



CARPET AMERICA RECOVERY EFFORTSM

Developing market-based solutions for the recycling & reuse of post-consumer carpet

February 20, 2017

Scott Smithline, Director
CalRecycle
1001 I St
Sacramento, CA 95814

Re: Response to Findings in Connection with CARE's Revised Carpet Stewardship Plan 2017-2021

Mr. Smithline:

This letter responds to the findings issued by CalRecycle in its December 2016 report (the "RFA") made in connection with CARE's Carpet Stewardship Plan 2017-2021 ("Plan"). This letter addresses some of the concerns raised in the seven findings in the RFA, whereas the revised Plan remains forward-looking and, therefore, does not specifically refer to the RFA. Our responses below are meant to be constructive and to build a bridge to an approved Plan that will provide flexibility for CARE to modify the program in response to market feedback and new developments over the next five years. The table below provides an easy reference to changes in the Plan that address the RFA's findings.

While this program has been in place for 5 ½ years, the first few years provided a steep learning period and, in more recent years, the program has been affected by major, adverse market developments within the State, and in the global recycling community and energy sectors. These developments have clearly disrupted CARE's ability to grow collections, expand in-state capacity and generate recycled output. Significant in-state capacity increases did occur in 2016, but those have been more than offset by the reductions of two major operations. Those reductions were driven by technical and economic factors that are well beyond the scope of CARE's control.

Another challenge is that when the program began in July 2011, aggregate carpet sales in California totaled approximately 100 million square yards. Since then, sales have steadily eroded, down to approximately 94 million square yards in 2016. Market trends indicate this slide will continue. The reduction in California carpet sales directly affects the revenue available to implement the Plan. Ongoing increases in the assessment, however, are not the solution as they may cause further reductions in carpet sales, therefore harming CARE's successful implementation of the Plan over the long term.

Despite these macroeconomic challenges, the Plan has been revised to illustrate a number of new developments that, while still early, are beginning to make significant contributions toward the diversion of post-consumer carpet ("PCC") from California landfills. Among them are the DoubleGreen™ branding initiative, cooperative efforts between tire and mattress recyclers, along with healthy soils R&D, new in-state capacity, and growth in the use of calcium carbonate. The latter development is significant because it offers a major way to reuse and recycle carpet backing, which previously had not been done before. These are powerful alliances that can make a difference, but will take time to nurture during the early stages of implementation. We are also in discussions with another, new to CARE, California-based company regarding additional new outlets for PCC materials.



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A matrix is provided below that identifies where each finding is addressed in the revised Plan and, in some cases, in multiple locations. The following responses address each finding in more detail.

1. **FINDING 1:** *The Plan does not provide enough information about the effectiveness of financial incentives and other Program elements to evaluate whether the recycled output goals (24 percent by 2020 and 26 percent by 2021) would actually constitute continuous meaningful improvement, nor how the Plan would achieve these goals.*

- (a) Finding 1 urged CARE to address **installer subsidies, funding for discounted drop-off fees, or subsidies for secondary manufacturers to use nylon PCC.**

The Stewardship Planning Committee (SPC) took into consideration many ideas for influencing the supply chain, including the idea of installer incentives, payment of drop-off site tip fees, etc. It would be impossible to cover all of the options discussed over hundreds of hours of meetings, analysis and brainstorming. The fact that they are not explicitly discussed or proposed does not constitute a basis for rejecting the Plan.

For example, with regard to discounted drop-off fees, this subsidy would likely increase the diversion of PCC, but it would ultimately hinder CARE's implementation of other incentives. Looking at total collections from 2016 (Q1-Q3), CARE collections represented approximately 3.5% of total collections, resulting in 3 million pounds (1,500 tons). A discounted local tip fee of \$48 per ton would have cost CARE approximately \$720,000 during 2016 (Q1-Q3). On a full-year basis, and assuming collections will grow further in 2017, implementation of a tip fee payment by CARE would equate to an additional 1 cent per pound assessment. At the current stage of implementation, however, the Plan is focusing program revenue towards new developments to reuse and recycle PCC.

- (b) Finding 1 stated that **"preserving market share** is not relevant to CalRecycle's evaluation of the adequacy of CARE's 2017 Plan."

CARE and its members disagree with this finding. Public Resources Code § 42972 clearly provides, "[t]he amount of the assessment shall not create an unfair advantage **in the marketplace.**" Public Resources Code § 42973 establishes that, in preparing the Plan itself, the amount of the assessment cannot create an unfair advantage **in the marketplace** "for one or more of the companies in the organization." CalRecycle therefore is required to consider market share via the assessment and Plan implementation, in two contexts: (1) unfair advantages that might arise within the broader flooring market, and (2) unfair advantages that might arise between companies participating under the same stewardship plan. Simply put, the broader market implications of raising the assessment must be taken into consideration.

At current sales of 94 million square yards per year, CARE must add 1.064 cents to the assessment in order to fund each \$1 million in costs for implementing the Plan. CARE is and must continue to be sensitive to the fact that, unlike other products subject to stewardship fees in California such as bottles, paint, mattresses, etc., carpet products have accepted, viable, competitively-priced and readily available alternative floor covering options, including wood, vinyl, ceramic, stone, engineered



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wood, and rugs. As foreseen by the Legislature, the assessment under AB2398 will influence California consumers' purchasing choices. If the assessment is allowed to become too high, it will negatively affect carpet sales within the competitive flooring marketplace and cost California jobs. Any future consideration of assessment increases will need careful thought to ensure that the mandate of AB2398 for a fair marketplace is maintained. With this in mind, the assessment proposed by this Plan balances the positive potential effect of greater assessment revenue to meet diversion and recycling goals, with the potential negative disruption of the marketplace.

2. **FINDING 2:** *The 2017 Plan **does not discuss how stakeholder input, especially the recommendations of the newly formed California Council on Carpet Recycling, is evaluated.***

It is critical that the revised Plan be approved so that recyclers have confidence in the security of their subsidy streams and investments in a stable climate. Thus, there was not sufficient time to review the latest changes with the Council. However, CARE commits to actively discuss all program changes in the future with the Council. A webinar was held on February 9th to share changes and to specifically discuss ideas proposed by the Council that have been incorporated into the revised Plan.

3. **FINDING 3:** *The 2017 Plan **does not sufficiently address reasonable consumer access to recycling services in critical population centers in California.***

CARE recognizes this is a major challenge; however, CARE has worked diligently and will continue its work to make convenient collection available. After a successful rural pilot program, CARE increased staffing specifically to implement an expanded collection program, with a target for adding both rural and urban locations. As the size of our operations became more sophisticated, CARE realized that a standardized model was not going to work, especially for more sophisticated and urban locations. In addition, each site has varying restrictions of space, labor and dock or ramp access. The development of each collection site requires significant staff resources to modify and individualize contracts, and to address the diverse needs of each site to ensure success.

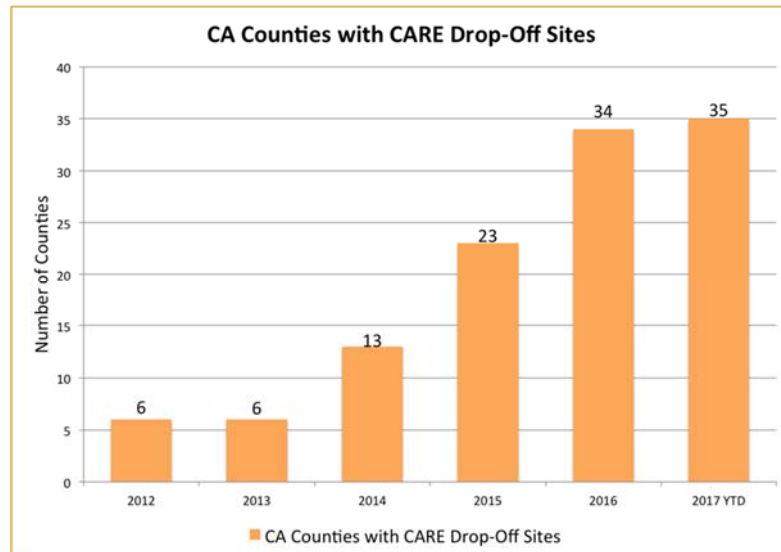
In addition to the continued expansion in 2017, which the goal of providing coverage in all 58 counties by the end of the year, CARE will conduct the convenience study referenced in the Plan. CARE is also working to ensure that our expansion compliments, and does not compete against, the private collection networks set up by collectors, sorters and processors.

The following chart shows CARE's collection expansion progress from 2012 through January 2017. As the chart shows, CARE increased its number of collection sites by 77% between 2014 and 2015. Between 2015 and 2016, CARE increased the number of sites by 48%. If CARE establishes sites in all 58 counties by 2017, this would further represent a 71% increase over 2016. This growth clearly demonstrates continuous and meaningful progress to increase collection sites, along with CARE's commitment to complete the study referenced above for achieving the convenient collection of PCC.



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4. **FINDING 4:** *CARE’s proposal to reduce subsidy guarantees to six months does not mitigate the uncertainty and high risk in investment for processors and others to establish and grow critical California infrastructure for long-term carpet recycling.*

This finding has been resolved, as CARE has reverted back to a twelve-month incentive guarantee, with the addition of a “safety valve” provision to help ensure fund solvency.

5. **FINDING 5:** *In the 2017 Plan, CARE has inappropriately redefined its primary method for measuring progress towards achieving its diversion and recyclability goals (from proportion of all discards to proportion of gross collections).*

CARE regrets this unintended development. While the “revised” metric was meant to be an addition to look at the efficiency of conversion of gross collected material to recycled output, it was not the intent to replace or redefine the original diversion definition. Refer to page 17 in the revised Plan to find the original definition of diversion incorporated.

6. **FINDING 6:** *The 2017 Plan fails to identify or evaluate the education and outreach (E&O) activities most likely to result in increased recycling and diversion.*

CARE’s E&O activities are focused on increasing awareness, adoption of desired practices, and effective communication within the carpet recycling ecosystem. Gigantic Idea Studio (Gigantic) uses marketing-based metrics and analytics to assess the effectiveness of CARE’s outreach efforts. CARE’s marketing activities are created to support program efforts around market development, leading to increased recycled output and diversion rates. In response to this finding, CARE revised the Plan to include additional outreach audiences, including installers, building owners and managers.



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The Plan does not provide specific metrics for correlating outreach activities with program goals, such as increasing recycled output. These goals are accurately quantified through CARE's reporting system. CARE's E&O activities are intended to direct information to targeted audiences identified in the Plan and, as required under AB 2398, to encourage the industry changes necessary for meeting program goals. For example, as CARE informs installers about new drop-off site in their area that accept carpet for recycling at a reduced fee, CARE expects that more carpet will be diverted from landfills to that site.

CARE's E&O strategy is designed and identified to support operational program goals. However, it is not accepted marketing practice to directly tie a particular tactic (e.g. brochure or website campaign) toward the improvement of an operational goal, such as increased recycling output.

CARE's original market research identified installers, retailers, local government and consumers as key target audiences. CARE's E&O activities have been designed to specifically reach these target audiences, with additional targets, such as commercial building operators, to come in ensuing years.

The Plan budget does not allow for a full statewide public information campaign, nor does this make sense, as carpet purchase is a discrete event with a long time interval before a subsequent purchase. Thus, CARE's strategy is to provide outreach support at places where consumers are most likely to be thinking about carpet: at retailers, drop-off sites and in contacts with installers. The Plan therefore supports a regional approach to conduct in-person outreach with a targeted group of stakeholders, coupled with digital marketing and website campaigns.

CARE regularly researches the effectiveness of E&O activities, through phone surveys to evaluate the use of outreach tools distributed to retailers (brochures, signs, etc.) and drop-off sites (signs, communication samples, flyers, etc.), and to determine other needs to be filled. For example, CARE has determined that many drop-off sites lack basic marketing skills and resources; therefore, in the coming year we will be working to provide website and advertising advice and assistance to improve public communication by our drop-off sites.

CARE E&O activities utilize classic behavior change marketing. These activities take time and present challenges to measuring their efficacy. We will continue to explore ways to get indicators of progress.

Please refer to the E&O section of the revised Plan starting on page 57 for additional details.

7. **FINDING 7:** *The 2017 Plan **does not sufficiently address increasing the recycled content in carpet itself** (as opposed to secondary products), which could significantly boost end markets for PCC material.*

Mills are independently investing and examining ways to recycle carpet to carpet. In fact, millions of dollars are spent annually on this process. A notable recent example is the Mohawk Air.O brand product launch. This program required several years to go from proposal to final launch. The same technology is under development for a nylon face fiber carpet. Continuing efforts are being employed for tile recycle by Interface, Tandus Centiva, Shaw and fiber recycle by Aquafil. The development of



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such programs, however, requires 5-10 year cycles costing tens of millions of dollars. CARE discussed this particular strategic element internally and determined that financial incentives to the mills are well beyond the scope of the financial capacity of this Plan.

Additionally, CalRecycle is aware of recent developments at the Ringgold Plant of Shaw Industries. This program was five plus years in development and cost more than \$20 million. Unfortunately, the technology was not successful at the commercial scale and had to be discontinued. While R&D continues at Shaw, it is a stark reminder of just how challenging the recycle of post-consumer carpet can be.

CARE now maintains a matrix of over 60 potential technologies and is constantly looking for new opportunities. Please refer to page 21 under Closed-Loop Recycle in the revised Plan for more information.

Conclusion

CARE believes we have a formula that is working, but we also recognize that the Plan will need constant evaluation and adjustment as the market continues to throw curveballs. We believe working collaboratively with CalRecycle and further improving our stakeholder engagements will continue to drive the continuous and meaningful improvement we have seen from 2012 through 2016, and which we expect to continue over the next five years.

Respectfully submitted,

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Finding Number	Finding	Associated Revisions
Finding 1, Part A	The Plan does not provide enough information about the effectiveness of financial incentives and other Program elements to evaluate whether the recycled output goals (24 percent by 2020 and 26 percent by 2021) would actually constitute continuous meaningful improvement, nor how the Plan would achieve these goals.	page 6-7, middle of last paragraph, sentence that starts “CARE supports the growth of California’s carpet...” page 8, first sentence following bullets, sentence that starts “Please refer to the Section...” page 13, under Goal #1, goal increased to 60%. page 14, multiple revisions in first paragraph under Goal #2. page 16, additions to first paragraph under Goal #4 starting with “Recognizing that CARE finished the year 2016 ...” page 37, third paragraph was added, paragraph starts “Subsidies are prioritized under this Plan...” page 38, middle of second paragraph, new text starts “CARE will review Program financials...” page 39, second paragraph under “Performance-based Payouts”, paragraph begins, “As part of this Plan...” page 39, first paragraph in “Subsidy Guarantee” section, 12-month guarantee reinstated and proration formula language added. page 40, in “Subsidy Caps” section, reference added to “Performance-Based Payouts” section. page 40-41, in “Proportional Payouts” section, safety valve language added. page 46, in “Grants” section, first paragraph, addition starts in the middle of the second sentence with “...with a combined \$6 million...” page 47, new second paragraph under “Research, Development, and Testing Grants” begins “In an effort to further expand...” page 53, second paragraph that begins, “The current subsidy structure...” and third paragraph. page 53, second to last paragraph that begins, “More recent developments regarding...” page 56-57, additional detail added to Table 2.



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Finding 1, Part B	There is a clear discrepancy between the two estimates of the “universe” of total discarded carpet available for recycling in California.	page 13, second full paragraph that starts, “CARE acknowledges that this formula...”
Finding 2	The 2017 Plan does not discuss how stakeholder input , especially the recommendations of the newly formed California Council on Carpet Recycling, is evaluated.	page 7, last paragraph, insertions regarding the Council and decision-making process. page 8, sentence before Table 1 referencing “Council on Carpet Recycling” section. page 25-26, building owners added to last bulleted paragraph on page, begins “Installer/Contractors.” page 39, first paragraph in “Subsidy Guarantee” section, proration formula language added. page 48, in the section “Micro-Grants for Reuse and Collection,” added “This is a Council idea...” page 53, first paragraph that begins “The SPC has taken into consideration...” page 61, building owners added to Table 3 in audience. page 70, starting with the second to last paragraph, which starts “The SPC met multiple...”, through bulleted list on page 70. page 71, last paragraph starting with “CARE will review all major program changes...”
Finding 3	The 2017 Plan does not sufficiently address reasonable consumer access to recycling services in critical population centers in California.	page 18, under Goal #6, changed wording from “may” conduct to “will” conduct a convenience study. page 29, second to last paragraph, starts with, “As part of CARE’s 2017 convenience study...” page 33-34, starts with first paragraph in Section “Convenient Collection” through bulleted point #6 on page 34. page 34, middle of paragraph that starts, “The drop-off sites...” starting with sentence that starts, “Although most carpet is installed by...”



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Finding 4	CARE's proposal to reduce subsidy guarantees to six months does not mitigate the uncertainty and high risk in investment for processors and others to establish and grow critical California infrastructure for long-term carpet recycling.	page 39, first paragraph in "Subsidy Guarantee" section, 12-month guarantee reinstated and proration formula language added.
Finding 5	In the 2017 Plan, CARE has inappropriately redefined its primary method for measuring progress towards achieving its diversion and recyclability goals (from the proportion of all discards to the proportion of gross collections).	page 17-18, in Goal #5, in formula and text, "gross collections" changed to "discards."
Finding 6	The 2017 Plan fails to identify or evaluate the education and outreach (E&O) activities most likely to result in increased recycling and diversion.	page 25-26, building owners added to last bulleted paragraph on page, begins "Installer/Contractors." page 58-60, new content from start of "Education & Outreach (E&O)" section through first paragraph under "E&O Regional Strategy" section.
Finding 7	The 2017 Plan does not sufficiently address increasing the recycled content in carpet itself (as opposed to secondary products), which could significantly boost end markets for PCC material.	page 21, last sentence in third paragraph in "Source Reduction" section, beginning with "Experience has shown that..." page 21-22, new "Closed-Loop Recycle" section. page 23, first full paragraph that starts "As noted in the closed-loop recycle..." through end of "Recycling" section.
General Revisions		in plan submittal letter, page 2.