

Comments on the California Carpet Stewardship Plan -- May 2013

Submitted by:

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

First let me congratulate you on your efforts during the initial years of the implementation of the ground-breaking AB 2398. Much progress was made but hopefully also lessons learned that will result in improved results moving forward.

I have personally been intimately involved with AB 2398 as a Vice President with *The Carpet Recyclers* (TCR) in La Mirada CA from November 2010 through December 2012 and then with Nylon Recovery Corporation (NRC) from January 2013 through March 2013 who took over the funding and operation of *The Carpet Recyclers* facility.

My responsibilities included being the primary company contact with CARE and having lead responsibility for AB 2398 funding request submittals. This responsibility included setting up internal systems to ensure funding requests met audit requirements.

NRC walked away from their investment in TCR because the cost of operating the facility, including securing adequate carpet, was significantly higher than the revenue that could be generated from the harvested material (including the AB 2398 funds). Sadly, over 70 good people also lost their jobs.

NRC is conducting a major study to determine whether to invest millions to build a new carpet recycling facility in California. Their “EarthCare Carpet Recyclers” would produce high-value material with the highest recycling rates in the nation that creates quality green jobs. The following is additional information regarding our efforts.

XT-Green: Nylon Recovery Corporation parent company established to invest and grow recycling-based companies. Initial focus is on California but interested in expanding nation-wide and beyond

- ❖ Exploring carpet recycling (*EarthCare Carpet Recyclers*) as possible first venture. Goals include:
 - Developing facility with highest recycling rates in U.S. with zero waste to landfill goals. Optimize resources of carpet processed.
 - Utilizing harvested resources in California (and local communities if possible). Note: With exception of Reliance carpet cushion, California carpet recyclers presently ship all carpet resources out of state and overseas.
 - Increasing California carpet diversion and recycling rates by increasing value of collected carpet
 - Create significant environmental benefits and reduce greenhouse gases through replacing virgin petroleum-based raw materials
 - Provide a safe and healthy working environment for employees, living wage and profit sharing.
 - Expand nation-wide

- ❖ Present activities include:
 - Designing next generation carpet recycling facility
 - Developing relations with end-user customers
 - Providing comments to AB 2398 California Carpet Stewardship to ensure adequate carpet (especially nylon)

- ❖ Most concerned if adequate carpet available for processing (especially if incentives not focused on “best and highest use”)

- ❖ Exploring other recycling opportunities

At this time NRC has a number of concerns regarding the California Carpet Stewardship Plan which impacts its decision to move forward. These concerns include:

1. The misleading data used by CARE to report on “success” which leads to unfounded confidence that the AB 2398 program does not require significant changes. This includes the 112 million pounds of material in 2012 reported as “diverted” which includes a large percentage of the material still going to landfills as either low value non-nylon carpet sent or large amounts of process waste from carpet recycling facilities or is being shipped overseas as whole carpet.

2. An inefficient state-wide collection infrastructure which focuses on primarily large carpet retailers/installers or collects contaminated carpet at MRF's which reduces recycling rates. Wide-spread theft of nylon carpet prior to reaching collection and recycling locations.
3. The increasing volume of whole carpet being shipped overseas due to the low cost of transportation (less to ship to Asia than across California) and high environmental impacts from foreign "recycling." AB 2398 low incentives are not high enough to offset this drain of resources and source of pollution overseas.
4. The lack of resources by CARE for implementation of the AB 2398 program including assuring a level playing field for securing carpet and competitors' providing a healthy working environment for employees and compliance with applicable environmental protection regulations. This includes no CARE "boots on the ground" in California to support the program.
5. The lack of incentives in the current AB 2398 funding to promote higher recycling rates, not meeting the statutory requirements of the AB 2398 including conducting education and outreach programs to consumers, increasing the recyclability of carpet and incentivizing the market growth of secondary products.
6. The minimal representation of California on the committees overseeing the AB 2398 plan development and the Sustainability Funding Oversight Committee (SFOC) which decides on payouts from the plan. The program is being run by the mostly Georgia-based carpet industry members who can have a conflict of interests when it comes to deciding what is best for California in regards to diverting post-consumer carpet from landfills or heading overseas and recycling these resources vs. what is best for their carpet company. This is especially true when it comes to the management of their polyester (PET) carpet.

The comments organized section by section focus on these and other related issues.

INTRODUCTORY SECTIONS

Executive Summary

Page 3 -- Plan assumes that that carpet stewardship assessment will continue to be \$0.05/square yard through to 2016

The purpose of the stewardship assessment is to:

- a) **Educate the public regarding carpet recycling i.e. seeing the line item on the invoice is supposed to motivate them to ask if their carpet will actually be recycled.**

Although all carpet manufactures are required to pay the \$0.05/square yard into the fund, the carpet retailer is not required to recycle its post-consumer carpet. Therefore, consumers could be paying this fee assuming that their carpet will be recycled when it is not.

If enough consumers are motivated to ask whether their carpet will be recycled, then this might motivate the retailer to start recycling.

This also might happen if there were a better AB 2398 education program (this issue will be discussed later) or if the assessment was actually a significant component of the invoice, which it is not.

The average size of home in U.S. 2392 square feet, assume 20% not carpeted = 1912 square feet = 212 square yards x 5 cents = \$10.60 assessment for the entire average house. Using an average price of \$20 - \$25 per square yard installed, the invoice pre assessment would be \$4240 - \$5300 with the assessment fee being .25-.2% of the total, hardly any amount to get anyone's attention.

As a square yard of carpet weighs an average of 5 pounds, the assessment fee is equal to 1 cent per pound. This compares to the estimated upcoming mattress charge = \$25/unit = 25 cents/lb. Using an average of \$500/mattress, the assessment fee will be 5% of the total.

The assessment fee for paint = 75 cents/gallon = 7.5 cents/lb. The average price for a gallon of paint is \$20 per gallon, therefore the assessment fee 3.75% of the total. This comparison is exceptionally unfair when the difficulty of handling and transporting carpet is compared to mattresses and paint and the fact that 30% and rising % of carpet has minimal recycling value (discussed later).

It's been noted that comparison to paint is not valid due to the hazardous components in some paints. However, the landfill of carpet also has its hazards plus there is a significant loss of greenhouse gas benefits because fossil fuels will be required to extract and process virgin nylon material not harvested from carpet that is land filled.

The following summarizes the comparisons these programs.

| Material | Assessment Fee | Assessment Fee/lb | Average invoice | Assessment fee per invoice | % of average invoice |
|-----------------|-----------------------|--------------------------|--|-----------------------------------|-----------------------------|
| Carpet | 5 cents/sq yard | 1 cent/pound | \$4240 - \$5300 for an average size home | \$10.60 | .25-.2% |
| Mattress | \$25/unit (estimate) | 25 cents/lb | \$500/queen sized mattress | \$25 | 5% |
| Paint | 75 cents/gallon | 7.5 cents/lb | \$40 for 2 gallons for 10x10 room | \$1.50 cents | 3.75% |

b) Incentivize carpet recycling including increasing recycling rates

The funding model of the AB 2398 plan provides that the incentives are paid to the “first line processors” who in turn would create a “push/pull” to use these funds to help increase carpet collection and also incentivize the creation of markets to use the harvested recycled material.

Payments to the “first line processors” is 6 cents per pound for harvested and sold fiber and 3 cents per pound of harvested and sold filler. With the exception of Reliance Carpet Cushion, as there is no current market for harvested fiber in California, this material is shipped to the East Coast or internationally. Shipment to the East Coast costs 8 cents per pound which immediately uses up the value of AB 2398 incentive. (See attached presentation made at CARE 2013 conference in April regarding the unique problems with California carpet recycling.)

The negative shipping costs must be made up by the value of the fiber which must also cover:

- Carpet Collection Costs
- Disposal Costs
- Processing Costs
- Administrative Costs

Although there are numerous California “Carpet Recycling” facilities on the CARE website, with the exception of carpet tile take-back programs by Tandus and Interface, only five companies are “first line” processors that recycle California carpet. Note: SOEX has been closed since 2011.

Prior to the start of AB 2398, only LA Fiber operated a carpet recycling facility in California. Shaw Carpet’s carpet recycling facility (Nylon 6 only) in Georgia was also operational prior to AB 2398, historically operating as loss-leader for the company in order to sell recycled-content carpet.

The following three companies built carpet recycling facilities in California partially incentivized by funding from AB 2398:

By June of 2013:

1. **The Carpet Recyclers**, CARE's "recycler of the year" for 2012 opened in 2011 and closed its recycling facility in La Mirada on March 26 2013 due significant losses, even with the AB 2398 funding. It is in the process of reopening but just for processing non-nylon carpet for CAAF (Carpet as Alternative Fuel). Closing of this facility lost the carpet recycling capacity in the state of 30 million pounds per year and greenhouse gas reduction of the equivalent of keeping 45.7 million automobile miles off the road.
2. A cease and desist order has been issued by the County of Sacramento against **Carpet Collectors** for illegal disposal of 20 million pounds of PET carpet and carpet waste behind their facility.
3. **Carpet Solutions** (a division of Ming Industries, China) operates a low-tech, low-recycling rate carpet recycling business shipping all the harvested carpet fiber to China at an assumed loss subsidized by the parent company and probably additional waste generated from the facility.

All carpet recycling is not created equal. There are companies that just shear the face fiber from the carpet and consider the remaining 80% of the carpet as waste and dispose of it in landfills or as waste-to-energy. Others shred the carpet creating a low-value fiber product plus waste calcium carbonate (40% of the carpet) which is usually land filled. This low-value fiber usually has > 25% ash and is usually shipped overseas. There additional processing is usually required to separate the polypropylene from the nylon as their different melting points impact the ability of this material to be used. This creates more waste. (See later comments regarding fund payment of this material)

To have high carpet recycling rates requires an extensive and capital intensive processing facility. At *The Carpet Recyclers*, the face fiber was sheared and baled. The carpet backing was processed and separated into additional nylon resources, mixed polypropylene and harvested calcium carbonate. Additional equipment was planned to increase the value of this material before the facility was closed.

The Carpet Recyclers (TCR) had a recycling rate of over 70% (highest in California). Any facility that would be built by Nylon Recovery Corporation would have even higher recycling rates. Also, the end product would be pellets. This is in contrast to the large fiber bales presently shipped (or whole carpet to the Shaw Georgia facility) both of which generate transportation GHG emissions.

High-tech, high-recycle rate facilities who generate higher quality resources should receive higher fund payouts. In the case of TCR, the company could be still in operation if the AB 2398 funding awarded its higher recycling rate and was paid a premium per pound for fiber recovered and recycled rather than the existing six cents per pound. A bonus for high recycling rates was submitted to the CARE SFOC but no decision was made before the TCR facility was closed.

Suggested AB 2398 Stewardship Plan Change #1:

- **Companies with recycling rates > 70% will be paid \$0.16 per pound for sold recycled fiber (must have <25% ash)**
- **Companies with recycling rates <70% will be paid \$0.08 per pound for sold recycled fiber (with <25% ash)**
- **Companies with fiber > 25% ash paid \$0.04 per pound**

Note: Comments regarding Ash sampling procedures will be discussed later.

How will these increases be funded to support capital-intensive facilities, incentivize increased recycling rates and compete with whole carpet presently being sent overseas?

CARE presently has over \$3 million on account for “future payouts.” It is difficult to see how these funds are going to be used if neither *The Carpet Recyclers* reopens as a carpet recycling facility or if the Carpet Collectors is permanently closed after its appeal hearing is held at the end of September.

Unless there are significant changes, it is also difficult to see how California can attract new carpet recycling facilities into the State, including **EarthCare Carpet Recyclers** that would be funded by XT-Green the parent company of Nylon Recovery Corporation.

As noted above, California presently has very limited markets for the harvested resources from carpet recycling. This results in the 8 cents shipping charge to the east coast if one wants to keep these resources in California.

California carpet recyclers are also challenged by inexpensive shipment of whole carpet to Asia – a 40,000 pound shipment now costs @ \$400 per container.

The shipment of whole carpet is supposedly illegal into much of Asia including China due to the significant water pollution and illegal waste generated from the mostly manual carpet recycling. But overseas shipment continues and will be discussed later when addressing actual California recycling rates.

If the AB 2398 payments do not increase for recycling the options for California post-consumer carpet processing (not including carpet tiles) will be reduced to the following by as early as October 2013 and continuing on indefinitely:

1. The capacity of LA Fibers' aging facility
2. Carpet Solutions' facility which landfills the calcium carbonate component of the carpet resulting in a recycling rate of < 50% of the carpet. All harvested material is sent to parent company in China (volumes limited by permit). Based on processing equipment, additional waste may be generated when used in China.
3. Nylon 6 carpet shipped to Shaw facility in Georgia
4. Possible shearing only facility which recycles @ 20% of the carpet with the rest land filled or sent for CAAF

Increased payments to processors are needed compete with shipment of whole carpet sent overseas and incentivize higher recycling rates of existing and new facilities. To raise these funds, the California Carpet Assessment Fee needs to be increased to 5 cents per pound (25 cents per square yard) for nylon carpet. This includes an increase for recycling of calcium carbonate from 3 cents per pound to 6 cents per pound to keep out of landfill.

Suggested AB 2398 Stewardship Plan Change #2:

- **Increase California Carpet Assessment Fee to \$0.25 per square yard (5 cents per pound) for nylon carpet**

Besides the needs to assure a continuing carpet recycling industry for California carpet, this assessment fee will bring it in line with other programs.

| Material | Assessment Fee | Assessment Fee/lb | Average invoice | Assessment Fee/Invoice | % of average invoice |
|-----------------|-----------------------|--------------------------|--|-------------------------------|-----------------------------|
| Carpet | 25 cents/sq yard | 5 cent/pound | \$4240 - \$5300 for an average size home | \$53.00 | 1.25-1% |
| Mattress | \$25/unit (estimate) | 25 cents/lb | \$500/queen sized mattress | \$25 | 5% |
| Paint | 75 cents/gallon | 7.5 cents/lb | \$40 for 2 gallons for 10x10 room | \$1.50 | 3.75% |

The additional costs associated with recycling nylon carpet are made up by the value of the nylon resources harvested from the carpet. This material is sold to compounders to produce pellets that replace virgin nylon. This additional value is not available for polyester carpet (PET) due to the low cost of the virgin fiber and the difficulty processing the PET material for reuse as it becomes brittle upon extrusion.

The carpet recyclers experiences a double hit for this material being in the wastes stream. For example, for a trailer that holds 30,000 pounds is set out at retail or installer locations, if the % of PET carpet is 30%, the recycler incurs a probable 3 cent per pound disposal cost for this material plus they lose the value of 30% capacity of the trailer for the very recyclable nylon carpet.

This will become an even greater problem as the % of PET carpet reaches a projected 50% in 2-3 years. The disposal cost goes up and the nylon carpet amount goes down. For example, a trailer at 30% has an estimated value (minus disposal costs) of \$1300 per trailer (excluding transportation costs). At 50% PET the value (minus disposal costs) drops down to \$750 per trailer (excluding transportation costs). This could easily destroy the carpet collection/recycling industry. At the recent 2013 CARE conference, the collector/recycler attendees located nation-wide were asked who will be out of in business if PET hits 50%. Every company raised their hands.

Recycling polyester (PET) from carpet is an especially difficult problem as the carpet industry takes a very recyclable material of the clear plastic bottles and adds color and other additives which result in the recycling problems e.g. after the carpet PET fiber is harvested if you try to compound and extrude the material it becomes very brittle and cannot be injected molded into things like auto parts as you can do with recycled nylon. Also, the cost of virgin PET is much less than virgin nylon and therefore it's difficult to get the value from the recycled PET even if it did perform acceptably.

In regards to the California Carpet Stewardship program, it is not right that consumers are walking into stores thinking they are making an environmentally-sound choice by buying recycled-content carpet when in actuality if a PET recycling solution is not found the 5 cents/square yard recycling assessment fee (1 cent per pound) does not cover the 15 cents per pound that it will cost to dispose of the PET material when removed.

The consumer is paying less for PET than for recyclable nylon carpet (\$8 to \$22 per square yard vs. \$25 to \$30 per square yard for nylon). The carpet industry continues to increase production of PET because of its higher profit. It will cost a significant investment to develop solutions to the PET recycling problem. It should not be the burden of the carpet collectors/recyclers (including municipalities) to shoulder the burden of PET carpet.

It should be part of the Carpet Stewardship responsibilities of the carpet industry and addressed more specifically in the AB 2398 plan. This will be commented on again later but in the context of the assessment fee:

Suggested AB 2398 Stewardship Plan Change #3:

- **Put a \$0.25 per square yard surcharge for non-nylon (mostly PET carpet) to offset disposal costs for a total of \$.50 square yard for non-nylon carpet (still significantly less than the total charge of PET carpet vs. nylon)**
- **Develop a plan to use funds to:**
 - **Subsidize collectors to ensure ongoing collections (this could include municipalities)**
 - **Fund research into PET alternatives**
 - **Educate consumers on the current environmental costs of PET carpet and the environmental benefits of nylon carpet (see attached “The Green Choice.”**
 - **Provide bonuses for the recycling of PET fiber into manufactured good for a defined number of years to offset capital investment.**

In addition to the need to increase the assessment fee to 5 cents, there are other issues with conclusion in the Executive Summary. However, the following will address these in the details of the plan and return to the Executive Summary at the end of this document if any issues are missed.

Page 7 – CARE Carpet Stewardship Organization

The CARE Board of Directors includes 19 members. Of these, one is the Executive Director of CARE Bob Peoples (non-voting), of the other 18 members of CARE’s board, 14 members represent companies whose primary business is carpet manufacturing, supplying to the carpet industry or carpet contractors. Only four are carpet/plastics recyclers as their primary business. Only one member of the Board is from California, Ron Greitzer of LA Fiber. All other CARE board votes making decisions regarding California’s AB 2398 plan is being made by individuals not from California, most employed by the carpet industry. There are no government representatives or other categories of stakeholders on the CARE Board.

California needs to have more control over its own carpet stewardship plan. (Included in the attachment is an excerpt of a proposal for California-based AB 2398 support submitted to CARE in March of 2013. It was denied by the Board in April of 2013.)

Page 8 – Background in Carpet Recycling

The conclusion states that “up to 30-40% of carpet can be cost-effectively recycled. The remaining has little or no value in the market place.” This is one of the reasons for the incentives, to make up the difference and keep this material out of the landfills. This section should be expanded to acknowledge that carpet recycling facilities have a wide range of recycling rates and the AB 2398 program (as noted above) should support and reward these facilities to order to increase recycling rates.

Performance Goals and Activities

Page 9 – Increase the recyclability of carpet

This is the first of many sections that list proposed CARE action items to meet goals but do not identify the resources that will be used to accomplish these activities, or time lines to get this work done. Without this it is not a plan. Besides the voluntary CARE Board of Directors, CARE consists of paid an Executive Director Bob Peoples and an Operations Manager, Anthony Cline both of which have nation-wide responsibilities. The rest of CARE is unpaid committee members. In addition to human resources, many of these goals also require financial resources for testing, travel, studies...

Suggested AB 2398 Stewardship Plan Change #4:

- **“Description of how these goals will be achieved” must include who, what and when these items will be done in order to be able to track progress. An overall timeline and budget should be developed as part of the plan including who is responsible to get it done.**

Additionally, this is the CALIFORNIA Carpet Stewardship Plan. It should NOT be administered 100% from Dalton Georgia by a staff that does not have the time or resources to provide the support needed.

Suggested AB 2398 Stewardship Plan Change #5:

- **A commitment MUST be included in the plan that requires at least at least a 50% commitment of a CARE staff person living in California who has lead responsibility for the administration of the Plan.**

In addition to an understanding of carpet recycling, this person should be familiar with the environmental, health and safety regulations in order to participate with the financial auditor to ensure that no one is receiving AB 2398 funding while not meeting

regulations and creating an unfair competitive advantage over other recyclers complying with the rules.

This person should report to both CARE and CalRecycle. CalRecycle should not approve of this plan until this person is in place. It should NOT be up to the Board of Directors of CARE as to whether this individual is hired. The California Carpet Stewardship Plan needs representation in California.

The performance goals listed to “increasing the recyclability of carpet” does not match the “description of how these goals will be achieved.” As noted above the recyclability of PET is the carpet recycling industries biggest problem, therefore

Suggested AB 2398 Stewardship Plan Change #5:

- **Identify track able tasks, time line and resources to increase recyclability of PET carpet**
- **Eventually replace the need for \$18,000 fiber identification devices to determine the difference between carpet fiber types by requiring the carpet industry to stamp the fiber type on the back of the carpet.**

Page 10 – Incentivize the market growth of secondary products made from post-consumer carpets.

With the exception of the final bullet, the first four were including in the original plan. Have there been any positive results from these efforts. Will a manufacturer be incentivized to utilized recycled content from carpet recycling because of these opportunities?

This revised plan includes a new “discretionary incentive fund” but the description is very unclear of how it would be used and how these funds will not create an unlevel playing field. Also, what resources does CARE have that will ensure that this preferential treatment is provided to only those “innovative or break through technologies” that do not have the potential to cause environmental harm and/or that there are markets ready for the products to be developed.

Exhibit A regarding the problem with CARE and the existing California Carpet Stewardship Program: The mismanagement of the Carpet Collectors’ CARS as an “innovative solution”

During 2012, CARE provided this type of “discretionary funding” to the Carpet Collectors’ CARS (Carpet as a Rock Substitute) “innovative solutions.”

I will be going into significant detail regarding this issue as I believe it is Exhibit A in demonstrating the extent of the problems with this plan and the present CARE organization. This is all very onerous as, due to the large potential volume of the carpet used in CARS projects, CARE committed hundreds of thousands of AB 2398 funds to CARS and actually just to the Carpet Collectors as they claimed that it was a “patented process” that they would be the only ones eligible for these funds.

So what is CARS (now listed as PCC rock substituted in the funding reports)? Supposedly the Carpet Collectors was going to take PET carpet and carpet backing and use it in some way as a “rock substitute” in roadbeds. The material was going to be processed and then put into the ground. This of course should have required significant reviews by the applicable Regional Water Boards to ensure that the carpet material did not contaminate both surface and/or ground water. The calcium carbonate in carpet backing contains silica dust which is a dangerous substance relative to inhalation and danger to living organisms in rivers and streams. (The 20 million pounds behind the Carpet Collectors sits on 17 storm drains.) Concerns about water pollution from this material when uncontrolled is why China made shipping whole used carpet into China illegal (it is still being smuggled and shipped to other countries in Asia). The use of this material should have also been discussed with CalOSHA as they have very specific requirements to prevent silica dust hazards in construction sites.

CARE shouldn't be expected be an expert on California environmental compliance but they should ask for documentation regarding what agency approvals an applicant for funds for a new process has received especially when the “recycling” option is discharging this material into the environment. One of the applications considered for CARS was using it with “pervious concrete” which is designed to drive water into the groundwater. Also if this CARS material utilized alongside existing roadways, there should have been consultation with DTSC and/or Regional Boards as much of this soil they would disturb often has aerially-deposited lead contamination from past uses of lead gasoline and may need to be handled as a Cal Haz or RCRA hazardous waste.

The review by CARE that would result in payments of hundreds of thousands of dollars should have also included whether the Carpet Collectors actually had a customer for their CARS material. This needed to be done BEFORE the approval of CARS not after there was concern by many due to the growing pile. (See photo included in attachments) Included in the inspection reports by the County of Sacramento was a note that this material was being “sold” to their consultant Bob Lily for a project with the City of Elk Grove. (The most recent inspection report regarding the Carpet Collectors continued operation of the facility under a cease and desist order is included in the attachments.)

During this time *The Carpet Recyclers'* (TCR) was turned down by CARE for bonus funding that was included as a provision in the original CARE California Carpet Stewardship Plan. I was told this was because the funds were needed for future payments anticipated that would be needed for CARS. Also, GreenWaste Recovery, TCR's Northern California carpet collector was having trouble competing with the Carpet Collectors for carpet as they and we had the additional cost of legally disposing of the PET carpet and TCR was processing the nylon carpet backing while the Carpet Collectors was creating the 20 million pound pile behind their property and CARE was paying them to do it.

I had been informed about the growing pile by GreenWaste and personally visited the Carpet Collectors site during the Thanksgiving Weekend of 2012. I sent a photo of the Carpet Collectors' pile (up to 20 feet high over 15 acres) to the City of Elk Grove and asked if this was their material and whether there was an end use for this material. (A photo of the current pile is attached.) The City Engineer sent me an email back saying that Bob Lily had contacted them but there was no planned project for this material. It took minutes to make this connection. I forwarded the City of Elk Grove email to CARE along with a disk of the complete compliance file from the County of Sacramento which is also readily available on the internet. I was concerned both as an environmentalist but also by the unlevel playing field that had been created by that the pile and the CARE CARE funding provided to the Carpet Collectors. (I understand that they received one check for 2nd quarter and the rest is in escrow due to the compliance issues.)

Prior to receiving AB 2398 funds, the requirement is that the fiber (Type A) or fiber (Type B) must be "sold and shipped." When *The Carpet Recyclers* was audited by CARE representatives, the company was required to show customer invoices, proof of payment and shipping documents. In the case of the Carpet Collectors' CARS material it was "sold" to their associate Bob Lily and "shipped" to the lot behind the Carpet Collectors. This material is actually still the property of the Carpet Collectors' as demonstrated by the fact that the "cease and desist" order by the County of Sacramento for the "mountain of illegally disposed carpet" (the description by the County Attorney) and other actions find the Carpet Collectors as the liable party. This is not disputed in any of the communications back to the County by either the Carpet Collectors or their attorneys.

The result of this lack of review for the "innovative solutions" by CARE is:

1. The 20 million pounds of waste carpet behind their facility which has been issued a cease and desist order by the County of Sacramento as an illegal disposal site and the City of Sacramento Fire Department plus other compliance actions by the Regional Water Control Board for storm water violations.

Note: CARE would probably have noticed that this pile was growing and there was no real "shipping" going on if CARE had "boots on the ground" in California.

2. The majority of the Type B funds paid (\$424,000) in 2012 by CARE went to the Carpet Collectors for this “sold and shipped” material which actually was neither “sold or shipped.” This is 25% of all the “recycled material” reported by CARE but there is not one mention of this material in the Stewardship Plan.
3. The recycling % of the CARE AB 2398 is greatly inflated as the majority of the 14 million pounds of Type B material is the CARS material on the pile. (See Attached “Fate of California Used Carpet in 2012”)
4. Created a non-level playing field for *The Carpet Recyclers* with the elimination of the promised growth bonus and created the difficulty in getting adequate northern California for facility. The handling of CARS by CARE was a major component in the financial difficulties of *The Carpet Recyclers*.

Therefore in order to ensure CARE’s use of discretionary funds for innovative funding does not result in environmental issues or unlevel playing field:

Suggested AB 2398 Stewardship Plan Change #6:

Additional details need to be provided regarding the use of discretionary funds for innovative uses. Requirements should include:

- **Claims of patents must be carefully checked.**
- **Applicant must demonstrated that they have secured applicable permits and approvals**
- **An analysis should be done to insure that discretionary funds for an unproven technology are not creating an unlevel playing field for competition**
- **Limits set for payouts and comprehensive review conducted prior to permanent funding for innovation.**

Specific details for this type of review is included in the attachment that proposes the California-based AB 2398 support.

The following is an example of an actual way that the CARE plan can incentivize the market growth of secondary products and significantly increase recycling rates. As shown on the attached, this was proposed to CARE in Feb of 2013.

Approximately 40% of all carpet is made up of “limestone” i.e. calcium carbonate. Significant effort was conducted by *The Carpet Recyclers* and others to convince manufactures to utilize harvested calcium carbonate in their products. This is a very difficult task due to the low cost of virgin calcium carbonate and the risks associated with using harvested, recycled material.

The motivations for manufactures to use recycled content from carpet in their products include the follow: reduce costs, improve products, increase sales to eco-buyers (including the government) and secure LEED credits.

Even with these motivations it is often difficult to overcome objections and change the status quo. These objections include: not wanting to change their process, concerned about ongoing supply, costs them start-up money to try.

Calcium carbonate is especially challenging for finding manufacturers to use this material due the low cost of the virgin material (@ 1 cent per #). But because calcium carbonate in 40% of carpet, unless end users are found for this material, there will always be a maximum 40% recycle rate for carpet (40% calcium carbonate plus other materials from processing such as bag house waste that are difficult to find end users.)

The revised plan continues to address calcium carbonate (backing) as a “lower value recycling as “non-functional filler” but it can be used as functional, higher-value raw material but it requires additional processing to sell/increase value of the material.

Therefore, to significantly increase the recycling % of processed carpet:

Suggested AB 2398 Stewardship Plan Change #7:

- **Provide incentive of \$.03/lb of calcium carbonate to manufacturers utilizing harvested material as raw material in their manufactured (or 1st line processors to pass on to manufacturers).**
- **Incentive will be for 2 years to overcome objections & offset startup costs to use this material.**
- **Explore other incentives to overcome other objections by manufacturers to use under-utilized harvested carpet resources.**

Page 11 – Increasing the diversion and recycling (output) of post-consumer carpet

The ability to measure and improve performance is based in the appropriate presentation of data regarding the current situation. The information provided in this section regarding the “success” of the current CARE Stewardship plan is based on misleading information.

The actual fate of California used carpet during 2012 is included in the attachments provided with these comments. The following summarizes the problems (a flow chart is provided in the attachments):

| | |
|-----------------------------|-----------------------------|
| Total Used Carpet Generated | 343.2 Million Pounds |
| “Diversion ” | 112 million pounds |
| | 32.6% sounds good except... |

Almost 90% of the material diverted did NOT become recycled product and much of this material ended back up in landfills. (See comments below) and ...

CARE reported Recycled:

| | |
|-------------------------|---------------------|
| Type A Fiber | 34 million pounds |
| Type B (Filler/Backing) | 14 million pounds |
| CARE total | 48 million pounds |
| | 42.8 % ok except... |

An estimated 11+ million pounds of Type B material is the material illegally disposed as part of the 20 million pounds (15 acres, 15-20 feet high) behind the Carpet Collectors' facility in Sacramento (discussed above) with Cease and Desist orders on the facility from the County of Sacramento LEA and City of Sacramento Fire.

Removing this material reported to CARE as "Carpet as Alternative Rock" (CARS), the revised totals become --

Actually Recycled:

| | |
|-------------------------|---------------------|
| Type A Fiber | 34 million pounds |
| Type B (Filler/Backing) | @ 3 million pounds* |
| Actual total | 37 million pounds |

33% of Total Collected (9.8% less than CARE numbers) and...

Only 10.8% of the used carpet generated in California during 2012, where did the rest of this carpet go...?

| | |
|--|-----------------------------|
| Total Used Carpet Generated | 343.2 million pounds |
| Recycled Amount | 37 million pounds |
| Used Carpet Material Not Recycled | 306.2 million pounds |

Where did the rest of the carpet 306.2 million pounds go?

- Carpet Not Collected 231 million pounds
- Carpet Collected Not Recycled 75 million pounds

This material went to:

- ❖ Landfill
- ❖ Waste-to-Energy
- ❖ Waste from Carpet Recycling
- ❖ Carpet in C&D Recycling Bins
- ❖ Whole Carpet Shipped Overseas

Note: CARS total is an estimate as CARE would not release these amounts as it considers this information confidential information. This amount was conservatively back calculated based on the fact that the only other Type 2 Recycled Output would be the recycling of calcium carbonate.

Upon discussion with other carpet recycling in operation it was determined that The Carpet Recyclers were the only ones with any significant recycling of this material (@ 900, 000 pounds). Therefore the estimate of 11 million pounds for CARS of the 14 million pounds reported would be a conservative estimate (78.5%).

With this it would follow that of the \$424,000 reported on Table V paid out for “Type 2 Recycled Output,” at least \$332,848 was paid out for CARS.

Suggested AB 2398 Stewardship Plan Change #8:

- **The 2012 totals in Plan’s Table 1 must be modified to remove CARS totals to reflect the actual 2012 recycling rates – being stockpiled behind the Carpet Collectors’ facility does not meet the “sold and shipped” definition of recycled material payable from AB 2398 funds.**
- **This 20 million pound pile of carpet waste generated in 2012 has started going to landfill e.g. +2.8 million pounds in April alone. The cease and desist order requires all this material to be removed by August of 2013. With this...**
- **CARE should commit in the plan to adjust 2012 landfill disposal amounts to reflect disposal of the pile by the Carpet Collectors**
- **Material disposed for which CARE has paid the Carpet Collectors for CARS must be refunded and returned to the AB 2398 account.**
- **A definition of “diversion” needs to be included in the plan. It is very misleading to for CARE to report their successes include “diverting” 112 million pounds of post-consumer carpet has been “diverted” and for others to assume that this means this material has been kept out of landfills (including in Press Releases world-wide regarding AB 2398 successes). With this ...**
- **Much more emphasis needs to be put on recycling results (i.e. recovered and reused material), not on “diversion rates” especially as much of this material is still going to landfill in the U.S. and from “recycling” operations for whole carpet shipped overseas.**

NOTE: Including in this section is the identification of the continuance of the \$0.05/square yard assessment. See comments earlier as to why this is much too low.

CARE projects the plan will achieve a 16% carpet recycling (output) by 2012 for California. These projections include amounts included in AB 2398 reports provided by *The Carpet Recyclers* and the Carpet Collectors. Unless CARE and their auditors have reasonable assurance that these operations have the financial resources to reopen (and stay open) in the case of *The Carpet Recyclers* and that the Carpet Collectors can overcome their environmental liabilities (including the potential \$5000/day liabilities from current violations of the County of Sacramento cease and desist orders), these totals should be removed from the projection.

For example, prior to the facility closing on March 27, 2013, *The Carpet Recyclers* (TCR) reported that in 2013, the facility will have a total recycling output of 17.7 million pounds. Already during 2013, from short falls during first quarter and the facility being closed during second quarter, there has already been a reduction of 5.8 million pounds from the projections reported to CARE and assumed to be used in this plan.

Let's see how this affects the progress reported in Table 1 from 2012 to 2013. Numbers are in millions of pounds:

| | Actuals reported for in Plan 2012 | 2013 Plan | 2013 Plan less TCR output lost to date (actual) | 2013 Plan less TCR output in projections if facility does not reopen in 2013 |
|-----------------------------|-----------------------------------|-----------|---|--|
| Discards | 343 | 347 | 347 | 347 |
| Total Recycling (Output) | 48 | 40 | 34.2 | 22.3 |
| Percentage of Discards | 14% | 12% | 9.9% | 6.4% |
| Recycling loss 2012 to 2013 | | (2%) | (4.1%) | (7.6%) |

Now let's take this same 17.7 million lost in the projections from *The Carpet Recyclers* closure and see what this does to the 2016 projection of 16% if the facility does not reopen or is replaced by another facility. The plan presently shows the following forecast. Numbers are in millions of pounds:

Current Plan

| | 2013 | 2014 | 2015 | 2016 |
|------------------------------|------|------|------|------|
| Estimated Discards | 347 | 350 | 354 | 357 |
| Diversion (amount collected) | 113 | 114 | 115 | 116 |
| Total Recycling (Output) | 40 | 44 | 53 | 57 |
| Reuse | 1 | 2 | 3 | 5 |
| % of Discards | 12 | 13 | 15 | 16 |

Adjusted for loss of The Carpet Recyclers:

| | 2013 | 2014 | 2015 | 2016 |
|------------------------------|------|------|-------|-------|
| Estimated Discards | 347 | 350 | 354 | 357 |
| Diversion (amount collected) | 113 | 114 | 115 | 116 |
| Total Recycling (Output) | 22.3 | 26.7 | 35.3 | 39.7 |
| Reuse | 1 | 2 | 3 | 5 |
| % of Discards | 6.7% | 8.2% | 10.8% | 12.5% |

Even without adjusting for the loss of the Carpet Collectors, the projected 2016 is less than % recycled in 2012.

Suggested AB 2398 Stewardship Plan Change #9:

- **More detailed information is needed regarding how the projections for Total Recycling (Output) was developed for Tables 1**
- **If projections are from the AB 2398 request for funding submittals from carpet recycling companies, please explain how totals for 2013 will increase after the closure of The Carpet Recyclers (actual current loss over projections already 5.8 million pounds, also % should decrease due to loss of high recycling % of The Carpet Recyclers), a cease and desist order on the Carpet Collectors and an increase in whole used carpet being shipped overseas**
- **Also, for years going forward, if The Carpet Recyclers and Carpet Collectors projection are to be included in total, an audit must be conducted of both facilities by CARE to determine if they have the financial viability to open and stay open through 2016. If not ...**
- **Projections from these facilities need to be removed from the projections and ...**
- **Incentives need to be included in the Plan to attract other facilities to replace The Carpet Recyclers and Carpet Collectors.**

Page 12 and 13– Includes the statement *“After 7 quarters of operation good progress has been made in both landfill diversion/recovery and recycle output.”* This statement is misleading as Figure 1 includes both The Carpet Recyclers and Carpet Collectors’ results including CARS and does not address the current issues that are severely impacting carpet recycling discussed above.

There should also not be an assumption that “diversion” which is actually “collection” of carpet will continue at its current and projected rate due to the increase in the % of PET carpet and loss of value to collect California carpet. See earlier discussion.

Also none of the data provide gives any assurance that the recycling output by 2016 will achieve a 16% recycling output.

Suggested AB 2398 Stewardship Plan Change #10:

- **Provided documented evidence as to the increase in recycling output to 16%. Include capacity of existing carpet recycling facilities vs. projected recycling output. If capacity is inadequate, what will be done to incentivize the increase in production capacity of existing or new facilities?**

Page 14 -- It is assumed that recycling output will increase by 17 million pounds by 2016. The present recycling rate is 30% of the total carpet “diverted” (collected). At this rate, 165 million pounds would need to be collected (53 million pounds more than current) to make up this total (and probably even more if no solution is developed for the recycling of non-nylon carpet and the volume increases to 50% by 2016.

The increase of the 17 million is especially challenging if the recycling capacity of *The Carpet Recyclers* and/or the Carpet Collectors also needs to be replaced.

As I represent investors interested in spending millions to build a high-tech, highest-recycling rate carpet recycling facility in California I’ll address the Plans goals on how they can reach the 16% 2016 recycling goal from this perspective.

The list on Page 14 is impressive at first glance but has no distinct action items, identified resources or deadlines.

These are examples of the types of programs and support needed for someone to invest millions of dollars on a new carpet recycling facility in California with recycling capabilities to process that entire carpet and keep carpet material out of California landfills or going overseas where it causes even more harm.

This requires help from both CARE and from the State of California.

1. The most important is the assurance that there will be adequate carpet for processing. The following is a list of items that can help this effort.
 - a) To eliminate the need for \$18,000 carpet detectors, require carpet manufacturers to stamp the fiber type on the back of the carpet that they sell into California.

- b) Create a more effective carpet collection infrastructure. (See existing program and alternative program attached)
- c) Require higher landfill disposal rates for carpet.
- d) Support the implementation of AB 341 commercial recycling requirements with the carpet retailers in California. All are covered under the minimums. Carpet requires source segregation in order to meet the AB 341 rules i.e. going to MRF's impacts the recycling % and therefore is not an option under the rules. Proposed alternative program meets these requirements.
- e) CARE and the carpet manufacturers/installers need to police the significant pirating of nylon carpet in California. It's difficult enough cost-effectively collect carpet (especially with the rising % of PET) but... Used nylon carpet is routinely intercepted at or before reaching the collection trailers. Cash payments are made and the material is either sold to other carpet recyclers or more likely shipped overseas.
- f) A solution is required for the PET carpet before the cost of handling this material destroys the economics of recycling carpet.
- g) Until there is a solution... Consumers must be educated that all carpet is not equally recyclable (see attached example flyer and later comments regarding education).
- h) Education must also include the fact that consumers need to ask their retailer if they are actually going to recycle their carpet (see example advertisement). This education should include the unique environmental benefits from carpet recycling of saving oil and reducing GHG by not using oil resources in addition to landfill diversion. Also assessment fees need to be high enough to get their attention, the present \$10 per average sized house is not enough.
- i) These fees also need to be high enough to support the collection costs including to the municipalities for their "bulky item pickup programs." Incentives need to be high enough to compete with whole carpet being shipped overseas and...
- j) There is significant shipment of whole carpet to Georgia. This costs California jobs and increases the GHG footprint from carpet recycling. Incentives for out-of-state-processing should be lower.

Alright we have enough carpet, but how to we make sure it goes to companies that have the highest recycling rates (lowest facility disposal amounts), the cleanest products (which reduces disposal at the customers end) and the lowest GHG footprint and who also have the highest cost to recycle carpet.

- k) As noted earlier, provide a bonus for high recycling rates +70%
- l) Pay lower funds for products with high ash content

- m) Pay premiums for turning fiber into pellets to reduce GHG from transporting fiber bales out of California
- n) Pay premium for creating California markets for products again to stop GHG emission from shipping bales across U.S. or overseas

And to support creation of markets ...

- o) As noted earlier, give secondary market customers short term incentives to overcome start-up costs.
- p) Identify recycled-content opportunities with purchases by the State of California e.g. carpet cushion made from PET carpet
- q) Ban the purchase of carpet made from non-recyclable carpet material by the State of California e.g. PET or non-recyclable carpet tiles or commercial broadloom carpet
- r) Consider creating more value for carpet recycling by including carbon credits in California cap and trade program. This will help incentivize higher recycling rates. For example, the higher recycling rates of *The Carpet Recyclers* resulted in a significantly higher GHG benefit than calculated in the normal U.S EPA WARM model. Based on calculations done by Matthew Realff, Ph.D of Georgia Tech University, the GHG benefit of TCR was equivalent to over \$250,000 per year if traded on the minimum allowed value at the California ARB cap and trade auction. Recycling in general should be seen across the board as value weapon in reducing GHG while creating green jobs.

Suggested AB 2398 Stewardship Plan Change #11:

- **Find out the limitations and obstructions associated with expanding or creating new carpet recycling capacity for the 16% defined goal (including investment risks).**
- **Focus efforts on these needs**
- **Clarify comments such as: “Better technology for utilizing the carpet going into recycling facilities will happen over time.” Well they “happened” at *The Carpet Recyclers* with their +70% recycling rate but they couldn’t compete with facilities with lower recycling rates or companies with “innovative solutions” that resulted in a 20 million pound pile behind the Carpet Collectors. The plan needs to include concrete solutions on how CARE will incentivize higher recycling rates which require more extensive/expensive facilities and higher operating costs and not just hope that “magically” this will “happen over time.” It will not.**

- **Identify focused action items, resources and time lines to meet these goals.**

Page 18 – Collection Systems

Plan states that there are 20 California businesses that process and collect carpet for recycling with 150 Californians providing these services. With the closure of *The Carpet Recyclers* who reported 76 employees to CARE, this number has been cut in half.

The plan provides Attachment VIII as a list of these companies. Of these, there are only 5 processors on the list (only three are open at this time). Without the processors, carpet recycling doesn't happen, the collectors either close or ship the collected whole carpet overseas or out of state. The following lists of these processors and their current status:

Carpet Collectors -- Operating in defiance of cease and desist order from the County of Sacramento (see earlier comments and copy of most recent inspection report)

Carpet Solutions – Low recycling rate, low quality material, ships 100% of harvested material to Ming Industries, parent company in China.

LA Fiber – Has operated facility for 20+ years, contact Ron Greitzer regarding facility

SOEX – Hasn't collected or recycled carpet since 2010

The Carpet Recyclers -- Closed March 27, 2013. Claimed in May 2013 that they would reopen in 10-12 days. This has not yet happened.

Of the out-of-state recyclers, (not including carpet tiles) Shaw is the only significant processor of California carpet. They only accept Nylon 6.

CARE makes comments on this page that they “assume no financial or remedial responsibilities for the success or failure of any business or their operations.” Yes, carpet recycling is market-based industry but CARE should audit the financial viability and the compliance status of the recipients of the AB 2398 funding. They need to ensure that there is a level playing field and have a good enough understanding of these businesses such that they can make good assumptions regarding the long-term viability of the company and/or their recycling capacity in order to determine the focus of this plan.

Page 19 – Figure 2, per comments provided earlier Figure 2 is wrong and misleading. Totally recycling should be combined to show a significant overall reduction in 2013 from 2012. No data provided regarding basis for data regarding CAAF.

Page 22 – Regarding certified collectors, does CARE do any site visits to ensure certified collectors are complying with these conditions? Do they do any outreach to collectors who are not certified? As there are no CARE “boots on the ground” in California, it's

difficult to see if this is the case. This section needs to address the widespread piracy presently occurring in carpet collection in California discussed earlier.

Page 23 – The Plan states that “the current carpet recyclers reach most of the major retail stores” and that “carpet recycling is accessible up to 98% of the California population in 2012.” The key word here is “major.” Unless there is enough material to swap out a trailer every other week or enough space, there are a large number of carpet stores to do no receive trailer service.” This results in just the “low hanging fruit” being collected.

For example, in the City of Los Angeles, which generates 10% of all the carpet in California or 38 million pounds annually, due to the small number of stores, it is estimated that only 50% of the carpet is collected in Los Angeles which leaves 19 million of uncollected carpet in the largest city in California.

Included in the attachments is a flow chart prepared for the City of LA showing all the ways that carpet does not get not get collected and recycled this includes the carpet generated by DIY homeowners removing carpet. Collecting this material in their bulky item collection program will result in significant expenditures for the city especially with the disposal cost of the PET which will also be collected in this program. Also provided is an alternative collection scheme.

The rural counties definitely need additional support to collect their material but there is also need in the Cities to go after the “higher hanging fruit.” Collecting this material is also more costly. CARE has data regarding the higher cost of carpet collection as one collects more carpet. This should be included in the Plan along with a discussion regarding how this will be paid for e.g. raising assessment rates.

Suggested AB 2398 Stewardship Plan Change #11:

- **Plan needs to differentiate between the carpet processors and the carpet collectors. Identify clearly who are the carpet processors who are presently open and can legally accept carpet. Reduce the number of persons working carpet recycling due to TCR closure.**
- **Change Figure 1 to reflect reality**
- **Discuss oversight of certified carpet collectors and piracy issue**
- **Discuss the problem and increasing costs associated increasing “diversion” i.e. collection rates**
- **Identify alternative collection scenarios from trailer swaps that will be needed to collect carpet from locations where trailer swaps are not cost effective**

Page 24 – Market Development

Besides the NSF effort, the items identify under “Market Development” is really marketing support. Please see “Suggested Plan Change #7” regarding items to actually help support and overcome hurdles regarding secondary markets for material recycled from carpet.

Regarding the marketing support discussed in the section, please quantify successes in this arena relative to California. I understand that GeoHay has no market here in the State. Reliance Carpet Cushion made by LA Fiber is extremely important as it utilizes PET and other non-nylon carpet and is the only end user product produced in California. All other harvested resources are shipped out of California as raw materials.

What specifically has CARE done to support the growth of Reliance carpet cushion?

Suggested AB 2398 Stewardship Plan Change #11:

- **Give additional information or additional plans to actually help increase markets for secondary products beyond marketing support.**
- **Especially address support for Reliance Carpet Cushion due to its importance to California carpet recycling.**

Page 25 – 33 -- Financing Mechanism

The existing plan is NOT progressing as expected. It is NOT achieving its goals especially relative to the projected downturn in recycling rates that will happen in 2013. NOW is the time to review this plan and make changes to solve the following:

- A. This plan is inadequate to meet the statutory requirements of incentivizing:
 - ❖ Market growth of secondary products
 - ❖ Increasing the recyclability of carpet
 - ❖ Growth of recycling and diversion (actual recycling will go down significantly in 2013)
- B. Funding must be adjusted NOW based on market conditions and progress to meet the Plan goals for AB 2398
- C. It is good that the PET problem has been included in the Plan but actually action items, deliverables, resources and time lines needed to make progress on the problem that could destroy carpet recycling in California and the U.S.

D. The SFOC (Sustainability Financing Oversight Committee) will annually review the Plan payouts and progress. This committee is made up of members of the CARE board. The majority of the members are carpet industry representatives from Georgia. There is only one California member, Ron Greitzer for LA Fiber.

This is the committee of mostly carpet executives who:

- ❖ Decided to approve and fund CARS.
- ❖ They are partially responsible for the 20 acre pile behind the Carpet Collectors.
- ❖ Because of the funding of CARS and future anticipated CARS payment, it was this committee that decided NOT to fund the recycling increases from The Carpet Recyclers that was included in the previous plan.
- ❖ They created the unlevel playing field for carpet the severely impacted the ability of The Carpet Recyclers to secure carpet as the Carpet Collectors were not paying for disposal and CARE was paying them for the unsold and unshipped CARS material.
- ❖ They ignored numerous ideas submitted to them (see enclosures) which had the potential to save The Carpet Recyclers and –
 - ✓ Incentivize higher recycling rates
 - ✓ Increase education programs
 - ✓ Promote the creation of secondary markets
 - ✓ Create “boots on the ground” in California to help improve the AB 2398 program

The SFOC needs to expand its membership and be more transparent in its decision-making.

E. Table III is an overview of processing technologies that are included in the incentive funding. Please address whether and how this includes CARS.

F. The funding mechanism is to NOT create an unfair advantage in the marketplace. That’s exactly what happened with CARS.

G. The plan says that CARE will be working with its auditors and CalRecycle to eliminate any reporting issues or misreporting. This should be done BEFORE the request for funding is submitted. Anyone interested in funding should submit a request to be approved for eligibility. This application should include how applicant will determine % of incoming carpet is from California, certified weights of outgoing material, documentation of “shipped and sold.”

A material balance should be included determining the % of waste generated anticipated to be generated from the facility. Note: If this % is above 10%, a Solid Waste Management Facility Permit is required. (Specific ideas regarding this pre-funding application is included in the attached proposal for California Based AB 2398 support)

Per the certification required to request funding, applicants must be in full compliance with all local, state and federal regulations and requirements to operate their business. This is too broad, something more specific like “do you have any outstanding compliance orders against the facility that have not been resolved in the last 90 days.” Also, prior to receiving the initial funding, the applicant should review a checklist of California permit and compliance requirements. For carpet recycling these could include air quality permits, solid waste management facility permits if over 10% residual waste, stormwater management if outside storage, CalOSHA respiratory protection program, forklift certification, hearing protection and Fire Department permits. Applicant would either provide copies of these permits or describe why they are not applicable to their facility. (Specific ideas regarding this pre-funding application is included in the attached proposal for California Based AB 2398 support)

- H. See comments above regarding “Discretionary Incentive Fund.”
- I. Assumptions for Funding Distribution. As noted above the Carpet assessment is much too low for this program along with the recycling payouts. These should both be increased and the recycling payouts should be modified to incentivize higher recycling rates.
- J. The plan states that “CARE will examine progress and market dynamics from time to time and explore innovative ways to incentive market growth, outlets and process or product R&D. Such evaluations may include, but are not limited to differential pricing based on fiber types, reporting incentives, market outlets, funding university projects, market studies, etc.” Isn’t THIS the “time to time” that this should be done with this plan? Now that one carpet recycling facility has closed and the other has a cease and desist order against it and only two more are in the state of California? Now that with these closures the recycling rate will go down significantly in 2013 from 2012. Now that PET is heading toward 50% of the total fiber type in the next few years. This Plan IS the time otherwise it will be up to the members of the SVOC to make these changes, members who decided to approve CARS and include the largest manufacturers of PET carpet in the world which is made at a lower cost and higher profit than recyclable nylon carpet.

- K. CARE has had 18 months to come up with revisions to this plan and include “funding models to facilitate growth.” This plan cannot be a plan to write a plan, this work needs to be done now and made transparent for all the review.
- L. Unused Funds. At the end of 2012 there were unused funds of \$3.061 Million. CARE claimed these were needed due to future projections (while denying the bonus payment in the plan that was denied The Carpet Recyclers). However as noted earlier, these future projections are already significantly high for 2013 due to the closure of The Carpet Recyclers and the questionable future of the Carpet Collectors including the future of CARS. A detailed study is required to truly understand projections and capacities, the unused funds may be much higher than the \$8.399 projected for 2016 as there is no evidence that the projected recycling rate of 16% will be in anyway close to be reached.
- M. Fiduciary Responsibilities. As discussed, the CARE Stewardship Plan Committee (SPC) and the SFOC is comprised from members of the CARE Board. There is only ONE member that is from California, the majority of the members represent carpet manufactures headquartered in Georgia. The members of these committees should be identified in the plan. The makeup of these committees should changed immediately to include at least 50% membership from California that represents the citizens of this State who have paid the funds into this plan.

Suggested AB 2398 Stewardship Plan Change #12:

- **Review the problems and solutions listed in A through N above and adjust the Plan to resolve these concerns.**

Page 33 – Education and Outreach.

I’ll leave it up to others to comment on how the Education program is inadequate and doesn’t meet explicit statutory requirements. The focus needs to be on the consumer. They are the ones that need to know there is a difference in the how recyclable nylon carpet is vs. PET and to ask their retailer whether their carpet will be recycled. (See attached example flyers.)

All the activities listed for the education program happened in 2011.

Suggested AB 2398 Stewardship Plan Change #13:

- **Include in the education plan specific programs to reach out to consumers. Focus on positive benefits of carpet recycling rather than referencing AB 2398**

- **Develop an advisory committee for education program that includes California stakeholders**
- **See attached California based AB 2398 proposal for other ideas regarding education program including adds and door clings.**

Page 34 – Program Measurement

CARS is estimated to be 25% of the total output in 2012. It is still a category on the AB 2398 funding request form. This need to be included in the list of output pounds reported.

Suggested AB 2398 Stewardship Plan Change #13:

- **Increase the transparency of CARS. Include on the list of outputs in 2012 for the performance report.**

Page 37 – Stakeholder Consultation

Others can comment on this better than me but the majority of this consultation was prior the issuance of the original plan. Relative to the existing plan, no reach out to stakeholders in California happened until mid May 2013. Comments at that time were difficult because one didn't know what the plan entailed. This effort since the release of the plan on May 31, 2013 is the first opportunity to comment on this plan.

Suggested AB 2398 Stewardship Plan Change #14:

- **Differentiate between the efforts made in 2011 vs. efforts to input by stakeholders to input into the existing plan**
- **Include commitments to request more stakeholder involvement in the future.**

Page 64 -- Accounting firm requirements for Recyclers

A list of procedures is provided for the accounting firm for auditing recyclers for the quarter ending in September 30, 2012. During this time I was the Vice President at The Carpet Recyclers responsible for AB 2398 funding submittals and compliance with AB 2398 funding. I was not contacted to get this information. We were only audited once in December of 2011.

This is a great list especially looking at the financials of the company. It should be expanded to ask about enforcements actions against the company. Also, the first audit shouldn't be AFTER the first submittal to identify problems but rather BEFORE to ensure problems won't happen.

If this procedure was used for the Carpet Collectors' CARS pile in the back, how could it "reconcile with shipping logs" if it was "shipped" to the adjacent lot with a loader?

Also, the definition of "fiber" is supposed to be material with < 25% ash. This is provided in the certification form but how the collection and analyses must be done should be included in the plan. The audit should include sampling of the fiber as the paying is supposed to be reduced to Type 2 for high ash fiber material.

Suggested AB 2398 Stewardship Plan Change #15:

- **Please include in the Plan the actual auditing activity that has been conducted by since the beginning of the program in July of 2011**
- **Clarify rules for sold and shipped to ensure 20 million CARS pile cannot happen again**
- **Include enforcement status in the audits (see checklist provided in attachments)**
- **Require pre-audits to review systems PRIOR to the first quarter that output will be produced to prevent problems before this happen.**
- **Include sampling and analyses of fiber to ensure proper payment is being applied for and made regarding the ash content of the fiber.**

Page 67 – New Quarterly Reporting Format for Recyclers

Good changes to prevent double booking of collection amounts. Lines 77-79 relate to CARS (PCC as rock substitute). This should be removed from the reporting form until it is demonstrated to be an acceptable recycling method. Right now it is just a pile of illegally disposed waste behind the Carpet Collectors.

This is the ONLY mention of CARS in entire plan even though it was 25% of the reported "recycled material" in 2012.

Suggested AB 2398 Stewardship Plan Change #16:

- **Remove CARS as a payment category until properly vetted as an appropriate recycling category.**

Thank you for this opportunity to submit my comments. More information is provided in the attachments. Feel free to contact me if you have any questions on these comments or require additional information. Gail Brice

The Following Attachments provide additional information for your consideration. Much of which has been referenced in these comments:

- 1. Summary of Major Issues with Revised CARE California Carpet Stewardship Plan**
- 2. Fate of California Used Carpet in California in 2102: High Post-Collection Waste. CARS material not recycled in 2012 – Only 10.3 Recycling Rate**
- 3. Photo taken June 2013 of Carpet Collectors Used Pile (15 acres, 15-20 feet high). Cease and desist order issued regarding pile by the County of Sacramento and City Fire Department.**
- 4. Carpet Collection Issues, Presentation made to the City of Los Angeles**
- 5. CARE 2013 conference presentation regarding ideas to improve collections.**
- 6. Presentation made to CARE in Feb 2013 regarding Funding Initiatives to increase recycling %. Issues not addressed.**
- 7. Proposal for California-based AB 2398 support submitted to CARE in March 2013, denied by CARE Board in April 2013**
- 8. CARE Conference Presentation regarding problems with California Carpet Recycling.**
- 9. Example ad to promote recycling by the Paint Industry**
- 10. Draft ad for carpet recycling submitted to CARE, no action taken.**
- 11. Example flyer promoting the recyclability of nylon carpet**

AB 2398 California Carpet Stewardship Plan

A. Misleading 'Success' Reporting (2012) – See Attached Chart

- 1) Total Used Carpet Generated 343.2 Million Pounds
- 2) "Diversion "
32.6% sounds good except...
- 3) CARE reported Recycled:
 - a) Type A Fiber 34 million pounds
 - b) Type B (Filler/Backing) 14 million pounds
 - c) CARE total 48 million pounds

42.8 % ok except...
- 4) An estimated 11+ million pounds of Type B material is illegally disposed as part of the 20 million pounds (15 acres, 15-20 feet high) behind the Carpet Collectors' facility in Sacramento – Cease and Desist orders on the facility from the County of Sacramento LEA and City of Sacramento Fire

Material reported to CARE as "Carpet as Alternative Rock" (CARS)

Revising above for this –
- 5) Actually Recycled:
 - a) Type A Fiber 34 million pounds
 - b) Type B (Filler/Backing) @ 3 million pounds
 - c) Actual total 37 million pounds

33% of Total Collected and 10.8% of Used Carpet Generated
- 6) Correct Diversion Number
 - a) Total Used Carpet Generated 343.2 million pounds
 - b) Recycled Amount 37 million pounds
 - c) Used Carpet Not Recycled 306.2 million pounds
- 7) Where did the rest of the carpet 306.2 million pounds go?
 - a) Carpet Not Collected 231 million pounds
 - b) Carpet Collected Not Recycled 75 million pounds
 - Landfill & Waste-to-Energy (incl. PET)
 - Waste from Carpet Recycling
 - Carpet in C&D Recycling Bins
 - Whole Carpet Shipped Overseas

B. Management of Program

- Carpet America Recovery Effort (CARE), oversight by CalRecycle
- AB 2398 CARE Decisions Made By Committees made up of Carpet Manufacturers headquartered in Georgia and one California-based company – LA Fiber.

C. Severity of problems not address, no definite solutions/resources

1) Over \$3 million not spent by existing funding but CARE –

- a) Only dedicates part-time attention of Bob Peoples and Anthony Cline (one year old of college) to implementing plan
- b) Denied growth bonuses included in Plan
- c) Ignored requests by California recyclers to incentivize higher recycling rates and short-term secondary buyer incentives
- d) Committed no funding for PET recycling research
- e) Did no education programs as required by statute
- f) Claims funds are needed for future payoffs

2) Since January 2013, CARE could have increased recycling assessment up from current 5 cents per square yard.

- a) Plan keeps it at 5 cents per yard (1 cent per pound)
- b) Average size of home in U.S. 2392 square feet. Assume 20% not carpeted = 1912 square feet = 212 square yards x 5 cents = \$10.6
- c) Estimated mattress charge = \$25/unit = 25 cents/lb
- d) Paint charge = 75 cents/gallon = 7.5 cents/lb
- e) Environmental benefits and recycling challenges of carpet
- f) Fee should be increased for nylon carpet and significantly increased for non-recyclable carpet e.g. PET/commercial broadloom/non-recyclable carpet tile – Disposal cost of square yard of carpet > 15 cents/square yard (requested by CalRecycle, ignored by CARE)
- g) Cost of PET carpet < nylon carpet, reaches landfill faster because doesn't last as long (much higher profit for carpet industry, destroys recyclability of PET bottles) consumers should know.

3) PET % increasing from 30 – 50%

- Limited solutions (CARS is now waste, CAAF – cap on amount, limited outlets for carpet cushion)
- PET to landfill reduces the value of collections – double hit, cost of disposal + less nylon in collections

4) No California CARE presence oversight –

- Voted down CalRecycle’s specific request for California boots on the ground
- Example problem – “Carpet As Rock Substitute”
 - Minimal review as recycling method
 - Approved payment of over \$200K for “sales and shipment of material”
 - No customer, material “shipped to adjacent lot”
 - “Boots on ground” might have noticed 15 acres of material behind facility
 - Because of payment, unfair competition for carpet (one of reasons Carpet Recyclers no longer operating)

5) Existing Carpet Recycling Operations

- a) The Carpet Recyclers closed March 26, 2013 – CARE recycler of the year 2012, highest recycling rate in CA.
- b) Carpet Collectors – cease and desist (illegally operating solid waste facility)
- c) Carpet Solutions – grind up fiber and ship to China (< 50% recycling rate)
- d) LA Fiber – The Carpet Recyclers had been buying nylon carpet (+70% recycling rate), now grinding up fiber and shipping it out of U.S. and disposing calcium carbonate
- e) Shaw Carpet – Georgia
- f) Whole carpet shipped to Asia (major problem, container to Asia now \$400 or 1-2 cents per pound of carpet. Recyclers need higher incentives in order to compete.)

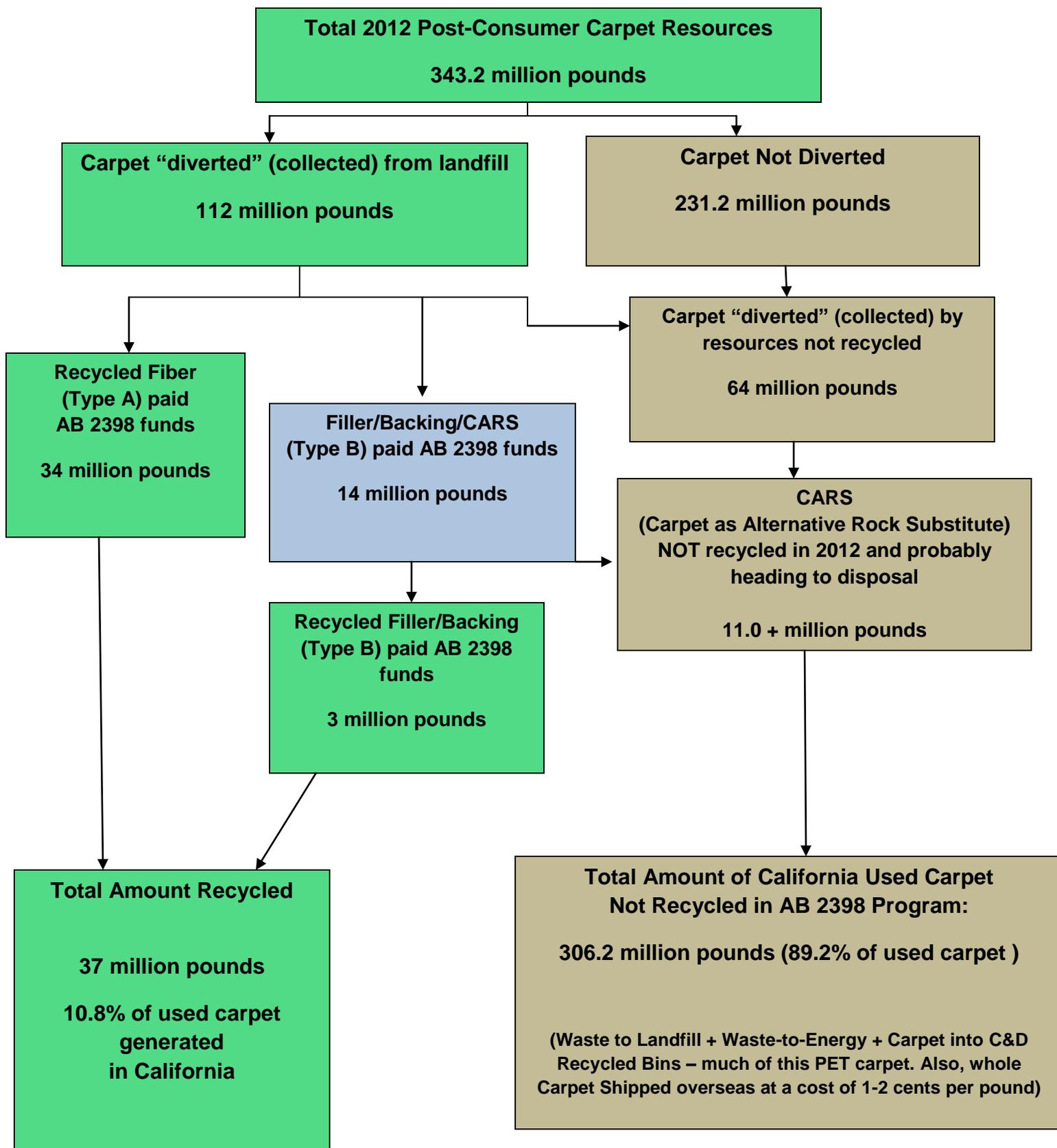
- 6) Rely on carpet processors to incentivize collections
 - a) Only “low hanging fruit” being collected
 - b) Wild West collections – significant stealing of nylon carpet
 - c) Too much carpet ending up in mixed waste, MRF’s, C&D recycling bins, sent direct to landfill
 - d) AB 341 needed to support collections
 - e) True product stewardship needed – require installers to return carpet to distribution warehouse where they pick up carpet – make it the carpet manufactures problem to find recyclers, make them dispose of their own non-recyclable carpet

- 7) Identify low recycling rate but no solutions (should pay higher incentives to facilities with high recycling rates)

- 8) Not meeting the following requirements of AB 2398
 - a) Increase the recyclability of carpet – ideas submitted by The Carpet Recyclers not acted on by SFOC
 - b) Incentivize the market growth of secondary products – ideas submitted by The Carpet Recyclers not acted on by SFOC
 - c) Have an funding mechanism that provides sufficient funding to carry out the plan (see comments below)
 - d) Include education and outreach efforts to consumers, commercial building owners, carpet installation contractors and retailers to promote their participation including signage, written materials, promotional materials (nothing done since 2011)
 - e) The plan shall be designed to accept and manage all suitable postconsumer carpet, regardless of polymer type or primary materials of construction.

- 9) AB 2398 template for rest of the U.S. carpet industry committed to support it elsewhere if it works in California.

Fate of California Used Carpet in California in 2012: High Post-Collection Waste -- Only 10.3% Recycling Rate



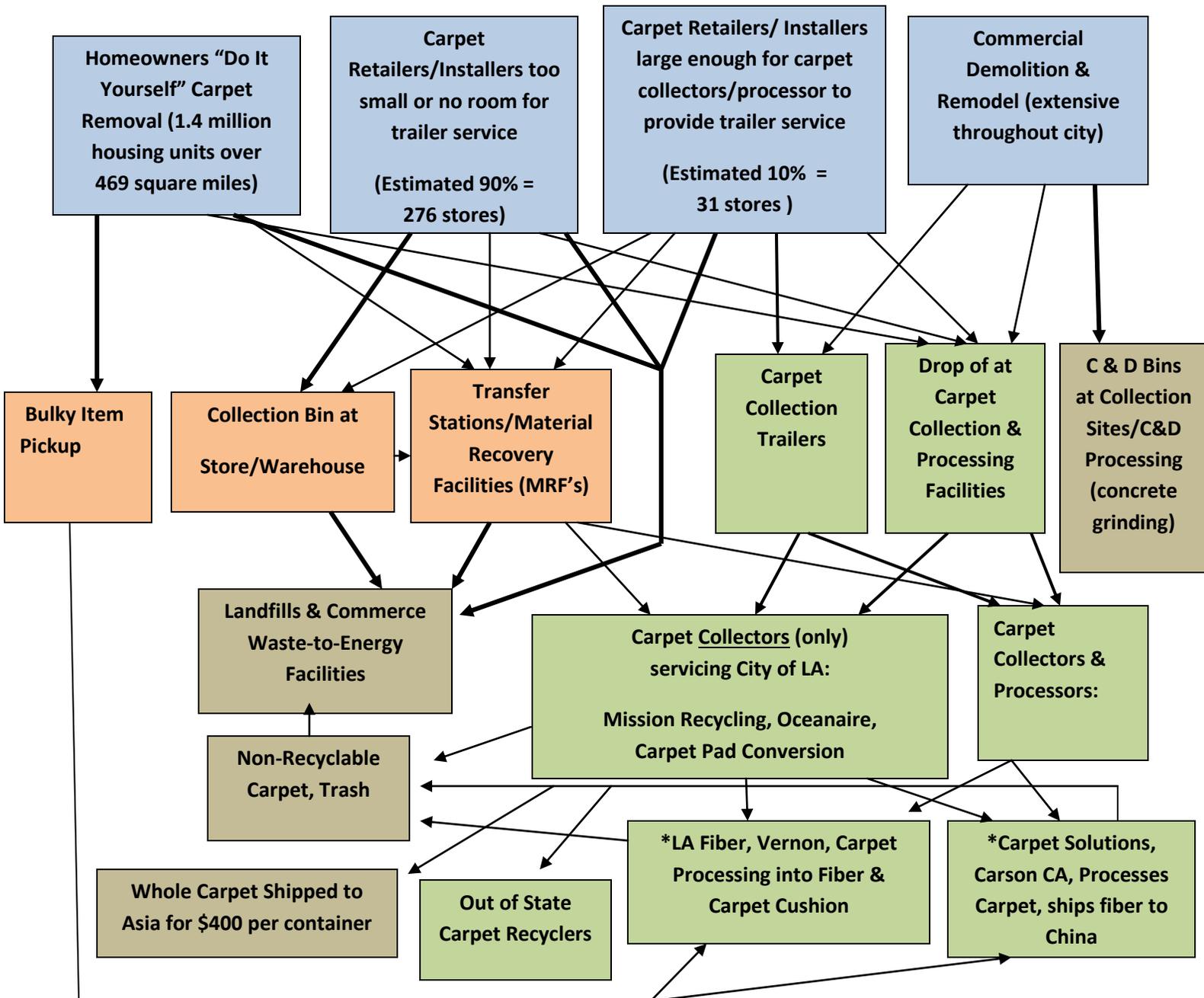
**Carpet Behind Carpet Collectors Facility in Sacramento June 2013 –
15 acres 15-20feet high**



Carpet Recycling Issues: City of Los Angeles – CARE Meeting

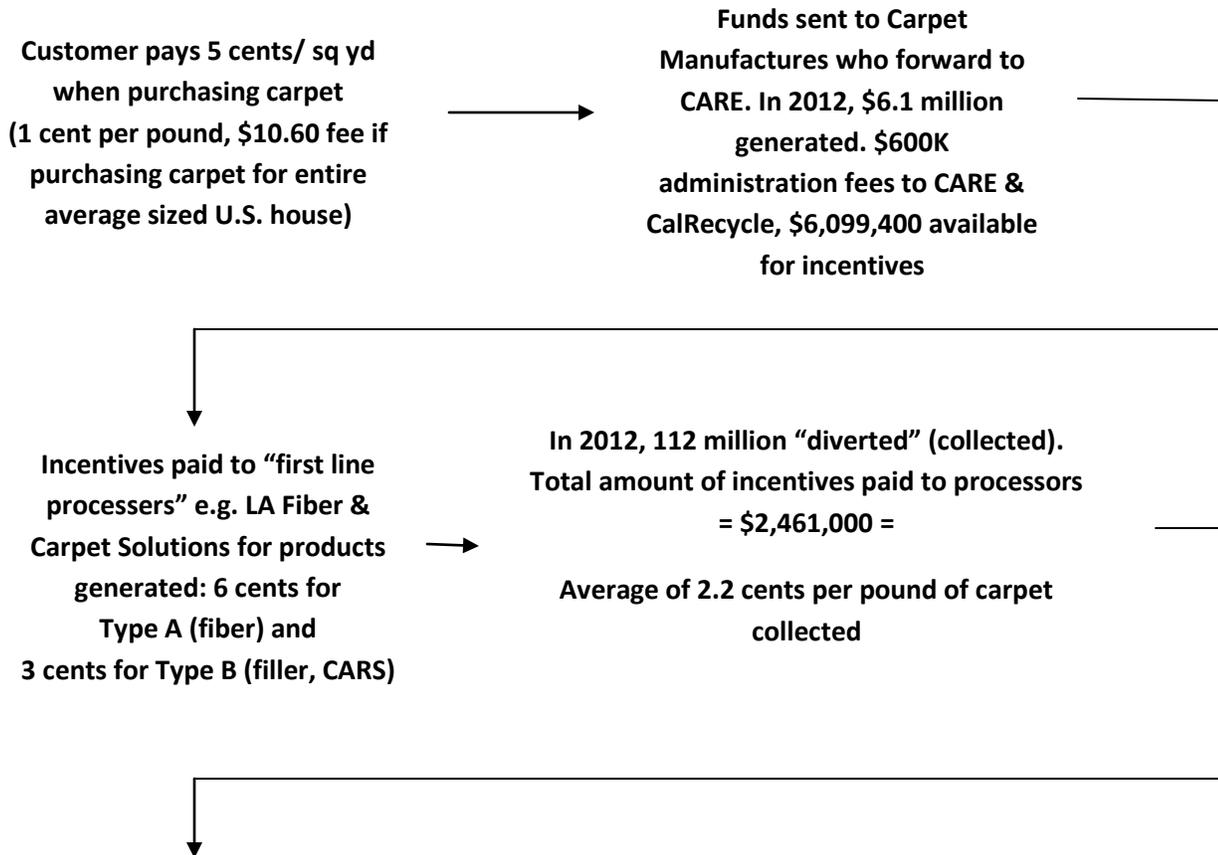
1. Per CARE, 343.2 million pounds of post-consumer carpet generated in California in 2012
2. Based on population, 10% or 34.3 million pounds generated by the City of Los Angeles.
3. Following shows generation points, disposal options and present carpet recycling resources (does not include *The Carpet Recyclers* facility closed 3/26/13).

City of Los Angeles Carpet Generation Points:



The recipients of AB 2398 funds on this chart is LA Fiber & Carpet Solutions and out-of-state carpet recyclers. Only 10.8% of collected carpet in 2012 recycled into products (See next page for the flow of funds)

Resources available to supposedly help incentivize carpet diversion/recycling for City of LA from AB 2398:



AB 2398 Funding "push/pull" Model Assumes Incentives paid to "First Line Processors" (2.2 cents per pound of carpet collected) will be adequate to incentivize the "pull" of diverting more carpet from landfills (e.g. support City of LA efforts) and "push" manufacturers to create markets for secondary products while –

Paying for collection and processing costs and high disposal costs including increasing % of low/no value PET

Existing Collection Model (reliance on entrepreneurial community to collect carpet) must be changed significantly because:

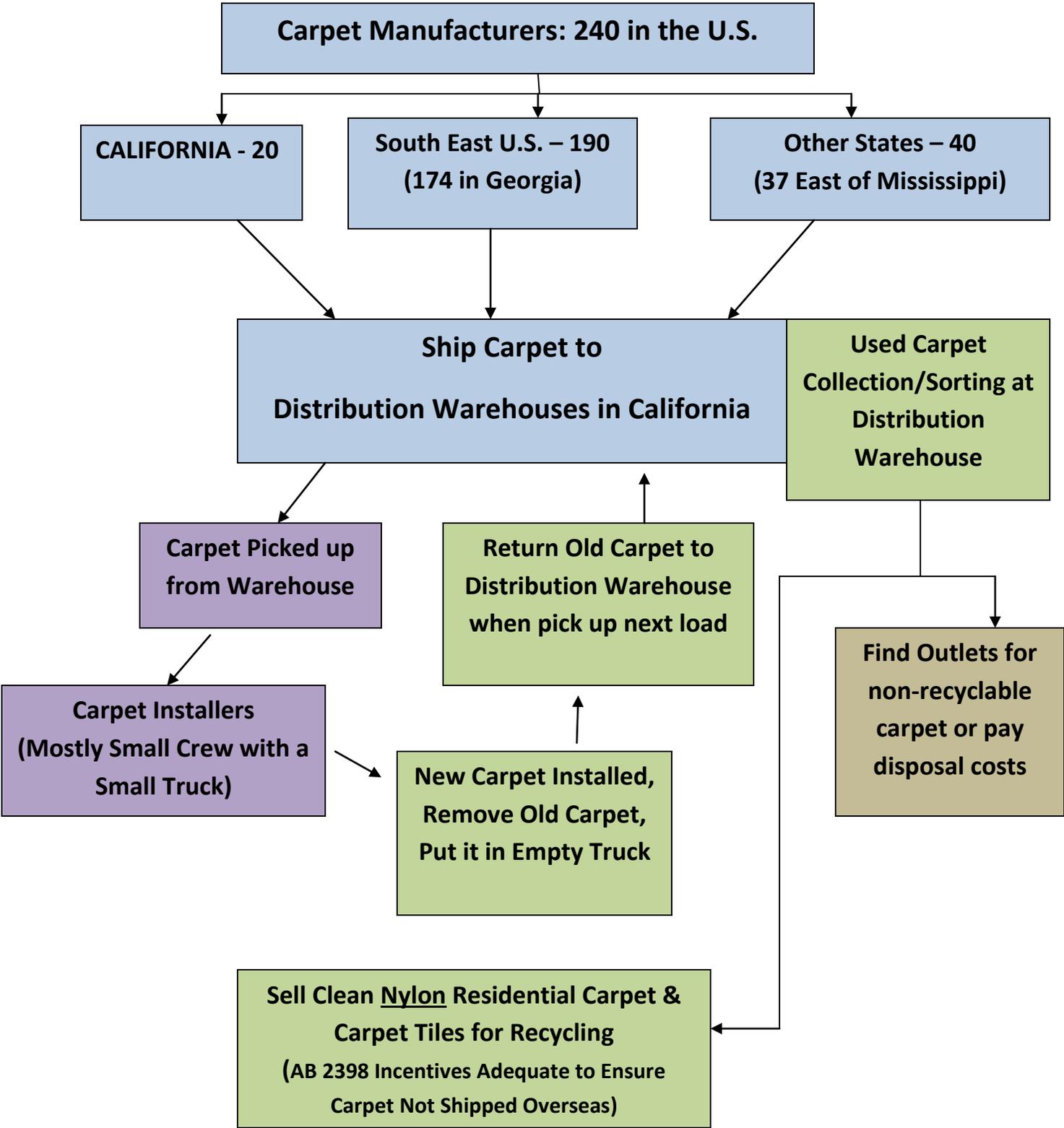
- 1) No funds to support efforts of municipalities like City of LA
- 2) Too much carpet "diverted" (collected) is not being recycled -- 68.6 million pounds which is going back to landfill or –
- 3) Whole carpet shipped overseas at a cost of 1-2 cents per pound (carpet recyclers having problem competing with exporters). Import being stopped into China due to environmental issues but continuing into other Asian countries.
- 4) Carpet collected in transfer stations and MRF often is too contaminated to recycle
- 5) Significant stealing of nylon carpet from collectors and ...
- 6) Increasing % of PET in waste stream reduces viability of collection community

PET impact example: 30,000 pounds (trailer) of collected post consumer carpet assuming sales value of 8 cents per pound of nylon carpet and zero value/2.5 cent disposal cost of PET carpet:

| | |
|---------|--------------------|
| 30% PET | \$1455 total value |
| 40% PET | \$1140 total value |
| 50% PET | \$825 total value |

It will take 5 years before actions today solve existing waste stream problems. Can't rely on existing collection systems.

PROPOSED Alternative Collection Program***



*** Alternative program would significantly reduce collection costs and increase diversion. This would free up AB 2398 funds to pay cities to still handle “Do it Yourself” removal of carpet (for alternative flooring) through bulky item removal program and also have more money to improve processing facilities, increase recycling rates and incentivize secondary markets. This model puts the burden of disposing of the non-recyclable carpet on the manufacturers and thus might motivate them to increase carpet recyclability which is one of the requirements of AB 2398.

CARE Conference 2013

CITY OF LOS ANGELES



SANITATION
DEPARTMENT OF
PUBLIC WORKS

**City of
Los Angeles**

**Carpet Recycling
& Sustainability**

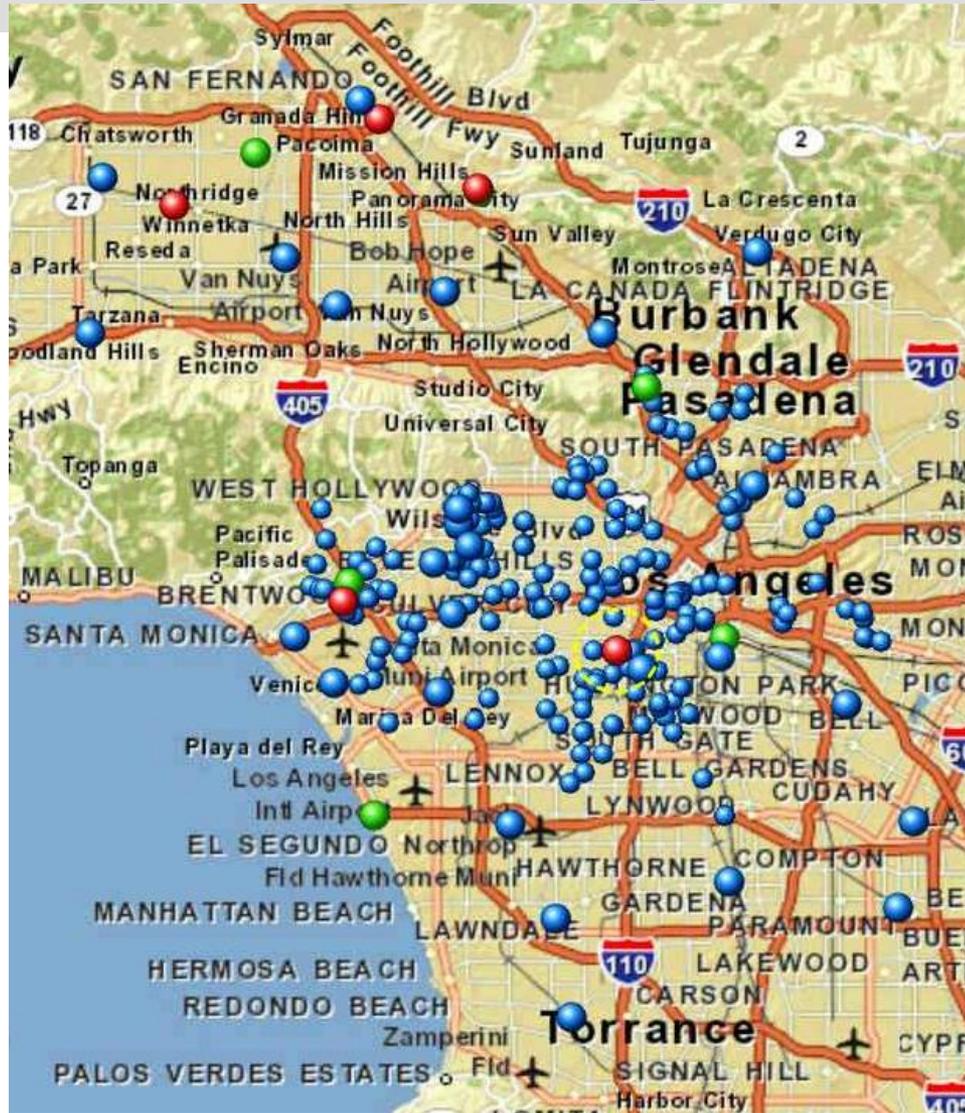
A New Day?

“Commercial” Waste



- **Everything except single family homes**
- **Business, multi-family, churches, film studios...**
- **Everyone who generates post-consumer carpet except...**
- **DIY Home owners – bulky item pickup**
- **38 Million #/carpet year**

311 Carpet Stores in City of LA < 5% Served by Collectors



Small Stores, Little Parking



City of LA Existing System

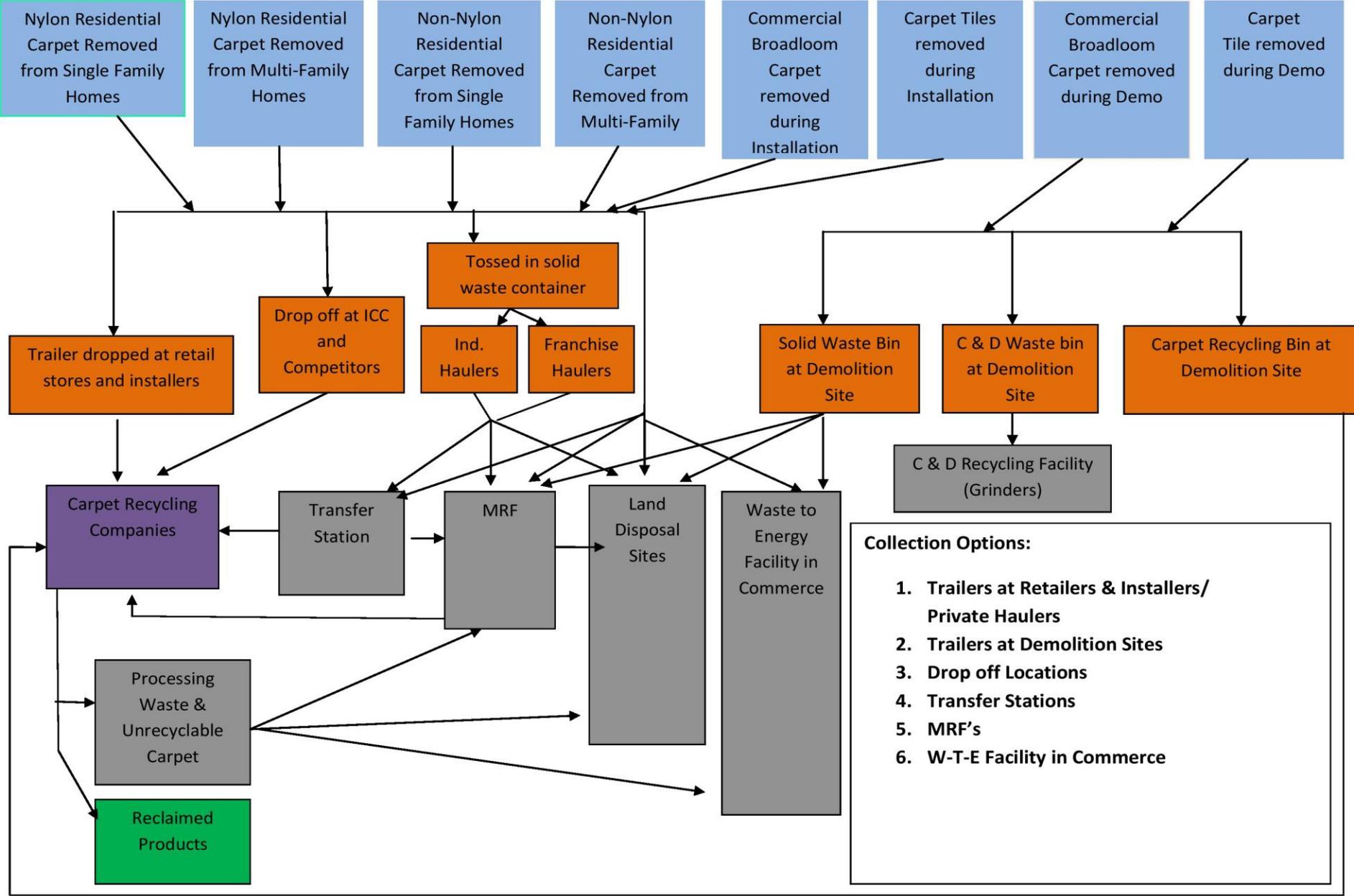
Choice of 150
Commercial Haulers

aka “The Wild West”

Limited Recycling,
High Chance of
Dirty Carpet



Used Carpet Flow in California



Material Recovery Facility (MRF)



Save Money? Landfill Cheaper



150 to 11 Exclusive Franchises



- ❑ ***“Clean Air, Good Jobs, Recycling for All”***
- ❑ **Developing RFP Now**
- ❑ **Big Prize ...**
Social Engineering
(e.g. Clean Trucks,
Clean up MRF’s)
- ❑ **Opportunities of Carpet Recycling ...**

Concept: City of LA RFP Goals



- **Call out Carpet as a Special Waste (like E-waste)**
- **Require proposer to specifically address how they will handle carpet including...**
- **Source segregation**
- **One year + out**
- **Need short term solutions now (Small biz drop off)...**

Additional Opportunity



SUSTAINABILITY

SOCIETY | ENVIRONMENT | ECONOMY

**City of
Los Angeles
as end user of
reclaimed carpet
resources**

**Program could be
model for other
government
partners**

Summary



- **City of LA: 38 million pounds of carpet/year**
- **Most stores small**
- **New system will create collection infrastructure**
- **Potential for sustainability model**
- **Per request of City of LA meeting being set up in May with Bob Peoples**



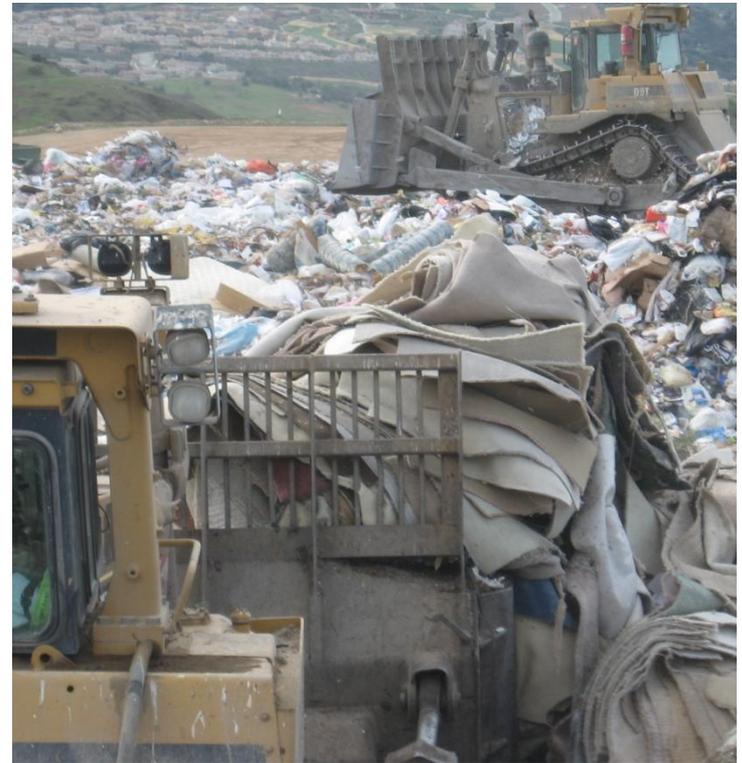
AB 2398 PROPOSALS TO INCENTIVIZE INCREASING DIVERSION % & RECYCLING RATES

**#1 Educate carpet retailer regarding
AB 341 requirements to recycle carpet**

**#2 Provide bonuses for higher % of
yields from the processed carpet**

**#3 Support creation of additional
secondary products made from
post-consumer carpet**

**#4 Increase awareness of consumers
regarding carpet recycling**



#1 Educate Carpet Retailers on AB 341



- **AB 341 is the California Commercial Recycling Bill (set the 75% recycling goal)**
- **Since July 1, 2012 requires all business with 4 cubic yards/week to “arrange for recycling services”**
- **Applies to stores with carpet waste > 12 x 12 room**
- **Implemented by local governments**

#1 Educate Carpet Retailers on AB 341



- They can self haul, arrange for pickup but cannot...
- Subscribe to recycling services if mixed waste processing does not yield diversion comparable to source separation (e.g. carpet)
- Use AB 2398 funds to educate carpet retailers and local governments regarding requirements to recycle carpet.

#2 Provide Bonuses for Higher Production Yields



*Recycling Resources for
Our Children's Future*

- **Present “Recycled Output” for AB 2398 Program is 14.1%**
- **Significant loss component is to non-nylon carpet collected**
- **Also low production yields of sold products from processed carpet (rest becomes “waste”)**
- **Additional equipment and operational costs to increase % yields of recycled products**

#2 Provide Bonuses for Higher Yields



- **Also costs to create markets for recycled products**
- **Bonuses focuses on turning more carpet resources into products (CAAF, Cement Kilns & CARS not included)**
- **Replace previous proposed bonuses with increased production yields e.g. +70%**
- **Pay out \$.08 for fiber and \$.04 cents for filler. For example...**

#2 Provide Bonuses for Higher Yields

- **Example Using AB 2398 Reporting Form, under “Output and other destinations of post-consumer carpet processed, sold & shipped to a manufacturer”**

As Bonus does not include CAAF, Cement Kiln Feedstock or CARS:

Step #1, Add Up:

**Fiber < 25% ash (Line 64) + Poly < 25% ash (Line 65) +
Filler (Line 67) = X (Total Output that may qualify for bonus)**

**Step # 2, Divide X by pounds Processed (Line 63) =
Y (Output % Yield that may qualify for bonus)**

Step #3, If Y > 70% Payouts increased to the following:

| | |
|--|------------------|
| Line 77, Fiber & Poly (<25% ash) | \$0.08/lb |
| Line 79, Filler | \$0.04/lb |

#3 Support Creation of Secondary Products



- ❑ **Motivations for Manufactures to Use Recycled Content from Carpet in their Products:**
- ✓ **Reduce Costs**
- ✓ **Improve Products**
- ✓ **Increase Sales to Eco-Buyers (including Government)**
- ✓ **Secure LEED credits**
- ❑ **Often difficult to overcome objections (status quo)...**

#3 Support Creation of Secondary Products



- Don't want to change process. Concerned about supply. Limestone challenging due to low cost but...
- Limestone highest % not recycled
- Per Plan: Limestone is “lower value recycling as “non-functional filler” but can be used as functional, higher-value raw material
- Requires additional processing to sell/increase value of limestone
- Provide incentive of \$.01/lb to manufacturers (or 1st line processors to pass on to manufacturers) for 2 years to overcome objections & offset startup costs

#4 Increase Consumer Awareness



ReDuce
Greenhouse
Gases

A photograph of two polar bears in a snowy, icy environment. The text 'ReDuce Greenhouse Gases' is overlaid in green.



Reject
Disposal

A photograph of a child being held up by an adult against a blue sky with white clouds. The text 'Reject Disposal' is overlaid in green.



ReCycle Your Carpet &
Help Create Green Jobs*

A photograph of a field of yellow flowers under a blue sky with white clouds. The text 'ReCycle Your Carpet & Help Create Green Jobs*' is overlaid in green.

#4 Increase consumer awareness



- ❑ **Consumers paying carpet recycling assessment**
- ❑ **Educate on benefits**
- ❑ **Get them to ask “will you be recycling my old carpet?”**
- **Expand on startup campaign (door clings, posters, ad art)**
- **Advertising (paint industry)**
- **Internet/Social Media**
- **Carpet Mfg, Enviro Groups**



CARPET SM
AMERICA
RECOVERY
EFFORT

**Thanks for
this
Opportunity!**

Go CARE!

Proposal for California-Based AB 2398 Support

The following was submitted to CARE in March of 2013 by Gail Brice to encourage California based AB 2398 support in order to include the program. It includes a list of proposed tasks for this support function.

Ms. Brice was notified in April that the CARE Board voted down the idea of California based AB 2398 Support.

Section A. Why is California-based AB 2398 support needed at this time?

CARE, CalRecycle and the carpet industry have done an excellent job setting up and initiating the implementation of AB 2398, especially with the very limited resources in CARE available for this effort. AB 2398 is a carpet stewardship law designed to increase the diversion and recycling of carpet in the state of California. In addition to landfill diversion and increasing recycling of post-consumer carpets, the goals of AB 2398 includes promoting the recyclability of carpets and market growth of secondary products made from post-consumer carpets.

Until a program is underway, it is often very difficult or impossible to imagine complications that can arise. The following are recent developments indicating there are problems associated with the implementation and ongoing success of AB 2398. Having “boots on the ground” in California that can serve as an additional CARE resource possibly could have minimized the impact of these issues and help to resolve or eliminate related problems in the future:

1. **The Carpet Recyclers** (the recipient of the CARE 2012 “recycler of the year”) ceased operation on Dec. 14, 2012. The facility reopened in 2013 under the operation of Nylon Recovery Corporation but closed again March 26, 2013. At this time, there are no plans or resources to reopen the facility.

The Carpet Recyclers (TCR) had possibly one of the highest recycling rates in the industry as, in addition to sheering face fiber, they were also harvesting the raw materials from the carpet backing and had buyers for screened calcium carbonate which is primarily being sent to landfill by other carpet recyclers. Carpet that had been going to the TCR is now either going to recyclers with lower recycling rates or is being shipped out of state or out of the country as whole carpet.

In addition to the loss of over 36 million pounds per year recycling capacity in California, 76 green jobs were lost by those directly employed by TCR.

There are numerous reasons why TCR are no longer operation. A number of them would have been readily apparent with more frequent visits by CARE and also just having a presence in the state (it's a small industry). This might not have saved TCR but it could possibly helped minimize the impact on the State including...

- 2. Independent Carpet Collection Companies** - A number of carpet collectors have left the business that had been supporting The Carpet Recyclers. For example San Diego CA (the second largest city in California with a population of 1,307,402) has only one active independent collector left in San Diego County (population 3,177,063). An estimated 31.5 million pounds of post-consumer carpet is generated annually in San Diego County. In addition to this one small collector, the carpet collection infrastructure in San Diego County consists of LA Fiber and Carpet Solutions collection trailers at larger stores and possibly some collection at Material Recovery Facilities (MRFs).

The price for used carpet per pound has been significantly reduced the past two months due to closure of The Carpet Recyclers and increasing enforcement of used whole carpet shipped into China. Additional problems could also be developing with compliance issues at the Carpet Collectors in Sacramento. These events could severely impact the level of interest and activity of independent carpet collections and reduce California diversion and recycling rates.

- 3. Carpet Collectors of Sacramento** - Numerous notifications of violations/correction orders have been issued against the Carpet Collectors in Sacramento associated with a 15 acre, 10-20 foot high waste pile of non-nylon carpet, sheered carcass, carpet padding and bag house waste stored outside their processing facility. Per publically-available records on the Internet, these include issues regarding solid waste facility permitting issues, storage time limitations, water quality protection from stormwater runoff and fire protection.

This is additionally of concern due the close proximity of the Carpet Collectors' facility in Sacramento and possible adverse effects to the reputation of carpet recycling and ongoing support of AB 2398 by State legislators.

- 4. Carpet As Rock Substitute (CARS)** – CARS is presently a CARE-approved lower value recycling option that qualifies for AB 2398 funds. However, since originally presented and approved by CARE as supposedly a patented process which could only be claimed by one company, questions have been raised regarding this category which include:

- a) Payment of AB 2398 funding requires the material to be “sold and shipped” and have the documentation to prove this. Much of the pile discussed in item #3 is supposedly CARS. The only “shipping” is the use of a front-end loader on tracks. If there are no bills of lading, is this “shipped?”
- b) When should CARE funding be paid? CARS projects require a large amount of used carpet. As this is a new application, there is a long lead time to win a project, secure permits and approvals and begin the project. Therefore, the carpet “sold and shipped” for CARS is probably to an intermediary (and not the final end user) in anticipation of a future CARS project. Because of this, there is significant risk that this material may be improperly stored in the interim and if a project is not found, end up in a landfill after CARE has paid the funds. This is especially of concern if ...
- c) The exclusivity of a supposed patent is not a reality. Because there are no significant capital requirements associated with CARS, anyone could “sell and ship” used carpet (including low value PET or commercial broadloom) to a “buyer” of CARS who gets paid \$60/ton by CARE and then stores it indefinitely or legally/illegally disposes the carpet or just walks away.
- d) Is “sorting” adequate “processing” to qualify for CAR funds and if not, what is adequate processing to qualify? Again, a significant component of the CARS pile in #3 is unprocessed non-nylon carpet.

Conceptually CARS could be an important solution for managing non-nylon residential carpet and commercial broadloom both in the U.S. and nationwide. However, systems and approvals need to be in place to assure environmental protection of the application, proper storage and protection of AB 2398 funds.

The proposed tasks provided in Section D include efforts to resolve issues and needs identified above and to minimize the potential for similar problems arising in the future.

Section B. Regulatory Requirements and Opportunities

AB 2398

On September 23, 2011 the CARE California Stewardship plan was submitted to CalRecycle. The due date for an update had been extended to May 31, 2013 by CalRecycle and now has been extended again. The requirements of the plan include:

- A. Provide goals that, to the extent feasible based on available technology and information –
- 1) Increase the recycling of post-consumer carpet
 - 2) Increase the diversion of post-consumer carpets from landfills
 - 3) Increase the recyclability of carpets
 - 4) Incentivize the market growth of secondary products made from post-consumer carpet
- B. Propose measures that will enable the management of post-consumer carpet in a manner consistent with the state’s solid waste management hierarchy, including, but not limited to: source reduction, source separation and processing to segregated and recover recyclable materials, and environmentally safe management of materials that cannot feasibly be recycled.
- C. Include a funding mechanism that provides sufficient funding to carry out the plan including incentive payments that will advance the purpose of the program.
- D. Include education and outreach efforts to consumers, commercial building owners, carpet installation contractors, and retailers to promote their participation. Education and outreach material may include but not be limited to, any of the following:
- 1) Signage that is prominently displayed and easily visible to the consumer.
 - 2) Written materials and templates of material for reproduction by retailers to be provided to carpet installation contractors and consumers at the time of purchase or delivery or both.
 - 3) Promotional materials or activities, or both, that explains the purpose of carpet stewardship and the means by which it’s being carried out.
- E. Process for independent audit. For fund recipients, beyond financial auditing, this should also include auditing to ensure that the processing operation is meeting all the regulations to operate a business in their state (which at a minimum would be there are no outstanding notices of violation against the facility that have not been resolved in 60 days).

California AB 341

AB 341 is an ambitious California Commercial (Businesses and multi-family residence) Recycling Bill that can be utilized to increase the landfill diversion and recycling of carpet. The provisions of the bill which started in July 1 of 2012 includes:

1. Commercial (Business) Recycling:
 - a) Since July 1, 2012 requires all business with 4 cubic yards per week to “arrange for recycling services. They can self haul, arrange for pickup but cannot subscribe to recycling services if mixed waste processing does not yield diversion comparable to source separation e.g. carpet recycling
 - b) Program implemented by local governments.

2. The development of a plan to reach a recycling goal of 75% for the state of California:
 - a) CalRecycle required to provide a report to the Legislature by January 1, 2014 detailing strategies to advance policy goals.
 - b) Draft Plan circulated since May 2011.
 - c) To reach 75%, 22 million tons additional material must be diverted and recycled from California landfills.
 - d) Numerous proposed programs could help (and also hurt the carpet industry/recycling) including:
 - 1) Increasing recycling infrastructure
 - 2) Increasing commercial (business) recycling
 - 3) Creating markets for secondary products made from recycled content material by through State procurement activities
 - e) Significant opportunity for CARE to be involved in planning

City of Los Angeles Commercial Hauling Franchise

The hauling of commercial solid waste in the City of Los Angeles is routinely referred to as “the wild west.” Presently businesses can contract with over 150 licensed haulers to pick up their commercial waste.

This system has made recycling difficult at best. Due to the size and limited parking space, it is estimated that of the 311 carpet retailers in the City of Los Angeles generating 38 million pounds of used carpet per year, less than 20 are served by carpet collection trailers. Because of the “wild west” much of the other retailers’ carpet are mixed with garbage prior to reaching MRF or disposed directly into landfills.

On November 14, 2012 the LA City Council adopted a plan to move toward a commercial (business) franchise system where 11 haulers would collect all the commercial waste in LA. The success of this hotly contested decision is due to “Don’t Waste LA” who showed

up for the final vote with hundreds of supporters wearing T-shirts with the slogan “Clean Air. Good Jobs. Recycling for All.”

The request of proposal (RFP) is presently being developed by the City of Los Angeles Bureau of Sanitation to compete for these lucrative contracts.

CARE could work with the City Council Environmental Committee requesting that bidders be required to include carpet recycling as a separate line item as part of their bid package. Companies would need to describe: how they are going to source segregate carpet and ensure that it is not mixed with garbage and identify what processor they would use as their carpet recycling subcontractor with additional points provided for high recycling rates.

California Cap and Trade

California is the first state in the U.S. that has an active “cap and trade” program to reduce greenhouse gases. The state auction has started. Carpet recycling provides a significant greenhouse gas benefit e.g. The Carpet Recyclers facility at full operation reduced greenhouse gas emission (as compared to virgin nylon) by the equivalent of keeping 45.7 million automobile miles off the road annually.

There may be an opportunity to monetize these reductions for carpet recycling but that will take significant work and approvals from the California Air Resources Board.

Section C. Proposed Action Items

The following lists proposed Action Items to provide California-based support for AB 2398 requirements and to capitalize on the opportunities of other new California environmental programs.

DRAFT Priority 1 Tasks:

1.0 California Carpet Stewardship Plan

- 1.1 Take lead responsibility to solicit information, ideas for program improvement and buy-in for final plan update from a wide-range of stakeholders including:
 - 1.1.1 CalRecycle – carpet recycling professionals, Zone Managers, Solid Waste enforcement/compliance (see CalRecycle comments below regarding compliance)
 - 1.1.2 Non-profit organizations e.g. California Product Stewardship Council, Rural Communities, Don’t Waste LA, Californians Against Waste

- 1.1.3 Carpet recycling processors in California (including those that have left the business) and out-of-state (if desired)
- 1.1.4 California-based carpet manufacturers
- 1.1.5 California carpet retailers/installers (including Home Depot, Lowes and Empire Today) – identify how to increase participation in carpet recycling
- 1.1.6 Independent California carpet collection companies – determine which CARE reclamation partners listed on website are no longer active and why. Identify collection companies not participating in CARE program and why. Discuss infrastructure needs to increase collections.
- 1.1.7 California Private Solid Waste Infrastructure: Haulers (California Waste Association, LA County Disposal Association), Transfer Stations, Material Recovery Facilities, Landfills. Major waste management companies - WMA, Republic, Waste Connections (based on discussions assess costs of land filling vs. carpet recycling)
- 1.1.8 Large City/County Sanitation Departments (Los Angeles City and County, San Diego, Orange County, Oakland/Alameda, San Jose/Santa Clara, Sacramento, Riverside)

2.0 Carpet Recycling Processors Regulatory Compliance /AB 2398 system and permitting review prior to receiving first payments

CARE presently has an auditing function to ensure that the financial documentation is in place to support requests for funds under AB 2398. Funded organizations are also required to operate under the applicable rules and regulations of the State of California (or their own states if operating outside of California) including environmental protection, public health and safety and fire protection requirements.

Of course CARE doesn't want to conduct full-scale compliance audits but CARE does have the right and the responsibility to ensure that fund recipients are not operating with issued notices of violations or outstanding compliance orders or that new facilities planning to request funds have not secured the required permits or approvals to operate.

Besides complying with the AB 2398 requirements that fund recipients must meet the regulations to operate in their state, a competitive advantage can be realized by those in non-compliance.

For example, if the 15 acre pile outside the Carpet Collectors is deemed to be illegal storage and disposal, they have been operating with a significant competitive advantage over the other processors in the state who have paid out hundreds of thousands of dollars in disposal bills including The Carpet Recyclers. Their disposal costs, especially at the beginning of the operations, were a factor associated with the company being no longer in operation.

Therefore, the proposed sub tasks associated with this item includes:

1.1.0 Develop and implement an initial approval program required prior to the first quarter in operation when a new applicant will be requesting AB 2398 funding in the following quarter.

This approval program will include demonstrating that systems, required permits and compliance are in place to meet the requirements of AB 2398 and applicable regulatory requirements. It will also ensure that there are no surprises “I didn’t know I had to...” “I didn’t realize it had to be shipped...” of new applicants.

2.1.0.1 Financial Backup: The specific details would be worked out with the financial auditors but the AB 2398 compliance systems that would be required to be in place prior to the first quarter of requesting funding would include:

- Systems to determine the weights and origination of the incoming carpet and retention of documents
- Procedure to determine the % of carpet received that was generated in California
- Certified weights of outgoing products
- Shipping documents
- Invoicing of outgoing products
- Receipt of payments
- Waste disposal amounts, locations and supporting billing from transporters and disposal sites.

2.1.0.2 Compliance Documentation: A checklist would be developed and provided to the company seeking to receive AB 2398 funding.

Prior to the first quarter of requesting funding, the applicant would either certify that the following permits have been secured and the programs in place or state why these programs are not applicable to their operations (these documents would be provided at the time of the financial audit):

- Air Quality Management District Permits
- Solid Waste Facility Permits (if operating as a recycling facility, documentation that waste is <10%). Systems in place to meet the maximum waste storage requirement of 30 days and processed product storage of one year.
- If material stored outside, best management practices used to prevent contaminated storm water runoff.
- Fire Department Approvals including systems in place to ensure compliance with storage requirements and maintenance of fire suppression systems. Document filing with the Fire Department HazMat of hazardous substance exceeding reportable quantities, e.g. propane, diesel, argon, spray paints.
- If disposing of material as hazardous waste e.g. waste fuel oil, has EPA Facility number been secured?
- CalOSHA – Is the Injury and Illness Prevention Program in place including Forklift Certification. If required, is the Respiratory Protection and Hearing Conservation Programs in place?

2.2.0 Help finalize the declaration letter signed by those requesting funds by adding specific language about non-responsiveness to written notices of violation and noncompliance letters that extend 60+ days beyond the due date for resolution. Provide checklist developed for new facilities to companies presently requesting and receiving funding.

2.3.0 Provide technical and compliance support to financial auditors.

3.0 Work with Local Governments to support source segregation programs and AB 341 ordinances to promote carpet recycling.

Priority effort and immediate need to work with the City of Los Angeles to ensure that the Request for Proposal (RFP) for those seeking one of the eleven new Commercial Waste hauling franchise call out carpet recycling as a separate item and require inclusion of a carpet recycling processor as a subcontractor in their proposal.

Investigate possibility of CARE support of City of LA carpet drop off program that was put on hold due to The Carpet Recyclers ceasing operations.

4.0 Conduct a comprehensive evaluation of Carpet As Rock Substitute (CARS)

See comments and concerns on page 4. Determine present status of CARS relative to:

- Proposed process and associated environmental protection issues regarding CARS application including: stormwater discharge to treatment systems, surface water and groundwater protections. Management of excavated soil especially that in roadsides that can be contaminated by air-deposition of lead and pesticide runoff.
- “Sold and shipped” issue
- Proper storage
- When funding should be paid i.e. when stored or when used
- Degree of processing required to be paid
- Local permitting presently required to assure environmental protection
- Potential impact to overall fund requests if previous patent claims are not applicable and program has extremely low barriers to entry

5.0 CARE involvement in AB 341 Commercial (Business) Recycling Implementation and California 75% Plan

Take lead in ensuring development of the California plan to increase state recycling to 75% (due to the State legislature January 1, 2014) supports increased carpet recycling and diversion especially in terms of carpet collection infrastructure.

Take lead in supporting the implementation of current AB 341 regulations requiring recycling by carpet retail stores. Ensure that ordinances developed to implement requires minimize impact on retailers and installers while maximize post-consumer carpet collection for recycling.

6.0 Promote the market growth of secondary products made from post-consumer carpet

As indicated in the beginning of the document, an inherent problem with the success of carpet recycling in California is the lack of buyers of harvested carpet resources within the state of California which results in significant loss of value of fiber products. This also significantly minimizes the potential use of the calcium carbonate resulting in @ 40% of carpet volume diverted being returned to landfills as waste calcium carbonate.

The motivations for manufactures to use recycled content from carpet in their products include:

- Reduced costs
- Improved Products
- Increased Sales to Eco-Buyers (including Governments)
- Secure LEED credits

However, it's often difficult to get manufactures to change especially due to the start-up costs to test new raw materials and change processes. Therefore, this task explores whether an AB 2398 incentive for 2 years to offset start-up costs could overcome these objections.

7.0 Take the lead in development and the implementation of an AB 2398 education outreach program

The present CARE California Carpet Stewardship Plan requires education and outreach efforts to consumers, commercial building owners, carpet installation contractors, and retailers to promote their participation in the AB 2398 carpet recycling program. Education and outreach material may include but not be limited to, any of the following:

- 4) Signage that is prominently displayed and easily visible to the consumer.

- 5) Written materials and templates of material for reproduction by retailers to be provided to carpet installation contractors and consumers at the time of purchase or delivery or both.
- 6) Promotional materials or activities, or both, that explains the purpose of carpet stewardship and the means by which it is being carried out.

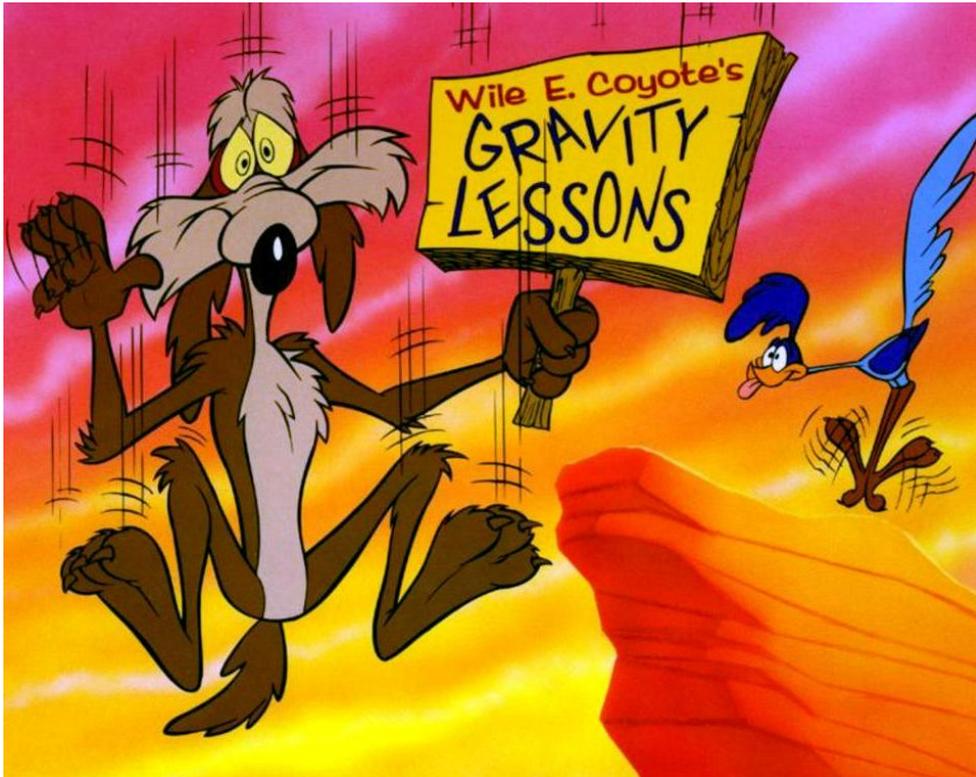
To date, the only significant educational/outreach effort has been conducted in 2011 prior to the origination of the program on July 1, 2011.

After discussions with the various stakeholders, the CARE California representative would prepare a proposed plan and budget for materials and methods to promote carpet recycling in California. This effort will include extensive internet based communications and social media marketing.

7.0 Explore payment of greenhouse gas benefits of carpet recycling as part of California “cap and trade” program. Determine the impact of the Commerce waste-to-energy facility if they can no longer take carpet and carpet waste due to cap-and-trade

Utilizing Matthew Realff, Ph.D of Georgia Tech as a resource, contact the California Air Resources Board to determine the opportunity for carpet recyclers to be paid for carbon credit offsets. Check on the status of the potential waste-to-energy carpet ban due to cap and trade restrictions. Ensure that CARE members are aware if there is a possible ban.

CARE Conference 2013



Lessons from the Edge (or...Over the Cliff)

Gail Brice
Former VP ...

**The Carpet Recyclers –
CARE 2012**

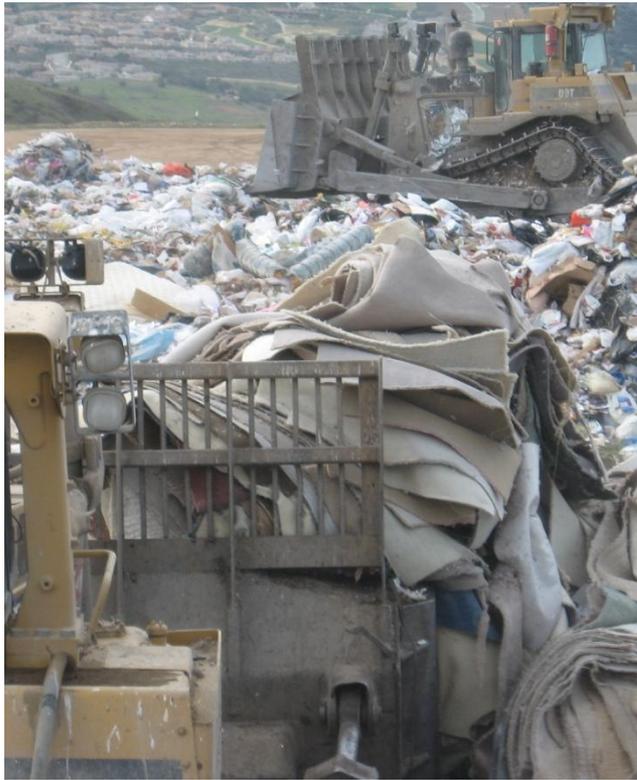
“Recycler of the Year”

Presentation Focus



- **Macro Problems**
impacting all carpet recycling in California
- **Including *The Carpet Recyclers* -- Facility closed March '13**
- **Unique California Opportunities & Solutions**
- **Need CARE help**

California Carpet Resources



- **380 million lbs/year of Used Carpet Generated in CA (current)**
- **122.6 million lbs diverted, 53.2 million lbs recycled**
- **Still going to landfills:
258.4 million lbs used carpet +
68.4 million lbs of carpet recycling waste (and rising)
(CA recyclers' average recycling %
= 43.75 %
TCR recycling % = +70%)**

Destinations of CA Diverted Carpet



- ❑ **Remaining CA Used Carpet Processors:**
 - ❖ **LA Fiber (Produces Carpet Cushion from PET, NYLON FIBER)**
 - ❖ **Carpet Solutions (Shred, ship NYLON FIBER overseas)**
 - ❖ **Carpet Collectors (NYLON FIBER +)**
- ❑ **WHOLE NYLON CARPET & Recyclable Carpet Tiles shipped to East Coast Processors**
- ❑ **WHOLE NYLON CARPET shipped overseas**

CA Challenge #1: Exporting Value



With Exception of Reliance Carpet Cushion & limited Limestone Recycling:

- ✓ **All recovered carpet resources are leaving CA as fiber or whole carpet**
- ✓ **Shipped to East Coast or Overseas**
- ✓ **Min 8 cents/pound lost for truck transportation +...**
- ✓ **Impact reduction of greenhouse gas advantages from carpet recycling**

CA Challenge #1: Exporting Value



“California Carpet Collectors and Processors harvesting carpet resources are like farmers growing wheat...

They work very hard and don't make much (or any) money...

They need to get closer to those 'making the bread.' ”

CA Challenge #2: Carpet Collections



- **“Low hanging fruit” is the majority collected e.g. <5% of the 310 City of LA City Carpet Stores**
- **AB 2398 requires fee but not recycling. Land disposal \$ < MRF**
- **Recently fierce competition for nylon residential carpet: CA and out-of-state processors vs. China**
- **Recent major price drop due TCR closure and China crackdown on imports (for real this time) threaten carpet collection infrastructure**
- **Waste challenges...**

CA Challenge #4: Waste Disposal



- **Incurred by Collectors/Processors**
- **+ 30% PET**
- **Besides LA Fiber – rest is going to Landfill or WTE**
- **No CAAF in California**
- **Significant Post-Processing Waste Especially Calcium Carbonate and...**
- **Carpet included in C&D Waste**

CA Challenge #4: Regulatory Requirements



“A Good Thing” (but there’s unintended circumstances too)

- ❑ **Fire Protection/Combustible Dust Documentation – CA Fires**
- ❑ **Air Quality Permitting/Visible Emissions – CA Air Quality**
- ❑ **Haz Materials (Propane, Argon, Spray Paints, Diesel)**
- ❑ **Solid Waste Management Facility Permits (C&D Exemptions require < 10% residual waste)**

CA Opportunity #1: AB 2398

- ❑ **Conduct a comprehensive study to identify improvements needed in program including...**
- ❑ **Re-evaluate incentive program e.g. High recycling rate bonuses**
- ❑ **Expand on implementation of the statute that requires:**
 - ❖ **Promote market growth of secondary products manufactured in California (including short-term incentives to start-up costs & overcome objections)**
 - ❖ **Education program to buyers promoting carpet recycling (including difference in carpet recyclability)**



CA Opportunity #2: AB 341

- **Requires all carpet business to recycle**
- **Sets a goal of 75% California Recycling by 2020. Opportunities for Carpet Recycling Include:**
 - ❖ **Expanding collection infrastructure**
 - ❖ **Creating California Markets for recycled material**
 - ❖ **Rise in landfill rates**



CA Opportunity #3: City of LA

- **10% of used carpet in CA generated by City of LA**
- **Major changes underway that will impact carpet recycling**
- **Details tomorrow**



CA Opportunity #4: Carbon Credits

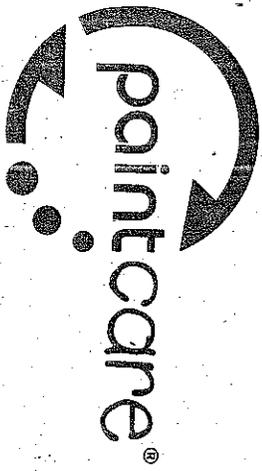
- **California “Cap and Trade Market Underway**
- **TCR annual greenhouse gas reduction was equivalent to removing 45.7 million automobile miles off the road**
- **Approvals required by California Air Resources Board**
- **Credits not state-based**
- **(Cap and Trade may also impact carpet WTE and CAAF)**



Summary



- **California has unique challenges regarding carpet recycling**
- **These challenges could severely impact the future of carpet recycling in California**
- **CARE can play a major role in helping resolve existing and upcoming challenges through AB 2398 and participation in emerging recycling programs.**



Do you know what to do with leftover paint?
Recycling with PaintCare® is simple and convenient.
Please join us in protecting the environment by
recycling and properly disposing of your leftover paint.

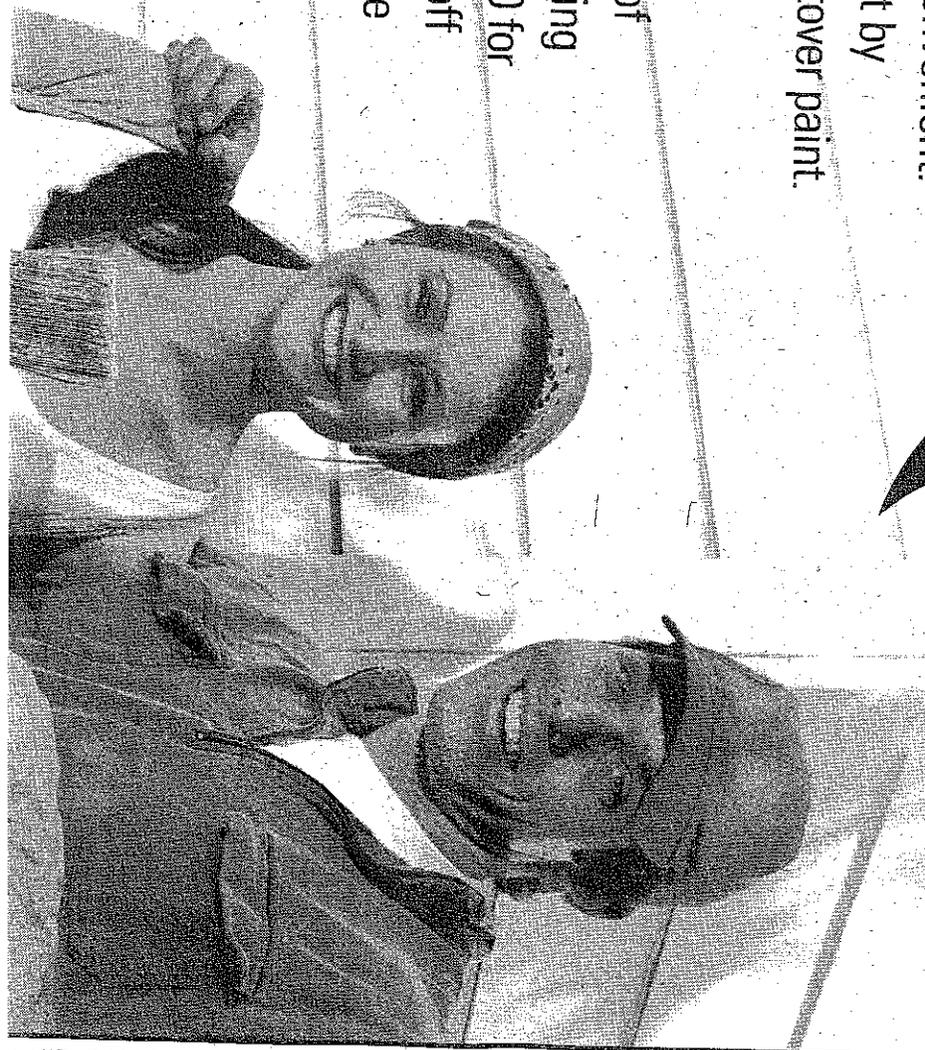
How does it work?

When you buy a gallon of new paint, 75¢ of
the purchase price funds the cost of recycling
your old leftover paint. (35¢ for quarts; \$1.60 for
5-gallon cans.) PaintCare is setting up drop-off
sites throughout California where you will be
able to bring leftover paint for no
additional charge.

*To learn more please
call (855) 724-6809 or*

visit maintainm.com

**We're planning
to recycle our
leftover paint.**



Please join us in protecting the environment by recycling and properly disposing of your leftover paint.

How does it work?

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To learn more please call (855) 724-6809 or visit paintcare.org.

Recycle with PaintCare



Are You Going to Recycle My Old Carpet?

Please ask your retailer this the next time you're shopping for new carpet and you'll ...

- ❖ Keep your old carpet out of landfills
- ❖ Help recover valuable resources
- ❖ Reduce greenhouse gases
- ❖ Create green jobs!



In California, consumers pay a carpet product stewardship fee of 5 cent per square yard to support carpet recycling. Tell your carpet retailer that you want your old carpet recycled!

Pulling out your own carpet and want it recycled?

Find your local carpet recyclers at www.carpetrecovery.org





Nylon Carpet: The GREEN Choice

Want the resources in your new carpet to be recycled over and over again...?

Choose Nylon!

Yes, PET carpet is made from recycled plastic bottles but the recycling ends there because...

Less than 1% of used PET and polypropylene carpet is recycled due to the low value of the reclaimed material but...



Keep used carpet out of landfills: Choose Nylon



Find a nylon carpet recycling company near you at:
CarpetRecovery.org



Used Nylon Carpet is recycled throughout the U.S. and the world because the reclaimed nylon is highly valued as...

Recycled materials used in new carpet, automobile engine parts, building materials and more! It's so valuable that...
The nylon from recycled carpet used in these products is recycled over and over again!

Nylon carpet: The GREEN choice

- ❖ More durable, needs replacing less often
- ❖ Highly recyclable
 - ✓ Keeps carpet out of landfills
 - ✓ Saves oil
 - ✓ Reduces greenhouse gases
 - ✓ Creates green jobs



TheCarpetRecyclers.com