

# **Update on AB 341 Legislative Report**

## **Statewide Strategies to Achieve the 75 Percent Goal by 2020**



**October 2013**

# Table of Contents

## Thoughts from the Director

### 1. What is the framework—how does it mesh with other initiatives?

Creating Green Jobs

Reducing Greenhouse Gas Emissions

Supporting Innovation and Creativity

### 2. Interim Progress--what has been occurring?

Budget Process: Beverage Container Recycling Program Reform

Regulations, Reform and Research

### 3. Stakeholder Feedback –what are the adjustments?

Who Responded?

Overarching Themes in Comments

Summary of Stakeholder Comments by Concept

### 4. Overview of Concepts—what is revised list?

Appendix A- Summary of Stakeholder Comments

Appendix B- Revised Concept List

Appendix C- CalRecycle Acronym Guide

## Thoughts from the Director

Over the past year, we have updated you monthly on our progress developing the January 2014 Report to the Legislature called for by AB 341 (Chesbro, Chapter 476, Statutes of 2011). Through three workshops, we've engaged in dialogue on the plan to achieve the law's goals, as well as workshops/webinars on programmatic and regulatory changes (particularly related to the Beverage Container Recycling Program but also including materials recovery facility standards, composting regulations, and others) and a web-based survey of the draft concepts. I promised to be transparent and receptive to your input, and I want to share the results.

Although we rightfully tout California's "world-leading" diversion rate, we know it is not necessarily resulting in a high rate of waste materials being recycled into new products or removed from the landfill. California's high diversion rate is, in part, a result of laws that allow diversion activities such as waste-derived materials being used at landfills as alternative daily cover, intermediate cover, tipping pads, and roads, and waste tires and solid waste residuals being used as fuel. As stated in the May 2012 Discussion Draft, and discussed during workshops over the last year, for purposes of the report and the plan we are committed to moving forward with a generally more intellectually honest definition of recycling. So, we will continue to emphasize the differences between "recycling" and "diversion" when we are setting a baseline, establishing targets, and measuring success.

Although the details of the final report are still developing, I'm confident it will reflect the conversations we've had over the past year. This update also reflects the ongoing work by my staff and our sister agencies to move forward waste management recommendations that meet integrated environmental, energy, and economic policy objectives. Please keep in mind that this update reflects a work in progress. The recommendations in the Report to the Legislature may still be modified based on new information from other state agencies, stakeholders, and the public. Six focus areas rise to the top at this juncture:

- Moving Organics Out of the Landfill
- Continuing Reform of the Beverage Container Recycling Program
- Expanding the Recycling/Manufacturing Infrastructure
- Exploring New Models for State and Local Funding of Materials Management Programs
- Promoting Extended Producer Responsibility
- Promoting State Procurement of Post-Consumer Recycled Content Products

Progress to date has been accomplished with the hard work and dedication of all of our partners in this endeavor, including local jurisdictions, the waste and recycling industry, and the public. We look forward to hearing any new ideas you may have that are not already included in the concepts as we envision the future together.

Yours in the journey,

Caroll

# **UPDATE on Legislative Report for AB 341**

This update consolidates the changes and refinements to the department's initial concepts into one document. Our Report to the Legislature in January 2014 will present concepts for legislative change and a vision of how CalRecycle programs will evolve within existing authority to achieve the goal of having 75 percent of California's solid waste source-reduced, recycled, or composted by the year 2020.

This update is organized as follows:

1. What Is the Framework—how does it mesh with other initiatives?
2. Interim Progress—what has been occurring?
3. Stakeholder Feedback—what are the adjustments?
4. Overview of Concepts—what is the revised list?

## **1. What Is the Framework—how does it mesh with other initiatives?**

In recommending strategies, CalRecycle supports the development of a sustainable system that meets both the 75 percent goal and contributes significantly to other critical societal objectives: protecting public health and safety, reducing greenhouse gas emissions, expanding manufacturing infrastructure and bringing green jobs to California, reducing local government costs for hard-to-manage wastes, increasing renewable production of energy and fuel, and reducing reliance on unstable export markets.

### **Creating Green Jobs**

As a part of developing the recommendations for AB 341 (Chesbro, Chapter 476, Statutes of 2011), CalRecycle reviewed prior jobs studies and, using current disposal tonnage and exports, forecast job creation as a result of recycling, composting, or source-reducing the additional millions of tons of material required to meet the 75 percent goal. Implementing the recommendations related to collecting/processing material and manufacturing new products in California facilities could add as many as 100,000 or more new full-time and part-time jobs. Growing the recycling sector and promoting manufacturing with recycled content at California facilities contributes to California's economic growth.

The largest job gains would be in processing and manufacturing for the paper, plastics, and inert materials sectors. If the manufacturing is done domestically, it would create 58,000 new jobs that would boost local and regional economies. While organic materials comprise one-third of the total material types, they do not require as much secondary processing or remanufacturing to produce a final product. Still, this sector could account for more than 14,000 new jobs. For each new job created, at least one additional job would also be created or induced indirectly. For example, the collection of recyclables creates secondary jobs because a new collection route requires a driver and possibly a specialized truck that must be manufactured, sold, and serviced.

Processing and manufacturing sectors support an estimated 3 to 11 times as many jobs as collection and landfilling (inerts and paper at the lower end, plastics and metals at the higher end). The average for recycled materials collection and secondary processes is an estimated 5.3 jobs per 1,000 tons.

CalRecycle does not have complete data on all recycled-content manufacturers, but the collected data do provide insight into manufacturing products with recovered materials in California and the relatively low ability of existing facilities to take in large amounts of additional material. For example:

- Glass Product Manufacturing—Statewide, 15 facilities use about 700,000 tons of cullet per year, leaving about 100,000 tons of unused capacity annually. The vast majority of the cullet is melted in furnaces operated by glass container and fiberglass producers (five plants and four plants, respectively) for use in new products.
- Plastics Manufacturing—Statewide, 21 facilities use about 400,000 tons of recycled resins per year, leaving only about 70,000 tons per year of excess capacity.
- Paper and Paperboard Manufacturing—Statewide, 14 facilities use more than 1.1 million tons of recovered fiber per year, operating essentially at full capacity.

California's organics processing infrastructure also faces many challenges, including competition with low landfill fees and difficulty in siting new facilities. Like recycled-content manufacturing, the overall capacity for handling increased tonnage of organic materials will be insufficient; unlike other commodities such as paper and plastics, organics cannot easily be exported.

It is unlikely California would be able to absorb much of the increased tonnage of recycled materials exported each year, or the millions of tons that would be diverted from landfills to meet the 75 percent goal, without substantial investment in new or expanded manufacturing plants and composting and anaerobic digestion facilities. During the past two decades, the recycling jobs have largely been created in countries in Asia, dominated by China, to which the recyclable materials (glass, plastic, metals, paper, etc.) have been exported. For the near term, this means California will continue to rely on export markets to consume many of the state's recovered materials, particularly fibers and resins.

### **Reducing Greenhouse Gas Emissions**

The challenges of managing and effectively utilizing California's resources, including waste materials, are diverse and interconnected. As part of the California Global Warming Solutions Act of 2006 (AB 32), CalRecycle is working closely with the Air Resources Board (ARB) to recommend waste management strategies that also reduce the production of greenhouse gases. The 2008 Scoping Plan began the process of identifying opportunities for greenhouse gas emissions reductions from the waste sector, including the need for mandatory commercial recycling, expanded organics infrastructure, extended producer responsibility, and other alternatives to landfilling. Control of landfill methane emissions was identified as an early action measure, and regulations addressing this issue were adopted. In addition to methane emissions, ARB directed its staff to work closely with CalRecycle to develop recommendations that would impact how quickly we achieve greenhouse gas emissions and waste reduction goals. In addition, the ARB directed staff to propose a comprehensive approach for the waste sector under the Cap-and-Trade program based upon the analysis of emission reduction opportunities.

CalRecycle continues to work closely with ARB on the 2013 Scoping Plan Update. Work to date has entailed co-development of six technical papers and an implementation plan, along with several workshops to solicit stakeholder comment. Preliminary estimates show that achieving the AB 341 mandate will result in an estimated 20 million to 30 million metric tons of carbon dioxide-equivalent emission reduction in 2020 compared to business as usual. To accomplish this, the Waste Sector Plan also acknowledged that meeting waste reduction and greenhouse gas emissions goals need to be addressed with the understanding that California must take ownership for the waste generated within our borders. As noted above in CalRecycle's study on potential new recycling jobs in California as a result of AB 341 recommendations, exporting waste

denies California the economic opportunity of significant job growth that would result if these materials were remanufactured in California. Decisions addressing these issues will directly impact how and how quickly we achieve greenhouse gas emission and waste reduction goals.

### **Supporting Innovation and Creativity**

CalRecycle's success over the past decades is also built on core values and principles related to program development: foster innovation and creativity; acknowledge sound advancements in science and technology; and continually improve efficiency and effectiveness. We strive to be strategic in our goal-setting and embrace change to ensure progress. Some key principles that will continue to guide program development include:

- Increase Californians' confidence in new systems and technologies by ensuring a safe and well-operated/enforced infrastructure.
- Remove barriers to increasing the use of secondary materials in manufacturing.
- Collaborate and coordinate with other agencies and partners to demonstrate the interconnectedness of goals.
- Spur local diffusion of innovation through demonstrations and partnerships.
- Build new programs based on successful models to jump-start continued innovation, reduce start-up time, and optimize cost effectiveness.
- Continually evaluate success and make adjustments—establish goals and measure outcomes.

## **2. Interim Progress—what has been occurring?**

The Legislature has indicated certain priorities as bills move through this two-year cycle, which has pushed certain concepts to the forefront. A number of bills have been introduced related to organics, product-related extended producer responsibility, plastic bags, medical sharps waste, mattresses, beverage container program, and waste-to-energy.

### **Budget Process: Beverage Container Recycling Program Reform**

The Beverage Container Recycling Program has an annual structural operating deficit in excess of \$100 million that has been public knowledge since at least 2009. In spite of this, dramatic changes to the program have been avoided through improved cash forecasts and appropriately timed repayments of loans by the General Fund. CalRecycle and stakeholders would both like to avoid anticipated proportional reductions. Stakeholder workshops helped CalRecycle refine major changes to the program that will improve accountability and reduce fraud. In a 2013-14 Spring Finance Letter, CalRecycle proposed five elements to provide a foundation that would maintain a beverage container recycling rate of at least 80 percent while establishing better accountability and preventing losses to the Fund:

- A more stringent certification process
- Formal training and technical assistance
- Mandated use of the DORiis data management system
- Redemption of segregated loads only
- Trailer bill language to adjust statute to reduce fraud and losses to the fund

Those adjustments complement the active enforcement strategy CalRecycle implemented to prevent fraud, waste, and abuse. Moving forward, CalRecycle anticipates working with the Legislature and stakeholders on a balanced set of program reform-related proposals. In addition, implementing alternatives to proportional reductions that address the operational deficit meet other important policy objectives without

compromising the California Legislature's goals for the program of achieving an 80 percent recycling rate and a reduction in litter. These objectives include: providing a sustainable solution that minimizes consumer and industry disruptions; investing in industry sectors that provide a growing demand for recycled materials; and supporting the goals of AB 341.

### **Regulations, Reform and Research**

CalRecycle staff continued to refine and develop existing programs as well as develop new initiatives and regulations in response to recent legislation. Many of these efforts set the stage for implementing the recommendations for 75 percent. Proposed changes to existing regulations moved forward both through informal and formal processes for tires and organics. Staff has been working closely with stakeholders to draft language related to permitting and operational requirements to all types of in-vessel digestion activities, including anaerobic digestion; expanding the definition of food material; and determining when use of compostable material and compost is considered disposal.

As a result of the Waste Sector technical papers, AB 341 activities that also contribute to achieving greenhouse gas emission goals are already moving forward. Emission reduction factors are being examined or updated related to landfills, anaerobic and aerobic digestion, and recyclable materials from extended producer responsibility programs including carpet and paint. An interagency group was convened to move toward permit streamlining and address conflicting permitting requirements. Benchmarks are being reviewed for under the Cap-and-Trade program to ensure that manufacturers have strong incentives to use recycled-content feedstock. Discussions continue about the potential use of Cap-and-Trade revenues to support the development of new re-manufacturing, composting, and anaerobic digestion facilities in the state.

Major research contracts were initiated or continued in 2013, including work focused on developing case studies/samples for local permitting decisions and funding strategies for local materials management programs (Institute for Local Government). Other current CalRecycle research focuses on analyzing and isolating volatile organic compound (VOC) emissions from compost piles; investigating the amount of greenhouse gases emitted by compost piles and whether application of finished compost on agricultural land can reduce nitrous oxide (N<sub>2</sub>O) emissions from soils; and assessment of bio-plastics production and recovery. Work is continuing on the used oil life cycle assessment project; recommendations to increase oil collection and promote responsible management of used oil will be delivered to the Legislature in January 2014. In addition, CalRecycle initiated a contract to conduct a comprehensive statewide waste characterization study to update general information on materials still being disposed in landfills from all sources.

On the economic development side, stakeholders provided input on how the Recycled Market Development Zone program could evolve, and CalRecycle is looking into the potential for a loan sale to recapitalize the program's loan subaccount. Closer relationships are being cultivated with the Governor's Office GO-Biz and local economic development agencies to facilitate assistance to manufacturers interested in expanding or developing new facilities in California. In another collaboration, CalRecycle, ARB, and the Department of General Services have been working together to identify opportunities for increased recycled-content product purchasing. As noted above, CalRecycle continues to engage in discussions about the potential use of Cap-and-Trade revenues. CalRecycle also established an internal working group to look at alternatives to the state's current landfill tipping fee, and contracted with Institute for Local Government to identify models to address local funding issues. The Facility Information Toolbox (FacIT) was recently launched on the CalRecycle website. Using FacIT, economic developers and other stakeholders can more easily access information about California's disposal, diversion, and recycled market infrastructure, including facility contacts, activities, material inputs and outputs, facility capacity, and facility throughput.

Increasing student and public environmental literacy continued to be a focus. Feedback from teachers, administrators, philanthropists, and foundations has led to the formation of public-private partnerships to support the development of training, tools, and materials to facilitate implementation of the Education and the Environment Initiative curriculum in classrooms across California. Lessons from increased use of social media, along with behavior-change efforts such as the successful “Check Your Number” campaign that encouraged oil change intervals according to manufacturer recommendations instead of every 3,000 miles, will inform proposed outreach efforts.

CalRecycle is also engaged in a variety of program activities concerning products and their impact on the environment. Several programs and initiatives at CalRecycle encompass aspects of producer responsibility, including ongoing implementation and oversight of the carpet and paint stewardship programs. CalRecycle actively participated in a national dialogue related to reduction of packaging and is planning workshops for 2013 and 2014 to further address packaging issues.

### **3. Stakeholder Feedback—what are the adjustments?**

Although the details of the final report are still developing, several concepts have been combined, most notably “funding for infrastructure,” as it cuts across many focus areas. Most concepts were refined since the draft was a “snapshot” and during the course of report development, more specific direction emerged as a result of ongoing work or workshops. A number of concepts that initially stood alone were integrated into other concepts. There are a couple of new concepts as well—particularly related to strategies for local funding and environmental education.

#### **Who responded?**

Stakeholder comments, including both the online survey and letters to the director, represented a wide spectrum of interests. Approximately one-third of feedback came from the solid waste industry, and another one-third from local governments. Comments were also received from associations (non-solid waste industry), other businesses/utilities, consultants, and environmental groups.

The online survey responses reflect stakeholder opinions on the importance of the concepts as well as suggested adjustments. Stakeholders were asked if concepts were critical, somewhat critical, or irrelevant. Although not everyone rated the concepts, patterns did emerge. Critical concepts fell into two main categories, with infrastructure funding most highly rated. Phasing organics out of landfills, permit streamlining, cross-regulatory collaboration, new models for state and local funding, and “selling” the benefits to the public were also rated as “critical” by a large number of respondents.

#### **Overarching Themes in Comments**

Overall, several themes emerged during the workshops, through online surveys, and in letters. However, many provided feedback related to the differences between “recycling” and “diversion” as it related to setting a baseline, establishing targets, and measuring success. Stakeholders weighed in on both sides of that issue. Below are a few of the comments we received.

In FAVOR of using “recycling rate” to measure progress/set statewide 75 percent goal:

- *“Good start. We need to reduce the incentives to game the system. ADC needs to go away.”*
- *“We strongly support CalRecycle’s recommendation to exclude disposal activities from qualifying as ‘recycling,’ drawing a clear line between recycling and disposal-related activities.”*

- *“We applaud your Department for starting with an honest assessment of the various practices that currently count as recycling or diversion from landfills that are anything but, including practices that deliberately deposit source-separated yard trimmings into landfills.”*
- *“In general, I agree with the changes to how the 75 percent goal will be calculated. In particular, ADC and beneficial reuse at landfills should not be counted as diversion.”*
- *“We are supportive of many items in the document, most notably.....new way to measure 75 percent acknowledging that the current baseline is flawed and that using an average from 1990 through 2010 would be more representative than 2003-2006.”*

Against using “recycling rate” to measure progress/ set statewide 75 percent goal:

- *“What are the consequences of this shift from ‘diversion’ to ‘recycling’?.....the shift from diversion to recycling directs attention away from source reduction.”*
- *“.....concerned that a significant change may initially result in perceived lower recycling rates, thereby eliminating past successes and undermining support for the program.....the new methodology should be phased in so that the switch from the old systems to the new system does not result in a radical transition that could undermine California’s past successes.”*
- *“Four years after jurisdictions have successfully adapted to SB 1016 and invested in diversion program, CalRecycle proposes to change the metric again. We believe that the time period since 2006 is unrepresentative of average disposal....and concerned about the quality of data prior to 2003; therefore, CalRecycle should carefully evaluate this data prior to its use.”*
- *“We submit that there is nothing impure or ‘intellectually dishonest’ about adhering to a compliance methodology that has worked well for more than 20 years. A sudden shift....is a big step in the wrong direction....”*
- *“There are elements critical to an ‘intellectually honest’ definition of recycling that seem to be missing.... CalRecycle does not have the tools necessary to verify the extent to which recovered materials sold to export markets are utilized for the remanufacture of new products.”*

Those against adopting the new “recycling” approach raised three primary concerns:

- **Conflicting Goals:** CalRecycle is setting up two conflicting and confusing systems (50 percent mandate for local programs under AB 939 vs. 75 percent statewide goal under AB 341).
- **Measurement:** CalRecycle should not use the proposed baseline period, but instead continue to use the SB 1016 baseline period for consistency, or use a more recent baseline period. In addition, CalRecycle’s measurement system fails to account for actual source reduction, recycling, and composting, and should be replaced or enhanced by direct measurement of these activities.
- **What’s In/Out:** CalRecycle should not exclude alternative daily cover (ADC), alternate intermediate cover (AIC), transformation, beneficial use, tire-derived fuel, construction and demolition fines, etc., especially if there is no better use or locally available capacity. Respondents also said CalRecycle should analyze the economic impact of eliminating these.

CalRecycle is committed to using the new recycling rate to measure progress in meeting the statewide 75 percent goal. We will continue to emphasize the differences between “recycling” and “diversion” when we are setting a baseline, establishing targets, and measuring success. Differences in the two approaches relate primarily to 1) whether or not beneficial use of waste-derived materials at landfills (e.g. ADC, AIC, road bed or pads, residuals for fuel) “counts” as recycling and 2) the selection of the base year. Using the proposed approach, the statewide “recycling rate” for 2012 is 50 percent. However, as stated many times, the

recycling rate will NOT be used to measure local compliance with AB 939 diversion mandates that still include ADC and other beneficial uses.

Stakeholders also wanted CalRecycle to clarify the role of energy recovery in the waste hierarchy and 75 percent approach. Some contend that energy/fuel from waste sent to conversion technology facilities and transformation should be included in 75 percent measurement and not be counted as disposal-related, or it should be placed in a different and higher level than landfilling in the waste hierarchy. Others remain concerned that these types of facilities may use feedstocks that could otherwise be recycled or composted. There was general support for materials recovery facility (MRF) residuals standards to determine when sufficient recyclable and/or compostable materials have been removed, although other ideas were offered (e.g., require source-separation first and then sending only trash to MRFs).

Many stakeholders felt it was important to address greenhouse gas emissions when recommending strategies for reducing landfill disposal. Subsequent to the release of CalRecycle's May 2012 draft, ARB directed its staff to work closely with CalRecycle to develop recommendations that would impact how quickly we achieve greenhouse gas and waste reduction goals. This collaboration was addressed earlier in this update but is included here as well since reducing greenhouse gas emissions was a major theme in stakeholder feedback.

Another overarching area of concern was financing the transition to a non-disposal based management system at the local, state, and private level. Many stakeholders had ideas about approaches for new and more diverse funding models for local and state programs. Some feared, incorrectly, that the 75 percent goal will impose new costs on jurisdictions for developing and enforcing new programs in order to be in compliance. As noted earlier, one of the new research contracts with the Institute for Local Government is also considering strategies for funding local solid waste and materials management programs. However, although there was agreement on the importance of ongoing funding, stakeholders had different ideas about how to accomplish that. Some opposed tipping fees on alternative daily cover, beneficial use, etc., while others favored such fees. Some expressed concern that an extra tipping fee on ADC could affect the flow of organics to landfills and negatively impact the economics of proposed landfill gas-to-energy projects.

Related to this, many comments focused on the need to provide funding for the development of new infrastructure. Concepts related to financial incentives and streamlined permitting were included in several focus areas. Some stakeholders provided feedback under one concept while others expressed a similar idea in another section. There was general agreement that financial incentives and funding would facilitate the development of new infrastructure, although even then local siting decisions would be difficult. It is difficult to separate siting or permit issues from financing as they are closely inter-related in determining the time, complexity and cost to obtain a permit. Hence, they may be combined into one major recommendation.

### **Summary of Stakeholder Comments by Concept**

Stakeholder and staff feedback is summarized by concept in **Appendix A**. The table includes an update on all the concepts presented in the May 2012 discussion draft. As a result of stakeholder and staff input, as well as programmatic developments, five categories of changes have been established:

- **Expanded Concepts**—broader concepts combining as many as five original concepts.
- **New Concepts**—two new topics not included in the May 2012 discussion draft.
- **Refined Concepts**—concepts adjusted as result of input or integration of portions of, or entire, concepts.
- **Integrated into Other Concepts**—concepts that will not appear in recommendations to the Legislature but have been included in other concepts. (Note: These are shaded in the table for easy reference.)
- **Ongoing Activities**—concepts that will continue to evolve primarily as a result of ongoing work.

#### 4. Overview of Concepts—what is the revised list?

**Appendix B** is the revised concept list that CalRecycle will incorporate into the January 2014 Report to the Legislature. This revised list includes 33 concepts clustered into focus areas.

Focus Area	Number of Concepts
Moving <b>Organics</b> Out of the Landfill	5
Continuing Reform of the <b>Beverage Container Recycling</b> Program	1 expanded
Expanding the Recycling/Manufacturing Infrastructure: <b>Permitting and Compliance Assistance</b>	9
Expanding the Recycling/Manufacturing Infrastructure: <b>Financing</b>	4
Exploring New Models for <b>State and Local Funding</b> of Materials Management Programs	2
Promoting <b>State Procurement</b> of Post-Consumer Recycled-Content Products	1 expanded
Promoting <b>Extended Producer Responsibility</b>	2
Source Reduction	3
Commercial Recycling	3
Other Products	3

To make it easier to correlate the revised concept list (Appendix B) to the stakeholder comments (Appendix A), Appendix B contains several columns that link back to Appendix A. The third column “*code*” references the concept number from Appendix A and the May 2012 Discussion Draft. The fourth column “*change*” re-states the category of change noted in Appendix A and explained in the previous section of this Update.

In refining the list, it was challenging to separate some of the concepts from each other as they are so integrally related. For example, the six concepts related to direct and indirect funding approaches for new and expanded infrastructure were combined into one expanded concept. However, statewide loans and grants related to recycling market development/manufacturing were kept separate. In contrast, two regulatory concepts—one related to solid waste facilities and the other to organics facilities and processes—were kept separate and listed under different focus areas. Another example is various permit-related concepts. One focuses more on issues related to facility planning, while the other focuses more on reconciling permit requirements across multiple regulatory agencies such as air, solid waste, and water. Thus, not all related concepts were combined into an expanded concept; some were refined and others integrated into another concept. Some were kept separate.

Fifteen concepts were integrated into other concepts to more effectively present multifaceted approaches. The revised chart does not include those concepts per se. The ideas and approaches have not been ignored but have simply been integrated into broader concepts. For example, in the procurement area, one concept combines a variety of strategies including demonstration/testing projects, product certification, building codes, and state agency procurement practices. In the extended producer responsibility focus area, concepts related to the framework, plastics, and minimum content were combined, but packaging remains separate.

Two new concepts were added as a result of stakeholder and staff comments. The first relates to funding mechanisms for local waste and materials management programs. The other new concept is for K-12 model environmental curriculum.

For most of the recommendations in the concepts, CalRecycle does not need new personnel, although the department may need to shift and refocus staff resources to concentrate efforts on those activities that would make the greatest impact. This shift reflects the natural evolution of CalRecycle programs over the past 25 years as well as “piggybacking” on new initiatives or opportunities. Internally, this may involve cross-divisional teams to minimize organizational change.

Progress in meeting AB 341 goals will rely on more than staffing or even funding. In many cases, the issue is clear policy direction, authority, cross-agency collaboration/cooperation, and private sector leadership. If, as result of the recommendations from this report, there are new or expanded legislative initiatives, additional staff would be needed to effectively develop and implement some of the programs. Additional resources also would be needed to implement a broad-reaching EPR framework program, both for program development and enforcement.

## Appendix A

### Summary of Stakeholder Comments

**October 2013**

Stakeholder and staff feedback is summarized by concept in the table below. It includes an update on all the concepts presented in the May 2012 discussion draft. As a result of stakeholder and staff input, as well as programmatic developments, five categories of “changes” to the original concepts are noted in the far right column:

- **Expand**—broader concepts combining as many as five original concepts.
- **New** —two new topics not included in the May 2012 discussion draft.
- **Refined** —concepts adjusted as result of input or integration of portions of, or entire, concepts.
- **Integrated into Other Concepts**—concepts that will not appear in recommendations to Legislature but have been included in other concepts. (Note: These are shaded in the table for easy reference.)
- **Ongoing Activities**—concepts that will continue to evolve primarily as a result of ongoing work.

CONCEPT	SUMMARY OF COMMENTS	STAFF RESPONSE / RATIONALE	CHANGES IF ANY
<p>1a. Funding for Infrastructure: Manufacturing and Processing:</p> <p>Develop financial incentives to support new and expanded infrastructure for manufacturing (from recycled materials feedstock), processing and energy/biofuels generation.</p>	<p>Stakeholders generally supported this concept, but did not agree on source of funding.</p> <ul style="list-style-type: none"> <li>• Several supported use of Cap-and-Trade funds, others suggested EPR-based programs or use of CBCRF funds, and two suggested assessing the funding demand/need.</li> <li>• Several supported landfill tipping fee increases, provided resulting funds were not swept in the budget process and were allocated proportionally (i.e., in relation to geographic contribution to increased tip fee revenues, or in proportion to regional need for new infrastructure).</li> <li>• Two suggested significant surcharges on landfill tipping fees, to significantly change the comparative economics of landfilling organics versus using organics as feedstock in composting, AD, etc.</li> <li>• Several were opposed to any additional landfill tip fees, with one indicating that both tip fee increases or Cap-and-Trade funding should be considered an AB 341 cost.</li> </ul> <p>Several indicated that financing was not the primary issue, but focus should be on regulatory reform and/or permit streamlining. One commented that infrastructure will not be built in California. Others commented on the need to include biosolids management, promote education on e-waste recycling, evaluate technology options on a cost basis, and consider workplace safety and hiring standards.</p>	<p>Staff agrees with the overall nature of many stakeholder comments.</p> <p>Discussions are ongoing regarding the Investment Plan with ARB for funding for the waste sector. CalRecycle is on the Advisory Committee of the CEC’s AB 118 Investment Plan and has worked with the CEC to include funding within this program for anaerobic digestion and related projects, and it also collaborates with CPCFA on its funding programs. CalRecycle also is examining the potential for sale of loans in order to recapitalize the RMDZ Loan Subaccount.</p>	<p><b>Expand</b> Concept - combine with various “funding” related concepts 2c&amp;d; 6f; 7d&amp;g (both direct &amp; indirect). Funding sources include tipping fee, Cap-and-Trade, AB 118 (via CEC), tax credits, beverage container recycling fund, pollution control financing,</p>
<p>1b. Inspections at “Other” Facilities</p> <p>Expand periodic inspections to include a more representative sample of all types of solid waste facilities/ operations</p>	<ul style="list-style-type: none"> <li>• Only one comment specific to the additional inspection concept and it was supportive of the concept and didn’t suggest any changes.</li> <li>• Regulatory oversight is irrelevant to achieving the 75 percent goal.</li> <li>• Effective regulatory oversight is important to ensure protection of worker health and safety and environment. CalRecycle should not describe how waste be handled (waste industry are the experts), but ensure sites are operated in compliance with standards and not relate to being an active part of a sustainable infrastructure. Focus on areas with the highest risks.</li> </ul>	<p>Compliant facilities are generally “better neighbors” that can offer the promise of continued and/or expanded services within a sustainable infrastructure.</p> <p>It is recognized that LEA programs will</p>	<p><b>On-going</b></p>

CONCEPT	SUMMARY OF COMMENTS	STAFF RESPONSE / RATIONALE	CHANGES IF ANY
<p>instead of focusing primarily on landfills.</p>	<ul style="list-style-type: none"> <li>Provide how additional regulatory oversight (inspections of all facilities, operations, activities, etc.) and certification will be funded. Identify the impact on LEA programs.</li> <li>Cross-Agency regulatory issues must be addressed to ensure facilities can comply with all regulations (2f)</li> </ul>	<p>potentially need to expand and additional revenue may be required for programs that do not have sustainable funding mechanisms.</p> <p>Cross-agency coordination efforts continue to be addressed through discussions and regulatory reviews and revisions.</p>	
<p>1c. Local Facility Siting</p> <p>Develop statewide tools and interagency relationships to streamline local facility siting/expansion to handle the increase in materials diverted from disposal.</p>	<ul style="list-style-type: none"> <li>Siting of new facilities and expansion of existing facilities is a local issue and should be left to the local jurisdiction. Local jurisdictions can identify communities willing to host such facilities and complete the siting and planning process.</li> <li>Work with other regulatory agencies to avoid duplicative regulations and adequate regulatory oversight (as described in concept 1.b.).</li> <li>Streamline regulations to expand the number and capacity of composting and in-vessel systems, including composting on farms.</li> <li>Utilize existing infrastructure, such as at existing landfills, to site recycling and composting operations, which may be less difficult than siting new operations.</li> <li>Clarify additional disposal capacity needs and criteria and possible flow control issues).</li> <li>Provide incentives for siting new or expanding recycling, composting and AD operations, e.g., host fees.</li> <li>Promote the use of compost and biosolids (marketing/market development).</li> <li>Clarify that landfill capacity should be in balance with the diversion infrastructure and take into account environmental justice issues.</li> </ul> <p>Some stakeholders suggested identifying incentives for locals, such as co-locating facilities (and streamlining the permitting process for upgrades at existing sites), providing assistance with selecting locations, state and/or locally provided incentive funding and tax credits, and improving local/state agency coordination (e.g., between ARB and local AQMDs). Some stakeholders also provided ideas related to CEQA, including developing and providing model EIRs for various types of facilities, providing standard models for GHG emissions for products and facilities,.</p>	<p>CalRecycle agrees that siting is a local issue. However, streamlining and incentivizing local permitting and siting of infrastructure also are needed to increase the number of new facilities and expand existing facilities.</p> <p>Cross-Agency coordination efforts continue to be addressed through discussions and regulatory reviews and revisions. Regulation reviews include an analysis of risk and the appropriate level of oversight. Risk analysis includes potential exposure to communities.</p> <p>CalRecycle contracted with Institute of Local Government (ILG) to examine case studies and models that might assist local officials in siting decisions including the role of host fees.</p>	<p><b>Refine existing concept</b></p> <p>Incorporate 1.f. regarding collection efficiency/ quality  Incorporate 1.g. for streamlining the planning documents process  Incorporate 2.f. regarding cross media collaboration &amp; consolidated permits</p>
<p>1d. Statewide RMDZ Program</p> <p>Provide loans and grants statewide to develop and expand manufacturing infrastructure (from recycled</p>	<p>Most indicated support for expansion of CalRecycle’s ability to provide loans to recycling manufacturing businesses throughout the state where local partnerships exist and retain current Zone structure (with network of local representatives). One stakeholder felt program expansion without additional funding would be ill-advised. Some supported eliminating the current RMDZ Zone structure.</p>	<p>CalRecycle agrees manufacturers need incentives wherever they are located. CalRecycle continues to engage in discussions about the potential use of Cap-and-Trade revenues to support loans to recycling manufacturers</p>	<p><b>Refine existing concept</b></p> <p>Keep this concept separate from 1a, even though it includes funding.</p>

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materials feedstock).		outside of existing Zones. The current Zone structure provides financial and technical assistance. CalRecycle will continue to work with existing Zones to assist recycling manufacturers, and it will examine means of recapitalizing the Loan Subaccount such as a secondary loan sale.	
<p>1e. Manufacturing Business Assistance</p> <p>Increase CalRecycle’s ability to respond to manufacturers’ and processors’ business assistance needs (e.g. attraction, retention, expansion, site selection, permit assistance) by enhancing existing programs and leveraging other business-related organizations.</p>	<p>All public comments were in support of this concept.</p> <p>Business assistance ideas: business recruitment; increase the composting infrastructure (including biosolids); and focus assistance on feedstock, permits, and financing; provide centralized information for business interested in locating in the state; manage a related database for assistance to manufacturers; create a CalRecycle assistance team; develop a California Green Manufacturing strategy addressing obstacles specific to industry and/or materials; link to financing/funding</p> <p>Implementation: commenters highlighted the importance of coordinating with and directly supporting local economic development programs and RMDZs. They also suggested that state level focus should be to provide related outreach/promotion, training and other resources to local programs, and should involve existing entities, programs and professionals with the related skills and knowledge.</p>	<p>There are no significant changes.</p> <p><b>Ideas:</b> CalRecycle agrees with stakeholders and has been increasing its business assistance, especially for manufacturers interested in expanding or siting new facilities in California, by updating tools and leveraging partnerships with CalEPA BDOs, GO-Biz, Small Business Development Centers, SCORE, Manufacturing Assistance Program, and other organizations.</p> <p><b>Implementation:</b> many are already planned or currently addressed. For example, “develop database” is covered via ZIRS and FacIT. CalRecycle also developed a new business assistance portal and is coordinating with GO-Biz on their centralized business assistance portal.</p>	On-going
<p>1f. Collection Efficiency/Quality</p> <p>Increase front-end efficiency, material quality and amounts collected to ensure that the</p>	<p>Overall comment summary indicates the need for research and case studies regarding this issue. This would entail funding for analysis/studies and promotion of results and case studies (i.e. alternative collection frequencies).</p> <ul style="list-style-type: none"> <li>• Clear legislative authority needed to allow communities to collect trash less than weekly, as long as</li> </ul>	<p>Integrate into other concepts –many of comments relate to others</p> <p>1i. adjust collection frequency in regulation</p>	Integrate into 1i and 8c

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<p>maximum amount of materials is collected and recycled.</p>	<p>food scraps/putrescibles are collected weekly through an Organics Recycling Program. Address challenges of source-separation, on-site storage, odor/pest management. Revise regulations to include design specs that promote collection efficiency/quality. (Regs-1i)</p> <ul style="list-style-type: none"> <li>• Research and analysis needed on impacts of different forms of waste contracting, i.e., exclusive franchises or municipal collection vs. open markets or multiple permitted haulers on efficiency and quality of collection (single vs. dual collection).</li> <li>• CalRecycle should get authority to monitor and track local collection and processing franchises and agreements (part of Annual Report compliance process?). Then it should develop case studies and technical assistance of model programs and contract/franchise clauses that would result in increased efficiency and materials quality. (8c)</li> <li>• Increased oversight and reporting requirements leads to more hurdles and paperwork which takes personnel time and money away from other tasks.</li> <li>• Include information on Life Cycle Analysis of materials collected through the collection process.</li> </ul>	<p>8c. data on collection efficiency</p>	
<p>1g. Solid Waste Facility Planning Documents</p> <p>Adopt update process for planning documents and adjust contract requirements for Project Recycle to save jurisdictions and state agencies money and time, allowing them to focus more on program implementation.</p>	<ul style="list-style-type: none"> <li>• Planning Documents: Stakeholders support streamlining planning documents, including eliminating the Five-Year Report requirement; making the SRRE, HHWE and CSE an update process instead of revision process; and removing the majority/majority requirement for adoption of a CSE</li> <li>• Countywide Measurement: Stakeholders were concerned about measurement at a countywide level. Some stakeholders assumed this would mean one countywide annual report, in which it would be difficult to capture each jurisdiction’s information.</li> <li>• State Agencies/Project Recycle: Allow state agencies to contract for their own recycling services and keep the revenue. Another suggested that penalties be placed on state agencies similar to local jurisdictions that the fines should be remitted to the host jurisdiction.</li> </ul>	<p>Not separate concept, but tie concept to 1c: local government assistance (streamline siting); (facility expansion (design), etc. and 1g: collection efficiency &amp; quality (franchise agreements)</p> <p>Also tie to 6a Project Recycle for state agencies to contract for recycling and keep revenue as well as be penalized for non-compliance</p> <p>Eliminate the requirement of submittal of Five-Year County or Regional Integrated Waste Management Plan (CIWMP) or (RAIWMP).</p> <p>Change SRRE, HHWE and CSE revisions to an update process similar to the new NDFE update.</p> <p>Modify measurement of local disposal reduction under SB 1016 to a countywide basis.</p> <p>Allow state agencies to contract for</p>	<p>Integrate into 1c</p>

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		<p>their own recycling services without having to seek approval from CalRecycle and enhance their own agency recycling programs with revenue received from sale of recyclables instead of sending annual revenue greater than \$2,000 to CalRecycle as is currently required by statute.</p>	
<p>1h. Communications Plan: Recycling &amp; Manufacturing Infrastructure</p> <p>Develop a fully integrated communications plan that can be tailored to specific regions and highlight the positive economic and environmental aspects of siting recycling and manufacturing infrastructure.</p>	<p>Overwhelming majority of responses see this as a “critical” project  Like focus on jobs—several want focus on specific sectors—manufacturers, biosolids &amp; feedstock use by manufacturer mentioned  Several encourage use of community based social marketing campaigns &amp; behavior-change focus  Topics mentioned which aren’t now in write-up, e.g. assist locals with CBSM barrier studies, consistent statewide messaging with targeted focus on local projects, CBSM for home composting, multi-family &amp; special events  Misc. Ideas:</p> <ul style="list-style-type: none"> <li>• Partner with Green Sports Alliance or Environmental Media Assn. ;</li> <li>• Build on successful statewide used oil &amp; tire behavior-change oriented campaigns.</li> </ul>	<p>CalRecycle agrees for need to balance statewide messaging with focus on local or priority projects or target markets/products/waste streams.</p> <ul style="list-style-type: none"> <li>• Add NIMBY issues to description</li> <li>• Add Media partnerships to implementation</li> <li>• Add funding constraints to barriers</li> </ul> <p>Integrate feedback about behavior change into 9a &amp; c (Source Reduction). Build on successes with oil change intervals and tires. Add statewide role for social media and behavior change campaigns.</p> <p>Comments about behavior change related to source reduction. Add statewide role for campaign or social media use to concepts 9a &amp; 9c.</p>	<p><b>Refine existing concept</b></p>
<p>1i. Solid Waste Facility Regulations</p> <p>Continue to adjust solid waste and recycling facility regulations to ensure they are</p>	<p>Regulatory resources should be put into where the highest volumes of items are being processed and where there are the highest risks for environmental or occupational health violations.</p>	<p>Incorporate comments from 1f on changes re collection frequency and promoting quality/efficiency.</p>	<p>On-going</p>

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grounded in current science, address market conditions and changes in waste streams, facilitate permit streamlining and take advantage of emerging technologies.			
1j. Facility Operator Training/Certification  Promote consistent facility operator training and/or certification to ensure sites can be operated in compliance.	<ul style="list-style-type: none"> <li>• Oversight and certification doesn't equal a more sustainable infrastructure or increased recycling.</li> <li>• Provide a list of facilities that are certified and inspected by the State.</li> <li>• Define "sustainable infrastructure".</li> </ul>		On-going
2a. Greenwaste ADC Phase-Out  Phase out greenwaste ADC at landfills and re-direct green waste material to composting and anaerobic digestion (AD) facilities.	<p>Opinions vary from opposition, partial opposition to support. Approximately one third of respondents see this as a "critical" project; a similar number see as irrelevant; and the final third rate it as somewhat relevant.</p> <ul style="list-style-type: none"> <li>• Phased approach? Start with 10 percent ADC diversion each year over 10 years. (Add)</li> <li>• The timing of 2a and 2b are important. Since progress with organics facilities has been slow (hard to open and sustain) this needs to be addressed first or there will not be enough alternative organics collection facilities to handle the GW ADC being diverted away from landfills. (Add)</li> <li>• Siting new composting facilities is expensive and difficult, and jurisdictions with the highest ADC use may not have composting facilities nearby, which will increase hauling cost and emissions.</li> <li>• Local jurisdictions that manage landfills use ADC to reduce operations/maintenance costs. Levying a tipping fee on ADC will financially impact jurisdictions that operate landfills.</li> <li>• Dis-incentivizing the use of GW ADC could create a need for more market development resources, although that need would be much greater under 2(b), where the focus is much broader and the "push" is much greater. As landfill disposal shrinks, ADC use will diminish accordingly.</li> <li>• This would need to be coupled with strategies to increase composting and biogas infrastructure (requiring coordination with air and other permitting agencies). Without that expansion, this could result in these materials being shifted to biomass incinerators.</li> <li>• Focus on adding food scraps recycling statewide since food scraps mixed with green material can't be used for ADC. Ban commercial food scraps from landfills, then phase-in as new composting capacity develops.</li> <li>• There are contamination issues associated with curbside green waste that are of particular concern for composting facilities.</li> <li>• Inert ADC is sent to a regional landfill for their daily cover requirements and should continue to be counted toward recycling rather than disposal.</li> </ul>	<p>CalRecycle considers organics in general to be key in reaching the 75 percent goal, and also does not consider ADC as counting for the <u>statewide</u> 75 percent goal (in contrast to <u>local</u> jurisdiction AB 939 compliance with the 50 percent disposal equivalent requirement where ADC still counts). Organics also are key in the ARB's efforts to reduce GHG emissions from landfills, and options to address this will be included in the ARB's 2013 Scoping Plan update. Such options might include the possibility of direct regulations to prohibit disposal of organics in landfills and use as ADC.</p> <p>CalRecycle and ARB recognize that a ban or phase out will only work if we can expand current infrastructure for diverted material. An effective phase out must be implemented in combination with additional</p>	Refine existing concept

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	<ul style="list-style-type: none"> <li>Where would the material go if composting facilities cannot take it—particularly in southern California and Bay Area.</li> </ul>	incentives for organics facilities and products manufacturing as well as cross-regulatory collaboration.	
<p>2b. Landfill Disposal Phase-Out of Organics</p> <p>Phase out organics disposal at landfills and re-direct material to composting and AD facilities.</p>	<p>Most agree with the Organics Disposal Phase-out, but only if there is strategic planning to create an expanded infrastructure and/or alternatives for the organic material being banned. Needs to be a balance between organics infrastructure and landfill capacity, so when the infrastructure is in place, bans can be phased in. Regional differences also need to be taken into consideration (i.e. Southern CA uses more green waste as ADC).</p> <ul style="list-style-type: none"> <li>Make sure the infrastructure development is in front of the phase-out. Consider beginning phasing out in localities with sufficient infrastructure.</li> <li>Encourage and incentivize development of diversion facilities by lowering the costs of permitting, etc.</li> <li>Viable, cost-effective biosolids management practices need to be developed. This would need to be coupled with strategies to increase composting and biogas infrastructure (requiring coordination with air and other permitting agencies, as noted). Without that expansion, this could result in these materials being shifted to biomass incinerators.</li> <li>Ban should be structured like C&amp;D Recycling Ordinances. Build upon over a decade of experience with the phase out of organics in Europe.</li> <li>Build in the concept of requiring businesses that generate organics to recycle those organics by adding a specific requirement that they recycle all organics within 2-3 years and prohibit the landfilling of such organic materials</li> <li>The greatest obstacle here is getting all the State agency players to communicate and compromise on siting facilities. This will not be effective without that partnership. Facilities also can to be placed on operating landfill sites to maintain those sites and to provide for additional recycling options for the public who already send their materials to that landfill.</li> <li>The loss of revenue from the reduction of green waste from entering landfills will result in those sites not being able to generate enough funds to maintain them and insufficient jurisdiction funding for proper maintenance and closure.</li> </ul>	<p>CalRecycle and ARB recognize that a ban or phase out will only work if we can expand current infrastructure for diverted material. An effective phase out must be implemented in combination with additional incentives for organics facilities and products manufacturing as well as cross-regulatory collaboration.</p> <p>CalRecycle considers organics in general to be key in reaching the 75 percent goal, and in ARB’s efforts to reduce GHG emissions from landfills.</p> <p>Options to address this will be included in the ARB’s 2013 Scoping Plan update. One option might include the possibility of direct regulations to prohibit disposal of organics in landfills and use as ADC.</p> <p>Another option is to require businesses that generate organics to recycle those organics. This is the subject of current discussions in the Legislature.</p>	Refine existing concept
<p>2c. Funding for Organics Infrastructure</p> <p>Develop financial incentives to develop and expand organics management facilities in California, including anaerobic</p>	<p>Most stakeholders generally supported this concept, but they did not necessarily agree on where such funding should come from. Several supported use of Cap-and-Trade funds. Several supported landfill tipping fee increases, provided resulting funds were not swept in the budget process and that they are allocated proportionally (i.e., in proportion to geographic contribution to increased tip fee revenues, or in proportion to the regional need for new infrastructure). Two suggested significant surcharges on landfill tipping fees, to provide funding and significantly change the comparative economics of landfilling organics versus using organics as feedstock in composting, AD, etc. Two were opposed to any additional landfill tip fees. One</p>	<p>Staff agrees with the overall nature of most stakeholder comments. Discussions are ongoing regarding the Investment Plan with ARB for funding for the waste sector. CalRecycle also is on the Advisory Committee of the CEC’s AB 118 Investment Plan and has</p>	Integrate into 1a

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digestion facilities.	stakeholder focused on the need for permit streamlining, another on the transparency of loans, and several on the need to include biosolids management.	worked with the CEC to include funding within this program for anaerobic digestion and related projects.  Combine with 1a and link to (or possibly combine with) 7g, 6e, and 6f; link to 1d	
2d. Indirect Incentives for Organics Infrastructure  Develop indirect financial incentives such as climate change offsets, low-carbon fuel pathways, renewable portfolio standard eligibility, and sales tax exemptions to improve the economic viability of composting and recycling of organic materials.	Many of issues raised in comments, e.g. siting, tipping fees, direct incentives, education/outreach, etc. are addressed in other concepts and therefore not re-stated here. Other comments included: POTW's "need access to more incentives", as they are "helping meet 75 percent goal by land-applying and ADC". So far POTW's have been excluded from RPS, offset protocols, feed-in-tariffs. Direct AND indirect incentives are needed. Will market be able to find a use for greatly increased supply of compost product produced? Using tipping fees from landfills to incentivize recycling and composting is not sustainable	Staff recommends continued work with the agencies that have related authority to develop and provide indirect incentives for the use of organics as outlined in "implementation", as well as continuing to pursue more direct funding (2c)	Integrate into 1a
2e. Organics Regulations  Adopt regulatory changes to increase the likelihood that organic material will be composted or beneficially used while providing an appropriate level of regulatory oversight.	Simplify siting of food material composting facilities Allow residents to mix food material with greenwaste in their curbside collection containers and revise regulations to allow compost facilities to accept mixed food material & greenwaste from curbside collection programs. . CalRecycle must provide leadership to increase investment in the composting infrastructure and align regulations with technology and funding. Siting concerns for new facilities/projects such as permitting issues, odor/nuisance complaints, increased emissions from composting	While diverting organics from landfills is an important goal, organic material must be handled in a manner that protects public health, safety, and the environment. There must be an appropriate level of regulatory oversight at composting and other organic materials handling facilities. 2b – Organics Disposal Phase Out 2f - Cross Agency Regulatory Permit Issues	On-going
2f. Cross Regulatory Permit Issues  Collaborate with other	No stakeholders objected in writing to the concept of reducing permitting barriers for new organics facilities  A number of Southern California stakeholders who strongly oppose proposed changes in ADC policy point to the lack of diversion options for organics as an important reason for their opposition. They specifically cite	California needs to develop a regulatory dexterity that can gain the confidence of investors, even though each project will vary depending on	On-going collaboration

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<p>regulatory agencies to streamline the permitting process and resolve conflicting permitting requirements in order to reduce the time, complexity and cost to obtain a compost, AD or related permit.</p>	<p>land use and air quality permitting constraints that increase the cost and complexity of constructing and operating facilities.</p> <p>Other stakeholders acknowledge these regional challenges, and also link this issue to the plausibility of a statewide organics disposal ban (Concept 2b). Project developers, in particular, frequently cite the uncertainty of success in obtaining operating permits, and the complexity of obtaining multiple permits, as the primary barrier to financing and building new facilities. California needs to develop a regulatory dexterity that can gain the confidence of investors, even though each project will vary depending on unique circumstances and waste streams.</p> <p>Permitting issues have been discussed for nearly two decades. Developers are weary of the talk and would like to see action. . State and national groups, even those which support composting, AD, and related technologies are intimidated by this prospect or opposed to it altogether, as it may divide the environmental community. A federal-state task force may be needed to identify those portions of federal law which need to be changed, as well as commensurate changes in state laws and regulations.</p>	<p>unique circumstances and waste streams.</p> <p>Continue to participate in Cal/EPA's Consolidated Permit Procedure, as well as working with air districts and regional water boards to ensure that their regulatory proposals incorporate performance-based measures that include benefits associated with these facilities and address, to the extent possible, streamlining opportunities.</p>	
<p>2g. Biomethane Pipeline</p> <p>Work closely with the California Public Utilities Commission to develop policies and programs that promote in-state production, distribution and use of biomethane from landfills and AD facilities.</p>	<p>Biomethane from in-state landfills is currently prohibited from being injected into the pipeline, in contrast to biomethane from out-of-state landfills. Pipeline biomethane used for energy has uncertain renewable portfolio standard (RPS) eligibility.</p> <p>Policies are needed to allow the use of in-state biomethane, while at the same time ensuring there are no unintended consequences associated with allowing biomethane to be injected into the pipeline (in particular, to ensure that such an allowance does not result in more organic materials being disposed in landfills in the future, contrary to AB 341.) As the CPUC develops standards in response to AB 1900, biogas testing data from AD facilities should be included.</p>	<p>The CPUC already is considering this issue with respect to landfill gas, pursuant to AB 1900. CalRecycle agrees that biogas from AD should also be considered and is working with CPUC to identify appropriate data that would allow CPUC to consider this as development of this standard moves forward.</p>	<p>On-going collaboration</p>
<p>3a. Commercial Recycling</p> <p>Evaluate effectiveness of current requirements for commercial recycling before considering changes to thresholds or enforcement.</p>	<p>A few stakeholders indicated lowering the threshold using a phased approach or requiring all businesses to recycle would be somewhat useful, with one stakeholder suggesting this would achieve greater economies of scale. One stakeholder suggested requiring waste reduction plans of commercial businesses and government facilities. However, most stakeholders indicated that changing the threshold at this time was premature, would be resource-intensive, and would impact more businesses. They suggested that CalRecycle should not consider this concept until after it evaluates the effectiveness of the current MCR regulations in the 2014/15 timeframe that was put forth when the regulations were adopted. Additionally, most stakeholders do not feel it would be effective for businesses to report recycling tons.</p>	<p>CalRecycle agrees that the threshold requirements in the commercial recycling regulations should not be changed at this time. Instead, changes should be considered contingent on data from 2014 Statewide Waste Characterization study.</p> <p><b>Combine with 3c:</b> Enforcement—consider changes after results from study.</p>	<p>Refine existing concept. Combine with 3c:</p>

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		CalRecycle may also consider supporting legislation requiring businesses to recycle organics.	
<p>3b. MRF Standards</p> <p>Develop performance standards and certification process for determining if mixed waste processing facilities are “comparable to source separation” in removing recyclables from waste.</p>	<p>Support for each approach: quantitative (looking at end results) or qualitative (looking at systems and practices)) was evenly distributed. Some stakeholders felt standard is needed to encourage low performers to improve. Some felt that a quantitative is the best or only way to truly measure performance, and models exist in California for how this can be done. Others felt that qualitative provided more flexibility and more appropriate way to assess performance. Some stated the whole system should be considered in the standard, and a purely numerical or technical standard may not take the whole context into account. Stakeholders emphasized that due to the variability, any standard must take flexibility into account and there was concern that a single standard for all MRFs would not be appropriate. However, opinions differed on which approaches were more flexible. Some feel it is too difficult, may be impossible, to directly compare MRFs since the feedstock and processing are different</p> <p>Stakeholders said the standard should be simple and flexible. Some said that dirty MRFs are a valuable part of the diversion system in which much has already been invested, therefore the standard should sustain current operations but encourage improvement and focus on low performers. Stakeholders expressed concerns that a standard would be burdensome and add regulatory barriers when more MRFs are needed and that CalRecycle would become “MRF police”. Since feedstock varies widely, that can affect if MRFs can meet a standard feedstock quality can vary day to day, waste companies may direct some dirty loads to the landfill or particular facilities to meet a standard. Others stated that a quantifiable standard and enforcement is needed – measurement is needed and should be reported to CalRecycle, customers, and jurisdictions. Standards don’t have to be so restrictive that they create unintended consequences. Accountability is necessary.</p> <p>Several stakeholders expressed need for level playing field and all parts of the industry need to play a role, whether they own facilities or not. Standards should not favor source separation systems or companies that control both hauling and MRFs. Worker health and safety important, in terms of the nature of materials sent to facilities (such as medical waste) and operations (issues like belt speed).</p> <p>Some other important factors -- availability of markets for materials and the cost of recovery. Some materials are just too contaminated to be marketable;</p>	<p>Propose an approach based on feedback to various approaches, e.g. recovery rate, amount of recyclables in residuals, or implementation of best management practices.</p> <p>Since CalRecycle must define what it means for mixed waste processing to be comparable to source separation, a better understanding is needed for how source separation systems involving MRFs are currently performing. Data will be collected during the 2014 Statewide Waste Characterization Study to support this – field data on materials in the waste and recycling streams from businesses. Apart from the study, other data sources can be investigated to help assess the performance of both clean and dirty MRFs, including existing CalRecycle reports, local government reports, or data that facilities or cities are willing to share. Several stakeholders commented that a review of MRFs throughout the state would provide useful data on current performance.</p>	<p>Refine existing concept</p>
<p>3c. Enforcement Component</p> <p>Do not establish an enforcement program for business and multifamily complexes until after</p>	<p>A few stakeholders supported an enhanced enforcement component; some suggested enforcement should be at the local level, perhaps after establishing local ordinances, while others suggested it should be at the state level for consistency, and some suggested enhanced enforcement without identifying anything specific. One pointed out the need to determine exactly what is being enforced. Other stakeholders indicated that implementing an enforcement component would require tracking systems, staffing, additional fees, and other costs, and that it would be premature to establish an enforcement component before evaluating the</p>	<p>Combine with 3a and wait to consider enforcement approach until after evaluating the effectiveness of MCR.</p>	<p>Integrate into 3a</p>

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evaluation of the effectiveness of the current regulations is completed in 2015/16.	effectiveness of the commercial recycling regulations. Many stakeholders didn't want businesses to report recycling tonnages due to the cost to businesses and the difficulty in verifying the data. Additionally, the Statute and regulations allows local jurisdictions to implement enforcement on businesses and multifamily complexes. Some jurisdictions are currently implementing enforcement programs via ordinance and do so if they have the staffing resources to implement an enforcement component.		
3d. Grants for Multi-Family Recycling Programs  Provide grants to support and encourage recycling at multi-family complexes if Cap & Trade funds become available.	Most comments stated the new 75 percent goals will create a financial burden on both businesses and already strapped local jurisdictions. Several stakeholders oppose the 75 percent goals as a whole, with some proposing alternatives.  Most of the stakeholders cited the need for funding. Several specifically want grants and list potential applicants as jurisdictions, waste haulers, multi-family complexes, non-profit organizations, home-owner assoc., colleges and regional partnerships. Potential activities could include enhanced outreach, education, technical assistance and enforcement/monitoring by jurisdictions; provision of internal recycling bins; hauling costs, etc. In addition to funding, these challenges: 1) turn over in property management; 2) lack of container space and ordinances requiring space enclosures; and 3) lack of enforcement and/or anti-scavenging laws.	Develop grant program IF funding is provided through Cap-and-Trade revenues or some other mechanism. If funding is obtained, then staff would address comments about the specifics of such a program as part of developing eligibility and related criteria.	Refine existing concept
3e. Awards for Business  Eliminate Waste Reduction Awards Program (WRAP) and partner with other awards programs to recognize businesses that meet waste management and environmental goals.	Several suggested enhancements such as awards for multifamily, public sector, and zero waste businesses; tying WRAP in with DTSC's Green Biz program, e.g., they have to be a certified Green Business to receive a WRAP award; specifying clear criteria for what constitutes a winner (e.g., exceeding 75 percent MCR goals); and involving local jurisdictions and haulers in awards selection. Other awards suggested include Governor's Office GEELA program.	WRAP should be eliminated as needs can be met in other award programs. Include suggestions related to post-consumer recycled content procurement (6e)	Refine existing concept
4a. EPR Framework  Pursue legislation for an Extended Producer Responsibility (EPR) Framework that establishes a process for CalRecycle to select products/ set goals and continually improve the approach by incorporating changes and modifications resulting from existing programs.	Those offering general support of EPR provided several suggestions on how to implement EPR programs, including: <ul style="list-style-type: none"> <li>• Focus on products that are HHW or are problematic.. Factors to consider in selecting products include tonnage, special handling, recycling resources.</li> <li>• Learn from and model programs such as British Columbia (e.g., broad goal or target of 75 percent recovery, but flexibility in the time to reach goal; potential significant penalty for not participating).</li> <li>• Design EPR programs to use minimal state and local government resources so these resources can be applied to other programs.</li> </ul> For those expressing concerns about EPR, comments included: <ul style="list-style-type: none"> <li>• No need for EPR when a product category is covered by successful recycling programs.</li> <li>• Support "market-based EPR efforts, as well as voluntary incentives for increased recovery and sustainable product and package design" but not CalRecycle approach.</li> </ul>	CalRecycle has been involved in extensive discussions about EPR for many years, within the state and in national and international forums. CalRecycle recognizes many of the concerns expressed by stakeholders and has learned many lessons from implementing the paint and carpet programs and participating in numerous ongoing regional and national discussions, including with British Columbia and other provinces and states. As a result, the basic	Refine existing concept.  Integrates feedback from 4d

CONCEPT	SUMMARY OF COMMENTS	STAFF RESPONSE / RATIONALE	CHANGES IF ANY
	<ul style="list-style-type: none"> <li>Manufacturers are already doing everything that they can to ship with less packaging, design more recyclable products, produce more concentrated products, and use more recycled material in products.</li> <li>Don't focus on who pays, but rather who can most efficiently, most effectively and most expeditiously dispose of material in the most environmentally and economically sound manner possible.</li> <li>EPR is not cost efficient and provides mixed results.</li> <li>Manufacturers need more than one year to design/operate and finance a recycling program.</li> <li>The regulatory process for an individual product will not be transparent or sufficiently flexible.</li> <li>Policies designed to impact the waste stream should be consistent among states so as to not create un-level playing fields.</li> <li>A research institute to study products that currently isn't recyclable or compostable would be helpful. Such research could support re-design of products and packaging to reduce waste.</li> </ul>	<p>concepts that CalRecycle considers as essential for an effective EPR framework have already been modified significantly in comparison with previous versions developed several years ago.</p> <ul style="list-style-type: none"> <li>Added provision re: requiring continual improvement toward achieving a recovery goal, but providing more flexibility in when a program must be up and running and how long it takes to achieve a goal.</li> <li>Added provision re: need to establish clear criteria for how products become eligible for an EPR program so all stakeholders know in advance and can plan accordingly.</li> <li>Refine enforcement strategies and approaches.</li> <li>Highlighted how EPR does not preclude the use of market-based approaches.</li> </ul>	
<p>4b. Packaging</p> <p>Pursue statutory authority to establish a multi-year, packaging EPR pilot program.</p>	<ul style="list-style-type: none"> <li>Concept requires robust stakeholder consultation.</li> <li>Source reduction should be a central focus.</li> <li>Should be a "shared responsibility" approach; obligating manufacturers to assume all costs will increase costs and create market distortions.</li> <li>Would require careful oversight (e.g., regulation and monitoring).</li> <li>EPR for packaging should be addressed comprehensively, not piecemeal.</li> <li>Can learn from packaging EPR programs elsewhere, such as British Columbia, Canada and Germany.</li> <li>Would dismantle the existing effective infrastructure for collection and recycling, particularly for packaging materials with high rates of recovery.</li> <li>Several suggested that cardboard (as well as CRV containers and other highly-recyclable materials) should be banned from landfill.</li> <li>Manufacturers are already doing everything that they can to reduce negative environmental impacts (e.g.,</li> </ul>	<p>Staff recommends pilot that focuses on either a 1) small set of "problematic" products/materials (e.g., non-California redemption value beverage containers) statewide, or 2) small geographic area (e.g., coastal areas concerned with marine litter) that is comprehensive in terms of products/materials.</p> <p>Packaging constitutes a major portion of the waste stream but is a difficult to</p>	<p>Refine existing concept and integrate 7b (plastics)</p>

CONCEPT	SUMMARY OF COMMENTS	STAFF RESPONSE / RATIONALE	CHANGES IF ANY
	<p>ship with less packaging, design more recyclable products, produce more concentrated products, and use more recycled material in their products).</p> <ul style="list-style-type: none"> <li>• Should be pursued at a national level.</li> <li>• Landfill bans should be based on threat to the environment, not as a mechanism for recycling and EPR.</li> <li>• Would result in higher costs to consumers.</li> <li>• Coordinate within US EPA</li> <li>• A research institute to study packaging that currently isn't recyclable or compostable would be helpful. Results could be shared with manufacturers to support re-design of packaging to reduce waste</li> </ul>	<p>address because of the multitude of packaging functions, material types, and manufacturers. Given the complexity of packaging and the large universe of entities involved, a multi-year focused pilot program is recommended approach.</p> <p>CalRecycle and US EPA Region 9 will host workshops in late 2013 and 2014 to explore packaging-related issues.</p>	
<p>5a. Beverage Container Recycling Program Reform</p> <p>Adopt program elements that will address fiscal deficit in the Beverage Container Recycling Program while maintaining a high recycling rate, preventing fraud and supporting the goals of AB 341.</p>	<p>1 &amp; 3: Many industry participants expressed support for mandating DORiis use, especially if payments can be made electronically. This reporting will improve the accuracy and timeliness of data available to CalRecycle and will reduce operating costs for the Program and its participants. Extensive comment on this was taken at the Focus Group Workshop.</p> <p>4: Many in the recycling community supported the idea of allowing redemption of only segregated loads at buyback centers. Extensive comment on this was taken at the Focus Group Workshop. See in particular <a href="http://www.calrecycle.ca.gov/Actions/Document.ashx?id=3062">http://www.calrecycle.ca.gov/Actions/Document.ashx?id=3062</a> for documentation of comments from the workshop on Commingled Rates. Eliminating co-mingled rates will (1) reduce operations costs for the Department, (2) simplify operations for recyclers, and (3) reduce the risk of fraud and other abuse related to the redemption of non-CRV material.</p>	<p>Combine various reforms into a series of elements for Spring Finance Letter:</p> <ol style="list-style-type: none"> <li>1. Adjustments in Certification process</li> <li>2. Training and technical assistance</li> <li>3. Mandated use of DORiis phased in by participant group</li> <li>4. Eliminate co-mingled rates and Redeem only segregated loads (5a)</li> <li>5. Changes regarding out of state containers and other clarifications to reduce fraud</li> </ol>	<p>Expand Concept 5a (Spring Finance Letter) and integrate 5b and 5e.</p>
<p>5b. Fixed Dollar Expenditures: 14581 Limits</p> <p>Adjust approach for determining program allocations/expenditures to be based on percentages of available "surplus" funds rather than fixed dollar amounts.</p>	<p>Extensive comment on this was taken at the Focus Group Workshop. See in particular <a href="http://www.calrecycle.ca.gov/Calendar/EventDetail.aspx?ID=2927&amp;DS=ACES">http://www.calrecycle.ca.gov/Calendar/EventDetail.aspx?ID=2927&amp;DS=ACES</a> for documentation of comments from the workshop on 14581 Payments. Each stakeholder group expressed support for its own 14581 payment</p>	<p>Changing the 14581 limits from absolute dollars to percentages will help avoid a structural deficit and will help avoid the necessity of proportional reductions under 14581(d).</p>	<p>Integrate into 5a</p>
<p>5c. Minimum content</p>	<p>Only limited comments were offered on this topic at the Focus Group Workshops. See</p>	<p>Do not pursue at this time. No need</p>	<p>.</p>

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Expand scope of minimum content law to include plastic container manufacturers.	<a href="http://www.calrecycle.ca.gov/Actions/Document.ashx?id=3040">http://www.calrecycle.ca.gov/Actions/Document.ashx?id=3040</a> for those comments (offered in the context of processing fee reform.)	to include glass container manufacturers as part of concept as market forces are leading to industry using available glass.	
5d. Beverage Container Definition  Expand program to include all ready-to-drink beverages for human consumption, except specified drinks (i.e. milk, medical food, and baby formula).	Extensive comment on this was taken at the Focus Group Workshop. See in particular <a href="http://www.calrecycle.ca.gov/Actions/Document.ashx?id=2943">http://www.calrecycle.ca.gov/Actions/Document.ashx?id=2943</a> for documentation of comments from the workshop on adding beverages and containers to the Program. There was wide agreement with the idea that the Program needed to fix its structural deficit and program integrity issues before expansion to other containers or beverages.	Based on Team insight and stakeholder comments, this concept was revised to defer program expansion until after addressing the structural deficit and program integrity.	
5e. Fiscal Reform: Differential CRV  Create a differential between revenue collected for containers sold and amount refunded to consumers for containers recycled.	Many participants expressed support for a differential in CRV—amount paid by distributors for containers sold would be more than amount refunded to consumers.  Extensive comment on this was taken at the Focus Group Workshop. See in particular <a href="http://www.calrecycle.ca.gov/Actions/Documents/111/2012/712/Program%20Reform%20-%20WRKSH%20#1_Capture%20Document.pdf">http://www.calrecycle.ca.gov/Actions/Documents/111/2012/712/Program%20Reform%20-%20WRKSH%20#1_Capture%20Document.pdf</a> for documentation of comments from the workshop on Program payments in and out.	This concept was revised to create a differential between CRV in and out, and integrated in 5a along with other strategies to address structural program issues. There was little support for combining the redemption value with the processing fee and/or eliminating the processing fee offsets. Instead, there was broad interest in ensuring sufficient funds for program administration and the 14581 payments by charging the consumer a differential rate. This will eliminate the structural deficit (when combined with revised 14581 limits) and clarify the consumer role in paying the costs of the Program. One example might be to require distributors to pay 5 cents for every container sold, but to pay refunds at the 4 cent level. This has to be balanced with a consideration regarding how this affects consumer behavior and the resulting recycling rate.	Integrate with 5a.

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<p>6a. State Procurement</p> <p>Collaborate with the Department of General Services and delegated state purchasing entities to increase purchases of post-consumer recycled-content (PCRC) products, which could include reform of SABRC and PCRC laws.</p>	<ul style="list-style-type: none"> <li>• Comments are divided. Local jurisdictions and non-government organizations tend to strongly support active procurement of products that “close the loop” (i.e., contain post-consumer recycled content or support EPP), while some (e.g., paper industry) say no government action is needed because markets are already operating well. Many industries support EPP and use of existing standards and eco-labels, provided they are not state-specific. One industry group says emphasis should be on recycled content, rather than post-consumer recycled content.</li> <li>• Several local jurisdictions strongly support establishing incentives for state agencies to purchase products with recycled content and having some sort of enforcement mechanism or penalty for not participating. There is also a suggestion to provide an incentive to manufacturers who use recycled content (e.g., reduced sales tax).</li> <li>• Several emphasize the need to develop markets for composted materials and to require more durable pallets (50 uses) and modify state building codes to allow reclaimed lumber.</li> <li>• Support exists for using or adopting nationally based existing standards, certifications and/or eco-labels that have transparency and include clear, science-based criteria for decision making. (9b)</li> <li>• Evolving new technologies are making environmental information more readily available to consumers (e.g., barcode apps), but may not be ready to incorporate into state purchasing or recommend for public use. Further investigative work is needed. (9a)</li> <li>• DGS suggested that references to EPP be eliminated and that the scope of CalRecycle efforts be limited to recycled-content/waste management and not EPP implementation</li> </ul>	<p>Procurement is important for market development of recycled materials. Despite existing law (e.g., SABRC) and executive orders regarding state agency purchasing of recycled-content products, implementation has been slow. CalRecycle and ARB released a paper on this topic in August, as part of the Scoping Plan Update process that discusses data gaps, barriers, and opportunities to increase state procurement. This concept is accordingly revised to reflect work with DGS and ARB, including Scoping Plan.</p> <p>Staff recommends working with DGS and delegated state purchasing entities to increase purchases of post-consumer recycled-content (PCRC) products while supporting EPP; this could entail, for example, identifying agencies with delegated authority who are not purchasing PCRC products, incorporating new contractor requirements, and reforming SABRC and its PCRC requirements (Concept 6b).</p> <p>Some comments provide information to consider in potential updates to SABRC/EPP legislation.</p>	<p>Expand Concept - combine with various “procurement” related concepts.</p> <p>Integrate 6b on SABRC; 6c on TDP testing; 9b on Product Certification and 7e on building codes</p>
<p>6b. Reform SABRC</p> <p>Collaborate with the Department of General Services and delegated state purchasing entities to increase</p>	<p>Many stakeholders recommended the need to provide incentives for purchasing PCRC products. One stakeholder suggested that State purchasing should adhere to CalRecycle (and DGS’s) policies and support them; the State of California should honor existing EPP policies such as for paint and carpet; and the State government should welcome open discussion in order to do a better job of implementing EPPs.</p>	<p>Some stakeholder comments were considered but not included because they addressed a broader or indirect issue that is being addressed in other concepts, such as in concept 6a, or they are based upon</p>	<p>Integrate into 6a</p>

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<p>purchases of post-consumer recycled-content (PCRC) products, which could include reform of SABRC and PCRC laws.</p>	<p>One stakeholder suggests that giving priority to PCRC products should be reconsidered and revised, as this recommendation does not take into consideration life cycle analysis and may overlook products from virgin materials that have a smaller environmental footprint than alternatives made from PCRC.</p> <p>Another stakeholder cautions CalRecycle regarding mandatory minimum content requirements for certain products, which can distort the availability and supplies of recycled materials, resulting in material shortages and increased prices.</p> <p>Another stakeholder expressed that a limited concept of “recycled” excludes a key segment of the recovered marketplace’ (such as post-industrial recycled feedstock) and no need to impose non-market means, such as procurement mandates, to increase recovery of a material that is already being recovered at a very high rate.</p> <p>DGS suggested not pursuing enforcement on state agencies, but instead denying delegated purchasing authority to state agencies that do not legitimately meet the SABRC procurement requirements, eliminating the recommendation on pursuing preferences and incentives in State contracts as this would be difficult to put into practice, continuing to focus on educating procurement officials, and continuing to support the development of the FI\$CAL reporting system to increase reporting of PCRC materials.</p>	<p>misinterpretations about what SABRC requires (e.g., some stakeholders raised concerns about post-industrial material; however, the SABRC program requires the use of post-consumer and not post-industrial or secondary materials).</p> <p>Staff concurs with stakeholders’ suggestions in general about the need to explore opportunities to increase procurement of PCRC products at the state level. See concept 6a.</p>	
<p>6c. Testing Tired Derived Products</p> <p>Continue to work with Caltrans on identifying tire-derived products (TDP) that are suitable for testing to expedite the product approval process with Caltrans and other procuring agencies that have potential to use significant quantities of TDP.</p>	<p>Number of comments on this concept was small. Two stakeholders agreed that Caltrans procurement could have a large impact on markets for TDP (as well as organics) and that testing would aid in increasing procurement. One stakeholder generally supported this concept but noted it would not have a significant impact on the statewide 75 percent goal.</p>	<p>Staff recommends continuing to work with Caltrans on identifying tire-derived products that are suitable for testing and potential approval by Caltrans. This would entail continued technical assistance and possibly an interagency agreement or other contract, including some research funding for actual testing.</p>	<p><a href="#">Integrate into 6a</a></p>
<p>6d. Minimum Content Requirements</p> <p>Incorporate minimum content requirements into Extended Producer Responsibility.</p>	<p>Majority felt it was unclear what this proposal seeks to do and thus, how it would be accomplished. Recommend revisiting &amp; clarifying</p> <ul style="list-style-type: none"> <li>• Incorporate minimum content goals as part of future EPR laws.</li> <li>• Expand use of minimum content tool for problem areas. While some note newspaper minimum content has proven to be one of the most successful market development tools others stated minimum content newsprint was well under way when law was passed.</li> <li>• Remove reference to LEED. CALGreen already addresses minimum content requirements and goes beyond the minimum requirements within the CALGreen tiers. However....another believes linking to LEED/</li> </ul>	<p>Recommend combining with EPR and making adjustments to consequences for non-compliance and substantiating recycled content within existing programs.</p> <p>Retain reference to LEED to reinforce use of independently set standards.</p>	<p><a href="#">Integrate into 4a</a></p>

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	<p>energy efficiency reinforces the idea of managing waste differently</p> <ul style="list-style-type: none"> <li>Increasing the amount of PCRC procurement is good, however, not at any cost. Related purchasing requirements should contain a provision such as “+/- 5-10 percent of the cost of a comparable lower recycled content/virgin product.”</li> <li>Research needed for testing and/or third party verification of recycled content.</li> <li>Modify statutes to increase success of existing minimum content laws by: adding consequences for noncompliance; setting level for measuring achievement high enough to avoid “bean counting” (e.g. overall recycled content, not measuring recycled content of each item).</li> </ul>	<p>Learn from minimum content compliance experience when incorporating into EPR</p> <p>Track research regarding tests for independent verification of recycled content.</p>	
<p>6e. Private Sector RCP/EPP</p> <p>Provide sales tax reductions or exemptions on the purchase of recycled-content products (RCPs) and environmentally preferable products (EPPs) in order to increase the purchasing and use of selected products.</p>	<p>Most comments included caveats and limitations to the concept of granting tax exemptions, with some noted the need for sunset clause on any tax reduction or tax exemption.</p> <p>It will be necessary to perform some economic analysis and market research to determine whether the markets for the products proposed would actually benefit from the purchase incentives.</p>	<p>It will be necessary to perform some economic analysis and market research to determine whether the markets for the products proposed for inclusion under these programs would actually benefit from the purchase incentives.</p> <p>May be premature to address private business purchasing. Focus staff resources on state government procurement (concept 6a).</p>	<p>Integrate into 3e</p>
<p>6f. Financing Incentives for Manufacturer Use of Recycled Materials</p> <p>Pursue legislation for direct and/or indirect financial incentives to support manufacturing processes that utilize recycled materials.</p>	<p>Although there is no consensus among stakeholders on whether or not to pursue incentive payments focused on processors, manufacturers or specific end uses, there is a general agreement regarding the need to increase market demand and that financial incentives should be considered a high priority. .</p> <p>Options: carbon credit, direct/indirect production payments, RMDZ loan expansion, option over other tax reduction options, and several commented regarding impact of tax reductions on existing recipients and programs.</p> <p>SB 71 is a model that could be used for new legislation to provide authority for financial incentives for using recycled materials in a wider range of products.</p>	<p>Considering legislation re: tax-related proposals to support manufacturing processes that utilize recycled materials. Consider direct/indirect production incentive payments, if a funding available (e.g. Cap &amp; Trade)</p> <p>Among the tax-altering options, the reduction of sales tax will engender the most opposition, which may outweigh substantial industry support a production credit applied to purchased equipment, granted to manufacturers who use specified recycled materials or specified shares of input materials in their production process, would be more likely to gain industry and legislative support.</p>	<p>Integrate into 1a</p>

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		A carbon emission credit supporting the use of recycled materials will be more likely once the trading system has established some successes within its current design framework.	
<p>7a. Tire Market Development</p> <p>Develop and pilot programs to increase diversion of tires from landfills and create markets for products made from waste tires.</p>	<p>Although there is no consensus among stakeholders on whether or not to pursue incentive payments focused on processors or manufacturers or specific end uses such as TDA, there is a general agreement regarding the need to increase market demand for waste tire products.</p> <p>Stakeholders provided only a few comments on this concept. One indicated that EPR is worthy of continued consideration, others were generally supportive of innovative programs to prevent disposal, and others questioned where funding for incentive payments would come from. Opinions were polarized on whether waste tires should be used as tire-derived fuel in, for example, conversion technologies.</p> <p>At Tire Plan workshops, most stakeholders expressed skepticism regarding waste tire incentive payment program, especially if focused on haulers or processors or on specific end uses such as TDA. Some, though, did suggest that if implemented incentives should be oriented towards expanding market demand rather than providing payment for activities that are already occurring.</p>	<p>Staff agrees implementing incentive payments are difficult. However when ADC, exports, and TDF are excluded, then waste tire recycling is below 50 percent. Added market development – particularly demand by large businesses or purchasing entities for tire-derived products -- is still needed, something that has more general agreement among stakeholders.</p> <p>Staff plans a pilot grant program in 2013/14 that will provide funding to manufacturers, designed to expand commercial (business) demand for higher value-added TDPs. (2013/14 Tire Plan)</p> <p>This should enable participating manufacturers to increase TDP sales and market share by more competitively pricing and marketing their products.</p>	<p>On-going program evolution through Five Year Tire Plan</p>
<p>7b. Plastic</p>	<p>Stakeholders agreed a focus on plastics is important. Suggested efforts included:</p> <ul style="list-style-type: none"> <li>• Enhancement of existing collection infrastructure</li> <li>• market driven demand and local markets;</li> <li>• Additional focus on manufacturing &amp; remanufacturing;</li> <li>• Development of technological improvements, including identification &amp; separation sorting technologies, reuse and biodegradables.</li> <li>• Some did not support banning of plastics and plastics as fuel.</li> <li>• One stakeholder recommended re-evaluating data in the Plastic Information Clearinghouse for “Total Recycling pathways (end of life reprocessing, or depolymerization to fuels, chemicals, and polymers)</li> </ul>	<p>CalRecycle should participate in policy discussions regarding plastics. Statutory changes will be necessary to implement any policy direction related to various options from product bans, advance disposal fees, labeling enforcement, and many others. Recommendations are dependent on the specific issue and plastic—work</p>	<p>Integrate into 4b demonstration projects</p>

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	<p>available to CA stakeholders.”</p> <ul style="list-style-type: none"> <li>Plastic chemistry is continuously evolving. Because of this it is difficult to fully understand and assess current and future environmental and market impacts.</li> </ul>	<p>continues through the Beverage Container Program and RPPC implementation. Problematic containers such as plastic bags are being addressed locally and marine debris is being discussed in Legislature. In addition, plastic packaging will be examined as part of the packaging workshops that CalRecycle and US EPA Region 9 plan to hold in late 2013 and 2014.</p> <p>Integrate some feedback into 10a</p>	
<p>7c. E-Waste</p> <p>Monitor and analyze the impacts of the evolving character of covered electronic waste (CEW) and how the current CEW recycling model handles the influx of new technologies to determine whether alternative approaches are needed.</p>	<p>Stakeholder comments ranged over the entirety of proposed options, with EPR advocates urging a transition of the existing program, while those who benefit from the existing program recommending caution to avoid harming what is working. One comment suggested prohibiting exports into a global market).</p> <p>The suggestion of incorporating third-party certifications (e.g. e-Stewards, R2, etc.) into state policies or practices was a new idea that merits consideration. While not a substitute for effective regulation, and the state would need to be careful about endorsing third-party operations, certifications can extend the reach of preferred practice promotion beyond fundamentals required by law.</p>	<p>Do not pursue wholesale changes at this time. CalRecycle will be examining the impacts of the increase in types of electronic waste and how the current CEW system can handle this influx or whether new approaches are needed. Third-party certifications may influence the flow of recovered e-waste to increase domestic processing and reduce wholesale export.</p> <p>Some suggestions included taking action on matters beyond the scope of state statutory/regulatory authority (e.g., prohibiting exports into global markets).</p>	<p>On-going program evolution through statutory and regulatory reform workshops.</p>
<p>7d. C&amp;D: Equipment Retrofit</p> <p>Provide funding to help C&amp;D and organic materials processors remain in compliance as air quality management districts (AQMD)</p>	<p>Little consensus on how to approach this concept or if it was needed. Key stakeholder points follow:</p> <ul style="list-style-type: none"> <li>A grant or loan program is appropriate and could be done without any changes to the existing RMDZ program.</li> <li>Funds directed to Sacramento rarely return to the jurisdiction of origin.</li> <li>Since there is already a high rate of C&amp;D diversion, there is no need for a fee to be imposed to add equipment.</li> <li>Supports as long as it does not reduce landfills’ competitiveness.</li> </ul>	<p>Staff recommends consideration of funding to processors to remain in compliance with this requirement.</p> <p>The AQMD rules could impact a significant number of processors, which could impair the ability to</p>	<p>Integrate into 1a</p>

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reclassify existing mobile crushers and grinders as stationary sources.	<ul style="list-style-type: none"> <li>If an ADC ban is implemented, then any such fee would be unsustainable; and since it is the AQMDs that are responsible for the compliance, they should be responsible for supporting a fund for compliance.</li> <li>Should be a technological based fund rather than an entitlement program that would help advance new technologies, such as small modular thermal reprocessing systems.</li> </ul>	process C&D and organics and contribute to the 75 percent goal. A grant program may provide more direct assistance than loans. The total amount an effective grant program would require is dependent upon the number of pieces of equipment that would actually be affected; upgrading 10 percent of the 400 pieces of equipment currently in PERP would require a range of approximately \$4-20 million.	
<p>7e. C&amp;D: Cal Green</p> <p>Work with the Building Standards Commission, the Department of Housing and Community Development, and other code writing agencies to enhance and expand CALGreen’s provisions related to waste management and the use of recycled content products, including: expanding deconstruction and salvage provisions, collaborating with local jurisdictions to develop programs, and using the existing AB 939 review process to ensure that jurisdictions are enforcing their mandatory CALGreen provisions and/or C&amp;D Ordinances (whichever is more stringent).</p>	<p>Most were in support of proposed approach, but one believed it to be outside “of the mandates of the law” while worth it as a cooperative effort as locals already have the option of including deconstruction by adopting Tier 1 or 2 of existing CALGreen standards.</p> <ul style="list-style-type: none"> <li>Suggested CALGreen include a mandate for the use of recycled content materials.</li> <li>Two addressed reporting issues regarding facilities and jurisdictions; including the need for additional resources for facilities to document the materials coming to their sites.</li> </ul>	<p>Revise to tie this to CALGreen’s existing recognition of re-use and deconstruction.</p> <p>While CALGreen requires 50 percent C&amp;D diversion for new construction, renovations, and alterations, deconstruction and salvage are voluntary. Efforts could be made to expand local Tiered diversion requirements to incorporate voluntary or mandatory deconstruction elements where and when markets for these materials exist.</p> <p>CalRecycle staff recommends continuing to work with BSC et al to incorporate additional provisions related to waste management and RCP as well as deconstruction and salvage elements, continuing to work with locals to implement deconstruction and salvage programs, and continuing to evaluate local implementation of CALGreen standards as part of its cyclical AB 939</p>	Refine, but Include some ideas in 6a (state procurement)

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		jurisdiction review process.	
7f. Fiber: Landfill Cardboard Ban	<p>Contamination is an issue – What markets or management options will there be for contaminated, unrecyclable cardboard?</p> <p>Landfill permits will need to be modified in order to establish cardboard recovery programs, with grant support for needed equipment.</p> <p>MCR will capture more of the cardboard from the waste stream, is a ban necessary?</p> <p>Increase in commercial commingled recycling will eliminate the need for a landfill ban.</p>	Staff recommends deleting concept as goals will be achieved through 4b, Packaging. Landfill ban of cardboard would be difficult to enact and then enforce, and it is more likely that diversion of cardboard will be achieved via enhanced commercial recycling and collection and potentially through concept 4b (e.g., EPR for packaging).	Integrate into 4b
<p>7g. Grants for Mid-scale Manufacturing</p> <p>Develop grant and incentive payment programs similar to CalRecycle’s Plastic Market Development Payments and Market Development and Expansion Grants for plastic and paper manufacturers to increase supply and quality of postconsumer fiber and non-California Redemption Value plastic resins.</p>	<p>Most comments did not explicitly address fiber and resins, though several encouraged recycled-content manufacturing and implied support for incentives and/or grants. Some indicated this would be more useful than landfill bans and could help level the playing field in terms of providing financial incentives</p> <ul style="list-style-type: none"> <li>• One fiber-related trade organization noted that markets for recovered fiber are already successful, thus incentives or procurement mandates are not necessary. They felt reducing regulatory burdens would do more to foster recycling-based manufacturing.</li> <li>• One commenter believes remanufacturing incentives won’t do much because “the great Chinese vacuum cleaner” sucks up recovered commodities and California manufacturing is not coming back, while another argued the State should track and certify “Total Recycling” to ensure materials actually are used to remanufacture goods.</li> <li>• Several commenters expressed support for broader market development efforts to encourage manufacturing with recovered materials in CA, such as funding for infrastructure, expansion of RMDZ, minimum content requirements, and a “recycling incentive adjustment” for tons of material recycled.</li> </ul> <p>Other approaches: streamline permitting rather than provide grants, encourage source reduction should also be encouraged.</p> <p>Funding: using Cap-and-Trade rather than increasing tipping fees.</p>	<p>Staff recommends linking fiber and resin grant and/or incentive payment programs with other financial tools which should be expanded beyond tax breaks and carbon credits. Few stakeholder comments were specifically on point, but most expressed broad support for demand-side market development, including recycled-content manufacturing. Fiber &amp; resins are not unique in this regard. Also important to link “closing the loop” (RCP manufacturing) with other infrastructure funding “tools”.</p> <p>More specific to fibers and resins, staff recommends considering an incentive payment program, if funding and statutory authority are provided, perhaps modeled after the plastic market incentive program or the pilot tire incentive program (note this is consistent with internal discussions re: potential use of Cap-and-Trade funds).</p>	Integrate into 1a

CONCEPT	SUMMARY OF COMMENTS	STAFF RESPONSE / RATIONALE	CHANGES IF ANY
		No stakeholders mentioned the plastics program, although many lauded it at a January 2013 workshop as critical for plastic reclaiming and manufacturing. An alternative approach to payment incentives is to revive limited aspects of the Market Development Expansion Grant Program, targeting prioritized needs for CA processors and RCP manufacturers.	
<p>7h. Used Oil: Life Cycle Assessment</p> <p>Consider statutory, regulatory, and/or administrative changes to the Used Oil Program recommended in the Life Cycle Assessment report.</p>	<p>Only one relevant comment was received on this topic and suggested that more work be done on the “Check-Your Number” campaign, filter recycling and education related to collection centers for used oil. Significant stakeholder input is occurring in the LCA process;</p> <p>Significant stakeholder input already is occurring during quarterly stakeholder meetings in addition to many conference calls/webinars. Input is tracked and documented at the LCA Website: <a href="http://www.cce.csus.edu/conferences/CalRecycle/lca11/index.cfm">http://www.cce.csus.edu/conferences/CalRecycle/lca11/index.cfm</a></p>	<p>Postpone recommendations until after Jan 2014 Legislative Report is completed per SB 246 (Lowenthal, Chapter 4, Statutes of 2009).</p> <p>Integrate lessons learned from “Check Your Number” campaign into other behavior change campaigns suggested for source reduction (9c)</p>	<p>On-going program evolution through research and legislative report that may lead to statutory and regulatory reform</p>
<p>8a. State Funding Models</p> <p>Explore a combination of approaches to supplement the landfill disposal tonnage or tipping fees for funding CalRecycle waste/materials management activities.</p>	<p>There were differences of opinion from stakeholders regarding the pros and cons of increasing tipping fee. IN addition, there were some other options suggested.</p> <p>Concerns from those who did NOT support increase in tipping fee:</p> <ul style="list-style-type: none"> <li>• Landfills already pay more fees and are more highly regulated than any other waste management facilities. Permitting and expansion of landfills is already difficult and expensive to the point of impossibility. May reduce revenue to landfill owners.</li> <li>• Unsustainable approach and should be avoided in favor of a program that achieves independent, economic viability based on future waste management conditions.</li> <li>• Increasing landfill fees may promote recycling, but it may also promote illegal dumping and littering, which imposes costs on local government.</li> <li>• Waste disposal should pay its share of the programs needed to achieve 75 percent, but landfills will already be losing tonnage and revenue due to the reduction in disposal. This will result in fiscal impacts that need to be assessed and may threaten the economic viability of some landfills.</li> </ul> <p>Concerns from those In support of increasing tipping fee:</p> <ul style="list-style-type: none"> <li>• Modest increase, if the funds remain available strictly for solid waste/organics facility development.</li> </ul> <p>Ideas:</p>	<p>An internal working group has begun to research options including, but not limited to, the ideas shared by stakeholders. The funding model(s) selected will identify resources needed to collect revenue to support waste and materials management programs.</p>	<p>Refine existing concept</p>

CONCEPT	SUMMARY OF COMMENTS	STAFF RESPONSE / RATIONALE	CHANGES IF ANY
	<ol style="list-style-type: none"> <li>1) Promote legislation that applies the per-ton fee to all materials disposed at a landfill site, including those reported as ADC/AIC/beneficial use or applies a lower per ton fee to all tonnage received at MRFs and compost facilities.</li> <li>2) Consider approaches for fixed costs that cannot be reduced as tonnage declines.</li> <li>3) Extended Producer Responsibility (EPR) is a model to provide funding for oversight of Covered Electronic Waste (CEW) and should be discussed as a tool to recycle other material types.</li> <li>4) CalRecycle should pull funds from private recyclers as well.</li> </ol>		
<p>8b. Local Funding Models</p> <p>Work closely with local jurisdictions and related associations to identify new funding mechanism(s) for LOCAL materials management activities that are independent from landfill disposal fees.</p>	<p>Many stakeholders suggested the need to identify alternative and sustainable local funding to maintain local jurisdiction municipal revenues and diversion programs. Jurisdictions with landfill systems cannot support all the programs if they also have to maintain the landfill while it is open and for many years after closure. Some stakeholders felt that increasing the-per ton tipping fee at landfills is not sustainable. Other stakeholders felt a modest tipping fee increase would be helpful as long as the funds remain strictly available for waste management activities at the local level and are sheltered from a fund sweep, while others felt that increasing tipping fees could lead to increased illegal disposal.</p> <p>Several stakeholders said “we’re going to have to think outside of the box”. There were numerous suggestions on different local funding mechanisms: incentive-based contracts fining state agencies that do not meet their recycling mandates keeping the money locally for use; using EPR as an “addition by subtraction” method of funding, i.e., that local costs would decrease if local governments no longer fund the costs of processing of certain materials; charging fees on material used at the landfill (ADC, AIC, beneficial re-use) and/or addressing inequitable pricing concerns ; using a “European Model” approach that would incorporate temporary, one-time, fees of up to \$40/ton to kick-start infrastructure funding; and having CalRecycle create an innovative fund management account as a type of deposit that companies can draw from if they prove they are using recycled feedstock.</p>	<p>This is a new concept based upon stakeholder feedback that CalRecycle explore new Mechanisms for local funding of materials management programs to ensure the long-term viability of these programs. Relying upon tipping fees when the goal is to further decrease disposal is not a sustainable option.</p> <p>CalRecycle contracted with Institute of Local Government (ILG) to examine case studies and models that might provide resources for local programs.</p>	NEW
<p>8c. Data Gathering: Solid Waste Facilities</p> <p>Require recycling and composting facilities to submit reports on solid waste and material flows through their facilities.</p>	<p>Only two survey responses—both feel topic irrelevant. They are not interested in enforcement issues as they feel it creates an unfair burden on their businesses or processes.</p> <p>However, some comments were received related to MRF standards regarding need for data to develop quantifiable standard as well as enforcement since measurement is needed and should be reported to CalRecycle, customers, and jurisdictions</p>	<p>CalRecycle tried to gather data on a voluntary basis numerous times. Participation has low, with only 10 percent to 30 percent providing any data at all. This level of information is not adequate for statewide, regional or local planning efforts. Without clear requirements (regulations), many facilities will not provide the needed information because they claim it is proprietary.</p> <p>In the mid-1990s, CalRecycle did not</p>	<p>Refine existing concept.</p> <p>Integrate beverage container reporting through DORiis in 5a</p>

CONCEPT	SUMMARY OF COMMENTS	STAFF RESPONSE / RATIONALE	CHANGES IF ANY
		<p>exercise the reporting authority in PRC Section 41821.5 (b) and relevant portions of PRC Section 41821.5 (c) because the recycling and composting industries were just getting started. It was feared that reporting would be too much of a burden on facilities. Now the industry is well established and on-line reporting has evolved.</p> <p>Data reported on recycling and composting at facilities would help CalRecycle and local governments develop more meaningful regional and long term plans for new facilities and programs.</p> <p>Depending on how it is implemented, recycling and compost facilities could have one of several options to meet reporting requirements, such as:</p> <ul style="list-style-type: none"> <li>▪ Submit quarterly reports to the county on materials that are recycled or composted, disposed of, sold to end users or sold to exporters (by county of origin). The County then reports data to CalRecycle. This system could be a new module in the Disposal Reporting System.</li> <li>▪ Submit periodic (annual) reports using a CalRecycle online reporting system. CalRecycle would make data available to counties as soon as it is reported.</li> </ul> <p>It is premature to seek statutory authority to add penalties for facilities</p>	

CONCEPT	SUMMARY OF COMMENTS	STAFF RESPONSE / RATIONALE	CHANGES IF ANY
		<p>and reporting entities (landfills, recycling, composting and transformation facilities, transfer stations and counties) that fail to report, misreport, report late or fraudulently report information</p> <p>Data collection adjustments for beverage container program should be addressed in 5a.</p>	
<p>9a. Local Organics Programs</p> <p>Continue to provide information about effective programs and develop a grant program to support local food waste or composting programs.</p>	<p>Most stakeholder comments were supportive of increasing public outreach and education about food waste recovery, food waste source reduction, backyard composting and vermicomposting programs. Several recommended pursuing specific models for food source reduction, such as the United Kingdom’s “Love Food Hate Waste” campaign and a specific supermarket chain’s efforts through the “Fresh Choice” program. Others suggested expanding the source reduction plan to other areas outside of food waste, but were not specific as to what those materials should be. Several stakeholder comments were supportive of increased funding for these types of programs although they were not specific on how to secure that funding. One stakeholder identified the need to apply this concept to the large California agricultural sector.</p> <p>Funding for public outreach and education about food waste recovery is needed.</p> <p>Stakeholders also noted that traditional information strategies may not be optimal for behavior change as motivations are different. Uncovering the barriers and perceived benefits will help in crafting new messages. Successful “check your number” is good example.</p>	<p>Staff agrees with stakeholders about the need to increase education and outreach efforts, as well as to provide funding for food waste-related programs. Expanding use of social media is also worth exploring.</p> <p>RE: outreach and education: the UK program could exemplify other similar model programs such as the “Fresh Choice” program or San Francisco “Food Runner”. The broad implementation language would allow flexibility for model programs to be developed for food source reduction, backyard composting, and vermicomposting. Staff recommends continuing to provide examples of effective education and outreach efforts, and considering new funding for a grant program to support local food waste reduction and composting programs. Include ongoing coordination with “Food Waste Challenge” initiative of USEPA Region 9 and USDA.</p>	<p>Refine existing concept and consider comments about effectiveness of social media and behavior change when providing information..</p>
<p>9b. Product Certification and Eco-Labels</p> <p>Encourage Department of</p>	<p>Support exists for using or adopting existing nationally based or third party standards, certifications and/or eco-labels that have transparency and include clear, science-based criteria for decision making. Some stakeholders expressed general concerns about using state resources to develop standards. However, some</p>	<p>Staff agrees with stakeholders on the need to utilize existing standards as it would be easier to implement, save</p>	<p>Integrate into 6a</p>

CONCEPT	SUMMARY OF COMMENTS	STAFF RESPONSE / RATIONALE	CHANGES IF ANY
<p>General Services to adopt existing nationally based or third party product-related environmental certifications, standards, and/or eco-labels to motivate manufacturers to design and sell products that meet environmental criteria.</p>	<p>suggested evaluating the impact of labels and certification programs to determine effectiveness.</p> <ul style="list-style-type: none"> <li>Any product certification programs, eco labels, or other “green claims” should be fully compliant with California-specific requirements (e.g., CalGreen building standards) and U.S. Federal Trade Commission requirements as they apply to “green” marketing claims.</li> <li>Industry supports developing a universal language to describe items acceptable for plastic recycling.</li> <li>Consumers could benefit from a label system that distinguishes recyclable, organics, and disposable items. New and evolving technologies are making environmental information more readily available to consumers (e.g., barcode apps), but may not be ready to be incorporated into state purchasing or recommended for public use. Further investigative work is needed.</li> <li>DGS commented that they evaluate existing certifications against California laws and regulations and incorporate language as appropriate into contracts so no other effort is needed. However, not all products of interest to CalRecycle have state contracts and are a focus of DGS.</li> </ul>	<p>staff resources, and avoid duplication of effort as well as the need for an analysis of their effectiveness.</p> <p>DGS is starting to develop standards for products that would apply to delegated purchases as well as state contracts. CalRecycle staff support this as a good place to start, as it has the potential to expand environmental purchases made by state agencies.</p> <p>CalRecycle will also continue to support efforts related to “false advertising” for “green” products.</p>	
<p>9c. Local Zero waste Activities</p> <p>Develop a “Zero Waste” page on the CalRecycle website to promote local jurisdiction and private sector zero waste activities through model programs, case studies and other information.</p>	<p>The most common comment addressed the need for a more specific definition of zero waste and that it was difficult to achieve. One supported CalRecycle’s 2001 Strategic Plan definition. Some include incineration and/or CT as a major component; in contrast, others state that if incineration and/or CT are included as a component, then the program automatically would not qualify as reaching zero waste goals</p> <p>Stakeholders supported the promotion of zero waste goals, and one recommended that state agencies adopt a zero waste goal. Other comments were concerned about the effects that zero waste plans would have on landfills or regional waste facilities. One common theme was the need to keep flexibility in regulations and to provide a vehicle and tools for local involvement and control over zero waste activities. Others felt that nothing was more powerful to encourage businesses than hearing about how other businesses are saving money and garnering other benefits by going beyond recycling. They felt the media should be covering these stories.</p> <p>Finally, one comment stated that zero waste was paramount and should be the overall theme of the 75 percent plan.</p>	<p>Staff recommends re-establishing a Zero Waste page on the CalRecycle website as a resource for those wishing to investigate and promote Zero Waste activities. This could include model programs (both governmental and private sector), case studies, links to discussion of EPR and product stewardship. At the same time, CalRecycle supports the desire to retain local flexibility and control over zero waste activities.</p> <p>While many stakeholders suggest CalRecycle should define zero waste, staff does not recommend a formal definition until we’ve surpassed the 75 percent goal due to the range of perspectives regarding the definition.</p> <p>Expanding use of social media is also worth exploring.</p>	<p>Refine existing concept</p>

CONCEPT	SUMMARY OF COMMENTS	STAFF RESPONSE / RATIONALE	CHANGES IF ANY
<p>9d. K-12 Environmental Education</p> <p>Leverage partnerships to promote the use of K-12 model environmental curriculum to cultivate environmental literacy for students statewide.</p>	<p>As part of comments on other concepts, stakeholders noted the importance of education and the support and development of programs for K-12 schools. In addition to curriculum, they wanted to see the facilities themselves focused on reduction of food waste. Some suggested the importance of working with colleges and universities as well.</p>	<p>California is currently leading the nation in environmental literacy as a result of the Education and the Environment Initiative. EEI is a unique opportunity to formally include environment-based education in California’s classroom. Students are better informed as they make choices that affect their families, their own health and the future of a healthy environment.</p>	<p>NEW</p>
<p>10a. Define Post-Recycled Residuals</p> <p>Develop a technology-neutral standard for post-recycled residuals that promotes removal of a sufficient amount of recyclables before residuals are used for energy recovery.</p>	<p>There is a wide range of opinions about using waste materials for energy recovery - some say energy from waste is recycling, others think that is a ridiculous idea</p> <ul style="list-style-type: none"> <li>• Many stakeholders in Southern California argue that energy recovery is a desirable and practical use for waste materials that can’t be recovered that are currently disposed in landfills – they list many advantages (energy, jobs, avoiding landfills, GHG benefits, etc.). Some materials are just too contaminated or otherwise not suitable or marketable for recycling – energy recovery is a good option for these materials. Some plastics fit in this category (comments from 7b)</li> <li>• Some think energy recovery should be part of the hierarchy – MRFs, composting, then thermal processing, then landfilling. Others point out that there is an inherent conflict between recycling and energy recovery that desires high BTU materials</li> <li>• Standards for residuals puts additional requirements on processing and could drive residuals to landfilling, which is counterproductive to CalRecycle’s mission</li> <li>• CalRecycle needs to determine “when we are done with recycling” (such as – when processing materials into a usable product can no longer be done), so that the remainder material can go to energy recovery</li> <li>• Energy recovery facilities should have a front-end MRF – after that, remaining materials should be allowed for energy recovery</li> <li>• Some jurisdictions are very committed to recycling and have many programs in place. Jurisdictions should be allowed to certify that they have residential and commercial programs in place, and if so, the materials left after these programs work should be allowed for energy recovery. However, the existence of programs does not necessarily mean that most recyclables are being captured – there should be some assessment of the effectiveness of the programs</li> </ul> <p>Defining post-recycled residuals will be challenging because of the variability among MRFs (see comments for 3b)</p>	<p>This concept provides context for developing energy facilities using waste materials. Staff has developed several approaches (including this one) and all are currently under discussion. However, results from the “comparable to source separation” work will inform development of standards for post-recycled residuals.</p> <ul style="list-style-type: none"> <li>• Remove specific definition of the standard as consisting of an amount of recyclable/compostable materials in the residuals</li> <li>• Markets can change quickly so it’s not practical to have this component be part of the standard</li> <li>• Many of the issues from Option 3b crossover to this option</li> <li>• Remove reference to proving markets for materials don’t exist</li> </ul>	<p>Refine existing concept</p>
<p>10b. Beneficial Use</p> <p>Establish a consistent, cross-media procedure for evaluating the beneficial use of</p>	<p>This process needs to consider future impacts of markets, technology and materials value. Material with no or limited use or value today may become useful or valuable.</p> <ul style="list-style-type: none"> <li>• Energy capture needs to be separated from materials use applications. If material integrity is lost during an energy capture process, that process should not be protected as part of the remaining 25 percent. Processes that maintain material integrity can be part of the remaining 25 percent strategy.</li> </ul>	<p>It is often difficult to get another agency to “volunteer” staff resources for a project that may not necessarily align with the agency’s authority or primary responsibilities. A hard</p>	<p>Refine existing concept</p>

CONCEPT	SUMMARY OF COMMENTS	STAFF RESPONSE / RATIONALE	CHANGES IF ANY
solid waste, including as a feedstock for waste-to-energy.	<ul style="list-style-type: none"> <li>• The first priority should be achieving 75 percent recycling, and then seeing how much higher we can go, as well as redesign through a resources institute. New incinerator or related technologies will come with put or pay contracts, locking jurisdictions into delivering waste and undermining efforts to drive to an even higher recycling rate, as well as reduce waste generation over all.</li> <li>• Thermal systems should not be promoted by the State. Only biological systems like anaerobic digestion.</li> <li>• Consider beneficial use of “liquid resources” via water resource recovery centers.</li> <li>• If a use can be developed for energy recovery residuals then exploring the options for that waste product would assist with diversion.</li> </ul>	<p>mandate and an identified funding source would guarantee participation.</p> <p>Staff propose a cross-media workgroup to research and then develop procedures for state and regional agencies to use when evaluating and allowing solid waste beneficial reuse projects. Examples of beneficial use include use of combustion ash in road base and land application of green material. Consider model programs such as the State of Pennsylvania, Department of Environmental Protection’s Beneficial Use Program.</p>	
Measurement	<p>Most local government and waste/recycling companies or groups that commented or sent letters were generally not in favor of the planned approach to measure success in reaching the 75 percent recycling goal. However, some local government and other commenters did support the new recycling goal and target base. Some commenters suggest other ways to measure recycling success, such as better accounting of recycled materials into new products, or looking at highest/best use of all materials instead of just putting activities into categories of what counts and what does not count as recycling.</p> <p>Many commenters believed the legislative intent of AB 341 was to not to set up a recycling goal but to continue with, and enhance, the diversion measurement system set up under AB 939 and modified by SB 1016. Furthermore, many argued that an approach that is integrated with the AB 939 measurement system would be better than setting up a separate goal with a different target base and activities that are not consistent with AB 939 and SB 1016.</p> <p>A couple of commenters interpreted the draft to say that the 75 percent recycling goal changes the diversion mandate for local jurisdictions. It does not. Others acknowledge the distinction between the diversion mandate and new recycling goal, but are concerned that the new recycling goal will make waste disposal more difficult and costly for local jurisdictions, particularly if greenwaste is not allowed as ADC. Some also felt that a broad definition of “disposal-related” activities coupled with a new, lower target would impose an 80-90 percent diversion rate on local governments. There is also concern that the two measurement systems have and will cause confusion.</p>	<p>Comments are summarized to illustrate the differences in opinion and address stakeholder misconceptions.</p>	

## Appendix B

### REVISED Concept List

**October 2013**

The table below presents a “revised” list of 33 concepts that will form the basis of the Legislative Report. The first column (left side) creates a new numbering system for the concepts for ease of reference. The second column provides a one-sentence summary of the concept. The third column tracks the concept number from Appendix A and the May 2012 Discussion Draft. The fourth column notes the level of adjustment and/or change based on stakeholder comments. The fifth column (right side) includes additional information regarding the concept and/or current activities.

#	Concept Description	Code	Change	Notes and Current Activities
	<b>Moving Organics Out of the Landfill</b>			
<b>1</b>	<b>Phase out greenwaste ADC</b> at landfills and re-direct green waste material to composting and anaerobic digestion (AD) facilities.	2a	Refined	Potential for direct regulation to phase organics out of landfills is included in Waste Sector component of ARB Scoping Plan; no timeline specified. Legislation may address. Alternatives to phase-out: eliminate ADC as diversion credit or assess tipping fee on greenwaste ADC.
<b>2</b>	<b>Phase out organics disposal</b> at landfills and re-direct into composting and AD facilities.	<b>2b</b>	Refined	Potential for direct regulation to phase organics out of landfills is Included in Waste Sector component of ARB Scoping Plan; also includes GHG emissions reduction quantification, material quality standards, increasing markets for products, research on facility BMPs and public education campaigns.
<b>3</b>	Adopt <b>regulatory changes</b> to increase the likelihood that organics will be composted or beneficially used while providing the appropriate level of regulatory oversight.	2e	On-going	Included in Waste Sector component of ARB Scoping Plan; existing regulatory activity moving from informal to formal process.
<b>4</b>	Continue to provide information about effective programs and develop a grant program to <b>support local food waste or composting programs.</b>	9a	Refined	One of the current activities includes coordination with “Food Waste Challenge” initiative of U.S. Environmental Protection Agency Region 9 and U.S. Department of Agriculture.
<b>5</b>	Work closely with California Public Utilities Commission to develop policies and programs that promote in-state production, distribution, and use of <b>biomethane</b> from landfills and AD facilities.	2g	On-going	AB 1900 (2012) requires development of standards specifying concentration levels of constituents that pose rise to human health as well as requirements for monitoring, testing, reporting and recordkeeping. CalRecycle working with California Public Utilities Commission (CPUC) to identify testing data for biogas from anaerobic digestion(AD) facilities so that CPUC can include this within standards.
	<b>Continuing Beverage Container Recycling Program Reform</b>			
<b>6</b>	Adopt program elements that will sustainably <b>address the fiscal deficit in the Beverage Container Recycling Program</b> while maintaining a high recycling rate, preventing fraud, and supporting the goals of AB 341.	5 a, b & e	Expanded	CalRecycle is developing proposals to avoid proportional reductions in program expenditures. The Legislature instituted a quarterly reporting requirement to notify the public when proportional reductions would need to occur absent other policy actions. CalRecycle expects proportional reductions in the 2014-15 fiscal year. The Spring Finance Letter and Budget Trailer Bill included five proposed strategies to address multiple program issues. Several others may be pursued through legislation and budget process.

#	Concept Description	Code	Change	Notes and Current Activities
	<b>Expanding Recycling/Manufacturing Infrastructure: Permitting and Compliance Assistance</b>			
7	Collaborate with other regulatory agencies to streamline the permitting process and <b>resolve conflicting permitting requirements</b> in order to reduce the time, complexity and cost to obtain a compost, AD or related permit.	2f	On-going	Included in Waste Sector component of ARB Scoping Plan; Premise that changes are grounded in current science, address market conditions and changes in waste streams, facilitate permit streamlining and take advantage of emerging technologies as well as meet GHG goals.
8	Continue to <b>adjust solid waste &amp; recycling facility regulations</b> to ensure they are grounded in current science, address market conditions and changes in waste streams, facilitate permit streamlining and take advantage of emerging technologies.	1i	On-going	Includes development of guidance or tools such as program EIRs to facilitate siting in response to regulatory changes. As language is drafted, comments related to changes re collection frequency and changes to promote collection efficiency/quality would be considered.
9	Develop statewide <b>tools</b> and inter-agency relationships to <b>streamline local facility siting/expansion</b> to handle the increase in materials diverted from disposal.	1c	Refined	While state involvement in local siting is minimal, CalRecycle has contracted with ILG to provide case studies, samples, and strategies for local governments to use in considering the siting of new facilities. CalRecycle is also collaborating with other agencies to streamline permitting which is related to this concept.
10	Expand <b>periodic inspections</b> to include a more representative sample of <b>all types of solid waste facilities/operations</b> instead of focusing primarily on landfills.	1b	Ongoing	Significantly increasing number of non-landfills inspected would require statutory change or additional funds.
11	Require recycling and composting facilities to submit reports on <b>solid waste and material flows</b> through their facilities.	8c	Refined	Depending on how it is implemented, recycling and compost facilities could submit reports to the counties (new module in the Disposal Reporting System) or directly to CalRecycle through an online reporting system. CalRecycle would make data available to counties as soon as it is reported. Tracking material flows for beverage containers is facilitated by DORiis.
12	Develop <b>performance standards</b> and certification process for determining if mixed waste processing facilities are <b>“comparable to source separation”</b> in removing recyclables from waste.	3b	Refined	Required by AB 341 for mandatory commercial recycling. CalRecycle workshops held July 2013; timeline uncertain as to when to move to formal regulatory process. Can be a starting point for addressing post-recycled residuals for feedstock thermal processes.( Concept 13)
13	Develop a <b>technology-neutral standard for post-recycled residuals</b> that promotes removal of a sufficient amount of recyclables before residuals are used for energy recovery	10a	Refined	Standard will be developed with continued stakeholder input building on results from “comparable to source separation” (Concept 12).
14	Establish a consistent, <b>cross-media procedure for evaluating the beneficial use</b> of solid waste, including as a feedstock for waste to energy.	10b	Refined	Examples might include land application of green material, combustion ash in road base.
15	Promote consistent <b>facility operator training</b> and/or certification to ensure facilities can be operated in compliance.	1j	On-going	Training programs are offered by CalRecycle and the Department also co-sponsors or partners with training programs.
16	Develop a fully integrated <b>communications plan</b> that can be tailored to specific regions and highlight the positive economic and environmental aspects of siting recycling and manufacturing infrastructure.	1h	Refined	

#	Concept Description	Code	Change	Notes and Current Activities
	<b>Expanding Recycling/Manufacturing Infrastructure: Financing</b>			
17	Develop <b>financial incentives</b> to support new and expanded infrastructure for manufacturing (from recycled materials feedstock), processing and energy/biofuels generation.	1a	Expanded	Potential funding sources include tipping fee, Cap-and-Trade, AB 118 (via California Energy Commission), tax credits, beverage container recycling fund, pollution control financing, equipment retrofits, etc.
18	Provide <b>loans and grants statewide</b> to develop and expand manufacturing infrastructure (from recycled materials feedstock).	1d	Refined	Funding loans outside the RMDZ would be triggered by Cap-and-Trade funding. CalRecycle also considering potential sale of some loans in order to recapitalize Loan Subaccount.
19	Increase CalRecycle's ability to respond to manufacturers and processors <b>business assistance</b> needs (e.g. attraction, retention and expansion, site selection, permit assistance) by enhancing existing programs and leveraging other business-related organizations.	1e	On-going	New services are being added and partnerships formed. Increased coordination with Go-BIZ and local/regional/statewide economic development programs. Supports loans/grants recommended in Concept 18.
	<b>Exploring New Models for State and Local Funding of Materials Management Programs</b>			
20	<b>Explore a combination of approaches to supplement</b> the landfill disposal tonnage or <b>tipping fees</b> for funding CalRecycle waste/materials management activities.	8a	Refined	Internal working group established to research funding models
21	Work closely with local jurisdictions and related associations to <b>identify new funding mechanisms for LOCAL</b> waste/materials management programs and activities that are independent from landfill disposal fees.	8b	NEW	Local Funding was NOT in original draft, but added as result of comments. CalRecycle contracted with ILG to provide case studies, samples, and strategies for local governments to use in considering funding of local programs and infrastructure. Note: funding for infrastructure covered in other concept. (Concept 17).
	<b>Promoting State Procurement of Post-Consumer Recycled Content Product</b>			
22	<b>Collaborate with the Department of General Services and delegated state purchasing entities</b> to increase purchases of post-consumer recycled-content (PCRC) products, which could include reform of SABRC and PCRC laws.	6a	Expanded	Procurement technical paper addressing these concepts is included in Waste Sector component of ARB Scoping Plan. Also includes potential product certification and demonstration projects such as with Caltrans on tire-derived products.
	<b>Promoting Extended Producer Responsibility</b>			
23	Pursue legislation for an Extended Producer Responsibility (EPR) Framework that <b>establishes a process for CalRecycle to select products/set goals and continually improve</b> approach by incorporating changes and modifications resulting from existing programs.	4a	Refined	Interim strategy is to develop product-specific programs as legislation is passed similar to carpet and paint. Products in currently introduced legislation include sharps, pharmaceuticals, mattresses, and batteries.
24	Pursue statutory authority to establish a <b>multi-year, packaging pilot EPR</b> program.	4b	Refined	Pilot could focus on a select a small set of "problematic" products/materials (e.g., non: California redemption value beverage containers) statewide OR a small geographic area (e.g., coastal areas concerned with marine litter) that is comprehensive in terms of products and materials. Demonstration program results would ultimately inform EPR packaging legislation.

#	Concept Description	Code	Change	Notes and Current Activities
				CalRecycle is also coordinating with U.S. EPA on packaging issues with workshops planned for late 2013 and 2014.
<b>Source Reduction</b>				
25	Develop a “ <b>Zero Waste</b> ” page on the <b>CalRecycle website</b> to promote local jurisdiction and private sector zero waste activities through model programs, case studies and other information.	9c	Refined	
26	Eliminate Waste Reduction Awards Program (WRAP) and <b>partner with other awards programs to recognize businesses</b> that meet waste management and environmental goals.	3e	Refined	Other awards programs include Governor’s Environmental and Economic Leadership Award (GEELA), Cool California, and Green Business Certification. CalRecycle is also a sponsor of US Zero Waste Business Council.
27	Leverage partnerships to <b>promote the use of K-12 model environmental curriculum</b> to cultivate environmental literacy for students statewide	9d	NEW	Feedback from teachers, administrators, philanthropists, and foundations has led to the formation of public private partnerships to support the development of training, tools, and materials to facilitate implementation of the EEI curriculum in classrooms across California.
<b>Commercial Recycling</b>				
28	Evaluate <b>effectiveness of current requirements for commercial recycling</b> before considering changes to thresholds or enforcement.	3a	Refined	Data for evaluating effectiveness from Waste Characterization Study to be completed in 2015/16.
29	Provide <b>grants to support and encourage recycling at multifamily</b> complexes if Cap-and-Trade funds become available.	3d	Refined	Eligible entities might include complex owners or association, non-profits, waste haulers, jurisdictions, etc. Eligible activities might include outreach, education, technical assistance, equipment, hauling costs and enforcement.
30	Work with the Building Standards Commission, the Department of Housing and Community Development, and other code writing agencies to enhance and <b>expand CALGreen’s provisions related to waste management and the use of recycled content products.</b>	7e	Refined	Enhancements could include expanding deconstruction and salvage provisions, collaborating with local jurisdictions to develop programs, and using the existing AB 939 review process to ensure that jurisdictions are enforcing their mandatory CALGreen provisions and/or C&D Ordinances (whichever is more stringent).
<b>Other Products</b>				
31	Develop and pilot programs to increase diversion of tires from landfills and create markets for products made from <b>waste tires.</b>	7a	Refined	Concept includes broader set of activities detailed in the Five-Year Tire Plan.
32	Monitor and analyze the impacts of the evolving character of covered <b>electronic waste</b> (CEW) and how the current CEW recycling model handles the influx of new technologies to determine whether alternative approaches are needed.	7c	Ongoing	Industry costs assessed annually; collaboration with Department of Toxic Substance Control (DTSC) and stakeholder workshops.
33	Consider statutory, regulatory, and/or administrative changes to the <b>Used Oil</b> Program recommended in the Lifecycle Assessment report.	7h	On-going	Report due to Legislature in January 2014.as part of SB 546 (Lowenthal, Chapter 4, Statutes of 2009).

## Appendix C

### CalRecycle Acronym List

Acronym	Full Name
AB	Assembly bill
AD	Anaerobic digestion
ADC	Alternate daily cover
AIC	Alternate intermediate cover
ARB	Air Resources Board (state level)
AQMD	Air Quality Management District (local level)
BDO	Board, Department or Office within CalEPA
BOE	Board of Equalization
BSC	Building Standards Commission
C&D	Construction and demolition
CalEPA	California Environmental Protection Agency (state level)
CALGreen	California green building standards code (state level)
CalRecycle	Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation (state level)
CBCRF	California Beverage Container Recycling Fund
CBSM	Community-based social marketing
CEC	California Energy Commission (state level)
CEQA	California Environmental Quality Act
CEW	Covered electronic waste
CIWMP	County Integrated Waste Management Plan
CPCFA	California Pollution Control Financing Authority (state level)
CPUC	California Public Utilities Commission
CRV	California Redemption/Refund Value <ul style="list-style-type: none"> <li>• Redemption is paid when container purchased</li> <li>• Refund is paid when the container is recycled</li> </ul>
CT	Conversion technology-generally refers to technologies that convert unrecyclable solid waste into power, fuel or other useful products. Technologies may be thermal, chemical, biological, mechanical, or a combination of processes.
DGS	Department of General Services (state level)
DOC	Department of Conservation (state level)
DOJ	Department of Justice
DORIIS	Division of Recycling Integrated Information System
DTSC	Department of Toxic Substances Control (state level)
EEI	Education and the Environment Initiative
EIR	Environmental Impact Report (for CEQA)
EA	Enforcement Agency (for solid waste and waste tires)
EPR	Extended Producer Responsibility

<b>Acronym</b>	<b>Full Name</b>
FacIT	Facility Information Toolbox—CalRecycle database of information about facilities, diversion, market infrastructure, etc.
FOG	Fats, oils and greases
GEELA	Governor’s Environmental and Economic Leadership Award Program
GHG	Greenhouse gas
GO-Biz	Governor’s Office of Business and Economic Development
EPP	Environmentally preferable products
E-waste	Electronic waste
Fi\$CAL	Financial Information System (California state government system for budgeting, accounting, procurement, and cash management)
HHWE	Household Hazardous Waste Element
LCA	Lifecycle Assessment (for used oil program)
LEA	Local Enforcement Agency—solid waste
LEED	Leadership in Energy & Environmental Design (green building code)
MAP	Manufacturing Assistance Program (federal program)
MCR	Mandatory Commercial Recycling
MOU	Memorandum of Understanding
MRF	Materials Recovery Facility—solid waste
NDFE	Non-disposal Facility Element (local)
NDPES	National Pollutant Discharge Elimination System-- permit that controls water pollution
NIMBY	Not in my back yard
NIST	National Institute of Standards and Technology
PCRC	Post-consumer recycled-content
POTW	publicly owned treatment works or sewage treatment plant
PRC	Public Resources Code—state
RAIWMP	Regional Authority Integrated Waste Management Plan
RCP	Recycled content product
RMDZ	Recycled Market Development Zone
RPPC	Rigid Plastic Packaging Container
RPS	Renewable Portfolio Standard
SABRC	State Agency Buy Recycled Campaign
SB	Senate Bill
SBDC	Small Business Development Center
SCORE	Service Corps of Retired Executives--volunteer business counselors supported by Small Business Administration
SRRE	Source Reduction and Recycling Element
SWANA	Solid Waste Association of North America
U.S. EPA	United States Environmental Protection Agency (federal)
VOC	Volatile organic compounds
WRAP	Waste Reduction Awards Program (state level)
Zone	One of 33 geographic regions designated under RMDZ Program