



## Comments on the CARE 2013 AB 2398 Annual Report

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To the Carpet Team at CalRecycle and Carpet America Recovery Effort (CARE) –

XT-Green is a private investment firm presently funding the technology development/ testing and design of a world-class carpet recycling facility planned for both Northern and Southern California to be called *EarthCare Carpet Recycling*. I am the team leader for this effort.

Carpet recycling facilities have historically had low recycling rates and environmental, health and safety problems associated with the generation of hazardous dust from processing the post-consumer carpet (PCC). To resolve these issues, XT-Green has developed the first-of-its-kind high-recycling rate, low dust carpet recycling facility. This effort, over the past 12 months, required system design and testing in five countries on three continents.

XT-Green is ready to finalize the facility design, submit permit applications and begin construction of a new carpet recycling facility in California with a start-up during the first half of 2015. However, I personally cannot in good conscience advise XT-Green to move forward with the new facility (and create California green jobs) due to the following concerns with the California Carpet Stewardship Program, as administered by the Carpet America Recovery Effort (CARE), that will impact XT-Green's ability to secure adequate PCC to process at the facility:

- A. **The unlevel playing field** created by allowing estimated quantities of recycled output (RO) from exported California PCC processed in "International Facilities" to now be used as part of the determination of "continuous meaningful improvement."
- B. **Less Post-Consumer Carpet (PCC) being collected** due to the lack of CARE incentives to offset increasing costs and promote carpet collections in California which has resulted in a significant decrease in gross collections in 2013 from 2014.

Detailed comments regarding these issues and additional concerns regarding the CARE 2013 Annual Report are provided in the Attachments and organized as follows:

1. Attachment 1: Detailed Comments Regarding Problems Securing Adequate Post-Consumer Carpet (PCC) for New XT-Green California Facility.
2. Attachment 2: CARE 2013 Annual Report Problems Associated with Demonstrating Continuous Meaningful Improvement
3. Attachment 3: Back-Up Calculations

Based on the conclusions in these attached detailed comments, XT-Green respectfully requests the following from CalRecycle:

- a) **Reject the 2013 Annual Report** and direct CARE to produce a revised document that complies with AB 2398 and clearly addresses the status of the California Carpet Stewardship Program in 2013 and resolution of problems moving forward including:

- 1) Failure to meet “continuous meaningful progress” goals with both Recycled Output (RO) and the gross collections required for increased diversion.
- 2) Failure to discuss the significant event of a 30 million pound pile of waste carpet behind the Carpet Collector facility in Sacramento that was landfilled during 2013. CARE needs to take ownership that their “Carpet As Rock Substitute” (CARS) incentive helped create that pile and also helped create the unlevel playing field which contributed to the closure of *The Carpet Recyclers*.

CARE should address in the Annual Report what safeguards will be included in the California Carpet Stewardship Program to ensure that adequate due diligence procedures are in place prior to CARE initiating new AB 2398 incentives.

- 3) Failure to clearly identify the loss of 121 California green jobs due to the closure of two carpet recycling facilities in California during 2013. CARE takes credit on Table 1 in the 2013 Annual Report for the “creation” of 236 jobs since the beginning of the AB 2398 program but 121 of these jobs no longer exist.
- 4) Failure to include an evaluation of the current processing capacity California carpet recycling facilities in the Annual Report as required by AB 2398. This is especially important as a significant component of the States’ “excess capacity” was utilized in 2013 to offset the closure of 2 of the 5 facilities in California which had constituted 27% of the AB 2398 Recycled Output (RO) prior to closure.

b) **Reject the inclusion of Recycled Output (RO) generated from International Facilities** to attain “continuous meaningful progress” goals. As discussed in detail in Attachment 1, this should not be allowed because:

- 1) It creates an unlevel playing field for California carpet recyclers needing PCC to process (which is not offset by the 6 cent per pound RO incentive).
- 2) Over the long run, it will reduce the ability to meet “continuous meaningful improvement goals” due to the lower recycling rate of the International Facilities e.g. to produce 1 pound of Recycled Output (RO) requires 2 pounds of PCC in U.S. facilities while International Facilities require 4 pounds of PCC.
- 3) Twice as much waste is created in International Facilities which is sent to landfills and transformation facilities. Unless proven otherwise, it should be assumed that carpet disposal facilities overseas do not meet the “environmentally sound” requirement in the California State Hierarchy.
- 4) CARE audits the records of U.S. facilities to ensure that reported volumes of Recycled Output (RO) is totally accurate by reviewing invoices and shipping documents. CARE is proposing to just “assume” a recycling rate of 25% for International Facilities and not perform the audits required by U.S. facilities.

If CARE does decide to expand its audit program to the International Facilities it will need to be financed using AB 2398 funds paid for by the citizens of California. This would be unfortunate especially if the PCC export results in the loss of additional carpet recycling facilities and the creation of California jobs.

c) **Require CARE to provide incentives to collectors that supply collected PCC to California carpet recycling facilities.** These incentives are needed to offset the significant decline in gross collections and the rapidly increasing collection costs due to the rising percentage of low-value carpet in the waste stream.

Thank you for your consideration. Please contact me if you have any questions regarding the above comments and requests or the information provided in the detailed comments attached.

Sincerely,

*Gail Brice*

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## Attachment 1

### Detailed Comments Regarding Problems Securing Adequate Post-Consumer Carpet (PCC) for New XT-Green California Facility

As noted in the letter above, XT-Green is ready to finalize the facility design, submit permit applications and begin construction of a new carpet recycling facility in California with a start-up during the first half of 2015. However, XT-Green has major concerns relative to moving forward with the new facility (and create California green jobs) due to the following issues with the California Carpet Stewardship Program, as administered by the Carpet America Recovery Effort (CARE) that will impact XT-Green's ability to secure adequate PCC to process at the facility:

1. The **unlevel playing field** created by allowing estimated quantities of Recycled Output (RO) from exported California PCC processed in International Facilities to now be used as part of the evaluation of "continuous meaningful improvement."
2. **Less PCC being collected** due to the lack of CARE incentives to offset increasing collection costs and promote carpet collections in California which has resulted in a significant decrease in gross collections in 2013 from 2014.

The following discusses these two issues in detail:

#### 1. Unlevel Playing Field:

As Vice President of the *The Carpet Recyclers* in La Mirada, Gail Brice of XT-Green experienced first-hand what happens when CARE creates an unlevel playing field through their implementation of AB 2398. In the case of *The Carpet Recyclers* it contributed to the closure of the facility in 2013 and the loss of 76 California green jobs.

This "unlevel playing field" was due to CARE's support of a new incentive program proposed by the Carpet Collectors in Sacramento for "Carpet As Rock Substitute" or CARS which supposedly could use non-recyclable carpet (and carpet processing waste) as a raw material. This change resulted in an incentive payment of \$60 per ton for material that other companies were handling as waste at \$50 per ton, a difference of \$110 per ton. This advantage allowed the Carpet Collectors be much more competitive over companies like *The Carpet Recyclers* when it comes to being able to collect and secure PCC for its facility.

This would have been totally acceptable if the competition was fair but, CARE had not done adequate due diligence and the market for CARS actually did not yet exist. Therefore, the Carpet Collectors "stored" the non-recyclable material behind their facility, adding to it at the rate of an additional 58,000 pounds per day and continued to enjoy the competitive edge for collecting PCC.

## **Attachment 1: Detailed Comments Regarding Problems Securing Adequate Post-Consumer Carpet (PCC) for New XT-Green California Facility (Page 2 of 4)**

This finally ended in 2013 through the efforts of the County of Sacramento to close the facility when the waste pile behind the Carpet Collectors had reached 17,695 tons or 35.4 million pounds, all of which was eventually landfilled. (See comments in Attachment 2 regarding the fact that this significant event in 2013 was not mentioned in the CARE Annual Report.)

A similar “unlevel playing field” is created by allowing Recycled Output (RO) from exported PCC processed in International Facilities to be used to meet the AB 2398 “continuous meaningful improvement” requirements. The Recycled Output generated from U.S. facilities qualifies for a 6 cent/pound incentive while RO from International Facilities does not. However, this incentive payment does not make up for the following competitive advantages of the International Facilities over those in the U.S. and especially carpet recycling facilities located in California:

- The International Facilities require less capital and operating expenditures because they are processing and recycling less of the carpet. This is documented in the CARE Q1 2014 Report with the estimate of a 25% recycling rate of International Facilities compared with a 50% recycling rate in the U.S. reported in CARE’s Annual Report.

Note: The Carpet Recyclers’ facility that was closed during 2013 (see comments above) had a recycling rate of +70%. The facility being designed by XT-Green will have a +80%.

- Disposal costs are higher in the U.S. due to the environmental regulations and controls that landfills and transformation facilities much comply with to ensure they are operating in an “environmentally sound” manner.

Note: The California state waste hierarchy requires that the waste not recycled be sent to “environmentally sound” landfills and transformation facilities. Per CARE, 75% of the PCC exported is not recycled and therefore is waste. Unless demonstrated otherwise, it should be assumed that landfill and waste-to-energy facility in Asia do not provide the same level of environmental protection as U.S. disposal facilities.

- It is very inexpensive to transport PCC to Asia as 9 out of 10 containers shipped into California are returned empty. Shipping California PCC can cost as low as 1 cent per pound, significantly less than it costs to ship PCC across Los Angeles.
- CARE audits the records of U.S. facilities to ensure that reported volumes of Recycled Output (RO) is totally accurate. This is done by reviewing invoices and shipping documents. CARE is proposing to just “assume” that the recycling rate for International Facilities is 25% and not perform the audits required by the facilities in the U.S.

If CARE does decide to expand its audit program to the International Facilities, it will need to be financed using AB 2398 funds paid for by the citizens of California. This would be unfortunate especially if the export of PCC results in the loss of additional carpet recycling facilities and the creation of California jobs.

## Attachment 1: Detailed Comments Regarding Problems Securing Adequate Post-Consumer Carpet (PCC) for New XT-Green California Facility (Page 3 of 4)

- U.S. and especially California carpet recycling facilities must comply with environmental and employee health and safety regulations and permit requirements. This includes controlling air emissions with particulate control systems, securing California Solid Waste Management permits, and respiratory and hearing conservation for employees. Equivalent programs are not expected to be required in most, if not all, Asian countries presently processing California PCC.

Note: California Carpet Recycling facilities cannot be exempted from California Solid Waste Management Permits because residual waste exceeds 10%

Attachment 2 discusses additional impacts of promoting the export of PCC from California. This includes that fact that, although over the short-term the inclusion of RO from export will help CARE meet its “continuous meaningful improvement” requirements, over the long-term due to the difference in recycling rates it will have a severe impact on meeting recycling goals.

This is due to the fact that it takes 2 pounds of PCC to generate 1 pound of RO in the U.S. but, per CARE’s estimate, it takes 4 pounds of PCC to generate 1 pound of RO in International Facilities. (It will take < 1.5 pound of PCC to generate 1 pound of RO in the XT-Green facility if built.) Therefore, as the amount of exported PCC is increased, it will take more and more PCC to be collected to offset the lower recycling rate of the International Facilities while still attaining the “continuous meaningful improvement” of Recycled Output that is required by AB 2398.

This will be especially difficult as --

### 2. Less PCC is being collected in California

According to the CARE 2013 Annual Report, the Gross Collection of carpet went down from 111.8 million pounds in 2012 to 88.1 million pounds in 2013, a reduction of 23.7 million pounds.

CARE’s solution to this reduction was to create a new category of “Adjusted Gross Collections” by asking non-processor collectors for their results and add these to the 2013 totals. As these amounts were not in the 2012 gross collection totals, it’s not fair to compare but if you do...

“Gross Collections” have still gone down. Using the “Adjusted Gross Collections” of 107.2 million pounds, there was still a reduction of 4.6 million pounds from 2012 to 2013 and therefore again, no “continuous meaningful improvement” relative to gross collections.

The primary reason for this is the rising cost of collections due to the rapidly increasing % of low-value PCC in the waste stream (non-nylon and commercial broadloom nylon carpet) and the rapidly decreasing % of high-value residential nylon carpet that drives the carpet recycling industry. Comparing Q1 2012 vs. Q1 2013, the % of high-value residential nylon PCC went down from 58% in 2012 to 47% in 2013 as reported by CARE.

The following shows the revenue reduction per ton of PCC collected from 2012 to 2013 using the conservative assumptions of: (1) A payment of 8 cents per pound of nylon PCC by the processors to the collectors, (2) No markets for the low-value material and (3) A disposal cost of 3 cents per pound, including transportation:

**Attachment 1: Detailed Comments Regarding Problems Securing Adequate Post-Consumer Carpet (PCC) for New XT-Green California Facility (Page 4 of 4)**

	Pounds High Value Nylon	Revenue	Pounds Low Value Material	Disposal Cost	PCC Collection Return per Ton
Q1 2013	1160 #	\$92.80	840 #	(\$25.20)	\$67.60/ton
Q1 2014	940 #	\$75.20	1060 #	(\$31.80)	\$43.40/ton
Revenue lost per ton					(\$23.80) or a reduction of 35.8%

In addition to the reduction in revenue and the increase in disposal, the additional costs (that now must be paid with \$23.80 less per ton) are also going up including warehouse rental, labor costs, trailers, transportation etc. While carpet collectors are fighting –

The profits at the carpet mills are at record highs due to the high-profitability of the increasing volumes of non-recyclable carpet being sold, especially PET. This carpet is touted by the carpet industry as the “environmental alternative” due to the use of fiber from recycled bottles in the carpet. However, the amount of recycled content overall is rapidly being reduced due to the rise in the use of virgin PET.

The carpet recycling processors are also impacted by the rising cost in collections, either through their own collection operations or the cost of PCC carpet from independent collectors. This cost has not been offset by an increase in CARE incentives which has remained at 6 cents per pound since the inception of the AB 2398 Carpet Stewardship Program (even though there is a surplus of \$4.7 million of funds in the AB 2398 account).

It has been acknowledged by CARE that solutions for PET recycling are at least 2 years away. Due to this, a national coalition of carpet collector/sorter entrepreneurs petitioned CARE and the carpet mills to provide “bridge funding” to overcome the increased cost for collections from PET. It was announced at the CARE Annual Convention in May that the carpet industry would develop PET bridge funding incentives for collectors. Four months later they are still working out the details. However, it was made clear in the early negotiations that the national funding would not be provided to collectors in any state that had an Extended Producer Responsibility (EPR) program for post-consumer carpet. The only state in the U.S. with EPR is California.

Note: Regarding that National program, CARE announced with much fanfare that “total gross collections” had increased on a nation basis by 52% in 2013. This was actually not the case as they were comparing “apples and oranges.” The 2013 numbers included material that was collected but ended up in landfill while the 2012 numbers did not include landfill material. If you take the landfill numbers out of the 2013 numbers and compare “apple and apples” then, rather than going up 52%, there was 72 million pounds less carpet collected in 2013 over 2012.

Besides being “creative” with collections numbers, CARE failed to report in the Press Releases regarding 2013 National Annual Report that the national carpet recycling rate went down from 8% to 5%.

**In summary, as requested on the cover letter, to ensure adequate PCC to California Processors, CARE needs to: (1) Ensure that a level playing field is maintained, especially relative to PCC export and (2) Collections are incentivize to overcome increasing costs and turn around the trend of the rapid reduction of gross carpet collections in California.**



## Attachment 2

### Detailed Comments Regarding the CARE 2013 Annual Report not demonstrating “Continuous Meaningful Improvement”

The following is an analysis of the CARE 2013 AB 2398 Annual Report focusing on the lack of “continuous meaningful improvement” in the program as required by the legislation. These analyses are organized as follows:

- A. “High Level Comments”
- B. Detailed Analyses
- C. Attachment 3 – Backup Calculations

#### A. High Level Comments

The following is a “high level” summary of the CARE AB 2398 Annual Report regarding the status of the program meeting “continuous meaningful progress.” Greater detail and documentation of the following can be found in Sections B below and in Attachment 3.

- **Recycled Output (RO).** Recycling Output has not improved over the past 8 quarters especially, due to seasonal variations, when comparing the same quarter in 2012 vs. 2013. The RO improvement of 2013 over 2012 of 8 million pounds cited in the CARE Annual Report is 100% due to a low first quarter 2012, over 2.5 years ago at the beginning of the program.
- **Green Jobs.** Rather than creating new jobs, there was a loss of 121 California green jobs in carpet recycling in 2013 over 2012.
- **Diversion/Gross Collections.** Although diversion is up slightly, gross collections are down significantly. Even with the inclusion of exported carpet in Q1 2014, collections are still down. Supporting collections is especially important with the increasingly higher % of low-value carpet in the waste stream and the significantly lower recycled output when processing carpet in non-U.S. facilities (see next comment).
- **Including Export in Recycled Output Results.** CARE has decided to start including high-value exported post-consumer carpet (PCC) to meet “continuous meaningful improvement.” Although this will show short term improvement, it will severely impact the program long-term as to produce 1 pound of recycled content it takes 4 pounds of PCC in “International Facilities” but only 2 pounds in the U.S.

## Attachment 2: Detailed Comments Regarding the CARE 2013 Annual Report not demonstrating “Continuous Meaningful Improvement” (Page 2 of 11)

Also, if CARE uses export to meet short term “continuous meaningful improvement” there is no incentive to help keep this material in the United States. CARE needs to incentivize independent collectors to sell collected high-value (nylon) carpet to U.S. facilities to offset the un-level playing field between International and U.S. processing facilities including the fact that U.S. facilities must meet CARE record-keeping requirements and undergo CARE audits. (See comments in Attachment 1)

Finally, processing of exported California PCC Internationally creates 25% more waste. Unless proved otherwise, it can be assumed that the transformation and landfill facilities oversea do not meet the California “environmentally sound” criteria included in the state’s waste hierarchy.

Note: As discussed in Attachment 1, this and the collections issue will probably make the difference whether XT-Green goes forward with a new California facility.

- **California Facility Capacity Analyses.** AB 2398 requires that the existing capacity of carpet recycling facilities located in California be included in the Annual Report. This was not done. It’s especially important to do this for the 2013 Report as CARE acknowledges that the existing U.S. (and especially California) facilities increased production and used up some of its excess capacity to offset the 27% production lost by the closure of *The Carpet Recyclers* and the Carpet Collectors in 2013.

Therefore, determining the remaining capacity is extremely important in order to assess the ability to meet the recycling output goals for 2016 established in the CARE Carpet Stewardship Plan. If there is a shortfall, the report should indicate how CARE will support the development of new facilities.

- **Exclusion of the 17,695 ton Carpet Recycling Mistake in Sacramento.** A significant purpose of the AB 2398 Annual Report is to identify problems in the Stewardship Program and discuss changes to resolve these issues. During 2013, a massive pile of over 35 million pounds of waste carpet, that had been stored outside the Carpet Collectors facility in Sacramento, was landfilled.

This material was originally designated by CARE as meeting a new definition of “recycled output” called CARS and qualifying for a 3 cent per pound incentive from the California AB 2398 funds. Some of these funds, paid for by the citizens of California, was authorized to be paid to the Carpet Collectors for material that never left this pile and was eventually landfilled. With the exception of noting that the Carpet Collectors had closed in 2013, no mention of this problem or solutions to prevent this from happening in the future are included in the 2013 Annual Report.

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The details of this event are discussed in B. 4 below, including the fact that the new AB 2398 incentive created by CARE specifically for the CARS material at the Carpet Collectors, resulted in an un-level playing field which significantly contributed to the closure of *The Carpet Recyclers’* facility in La Mirada California.

There was also a significant impact on the County of Sacramento who closed the Carpet Collectors’ operations that was adding 58,000 pounds of additional carpet to the waste pile each day. CARE’s discussion in the Annual Report regarding ensuring these types of problems will not happen in the future should also include educating entrepreneurs applying for AB 2398 incentives that California Solid Waste Management Facility permits are required for all recycling facilities that generate over 10% residual waste (which is probably all carpet recycling facilities.)

### B. Detailed Analyses and Documentation

The following provides details and documentation regarding the summary points above.

#### 1. Recycled Output –

- A. The “Continuous Meaningful Improvement” provided in the CARE Annual Report for Recycled Output is based on comparing annual numbers between 2012 and 2013. This data shows an additional 8 million pounds of recycled output from 2013 over 2012. However...
- B. As shown in Attachment 3, 100% of the 8 million pounds increase is from the difference between Q1 2013 and Q1 2012. If you pull out this data from 2.5 years ago when the AB 2398 program was still in its infancy ...
- C. The last 8 quarters have been relatively flat ranging from 9.5 million pounds to 12.3 million pounds. To really have a clear picture of trends it’s best to compare the same quarter from year from year due to the seasonal variations that are inherent in carpet recycling. When you do this...
- D. Over the last 8 quarters, half of the quarters show a reduction in Recycled Output when you compare the same quarter 2013 vs. 2012. This includes...
- E. Q1 2014. In the Q1 2014 quarterly report, CARE reported a Recycled Output of 12.1 million pounds, of this only 11.4 million pounds was processed in the U.S. in facilities that are audited by CARE. The rest was an estimate of Recycled Output from exported carpet processed in “International Facilities.” Comparing these results with the same quarter in 2013 to allow for seasonal variability...

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- F. There continues to be no “continuous meaningful improvement” when comparing the material processed in the United States: The 11.4 million pounds in Q1 2014 is a reduction of .9 million pounds from the 12.3 million pounds in Q1 2013. There is still a reduction of .2 million pounds when you include the export.
- G. Inclusion of Recycled Output estimates for California carpet processed oversea is problematic for a number of reasons including its impact on attaining “continuous meaningful improvement.” This is due to the significant difference in recycled output yield. Per the CARE 2013 Annual Report and Q1 2014 Report:

	Recycled Output Yield	Waste
U.S. Facilities	50.3% (recycled output: gross collections)	49.7%
International Facilities	25%	75%

Significantly less Recycled Output is produced from the carpet that is exported. The difference is actually even greater than shown here as the U.S. numbers include the low-value post-consumer carpet (PCC), e.g. PET, commercial broadloom that is collected but not processed.

The International Facility Recycled Output result is just for the high-value nylon carpet that is shipped outside of the U.S. For every pound of this nylon PCC exported, at least another pound of non-nylon carpet is collected in the U.S. The majority of this is landfilled or sent to Waste-to-Energy facilities.

Allowing CARE to include “International Facilities” into their Recycled Output:

- Reduces the average recycled yield from high-value carpet
- Increases the amount of material sent to landfill, thus reducing overall diversion rates (see comments below)
- Creates an un-level playing field with U.S. processors who are operating higher-cost facilities to create higher recycling rates and less waste, in compliance with U.S. health and environmental requirements (including landfill requirements)
- Impacts the ability of U.S. processors to cost-effectively secure high-value nylon carpet for their facilities.
- (See #3 below regarding the impact on Gross Collections.)

Per Section 42976 of AB 2398: The CARE Annual Report is required to include “*The amount of postconsumer carpet recovered by not recycled, by weight, and its ultimate disposal.*” It’s difficult to see how they will be able to do this for International Facilities spread over numerous countries in Asia. Also...

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As discussed in #3 below, according to the California state’s hierarchy for waste: If waste cannot be feasibly source reduced, recycled or composted, then “environmentally safe transformation or environmentally safe land disposal” can be used. It is highly unlikely that the transformation (waste to energy) or disposal facilities that will be used for the 75% of the exported PCC that is not recycled would meet the California definition of “environmentally safe.”

The decision whether a company will invest millions of dollars to build a new carpet recycling facility in California is very dependent on whether the company will be able to compete with International Facilities to secure carpet. The AB 2398 incentives paid to U.S. companies are not enough to compete with the lower transportation, processing and disposal costs of International Facilities. For example, due to the fact that 90% of all container shipped back to Asia are empty, it costs more to transport carpet across Los Angeles than to Asia.

Due to the higher recycling rate of U.S. carpet processing facilities, the existing and future capacity of U.S. facilities to recycle carpet is key in the ability for CARE to achieve “continuous meaningful improvement.” That is why ...

- H. Title 14. Chapter 11. Article 1. Product Stewardship for Carpet. Section 18944 Annual Report Compliance Criteria requires under (4) Program Outline that: The Annual Report include the “capacity of recycling facilities” to be included in the “information about recycling facilities in California.”

This was not provided in the CARE Annual Report. Relative to “continuous meaningful progress” this is especially of concern due to the fact that the Annual Report notes the closure of 2 of the 5 California-based recycling facilities (processors). These closures include *The Carpet Recyclers* in La Mirada California and Carpet Collectors in Sacramento. Per the CARE report:

*“However, despite this loss in capacity, CARE is pleased to report that the actual reported Recycled Output numbers stayed relatively constant throughout the second half of 2013, indicating that the remaining marketplace was able to work collaboratively to continue collection and processing services despite this challenge.”*

This would indicate that the remaining carpet recycling facilities used at least some of their “excess capacity” to process the PCC that had previously been processed by the closed facilities. This is why it is important, and required by the regulations, to report on the “capacity of the California recycling facilities” in order to determine if there is the capacity for “continuous meaning progress.” Especially if a goal of the regulations is to create ...

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**2. California Jobs**

No “continuous meaningful progress” was achieved during 2013 for the creation of California green jobs associated with carpet recycling. As noted in the CARE Annual Report, there were 165 fewer California carpet recycling jobs at the end of 2013 than there were at the beginning of 2013 (a loss of 40%).

Table 1 is very misleading when it comes to “Green Job Creation.” It states that since the beginning of the program that 239 green jobs were created in California due to carpet recycling, this includes 22 jobs created in 2013. But of these, 165 were lost, therefore...

**The net new jobs created in California in total by AB 2398 is only 74.**

The Annual Report does not address in detail how this trend will be turned around going forward, and actually proposes policies, such as including Recycled Output from International Recycling Facilities, that will make it more difficult to site new facilities in California through the creation of an un-level playing field for California facilities.

(See discussion of this impact in both # 1 and #3.)

**3. Diversion/Gross Collections**

In addition to Recycled Output (discussed in #1 above), per Section 42975 of AB 2398 the carpet stewardship organization must demonstrate in its Annual Report that it has achieved “continuous meaningful improvement” in the rate of diversion of post-consumer carpet. The following definition of “diversion” is included in the Title 14. Chapter 11 Product Stewardship for Carpet definitions:

“Diversion” or “divert” means activities which reduce or eliminate the amount of solid waste disposed at landfills in a manner consistent with the states hierarchy for waste management pursuant to Section 40051:

40051. Implementation requirements. In implementing this division, the board and local agencies shall do both of the following:

- a) Promote the following waste management practices in order of priority:
  - 1) Source reduction
  - 2) Recycling and composting
  - 3) Environmentally safe transformations and environmentally safe land disposal, at the discretion of the city or county.
  
- b) Maximize the use of all feasible source reduction, recycling, and composting options in order to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot feasibly be reduced at their source, recycled, or composed, the local agency may use environmentally safe transformation or environmentally safe land disposal, or both of these practices.

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With the present state of carpet recycling, one must be careful to differentiate “diversion” from “gross collections.” This is due to the fact that a large % of the carpet that is collected actually still ends up in landfills or transformation facilities. This is either as process waste from the recycling activity but also a significant portion of the non-nylon residential carpet and commercial broadloom carpet that is collected.

As carpet can’t be “diverted” and turned into Recycled Output unless it’s collected, the following evaluation regarding the status of “continuing meaningful progress” as reported in the Annual Report includes both diversion and gross collections.

- A. According Table 1 of the Annual Report: The “2013 average diversion rate increased 2% compared to 2012.” Diversion Rate is defined as Recycled Output (RO) divided by Post Consumer Carpet Discards (PCC). This 2% increase doesn’t seem to be significantly “meaningful progress”, especially when...
- B. As shown on Attachment 3, the Gross Collection of carpet went down from 111.8 million pounds in 2012 to 88.1 million pounds in 2013, a reduction of 23.7 million pounds.

CARE’s solution to this reduction was to create a new category of “Adjusted Gross Collections” by asking non-processor collectors for their results and add these to the 2013 totals. As these amounts were not in the 2012 gross collection totals, it’s not fair to compare but if you do...

- C. “Gross Collections” have still gone down. For 2012 are unchanged at 111.8 million pounds. Using the “Adjusted Gross Collections” of 107.2 million pounds, there was still a reduction of 4.6 million pounds from 2012 to 2013 and therefore again, no “continuous meaningful improvement” relative to gross collections. This is especially of concern as...
- D. In 2013, all the PCC going to processors was included in the original “gross collection” number of 88.1 million pounds. If an independent collector was bringing material to a processor, this material would be included in the processors’ numbers. CARE makes sure this is the case so that the numbers aren’t “double counted.”

Therefore, the additional 23.7 million pounds included in the adjusted numbers from the non-processor collectors was material collected and sorted and, as it was not sent to U.S. processors, it was exported to International Facilities. This is a valuable number that is used in the following to evaluate the impact of including Recycled Output from export to achieve “continuous meaningful progress.”

First we need to understand how much PCC is required to be collected in the U.S. to result in the Recycled Output from overseas. Of the 23.7 million pounds of PCC collected by the non-processor collectors, approximately 47% of this material would be high-value nylon carpet exported to “International Recyclers” for processing or 11.1 million pounds of whole nylon carpet exported.

**Attachment 2: Detailed Comments Regarding the CARE 2013 Annual Report not demonstrating “Continuous Meaningful Improvement” (Page 8 of 11)**

As noted above, the recycled output from this material is 25% overseas or 2.8 million pounds of Recycled Output and 8.3 million pounds of waste going to unaudited disposal sites and waste to energy facilities.

Let’s compare this with the alternative of having this material kept in the United States and processed. In 2013, the U.S. Processors generated 44.4 million pounds of Recycled Output from the 88.1 million pounds of the collected carpet that was reported by the processors to be collected and processed in their facilities, or 50.4%. If the nylon PCC that was exported and processed “internationally” was processed in the U.S., rather than an a Recycled Output (RO) of 2.8 million pounds, there would be 5.6 million pounds or an additional 2.8 million pounds of recycled output and 2.8 million pounds less going to landfills or transformation facilities. The following table summarizes this for 2013:

All Amounts in million pounds	U.S. RO	Int. RO	Total RO	Waste	Adjusted Gross Collection	RO % of Collected Carpet
Actual 2013: PCC processed in U.S. (50.4% recycling rate) and Internationally (25% recycling rate)	44.8	2.8	47.6	64.0	111.8	42.6%
If all carpet exported processed in U.S.	55.9	0	55.9	55.9	111.8	50.4%
Difference			+8.3 million #	(8.3) million #		+7.8%

If we do this same analyses for Q1 2014:

All Amounts in million pounds	U.S. RO	Int. RO	Total RO	Waste	Adjusted Gross Collections	RO% of Collected Carpet
Actual 2013: PCC processed in U.S. (50.4% recycling rate) and Internationally (25% recycling rate)	11.5	.6	12.1	17.2	29.3 (2.4 million pounds exported)	41.3%
If all carpet exported processed in U.S.	14.7	0	14.7	14.6	29.3	50.2%
Difference			+2.6 million #	(2.6) million #		+8.9%

**Attachment 2: Detailed Comments Regarding the CARE 2013 Annual Report not demonstrating “Continuous Meaningful Improvement” (Page 9 of 11)**

There are significant increases in the recycled output keeping this material in the U.S. Let’s see how this impacts the ability to reach a 16% recycling rate (Recycled Output divided by Discarded PCC) by 2016. Note: For International Facilities it takes 4 pounds of collected carpet to produce 1 pound of recycled output. It takes 2 pounds to produce 1 pound of Recycled Output in the U.S. (A new facility proposed for California will only require 1.3 pounds of PCC to produce one pound of recycled output).

2016 PCC Discarded	378 million pounds
Recycled Output needed to reach 16% recycling rate	61 million pounds

To produce this Recycled Output, the amount of Gross Carpet Collection required:

United States (50%)	122 million pounds (32% of total PCC)
International (25%)	244 million pounds (65% of total PCC)

Of course the majority of recycling will continue to be done in the U.S., but this just gives an idea regarding the need to collect significantly more carpet to reach goals as the % of International processing increases.

Using the 25% Recycling Output estimate used by CARE, there was 11.2 million pounds of exported carpet in 2013 or 10% of the total Adjusted Gross Collection. In the first quarter of 2014, there was 2.4 million pounds of exported carpet or 8.2%. This is before CARE decided that it was acceptable to include Recycled Output for International Facilities to demonstrate Recycled Output. One would expect this to increase significantly if CARE increases their support of this recycling option.

But allowing CARE to use export for demonstrating “continuous meaningful progress,” although it will add to their short-term numbers, it will end up severely impacting the amount of carpet required to grow recycling rates and reduce the chance of attracting companies with high recycling rates into California and creating green jobs.

The ability to reach the modest 16% goal in 2016 (and generating the least amount of collected carpet returned to landfill or sent to waste to energy) will be best served by incentivizing collectors to send carpet to U.S. facilities rather than export overseas. Especially as the high-value nylon carpet being exported is reducing rapidly in the waste stream and being replaced by low-value non-nylon carpet.

**4. Incentivizing the market growth of secondary products. What can go wrong? A lot.**

Providing incentives are the primary tool of AB 2398 to increase “continuous meaningful progress.” A key to this, as required in AB 2398, is supporting the market growth of secondary products.

## Attachment 2: Detailed Comments Regarding the CARE 2013 Annual Report not demonstrating “Continuous Meaningful Improvement” (Page 10 of 11)

CARE did this successfully in 2013 by incentivizing the “Tier 2” payouts for the use of low-value non-nylon material into secondary products. Without this change, the disappointing results discussed above regarding “continuous meaningful progress” would have been even worse.

During 2012, CARE also attempted to use secondary product incentives through the support of “Carpet As Rock Substitute” or CARS, but this time with disastrous results that were realized in 2013. These include:

- The creation of a 17,695 ton waste carpet pile behind the Carpet Collectors’ facility in Sacramento (that’s 35.39 million pounds of carpet).
- The eventual closure of the Carpet Collectors facility
- Creating an un-level playing field which significantly contributed to the closure of The Carpet Recyclers in La Mirada California (with a recycling rate of 70%)
- The loss of 121 California Green Jobs
- Creating a major fire and environmental hazard and massive enforcement effort for the County of Sacramento
- The eventually land disposal of the 17,695 ton carpet pile at a cost of over \$1 million.

There is no mention of this fiasco in the 2013 Annual Report with the exception of noting on page 12 that two of the five carpet recycling facilities in California closed during 2013 with a resulting loss of 27% of Recycled Output.

CARE needs to take ownership in the fact that this problem would not have been created if they hadn’t decided in 2012 to create a 3 cent per pound incentives on CARS. As “those who ignore history will be doomed to repeat it,” CARE should provide an analyses of what went wrong with CARS relative to their incentive program and what safeguards will be put in place so that it won’t happen again.

This is especially important as AB 2398 doesn’t require CARE to inform CalRecycle that they’ve changed their incentive program until 30 days after the fact. Also, as in the case of CARS, creating a new incentive program can easily repeat an un-level playing field. Because the CARE CARS incentive resulted in the Carpet Collectors storing their waste for future CARS projects, this material qualified for a \$60 per ton incentive, while others were paying \$50 per ton for disposal of this same material – a difference of \$110 per ton. This created a competitive edge that severely impact the ability for other carpet recyclers to secure carpet and was a primary reason for the closure of *The Carpet Recyclers*.

## **Attachment 2: Detailed Comments Regarding the CARE 2013 Annual Report not demonstrating “Continuous Meaningful Improvement” (Page 11 of 11)**

Moving forward, prior to CARE creating new incentives for new secondary markets, especially from individuals requesting new incentives for new product applications, they need to do the proper due diligence that ensures:

- The market actually exists for the product utilizing the processed recycled content. This was not the case for CARS. This is what created the 17K ton pile.
- Request a material balance for the operation and where waste will be disposed.
- If more than 10% residual waste is created by the processing, that a Solid Waste Management Facility has been provided.
- Request proof of permits including clearance by the Fire Department

CARE needs to ensure that incentives add to “continuous meaningful improvement” rather create unintended circumstance that actually impact improvement, like the export issue.

### **SUMMARY**

CalRecycle should **reject the 2013 Annual Report** and direct CARE to produce a revised document that complies with AB 2398 and clearly addresses the status of the Carpet Stewardship Program in 2013 and resolution of problems moving forward including:

- 1) Failure to meet “continuous meaningful progress” goals with both Recycled Output (RO) and the gross collections required for increased diversion.
- 2) Failure to discuss the significant event of a 30 million pound pile of waste carpet behind the Carpet Collector facility in Sacramento that was landfilled during 2013. CARE needs to take ownership that CARS incentive helped create that pile and also helped create the unlevel playing field which contributed to the closure of *The Carpet Recyclers*.

CARE should address in the Annual Report what safeguards will be included in the Carpet Stewardship Program to ensure that adequate due diligence are in place prior to initiating new AB 2398 incentives.

- 3) Failure to clearly identify the loss of 121 California green jobs due to the closure of two carpet recycling facilities in California during 2013. CARE takes credit for the “creation” of 236 jobs since the beginning of the AB 2398 program but 121 of these jobs no longer exist.
- 4) Failure to include an evaluation of current California facility recycling capacity in the Annual Report as required by AB 2398. This is especially important as a significant component of the “excess capacity” was utilized in 2013 to offset the closure of 2 of the 5 facilities in California which had constituted 27% of the carpet recycling in the state.



## Attachment 3 Backup Calculations

The following are back up calculations for the conclusions regarding “continuous meaningful improvement” discussed in Attachment 2.

### Recycled Output -

The CARE Annual report compares the following annual results to claim that they succeeded in attaining “Continuous Meaningful Improvement.”

Recycled Output:

2013	44.4 million pounds
2012	<u>36.1 million pounds</u>
	8 million pounds increase

This would appear to be impressive except for the fact the 100% of the increase was realized on the first Quarter of 2013:

Q1 2013	12.3 million pounds
Q1 2012	<u>4.3 million pounds</u>
	8 million pounds increase

Note<sup>1</sup>: A significant part of this gain can be explained by The Carpet Recyclers having very limited operations in Q1 2012 and selling off the remaining inventory in Q1 2013 before closing March 26, 2013

Since the first quarter of 2012 (21 months ago) the recycled output has been relatively flat with the exception of the jump in Q1 2014 from the exclusion of exported product.

The table below shows the recycled output pounds for the past 8 quarters (not including the export amounts included in the Q1 2014 quarterly report).

	Q2 2012	Q3 2012	Q4 2012	Q1 2013	Q2 2013	Q3 2013	Q4 2013	Q1 2014
Recycled Output by Quarter <sup>3</sup>	11.3	11.0	9.5	12.3 <sup>1</sup>	10.8	11.1	10.2	11.4 <sup>2</sup>

Note<sup>2</sup>: Amount of non-exported recycled content calculated using base payout amounts:  
 Type 1: \$663,900/\$.06 per # = 11.1 million pounds plus Type 2: \$11,600/\$.03 per # =  
 .4 million pounds = 11.4 million pounds total

Note <sup>3</sup>: All numbers in million pounds

### Attachment 3: Backup Calculations (Page 2 of 2)

With the exception of Q1 2013 when The Carpet Recyclers were selling off inventory, the amount of recycled output has been relatively flat. Due to the seasonal variation of carpet installation, comparing same quarters in the two years, gives an even better picture.

	2012	2013	Difference
<b>Q2</b>	11.3 M pounds	10.8 M pounds	Down .5 M pounds
<b>Q3</b>	11.0	11.1	Up .1 M pounds
<b>Q4</b>	9.5	10.2	Up .7 M pounds
<b>Q1</b>	12.3 (2012)	11.4 (does not include export)	Down .9 M pounds
<b>Q1</b>	12.3 (2012)	12.1 (includes export)	Still down .2 M pounds

#### Diversion –

The CARE Annual Report calculates “diversion rate” as Recycled Output divided by Post Consumer Carpet (PCC) Discards. Using this method, CARE reports on Table 1 that the diversion rate increased from 2% compared to 2012, not exactly “continuous meaningful progress.” CARE does not provide the PCC discards for 2012 in the report.

	Q1	Q2	Q3	Q4	Total
<b>2012</b>					
Gross Collections	23.8	27.0	31.5	29.5	111.8
Recycled Output	4.3 (18%)	11.3 (42%)	11.0 (35%)	9.5 (32%)	36.1 (32%)
Collected Material Not Recycled	19.5 (82%)	15.7 (58%)	20.5 (65%)	20.0 (68%)	75.7
Landfilled	5.1	2.7	2.6	7.0	17.4 (16%)
Collected Material Not Recycled/Landfill	14.4	13.0	17.9	13.0	58.3 (52%)
<b>2013</b>					
CARE “Adjusted” Gross Collections	29.7	26.3	27.4	23.8	107.2
Gross Collections	23.8	21.5	23.3	19.5	88.1
Recycled Output	12.3 (42%)	10.8 (40%)	11.1 (41%)	10.2 (44%)	44.4 (42%)
Collected Material Not Recycled	17.4 (58%)	15.5 (60%)	16.3 (59%)	13.3 (56%)	62.8
Landfilled	6.4	6.5	5.5	5.3	23.7 (22%)
Collected Material Not Recycled/Landfill	11.0	9.0	10.8	18.6	39.1 (36%)
<b>Comparing 2012 vs. 2013</b>	Q1	Q2	Q3	Q4	Total
2012 Gross Collections vs 2013 Adjusted Gross Collections	+5.9	(0.7)	(4.1)	(5.7)	(4.6)
2012 Gross Collections vs. 2013 Gross Collections	0	(5.5)	(8.2)	(10)	(23.7)

