within the state will be discussed with CalRecycle beginning in Q4 2019 and implemented as appropriate and agreed to by CalRecycle and CARE. At the same time, it is important to recognize that every processing and manufacturing operation is unique.

Crowe's analysis of the small pool of stakeholders reporting, of varying types (e.g., CSEs, Processors, Manufacturers), noted that at this time size, economies of scale, processing technology differences and throughput capabilities, are more important factors than where a business is located (e.g., CA vs GA, NorCal vs SoCal, etc.). Further, differences in revenue by fiber types are the biggest variables for processors and manufacturers.

Based on the August models update, and the independent model analysis work by Crowe, the current models are relevant and realistic to market conditions at this time. A number of recommendations to build on CARE's on-going efforts to enhance the model quality have been developed by Crowe and are under review by the Model Team as noted above in more detail under Item 1a. Incorporation of changes will commence with the next update cycle and based on CalRecycle feedback.

CARE's current ability is limited by the very small pool of participants, lack of authority to require participation in cost data sharing, and the fundamental differences in operations for each recycler. As a result, neither the CARE nor Crowe analysis was able to report out on the specific geographic cost details. As noted by Crowe in their independent analysis, size differential is more important than the geographic differences and are thus not expected to be a major factor in recycling costs.

CARE is fully committed to continue to work with Crowe and CalRecycle to further refine and improve the cost analysis. CARE is also committed to conduct another independent cost analysis when the number of recyclers reaches a critical mass to be defined by Crowe to insure protection of individual company confidential information.

- II. With respect to convenience, CARE must include its commitments to accomplish all of the following and describe how it will fulfill these commitments by September 1, 2019:**

a. Submit modifications to its convenience goals that are consistent with the results of the convenience study to CalRecycle; and

Upon completion of the Convenient Collection Study, CARE will review the Study and share its results with the Carpet Stewardship Program Advisory Committee and CalRecycle staff. CARE will use the Convenient Collection Study as a guide in setting any revised goals for increasing convenience and evaluate the strategic options available based on the Study and existing information. By September 1, 2019, CARE will submit to CalRecycle all proposed revisions, consistent with the Convenient Collections Study, to the Plan's convenience goal.

CARE's approach to siting facilities generally involves the following approach:

- Local government owned/operated solid waste/recycling facilities.*
- Privately owned/operated solid waste/recycling facilities.*
- In rural areas, for which there is no space, interest, or willingness to site a CARE drop-off site, work with local independent recyclers, carpet distribution centers, or carpet retailers. Any carpet retailer site hosting a CARE collection container is required to be willing to accept carpet from the public.*

Additionally, CARE recently released a rural counties incentive program of \$3,600 per site to help offset the initial increased staffing costs related to setting up, fine-tuning, and implementing a new program. Thus far, response to this incentive program has been well received.

CARE maintains that the private collection network is a critical component in evaluating the convenience of carpet collection. While the convenience of that type of collection may be exclusive to the larger carpet retailers and their installers, it is believed to be capturing a significant portion of residential-grade carpet tear-outs. And, CARE is currently strategizing with local haulers and Collector Sorter Entrepreneurs (CSEs) in designated focus areas for expanded carpet capture opportunities with medium-sized to smaller retailers and installer groups.

One goal of the current Convenience Study is to obtain a better understanding of the professional installation versus do-it-yourself (DIY)/Contractor volume. Such information is intended to help guide efficient and cost-effective convenient collections. Success of collection expansion requires a parallel and coordinated effort to grow the outlets for PCC, defined as products containing PCC along with markets to buy those products; both private and public-sector

commitments will be critical. Efforts in this area are detailed in the Plan.

Recognizing the unique challenges associated with commercial broadloom (low yield/yd², adhesives, tile and/or asbestos rip up contamination, loop construction, and adverse production efficiencies) CARE will create a workgroup beginning January 2020 to address unique challenges regarding commercial broadloom collections, including options for segregation from C&D waste. The workgroup will explore how changes in local and state C&D diversion goals could increase commercial broadloom collections. Upon completion of the study, anticipated by end 2020, a report will be issued with recommendations for implementation.

CARE has worked closely with Cascadia to share preliminary results and development plans with both the Advisory Committee and CalRecycle to garner valuable feedback in the development of an informed convenience standard for carpet. While survey group activity was well scheduled and executed across multiple survey sectors (6 in total), two especially important large volume and anticipated growth area sectors (Installers for Big Box Retailers and Contractors/C&D) were challenging to engage and secure quantitative responses. Based on this unforeseen challenge, CARE chose to take additional time to ensure those sectors were fairly well represented. Making that strategically difficult, but necessary, choice did not afford CARE the opportunity to garner the much desired, and valuable input from the Advisory Committee and CalRecycle on the proposed standard prior to the September 1, 2019, submission date.

Relatedly, this decision has further impact on the below noted scheduling and completion of Agreed Upon Procedures (AUPs) on California CSEs relating to Convenient Collection. CARE's initial review of the CC Study shows that while CARE has been reasonably successful in our modest, yet consistent upward growth trends for number of drop-off sites established and increasing volume of PCC collected through those drop-off sites, there is room for improvement.

Based on current drop-off site figures of 70 CARE drop-off sites in 51 Counties (as of August 28, 2019), the CC Study showed the following:

Population Base in Proximity to CARE DoS:

- **89% of CA residents are within 20 miles**
- **63% of CA residents are within 10 miles**

Retailer Base in Proximity to CARE DoS (approximately 1,900 statewide):

- 87% of retailers are within 20 miles
- 59% of retailers are within 10 miles

Time did not allow CARE to solicit invaluable input and feedback from the Carpet Advisory Committee and CalRecycle due to unexpected delays (approximately 8 months) in obtaining feedback from key stakeholder sectors to be included in the final results as of the September 1, 2019, deadline. CARE was informed by CalRecycle we were expected to offer a new/modified proposed standard to fulfil its deadline obligation. As such, CARE believes the current definition is a valid one. CARE does propose the following builds on our Convenience Standards yet notes that details for the implementation will be finalized post feedback discussion with both the Advisory Committee and CalRecycle.

- Based upon the Convenient Collection study, CARE believes that the existing plan for:
 - o siting a CARE Drop-off Site in every county (with carpet retailers) by year end 2019,
 - o ensuring that counties with population densities of 500,000 or more have at least one public DoS per population increment by year end 2021.

Coupled with the expanding private collection network will provide a fair and reasonable collection standard of access for carpet recycling.

However, CARE recognizes that in the ongoing effort to meet and exceed the 24% recycling rate, expanding processor capacity needs and offer options to those retailers/flooring professionals located in franchise cities in which CSE private collection services may not be readily accessible, CARE offers the following approaches for expanding collection and access to collection:

- Develop a proposal and work with mills to ensure that all large volume direct-ship customers (e.g., retailers, flooring contractors, property management companies, etc.), with adequate storage space, have the opportunity for convenient on-site collection of tear-out carpet. This effort will increase PCC diversion and on-site collection convenience.
- Develop a proposal and work with mills to pilot two Distribution Center (DC)/Warehouse locations for their regular retailer/contractor/installer customers to self-haul their tear-out carpet for recycling collection. These DC/Warehouse locations, for some, are regular trips for which dropping off

tear-out carpet would be convenient. This also affords their long-time customers to have a DoS option in areas in which they either may not be able to contract for private on-site carpet collection due to local solid waste franchise agreement limitations or on-site space limitations. This effort will increase PCC diversion as well as expand convenience options for mill customers.

- Continue with the development of possible collection sites located at Union Training Centers throughout the state. After the Union PCC recycling training and initial collection site has been successfully piloted, expansion of the Union Training Center PCC collection sites will take place where space allows. This effort will increase PCC diversion, especially carpet tile, as well as expand convenience options for Union installers.
- Develop a proposal and work with the more than 70 statewide Supply House locations, which installers serving small to medium retailers frequent regularly to purchase their flooring supplies (e.g., tack strips, padding, etc.), to coordinate possible collection opportunities in underserved areas. This effort will increase PCC diversion and proximity convenience for installers serving small to medium size retailers.
- Complete the siting of at least one CARE DoS in each county, of which there are only seven (7) remaining. For counties with no retailers or sparse population centers CARE will continue to work with local government to develop creative alternative collection options to fulfill this objective.
- Expand upon successful pilot work efforts with retailers in underserved counties to develop installer and/or public DoS.

By end Q1 2020 CARE will solicit feedback from both the Carpet Advisory Committee and CalRecycle on Convenient Collection standards which can readily be expanded upon.

It is also worth noting that our average rate for bringing on new drop-off sites has historically been 10 per year. However, in 2019 CARE has already brought on 18 new drop-off sites due to an expanded focus and new initiatives (Figure 0-1). In counties which currently do not have a drop-off site, adoption incentives were given to the first drop-off site established in a county to help offset start-up costs, and public drop-off sites were established at retail locations in areas in which a public waste facility was not available. As a result of these enhanced efforts, CARE can now report there are 70 active drop-off sites in 51 counties (Figure 0-2). It should be noted that the Sonoma Country site was lost when a private company with a CARE DoS sold their

business to a third-party waste hauler. CARE is working to develop a new option in Sonoma County.

Figure 0-1. Number of CARE Drop-off Sites Over Time (2012-2019 YTD)

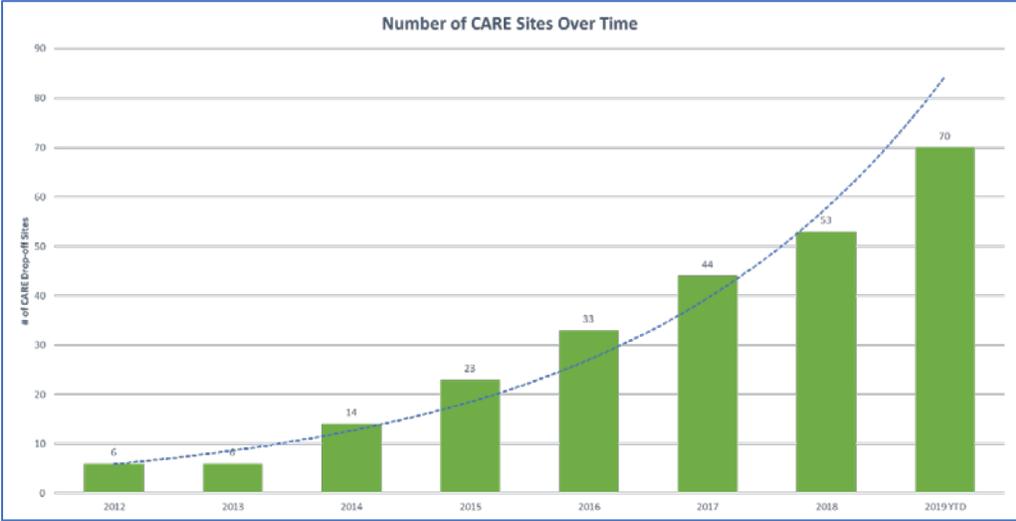
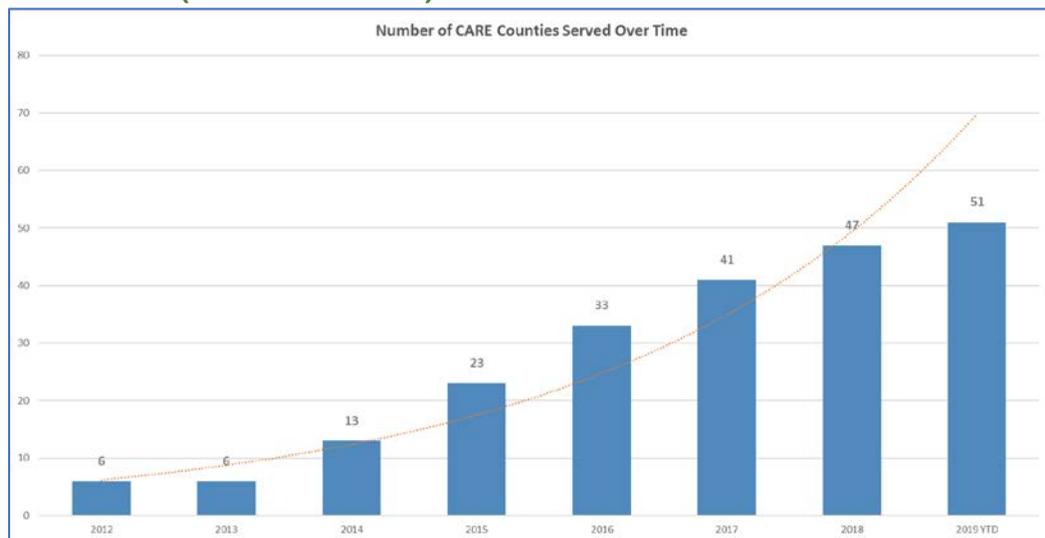


Figure 0-2. Number of Counties Served by CARE Drop-off Sites Over Time (2012-2019 YTD)



CARE has recently learned that a certain amount of level loop commercial broadloom goods are now making their way into the processing flow, especially as it relates to nylon 6.

The Cascadia Convenient Collection Study report is incorporated by reference into this document. Once we have received additional feedback from the Advisory Committee and CalRecycle, CARE will incorporate the revised convenient collection standard into the Plan.

b. Complete audits of participating collector/sorters to ensure compliance with the revised AUPs that support convenient collection (see below – refers to pg 9).

CARE will work with Aprio to refine and enhance CSE-related Agreed Upon Procedures (AUPs) to further strengthen analysis to ensure compliance, support of convenient collection as informed by the Convenient Collection study and help prevent fraud. Upon completion of the Convenient Collection Study, CARE will engage the CSE community to clarify their role in support of convenient collections.

There are currently four California-based CSEs registered with and eligible for subsidies through CARE. Once the revised AUPs are developed, and with appropriate notification to CSEs, CARE will complete audits of the CSEs by September 1, 2019, and on the normal rotating basis thereafter. Details of audit selection and

frequency will be included in the revised AUP protocol but is considered confidential to further aid AUP effectiveness.

CARE has revised the CSE AUP sans the final direction on revised Convenient Collection definition by agreement with CalRecycle. AUP changes thus far are shown in the appendix (yellow highlights). Several AUP's are currently underway or scheduled due to the prolonged effort to complete the study and inform Convenient Collections. Expected completion for all CA-based CSEs is expected by end 2019. An 18-month window was considered reasonable for prior AUPs so as not to over burden the CSE community. However, this time window does not apply if there are any concerns or issues that surface, thus AUPs on a shorter schedule are considered if anomalies or red flags surface.

As a primer, CARE has confirmed via telephone survey that existing CSEs are currently charging carpet recycling collection and service fees that are approximately 20-25% less than related solid waste collection fees. Based upon the Convenient Collection study, survey respondents noted that they would be inclined to recycle carpet if the rates were between 10-30% less than disposal costs.

The initial ADD to AUPs: Request data from CSEs on the related PCC recycling collection service costs as compared to disposal, and tip fees charged based on container sizes. Compare that data to the feedback received from the CC rate feedback and determine if expectation is being met.

III. With respect to incentivizing markets for products made from postconsumer carpet, CARE must include its commitment to accomplish the following and describe how it will fulfill this commitment by September 1, 2019:

a. Establish a minimum weight of postconsumer carpet content a product must contain, on an annual basis, to be considered as a product made from postconsumer carpet.

CARE will work with existing and new manufacturers of products made from PCC to establish an agreed-upon minimum weight of PCC that a product must contain and total content on an annual basis, to be considered as a product made from postconsumer carpet and thus eligible for subsidies. CARE will survey manufacturers to solicit threshold commitments for use of PCC to estimate consumption. CARE will present the proposed standard to CalRecycle for review on or before September 1, 2019. CARE then will issue guidelines and

establish AUP protocols for verification and tracking for implementation on or before January 1, 2020.

A survey of 24 companies (20 responses) receiving CARE manufacturer subsidies was completed and the following proposed requirements are outlined for consideration by CalRecycle. Once agreed upon, CARE will issue the guidelines and draft AUP modifications for manufacturer consistency. AUP revisions will be completed and incorporated into AUP reviews no later than January 1, 2020. These guidelines will evolve as additional products come on line and market growth drives volumes.

Proposed Requirements for Minimum Content and Annual Weight:

While CARE supports establishing a 10% PCC recycled content goal by 2025, maintaining currently established end market uses is critical for ongoing recycling rate growth and overall market stability. Minimum weight of products begins at 3% by content and an annual minimum of 25,000 pounds. The integration of multiple products of lower weight provides a strong foundation for building broader market impact. CARE expects to slowly increase over time the minimum weight content to 10% and 100,000 annually to qualify as a PCC content product. All PCC content must be sourced from California.

Double Green™ product certification has been recently approved by the Patent and Trademark Office (PTO). This certification process requires a minimum 10% PCC content plus minimum 10% other post-consumer content. As the program gains traction CARE intends to also build a CA Gold level of certification which will require the minimum 10% PCC content to be sourced from California.

- IV. With respect to source reduction, CARE must include its commitment to accomplish the following and describe how it will fulfill this commitment by September 1, 2019:**
 - a. Develop AUPs for reuse. The AUPs must describe the documentation, processes, and procedures that must be kept and followed by reuse incentive recipients. The AUPs should also ensure that expansion of the reuse market is not adversely impacted by reused carpet not meeting the performance expectations.**

CARE will work with Aprio and solicit input from CSEs to develop and revise AUPs specifically as they pertain to carpet reuse for both tile and broadloom. The AUPs will include a provision specifically on performance standards and expectations for reuse. CARE will issue a Reuse Guideline, to include a discussion of performance expectations for reused PCC, no later than September 1, 2019. CARE will review the revised AUP procedures with CalRecycle before being finalized and submitted to CalRecycle by September 1, 2019.

CARE does already have a reuse reporting requirement that CSEs maintain a log and report, via CARE's monthly reporting forms, end users that have received carpet for reuse. End user reporting currently includes name, address and/or telephone number. The greatest majority of reuse volume is through carpet tiles. Broadloom carpet, unless it is fairly newly installed and removed in larger pieces it is not generally found coming into CSEs in a reusable condition. Most often, CSEs find that carpet tear outs are received in smaller widths which are convenient for safe handling purposes. However, piecing together smaller pieces do not always lend themselves for standard reuse applications.

With regard to reuse market expansion, and specifically noted concerns regarding reused carpet not meeting the performance expectations, CARE has developed draft Reuse Guidelines which will be made available after further review and potential improvement via feedback from the Advisory Committee and CalRecycle.

Following are CARE's clarified AUPs for reuse:

- **Review logs documenting reuse customers who have received carpet for reuse purposes. Logs should include: Name/Company, telephone and number of pounds accepted for reuse purposes.**
- **Reuse Guidelines, specifically noting carpet quality and performance "grading" guidelines, will be presented to CSE for signature with the next contract cycle beginning January 2020.**

On a randomized basis, calls may be made to recipients of carpet designated for reuse. CARE and its auditors reserve the right to contact reuse customers.

CARE will facilitate promotion of access to carpet reuse opportunities through their website. Through this means CARE will provide an obvious reporting link for recipients of carpet for reuse to provide feedback on any quality or performance concerns.

As noted with other AUP related areas in Chapter 0, AUPs are generally conducted on an 18-month rotational schedule unless something has been red flagged from either monthly reporting, staff site visits or other indications. Thus, these initial reuse AUP confirmations and clarifications will be incorporated into the next round of AUPs scheduled for completion by the end of 2019.

V. CARE must also complete and include all of the following:

- a. Expanded and implementable collection procedures in CARE's AUPs for collector/sorters to support Program convenience, including but not limited to, requirements that all carpet types must be accepted and carpet is transported to a processor participating in CARE's Program and not directly to a landfill;**

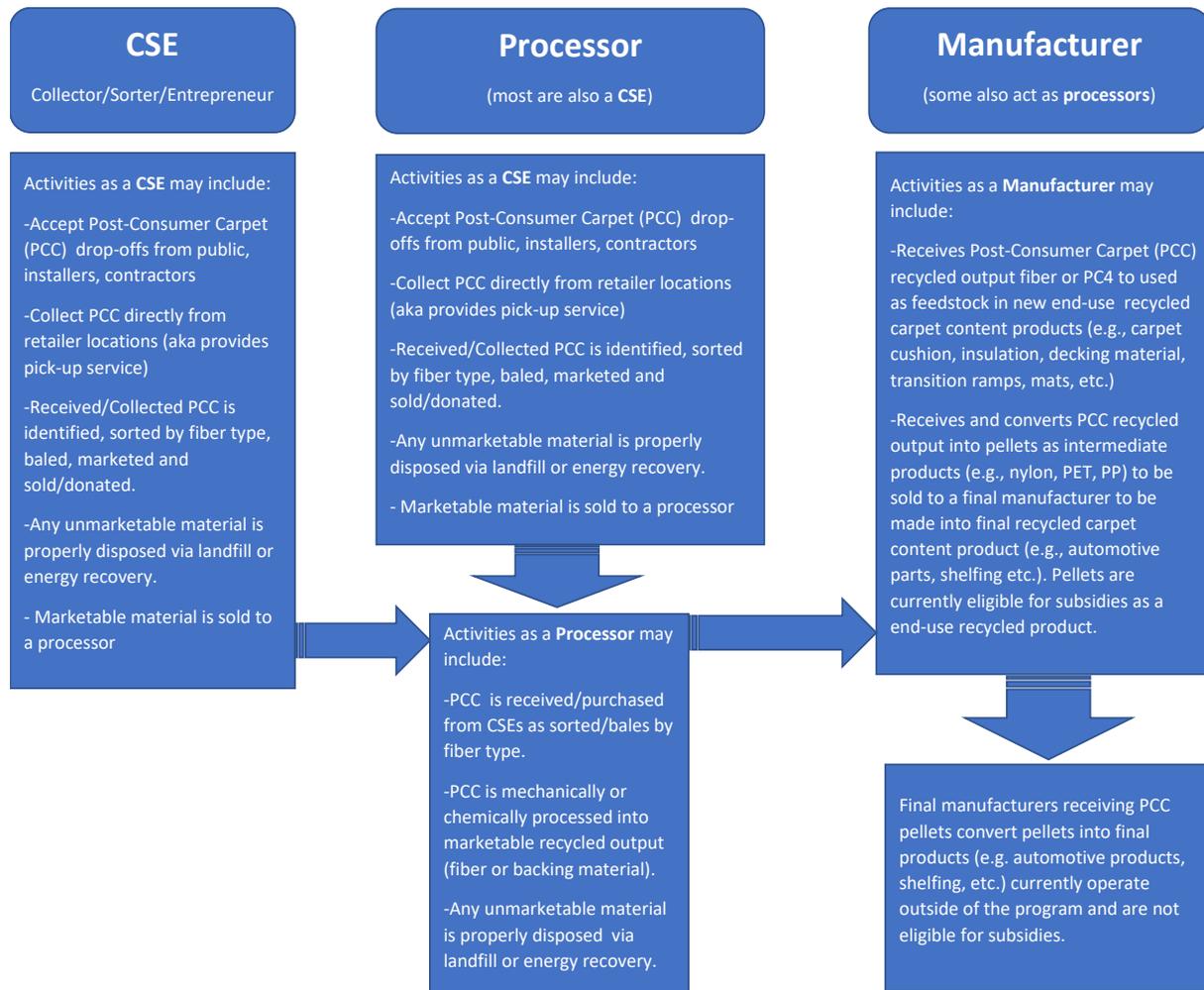
CARE will issue an outline of the collection protocol used by CSEs to facilitate a better understanding by CalRecycle. The protocol will explicitly state all polymer face fiber types must be accepted and sorted. Marketable (i.e., fit to be offered for sale in a market and wanted by purchasers) PCC will be sold and shipped to a processor for recycling or may be placed in inventory for future sale. Any PCC or other materials received that are not marketable and/or are waste material (small PCC pieces, contaminated PCC, or non-carpet materials) may be sent to a landfill. An outline of the current material flows is included below (Figure 0-3). A more detailed description of the AUP is included at the end of this Chapter 0 and a revised detailed AUP protocol will be issued by June 30, 2019.

Any PCC collected at a CARE public drop-off site will be sent directly to a CSE for sorting by fiber type, marketing, and/or disposition. In rare instances, CARE is aware that whole loads may have been diverted due to severe contamination/infestation, and this would certainly be an exception. CARE will include such exception reporting in future AUPs.

All PCC flows handled by CARE drop-off sites or private collection networks are reported monthly in detail and subject to AUP reviews. In no routine case would a load of PCC be routed directly to a landfill; rather, it would be routed to a CSE for further sortation and disposition. Any exceptions, as noted above, would require documentation.

The following table summarizes PCC flows across CSEs, Processors, and Manufacturers:

Figure 0-3. Post-Consumer Carpet Flows Across CSEs, Processors, and Manufacturers



Due to the delay in completion of the Convenience Study and as a result program convenience has not yet been reviewed with CalRecycle, the initial updates have been included in the AUPs and expanded upon once that added Convenient Collection feedback from the Advisory Committee and CalRecycle is complete.

CSE AUP protocol currently includes testing for the acceptance of all material types and loads and testing for exceptions (no loads directly sent to landfill without justification) and documentation once any changes in the protocol has been implemented. Appendix X includes a copy of the August revised current CSE AUP. Changes are highlighted in yellow for easy tracking. It should be noted CARE does not publish the full formal

AUP for security reasons (we do not want to disclose all techniques implemented to ensure compliance and avoid gaming the system).

The next (2020-2022) CSE contract will be modified to reflect all changes in terms of requirements and AUP modifications they must adhere to.

b. A proposed timeline for auditing collector/sorters to ensure compliance with the revised AUPs; and

As outlined above, once revised AUPs are issued, CSE audits will be completed no later than September 1, 2019 and periodically thereafter.

See above statement on timing and delays. Implementation will commence upon review and agreement with CalRecycle on any changes to the convenience definition. All CSE AUPs should be completed by the end of Q1 2020 per our AUP cycle schedule.

c. Clarifications and corrections to the revised Plan as specified in Attachment 5. [See attachment for 10 items for clarification & correction in the Plan. Added to the end of Chapter 0 on the following pages.]

All items specified in Attachment 5 have been addressed in Plan version dated December 2018. Please see item #4 below for a direct response.

All items specified in Attachment 5 were corrected with the submission of the final approved Plan and were document in the Plan 0 document as copied below.

THIS IS THE END OF SEPTEMBER 1, 2019 REPORTING ON CHAPTER 0 REQUIREMENTS

VI. Attachment 5 – Corrections

All corrections listed in Attachment 5 of the RFA have been completed or addressed and are included in the revised Plan. Attachment 5 is reproduced below for reference.

Attachment 5. Required Clarifications and Corrections to California Carpet Stewardship Plan 2018-2022

1. Page 10 states “During this period should any updates be required, they will be made through an Addendum process with CalRecycle.” This sentence must be removed, as a carpet stewardship plan cannot dictate department processes.
2. Paragraph that begins at the bottom of page 64 and ends at the top of page 65 discusses recycling of PC4 as source reduction. Recycling is not source reduction, so this paragraph should be removed. Similarly, discussion of “education and outreach to installers” on page 66 to facilitate recycling is not source reduction and should be removed or clarified how this is, in fact, source reduction.
3. Table 7. Subsidy Justification Model on page 123 states that the formula used to determine the values in column J are derived using the formula J-H. Please correct the formula to I-H. In column I, the header should refer to Table 8 rather than Table 9, and the row addressing PET fiber, should be corrected to indicate the subsidy is \$0.10.
4. Table 8. Subsidies for Processing Residential and Commercial Broadloom on page 125 lists subsidies for residential and commercial broadloom carpets. Although nylon 66 and nylon 6 commercial broadloom did not score highly for highest recyclability in table 6 on page 116, it appears that those materials are eligible to receive the highest recyclability incentive of \$0.05 per pound. Please add a brief explanation to clarify why. **CARE RESPONSE:** *While commercial broadloom scored low on the HR index, CARE notes HR is primarily driven by polymer type and market desirability. Since there is a desire to facilitate commercial broadloom recycling, and the preponderance of commercial broadloom is nylon, the HR incentive was also applied to this construction type. This subsidy is considered as an incentive to further drive growth in recycling of this important product category.*
5. Page 150 shows a pie graph titled “Output Impact of Lbs. Funded- 2A Capital.” Next to the graph says, “Hatched area = HR 68%,” however there is no hatched area shown and the addition of HR sections does not appear to add up to 68%. Please correct graph to show which areas should be hatched and ensure calculations are accurate.

6. Page 151 next to the pie graph titled “Original Grant \$ - Cycle 2B Funded” says “Hatched area = HR 28%, however there does not appear to be any hatched area on the graph. Please correct the graph to show which areas should be hatched.
7. Page 171 states that “the assessment has climbed from \$0.15 per square yard to \$0.25 per square yard,” although the assessment was never at \$0.15.
8. Page 178 discusses “Elements B and C, above in this list...,” as well as “element E.” Please clarify to what “elements” CARE is referring.
9. The incorrect subsidy amounts for Non-Nylon Tier 2 PET/PTT are used in row 52 of Table 13 and on pages 196 and 278. Please correct subsidy levels to \$0.23, \$0.22, and \$0.21.
10. On September 24, 2018, CARE submitted an updated Attachment 9 to CalRecycle. Please include the updated Attachment 9 in the corrected Plan.

Revised CSE Agreed Upon Procedure (AUP)

The following procedures have been updated effective August 2019 to reflect an enhanced protocol. The next update to the CSE AUPs will occur once CalRecycle and CARE agree on the new definition of Convenient Collection.



Agreed Upon Procedures – CSE's

General Procedures

- a. Obtain the Request for Payment submitted by the Company from CARE.
- b. Verify the Request for Payment was signed by an Officer of the business.
- c. Confirm with CARE representatives that the Request for Payment and supporting schedules were submitted prior to submission deadline.
- d. Confirm with CARE representatives the Company is a member of CARE in good standing.
- e. Confirm documentation in place in support of Requests for Payment on record with the collector identified to ensure compliance with the three-year documentation retention period requirement.
- f. Inquire of the Company regarding any reported significant deficiencies or material weaknesses reported by the Company's independent accountant.
- g. Perform a site visit and observe the Company's operations corroborating inquiry responses provided by CSE to observations.

Collection Procedures

- h. Document the Company's policy for tracking collections and estimating weights on inbound material, if applicable.
- i. Document CSE tip fees are lower than local LF tipping fees relative to the location where collection occurs.
- j. Inquire as to whether the Company collects PCC from any states outside of California.

- k. During the visit, observe an employee scan sorted PCC to confirm its fiber type is properly reported. Additionally, weigh the sorted PCC to determine the weight is properly reported and tracked.
- l. During the site visit observe that the Company is collecting all fiber types, evidencing that PCC loads are not being sent to a landfill prior to delivery at the CSE's operating location. In the event a redirected LF load is observed, ensure proper documentation to justify (rodents, wet, excessive non-PCC materials, etc.)
- m. Obtain a listing of all PCC collected from CARE collection sites during the quarter. Ensure the listing includes the date collected and the location collected from.
- n. For PCC received from CARE collection sites during the quarter, determine the fee structure and the total amount billed to CARE.

Outgoing Shipments

- o. Document the Company's method for calculating outbound PCC eligible for funding. Determine if the Company's method for calculating outbound shipments is consistently applied as a basis for reporting to CARE. Recalculate the Company's shipped output eligible for funding.
- p. Select a sample of sales invoices from the Company invoice register to verify the shipment of sorted output containing California based PCC during the quarter. For each of the selected invoices, obtain a copy of the corresponding invoice and signed bill of lading.
- q. Confirm the sorted output during the quarter directly with selected customers.
- r. Cross reference eligible output reported for funding, to submission from processors submitted to CARE as part of AB2398 program.
- s. Inquire as to whether there were any transactions with related parties.

Reporting Procedures

- t. Recalculate and test the mathematical accuracy of the requests for payment.
- u. Report exceptions noted to CARE.
- v. Provide a summary table of findings to CARE for exceptions noted during the performance of the procedures. This table includes the requested amount, adjustments to the requested amount, the magnitude of the adjustments as a percentage, and disclose other exceptions noted that have an undetermined impact on the amounts requested by the recyclers.