

APR 11 2013



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April 5, 2013

Caroll Mortensen, Director  
Department of Resources, Recycling and Recovery  
1001 I Street  
Sacramento, CA 95812

**RE: AB 341: 75% Diversion Goal – Report to Legislature: Public Comment**

Dear Director Mortensen,

The Solid Waste Association of North America (SWANA) is the world's largest association of solid waste professionals (7700 members). SWANA's California chapters represent more than 900 members. SWANA is committed to advancing the practice of environmentally- and economically-sound management of municipal solid waste. SWANA's California Legislative Task Force (LTF) is responsible for representing the California Chapters on legislative and regulatory issues.

The LTF wants to thank you for your continuing engagement with stakeholders on CalRecycle's 75% Initiative, which is the result of the ambitious policy goal of 75% recycling, composting and source reduction established in AB 341 (Chesbro, 2011). AB 341 requires CalRecycle to submit a report to the legislature by January 1, 2014 with strategies on how to achieve the policy goal.

CalRecycle's draft report, dated May 9, 2012, contained a number of proposals that would substantially alter how municipalities manage solid waste. The SWANA LTF submitted detailed comments on that draft report (attached), and prepared a white paper (attached) that outlines our vision of how to reach the goal of 75% recycling, composting, and source reduction in a manner that is more manageable for the local governments that are largely responsible for implementing the programs to achieve the goal.

We have been encouraged by your past comments that the initial report was a conversation starter and that CalRecycle would be asking stakeholders to help build on the concepts contained in the report. The response by stakeholders was impressive, with over 70 organizations submitting comments to CalRecycle.

SWANA members have participated in the multitude of workshops that have helped your team work toward final recommendations to the legislature. We hope that CalRecycle is going to make material alterations to the draft report released last year based on the comments. We respectfully request that CalRecycle engage in a second public comment period before submitting a revised report to the legislature by the January 1, 2014 deadline. The LTF believes that the additional comment

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period will strengthen the ultimate product submitted to the legislature and move stakeholders closer to consensus. This type of additional stakeholder review has always been a much appreciated practice that distinguishes CalRecycle, especially on issues of this magnitude.

Please contact me directly at 916-446-4656 if you have any questions regarding our request for additional stakeholder input on the 75% report to the legislature.

Sincerely,



Jason Schmelzer  
SWANA Legislative Advocate

Encl. SWANA LTF Comments on "California's New Goal: 75% Recycling"  
SWANA LTF White Paper on 75% Recycling Initiative

cc. Matt Rodriguez – Secretary, California Environmental Protection Agency  
Martha Aceves-Guzman – Deputy Legislative Secretary, Office of Governor Brown



APR 11 2013

## COMMENTS – CALIFORNIA’S NEW GOAL: 75% RECYCLING

### SHIFT FROM DIVERSION TO RECYCLING

The LTF is concerned with the general direction taken by CalRecycle in this plan. It is clear from the title and introductory portions of the plan that CalRecycle is proposing a fundamental shift. In fact, the opening pages speak of an “evolution of California’s solid waste stream management” and a “new paradigm for solid waste management in California.”

The LTF is concerned that the CalRecycle Plan’s focus on recycling is inconsistent with the scope of the report requested by the legislature in AB 341. Public Resources Code Section 41780.02 requires CalRecycle to provide “strategies to achieve the state’s policy goal that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020.” The LTF believes that the legislature called on CalRecycle to continue the work that has been done on diversion, not construct an entirely new definition of how we approach management of the waste stream.

The LTF does not support the overarching concept of the CalRecycle Plan, and instead would prefer that the report to the legislature focus on the task at hand – the policy goal of achieving 75% diversion through source reduction, recycling, and composting.

### THOUGHTS FROM THE DIRECTOR / THE NUMBERS! WHAT DOES 75% RECYCLING MEAN?

On page 6 and again on page 7, first paragraph, the CalRecycle Plan explains that the shift from diversion to recycling is in reaction to “past policy-making that allows activities such as waste-derived materials being used at landfills (Alternative Daily Cover, intermediate cover, tipping pads, roads and waste tires and solid waste residuals used as fuel) to constitute diversion.” This raises the question: should these practices be included in the definition of “diversion”?

1. Waste-derived materials as ADC, intermediate cover, tipping pads, and roads

Prescriptive cover (Resource Conservation Recovery Act subtitle D) is soil; therefore the impacts associated with using soil are the impacts against which alternatives should be compared. There are several disadvantages to soil; for example, it is expensive to haul, and hauling generates large amounts of green house gases. Soil also consumes large portions of a landfill’s airspace, meaning that the capacity is exhausted sooner, creating the need for more, and perhaps more remote, disposal facilities, resulting in related impacts. Soil can also confound advanced anaerobic composting techniques, by making it impossible to introduce moisture.

One alternative cover is tarpaulins. However, even when tarps are used, the sides often require soil or other form of material to prevent intrusion of wind, water, or animals into the wastes.

Should materials that are used first as cover, tipping pad, or road, in place of soil “count” as diversion, since they end up in the landfill? To answer that question, two pieces of information are critical: if diversion credit were unavailable, would the material still be used as cover, tipping pad, or road? If so, then it may be an economical cover compared to soil, and diversion credit may not be necessary. If it would not be used at the landfill, where would it go and what would the relative impacts be? For example, if sewage sludge is being used as cover, if it were to go elsewhere, how far would it be trucked? Would it have negative impacts on runoff?

*The LTF suggests that diversion credit through use of ADC should not be rejected without appropriate study. As the push to divert more materials increases, tools to accomplish that diversion should be narrowed only with good reason. Existing ADC practices should be evaluated to see if modifications to the existing laws or regulations could promote better methods.*

2. Waste tires and solid waste residuals used as fuel

Two questions are essential to an analysis of these practices. First, what are the alternative uses of the material and how do the impacts and benefits of the alternative uses compare with the relative impact/benefits of fuel? Second, what are the relative impacts of the waste fuel technology compared to gas-to-energy facilities, which are the standard in California? *The LTF suggests that diversion credit not be rejected without appropriate study.*

What are the consequences of this shift from “diversion” to “recycling”? According to the “Thoughts from the Director,” CalRecycle proposes to keep a focus on source reduction, as intended by the existing legislative framework. However, the word “recycling” does not include source reduction, whereas “diversion” does. Therefore the shift from “diversion” to “recycling” directs attention away from source reduction. To illustrate the problems that arise from a myopic focus on recycling, consider Company A, which generates 100 tons of solid waste per year, of which it recycles 75%. In contrast, Company B produces exactly the same number of widgets, using exactly the same source materials, consumes exactly the same amount of energy and water, but has modified its process to emphasize source reduction. Company B recycles 5 tons of waste and disposes of 20 tons of waste each year. Although Company B only has a 20% recycling rate, it is achieving far more for the environment than Company A.

The CalRecycle Plan emphasis on recycling may suggest to the public that it is preferable to buy more beverages in single-use containers rather than choosing tap water, filter tap water, brewed tea, homemade lemonade, or other less package-intensive alternative. Recent research supports this possibility. For example these article on research from U. C. Irvine:

[http://www.plasticsnews.com/blog/2012/05/do\\_recycling\\_bins\\_prompt\\_more.html](http://www.plasticsnews.com/blog/2012/05/do_recycling_bins_prompt_more.html)

<http://www.wasterecyclingnews.com/article/20120518/NEWS02/120519894/update-recycling-bins-may-prompt-additional-waste-researcher-says> *Therefore LTF suggests that the emphasis should not be changed from diversion to recycling.*

On Page 7, the CalRecycle Plan explains that a change in the numbers is needed because of the large, unrepresentative increase in waste generation between 2003 and 2006. This explanation of a radical change to the accounting method is unsatisfactory. The proposed change seems to call for a

minimum recycling rate of 8 pounds per person per day, which has the undesired consequence, described above, of undermining source reduction. The existing calculation method was developed with outside expertise and extensive stakeholder meetings. *Therefore, the LTF suggests that no changes be made to the calculation method without outside expertise and stakeholder input.*

The goal, as described on page 7, seems to be not so much to reduce waste generation, but to shift material from the trash bin to the recycling bin. What would change as a result of this shift?

1. Collection – As long the recycling service was comingled, single stream (versus separate collection for cardboard, food waste, etc.), then the total number of collection trucks on the road may not necessarily increase, although the type of truck may change. (There may be other drawbacks, however, as suggested in this critique of single stream: <http://www.wasterecyclingnews.com/article/20120425/NEWS02/304259990/study-single-stream-is-more-wasteful-expensive>.) For some jurisdictions, the cost of retooling trucks may not be consequential, since it would be at the expense of the service provider and ultimately the rate payer, but in jurisdictions where collection is paid for by the general fund, this could be a costly proposal.
2. Processing – As pointed out on page 10 of the CalRecycle Plan, there would be an increased demand for materials recovery facilities (MRFs). It is very likely the contamination rates in the blue bins would increase, and blue bins would accept many low value or negative value items. Thus MRFs would essentially be dirty MRFs, with low-paid workers producing low value materials many of which would have with limited or no local market. Residual rates could be 40% or more, making it unlikely the State would achieve the 75% diversion goal.
3. Impacts/Objections – The siting of MRFs would be subject to CEQA. CEQA requires a consideration of impacts, including greenhouse gas impacts, relative to an “existing condition” baseline. Even if the total number of trucks did not increase, the materials would have at least two destinations, instead of one. Because materials would be taken first to a MRF, and then by transfer trailer to a recycling or disposal destination, total traffic would in most cases increase. Trip distances of materials going to Asia for recycling compared to destination at local disposal facilities may not compare favorably. If specific details of the impacts that occur at Asian recycling facilities are not available, CEQA may require a “worst case scenario” analysis. Energy demand of MRFs and transportation systems would be compared to the energy demand (or production) at landfills. Comparisons of carbon sequestration, compost emissions, etc. would be analyzed. If sufficient offsets from savings of virgin materials or other sources could not be found, it would be difficult to make finding of overriding significance for impacts that may be identified. Thus because of CEQA environmental considerations and public perception, local government may be reluctant to site the necessary facilities. Thus, local conditions/environmental considerations may discourage this approach. *The LTF recommends that the viability of this approach be studied prior to implementing any changes.*

Chart 4 on page 11 of the CalRecycle Plan shows a correlation between recycling and the preservation of landfill capacity. However, recycling is not the only means to preserving landfill capacity. For example, the last few years since 2008 demonstrate that given economic pressures,

people will “source reduce” their waste. This occurred even when the market for recyclable materials crashed. Another indicator of the effectiveness of economic pressures is illustrated by the fact that many landfills saw a steep decline in the disposal of heavy construction and demolition debris (C&D) when scales were installed and pricing changed from volume-based to weight-based. Compaction rates also affect landfill capacity, as does the approach type of cover, and the character of the waste stream. *Preserving landfill capacity is an appropriate goal, but the LTF recommends that it be addressed in a more comprehensive manner.*

#### **INCREASE RECYCLING INFRASTRUCTURE**

The order of focus areas in the CalRecycle Plan seems inconsistent with the policy drivers listed on page 12 of the Plan. *The LTF recommends reorganizing the order of the issues to put product stewardship, lifecycle analysis, and market development first.*

On page 13, in the Funding for Infrastructure section, the first focus area, the very first issue identified by the CalRecycle Plan is the need for more money for CalRecycle so that CalRecycle can provide financial incentives for recycling facilities. The second sentence identifies potential source of funds, starting with increasing landfill fees to subsidize recycling infrastructure. However, as pointed out in the Plan on page 57, focus area 8, this self-defeating proposition carries its own incentive to continue to rely on landfills. If recycling is truly to replace disposal, it must be self-sustaining. Furthermore, it is unclear how the proposed fees would be allocated, and if they would accomplish any of the “drivers” listed on page 12. Given that drivers include preserving local control and reducing cost to local government, this approach seems counterproductive. *The LTF recommends identifying funding sources that can be provided automatically to private recyclers and local government, without placing Sacramento in between those that are diverting the materials and the funds.*

On page 14 in the Regulatory Oversight section, the Plan points out that reporting and oversight at solid waste facilities (other than landfills) is lacking. This existing deficit makes it difficult to know how effective these facilities are at diverting waste. While reporting is needed, facilities should not be overburdened with reporting, nor prohibited from making rapid changes based on market conditions, technology innovations, throughput composition, or other factors. Oversight should avoid duplicative or meaningless measurements that impose unnecessary burdens on operators. *The LTF is in agreement that this issue needs consideration, and recommends that the costs of oversight be borne by the facility, based on factors such as throughput and diversion rate, and should not be shifted to local government or to disposal operations.*

On page 21 in the Streamline Planning Documents section, one of the streamlining recommendations is to change the measurements made under SB1016 to countywide measurements. Unless the potential for fines of \$10,000 per day is repealed, this proposal is unworkable. It would make one jurisdiction responsible for the actions of another jurisdiction over which it has no control. *Therefore, the LTF recommends against this approach.*

Another streamlining recommendation on page 21 would allow state agencies to keep revenue from the sale of recyclable materials. The role of state agencies in providing leadership should be called out as a separate focus area. One way to improve the role of state agencies as leaders in waste diversion would be to impose the same type of financial penalty against state facilities that

fail to meet the 50% waste reduction target as is what is imposed against the host local government for the same failure. The fines should go to the host jurisdiction. *The LTF recommends that, to support the 75% target, penalties against a state agency should accrue for failing to divert 75%.*

## **ORGANICS**

This section begins by calling for repeal of the law allowing the use of ADC. However, as explained above, credit for ADC should only be removed after appropriate study.

Page 24 calls for increased organic waste diversion. Clarity is needed with regard to the definition of organic waste. Such clarity could help define what materials are being targeted for removal from the waste stream, so that potential uses and markets could be evaluated. It is unlikely that diversion rates will increase until this issue is resolved. The LTF recommends that target organic materials be specified, and methods of diversion evaluated for feasibility.

Page 25 calls for funding for incentives. Again CalRecycle is proposing to obtain the funding from landfills, and to filter the money through Sacramento. As explained above, the LTF recommends against this approach.

Page 27 calls for regulatory changes. In a March 20, 2012 letter to CalEPA agencies, the SWANA LTF also suggested regulatory reform, although some of this reform could be accomplished without changes to the regulatory structure. The letter explains that composting “offers a technically viable and environmentally beneficial alternative to managing compostable organic solid waste. However, composting operations must be economically viable. To preserve the composting option, every effort should be made to support existing composting operations and to remove barriers to siting new facilities provided they are environmentally sound and meet all appropriate laws and regulations. To this end, below are regulatory changes that we believe are support the growth of composting capacity in California, which in turn is necessary to assist the achievement of the statewide goal of diverting 75% of solid waste from disposal.

- While compost facilities that are not co-located with landfills must have proper stormwater controls, duplication should not be required for co-located facilities
- Base groundwater protection requirements on verifiable threats to groundwater that can be substantiated via field analysis, data, or other technical information
- CalRecycle and the Air Resources Board, in concert with local APCDs/AQMDs, should coordinate on a strategy for the regulation of volatile organic compounds and greenhouse gas emissions from compost operations
- CalRecycle, Department of Food and Agriculture (CDFA), Air Resources Board (CARB), and Water Board should use consistent regulatory definitions for terms, including, but not limited to ‘organic waste,’ ‘compostable organic waste,’ ‘agricultural waste,’ ‘food waste,’ ‘composting operation,’ ‘compostable products,’ and ‘biomass’
- CalRecycle and CDFA should help develop markets for compost. For example, they should promote the use of compost in agriculture and by state departments such as CalTrans and CalFire

- CalRecycle, CDFA, CARB, and the Water Board should provide coordinated outreach and education on composting issues to their regulatory staff and to stakeholders

The issue of regulatory changes and interagency cooperation should be a focus area unto itself. In general, regulations should be more consistent among state agencies. However, some interagency coordination may be accomplished without legislative or regulatory change. For example, many environmental impact reports fail to address solid waste management at all. Those that do address solid waste often only address disposal capacity, whereas disposal is only one aspect of solid waste management. Transportation, processing, public education, etc. are also essential components. CalRecycle could coordinate with OPR on the development of guidance on impact identification, and on formulation of appropriate mitigation measures. *The LTF recommends that CalRecycle coordinate with other state agencies to ensure that the impacts of waste generation are appropriately and consistently considered by all state and local government agencies.*

Another regulatory concept that is included in the SWANA LTF White Paper is the concept of volumetric rate structure. Paying by weight has been shown to be an effective approach to incentivizing waste reduction. Some local governments have local legal or political barriers to this approach that could be resolved with State legislation. *The LTF recommends that CalRecycle investigate legislative action that could facilitate volumetric rate structures where they do not currently exist.*

#### **INCREASE COMMERCIAL RECYCLING**

This focus area is too limited. The view of potential sectors for improved consideration of waste reduction should be as broad as possible, and should include not only the commercial sector, but also development and even urban form. For example, if a city were to take as proactive an approach to solid waste management as did Roosevelt Island (see, for example, <http://www.treehugger.com/corporate-responsibility/should-we-replace-garbage-trucks-with-vacuum-tubes.html> ), CalRecycle should be in a position to provide appropriate acknowledgement.

Page 32 addresses awards for businesses; however, again the discussion is too narrow. Awards should be provided not only to existing businesses, but also to developments that are structured to minimize waste. Awards should consider a broad range of life-cycle factors, such as durability, hazardous materials reduction, energy consumption, greenhouse gas generation, etc. *The LTF recommends considering life-cycle analysis of all major planning, development, and resource-consuming activities.*

#### **ESTABLISH EXTENDED PRODUCER RESPONSIBILITY**

The CalRecycle Plan narrows the description of the benefits of EPR primarily to packaging, whereas EPR involves other components, including toxicity, durability, end-of-life management. A more appropriate organization would be to provide a discussion of EPR as a sub-issue of source reduction. *The LTF recommends a stronger emphasis on extended producer responsibility, and a broader consideration of what this focus entails.*

## **REFORM BEVERAGE CONTAINER PROGRAM**

*The LTF supports the proposed reforms because the current program is underfunded and the reforms will assist with meaningful diversion.*

## **INCREASE PROCUREMENT/DEMAND**

The LTF believes that this focus area is vital. Without better domestic markets, the 75% diversion goal cannot be met. Within this focus area, the CalRecycle Plan appropriately addresses state agency procurement first, and includes a recommendation for an enforcement mechanism. Secondly it addresses development of incentives for incorporation of post-consumer content. *The LTF recommends making this a high priority and including additional activities to promote markets.*

## **OTHER MATERIALS**

This focus area addresses mechanisms for reducing tires, plastics, e-waste, construction and demolition materials (C&D), fiber, resin, and used oil in the waste stream. The LTF supports many of the proposed activities. For example, polystyrene is exceptionally expensive to recycle. Another material for consideration is “compostable picnicware,” much of which is not actually compostable.

On page 51, in the discussion of e-waste in section 7c, and in the discussion of cardboard in section 7f, the CalRecycle Plan proposes an expansion of the ban on e-waste disposal and a cardboard ban, respectively. Landfill bans should be based on threat to the environment, not as a mechanism for recycling and EPR. *The LTF recommends that landfill bans should only be implemented when an appropriately funded alternative method of handling the material has been put in place.* In the case of cardboard, since this is a relatively high value item, a more appropriate focus for increased diversion of this material may be public education.

On page 52, in the discussion of C&D in section 7d, a landfill surcharge is proposed. As previously pointed out, funds that are directed to Sacramento often do not make it back to the jurisdiction of origin. Some landfills, including the City of San Diego’s Miramar Landfill, already impose surcharges for construction and demolition debris entering the landfill. Such local approaches should not be compromised. *The LTF recognizes that a surcharge on specific materials can aid diversion, but the revenues associated with such a surcharge should not be directed to Sacramento.*

## **GOVERNANCE/FUNDING**

The CalRecycle Plan asserts that the existing \$1.40 tipping fee is so low as to provide no disincentive for the disposal of recyclable, compostable, or reusable materials. However, although increasing landfill fees may promote recycling, it may also promote illegal dumping and littering, which has environmental impacts, public health and safety threats, and imposes costs on local government. Additionally, landfills pay more fees and are more highly regulated than any other waste management facility. Permitting and expansion of landfills is already difficult and expensive to the point of impossibility.

For other waste management approaches to be successful in the long term, as land disposal is phased out, they must have a more appropriate and reliable funding source for necessary oversight. Furthermore, in some cases increased landfill fees would come directly from local government general funds, leaving less revenue for essential waste management programs and other civic services. *The LTF recommends against further disproportionate reliance on landfills for funding.*

## **SOURCE REDUCTION**

Although in theory source reduction is the top of the waste management hierarchy, the CalRecycle Plan addresses this focus area ninth. Source reduction should be addressed first, and EPR should be discussed next or even within this focus area. *The LTF recommends that this focus area be moved to earlier in the analysis. Additionally, source reduction should be a consideration within all focus areas.*

## **THE OTHER 25%**

On page 61, the CalRecycle Plan identifies no technical barriers to zero waste. However, technical barriers are, of course, the reason California still produces millions of tons of waste each year. As pointed out on page 13, without appropriate tools, including use of new energy technologies, zero waste will continue to be elusive. *The LTF recommends keeping the tools available to accomplish waste reduction as broad as possible.*

Different technologies and practices are appropriate in different locations based on a case-by-case analysis that considers factors such as trip distances, energy factors, greenhouse gas, and other life-cycle factors. One of the biggest challenges, and yet one of the most important tools for effective materials management, is providing effective life-cycle analysis. It is important that materials be used for their highest and best purpose, but determining the best use for a particular material in the waste stream at a particular location can be difficult. For example, when considering the benefits of recycling, the avoided impacts associated with producing the final product from virgin materials must be considered on the benefits side of the equation. These avoided impacts are benefits of recycling. However, the impacts associated with separation and recovery, transportation, remanufacture, etc. of the material must also be put into the equation.

As seen above, the overall equation identifying the benefits and impacts of recycling is complex. Once it is understood for a specific situation, it must be then compared with other options, including anaerobic digestion, landfilling, and various types of energy production. Similar equations for evaluating the alternatives must be developed and compared. *The LTF recommends that a guidance document for assessing the benefits and impacts associated with different technologies in specific situations be developed.*

There are several factors that need to be considered in evaluating different technologies. For example, when considering energy recovery, the avoided impacts associated with alternative forms of energy production need to be considered. *The LTF recommends that in the absence of a thorough case specific analysis, artificial costs and barriers to using materials as fuels should not be imposed.*

Energy production and distribution is an especially complex topic. Traditional fuels require environmentally harmful extraction, refining, and transportation. Typically, in California, corporate energy providers prefer a grid of powerlines connecting other states and even Mexico with the users in the United States. Energy is commonly produced at large, remote sites, and in other states and countries, then moved across the wires to urban areas. This approach results in costly environmental impacts at the site of energy production and along the utility lines. Significant percentages of energy are lost along the power lines during transport. The large facilities and the lines themselves are subject to accidental failure and may become targets for terrorists. This

complex system contrasts with alternatives that fall under the heading, “local distributed power.” Local distributed power includes, for example, solar, tidal power, and solid waste and solid waste-derived fuels. Thus, from an energy planning perspective, local distributed power from solid waste has several benefits that should be factored in when evaluating waste management options.

Current language in the state code addressing solid waste-based energy production creates confusion as to how facilities are regulated. The definitions for “transformation,” “conversion technology,” “waste-to-energy,” etc. are inconsistent from one part of the state code to another. *The LTF recommends the development of consistent language and definitions.*

## **CONCLUSION**

In reviewing the CalRecycle Plan, the LTF has identified several areas that should be modified.

1. **LANGUAGE** – To be consistent with policy drivers such as “preserving natural resources,” the word diversion should not be replaced with recycling. It is not clear to waste professionals, let alone lay people, that “recycling” includes source reduction, extended producer responsibility, composting, low temperature anaerobic digestion, or higher temperature processes. If there is concern about the use of ADC or other forms of diversion, these technologies and practices should be evaluated. If study shows that a particular technology or practice is inappropriate, it should be restricted or eliminated based on the results of the study.
2. **PRIORITIES** – To be consistent with policy drivers such as “maximizing source reduction” and “implementing product stewardship,” the focus areas should be reorganized to put key topics first.
3. **TARGETS** – “Per resident disposal” should not be used because it does not reflect a jurisdiction’s actual results. Similarly, there should be no specific weight of recycling as a goal. Setting such a goal could disincentivize vital resource conservation practices.
4. **PRESERVATION OF LANDFILL CAPACITY** – Preservation of landfill capacity could be added as a goal, with a full suite of appropriate measures targeting this goal, including possible measures such as: increased diversion, co-location of diversion facilities, use of ADC, increased compaction, increased moisture content to speed decomposition, etc.
5. **FUNDING** – Increased diversion will require funding; however, revenues should not go first to Sacramento. Instead, mechanisms should be identified to provide funding directly to those that are accomplishing diversion. Furthermore, funding requirements of all aspects of waste management should not be borne by landfills. Landfills already bear disproportionate fees and oversight. Additionally, as proper disposal becomes more expensive, littering and dumping problems are exacerbated. Thus funding mechanisms that increase disposal costs run counter to the policy driver of “reducing costs to local governments.”
6. **OVERSIGHT OF SOLID WASTE FACILITIES** – The LTF is in agreement that this issue needs consideration, and recommends that the costs of oversight be borne by the facility, based on factors such as throughput and diversion rate, and should not be shifted to local government or to disposal operations.

7. STREAMLINING – To be consistent with the policy driver of “preserving local control,” compliance with diversion requirements should not be measured on a countywide basis unless the jurisdictions involved support this approach.
8. STATE AGENCY RECYCLING – Because AB 341 establishes 75% diversion as a statewide goal, state government facilities should take the lead. The target for waste diversion from state facilities should be 75%, and penalties should be imposed against state agencies that fail to meet the goal. The penalties should be paid to the host jurisdiction that is responsible for waste reduction.
9. REGULATORY CHANGES – The LTF recommends that CalRecycle:
  - a. Develop a consistent definition of organic waste to be used by all state agencies.
  - b. Remove legislative and regulatory obstacles prohibiting and/or hindering the development of technologies and management techniques needed to divert waste.
  - c. Investigate ways to clarify energy production language and remove obstacles to local, distributed energy production.
  - d. Coordinate with other state agencies to ensure that the impacts of waste generation are consistently considered by all state and local government agencies.
  - e. Investigate legislative action that could facilitate volumetric rate structures where they currently do not exist.
10. AWARDS – Recognition should be provided to development and businesses and all activities that promote preservation of natural resources in a broader sense, not just by recycling and procurement.
11. LANDFILL BANS – To avoid illegal dumping, which imposes costs on local government and results in deterioration of the environment, landfill bans should be based on actual threat to the environment, not as a mechanism for EPR, and should be used only when a suitable alternative method of handling the material is in place.
12. LIFE CYCLE ANALYSIS – The LTF recommends that a guidance document for assessing the benefits and impacts associated with different management techniques and technologies in specific situations be developed.

**2013 WHITE PAPER  
LEGISLATIVE TASK FORCE FOR SWANA CALIFORNIA CHAPTERS**

**75 Percent Diversion and Beyond:  
The State's Role in Development of New Solid Waste  
Management Infrastructure and Diversion Programs in California**

California has led the nation in creating integrated solid waste management programs that place a priority on diverting waste materials away from landfills. In 2011, California diverted 65 percent of the 86 million tons of municipal solid waste generated statewide, far exceeding the requirements of AB 939 (Sher). This was possible, in large part, because local governments and solid waste management companies across the state have made significant financial investments over the years to develop and implement waste diversion programs as well as constructing and operating recycling facilities.

With the passage of AB 341 (Chesbro) in 2011, a new state goal was established where, by the year 2020, 75 percent of the solid waste generated in the state would be managed solely by source reduction, recycling, and composting. CalRecycle is currently developing a plan for achieving this new statewide goal, herein referred to as the "75% Plan," that will be submitted to the Legislature by January 1, 2014.

In March 2010, the Legislative Task Force (LTF) for the California Chapters of the Solid Waste Association of North America (SWANA) developed a white paper outlining the fundamental strategies and essential tools necessary for achieving greater waste diversion in California. This white paper addresses the new paradigm contemplated by CalRecycle to implement the provisions in AB 341 related to a statewide 75% recycling goal for managing solid waste.

**Proposed Framework for Achieving Higher Diversion**

The LTF asks that CalRecycle support local governments across the state in their efforts to add to the diversion infrastructure and programs developed thus far, rather than change to a totally new solid waste management paradigm.

CalRecycle is proposing sweeping changes on how solid waste diversion is measured in its plan to achieve a 75 percent "recycling" goal. "Recycling," in this case, is comprised of source reduction, recycling, and composting. In the 75% Plan, CalRecycle proposes to establish a new metric for measuring progress towards this goal, whereby all landfill diversion programs including alternative daily cover (ADC), alternative intermediate cover (AIC), and transformation (waste-to-energy) would be considered disposal. Additionally, CalRecycle proposes to change the time period in which the per capita disposal baseline is calculated, arbitrarily modifying the baseline from 12.6 to 10.7 pounds/resident/day. This would force jurisdictions to divert more than 75% because their starting point (baseline) is artificially lowered.

We believe that this new construct, if enacted through legislation and implemented by regulation, would waste investments already made in existing diversion programs, force local jurisdictions to a state-preferred infrastructure that usurps local control, and prevent

implementation of environmentally and fiscally sustainable pathways towards greater diversion. Furthermore, the new diversion infrastructure required for this plan cannot be built by 2020 (only 8 years from now) given the extensive permitting process, regional siting difficulties, lack of markets for end products, and the severe municipal budget constraints across the state. Lastly, while CalRecycle views this new construct as a measurement system separate from AB 939, we believe that if enacted and implemented, it will become the new mandated metric and it will replace the system originally enacted by AB 939 and SB 1016 for jurisdictions.

CalRecycle’s proposed plan should move from a prescriptive to a performance-based plan. Rather than mandating technologies and disregarding others, the 75% plan should allow local jurisdiction to select technologies and programs that are best suited and most sustainable for their communities. For example, composting may work well in many rural areas but may not be suitable for most urban areas. By streamlining goals, legislation, and regulations to allow local jurisdictions to implement innovative and sustainable programs, the goals established by AB341 can be achieved with fewer unfunded mandates on local jurisdictions.

The LTF proposes a phased approach towards greater diversion, which is performance-based rather than state prescribed. The first statewide goal should be 75% diversion, as currently defined in statute, and based on the existing per capita baseline. Once 75% diversion is achieved, additional forms of diversion can be explored in a deliberate and measured manner in collaboration with local jurisdictions and private industry. This phased approach has the advantage of applying the successes and lessons of the first phase to next, and allowing the infrastructure and programs from the first phase to gain their financial footing. Additionally, a phased approach would adhere to the Legislature’s intent (indicated in AB 341) of sustaining the existing diversion infrastructure and preserving the broad discretion conferred to local agencies regarding the management of municipal solid waste. The LTF’s proposed strategies for achieving 75% diversion are summarized in the following table and discussed below:

Strategy Proposed by SWANA LTF	Estimated Statewide Diversion After Implementation
<b>ACHIEVING 75% DIVERSION (Currently 65%)</b>	
<b>Strategy 1:</b> Allow Full Implementation of Mandatory Commercial Recycling Regulations	69%
<b>Strategy 2:</b> Facilitate the Development of Diversion Infrastructure for Food Waste	75 %
<b>Strategy 3:</b> Expand Product Stewardship and Extended Producer Responsibility Programs	Source reduction and markets for recyclables
<b>75% DIVERSION AND BEYOND</b>	
<b>Strategy 4:</b> Utilize Lifecycle Analysis to Select Sustainable Diversion Options and Technologies	75% and beyond
<b>Strategy 5:</b> Support Continued Operations of Environmentally-Protective, Well-Designed Landfills and Diversion Programs at Landfills	Manages residuals and recycles waste materials

## STRATEGIES FOR ACHIEVING 75% DIVERSION

### **Strategy 1: Allow Full Implementation of Mandatory Commercial Recycling (MCR) Regulations to Achieve 69% Diversion**

**Background.** The MCR regulations adopted by CalRecycle on January 17, 2012, are intended to divert 2 to 3.5 million tons of the estimated 27.6 million tons of commercial waste disposed of every year in order to achieve a reduction in greenhouse (GHG) emissions of 5 million metric tons of carbon dioxide (CO<sub>2</sub>) equivalents. The MCR regulations took effect on July 1, 2012. Businesses, public agencies, and multifamily dwelling of five units or more are now required to source separate materials from solid waste or subscribe to a recycling service.

**Implementation.** Evaluate the effects of the full implementation of the MCR regulations prior to adding additional programmatic burdens. According to CalRecycle's estimates, this measure potentially could increase statewide diversion to nearly 69% based on the 86 million tons of waste generated in 2011.

### **Strategy 2: Facilitate the Development of Diversion Infrastructure for Food Waste to Achieve 75% Diversion**

**Background.** According to CalRecycle's Organics Roadmap IV (2011), food waste is the largest fraction of compostable materials disposed of statewide, comprising of 5 million tons annually. In diverting this amount of food waste to technologies such as anaerobic digestion and composting, statewide diversion could reach 75 percent when coupled with MCR.

Local discretion, however, needs to be exercised in order for the technologies and facilities that are best suited, most cost-effective, and sustainable for each region of the state to be selected. For example, the amount of food waste and its share of waste stream vary throughout the state. Additionally, the land use and air quality permitting constraints that exist in highly urbanized areas make it very unlikely that new composting infrastructure will be developed in these areas in foreseeable future. Consequently, food waste management needs to be tailored to each region of the state. If performance standards or best management practices are established for food waste management programs, they should not restrict the local jurisdiction's ability to select a program or technology.

Finally, products derived from food waste will need markets to make this new infrastructure financially and environmentally sustainable. Some regions of the state have vast agricultural lands where compost can be used. However, in highly urbanized areas, this is not the case. CalRecycle can play an important role in creating markets for these new products and in reducing regulatory constraints so that innovative programs and technologies can be economically viable.

**Implementation in Urban Areas.** In highly urbanized areas, anaerobic digestion may be the best technology for managing food waste. This could be achieved in separate anaerobic digesters dedicated to food waste or comingled with sewage sludge in wastewater treatment plant anaerobic digesters. In most urban areas of the state there are wastewater treatment plants with anaerobic digesters that process sewage sludge, an essential step in producing

biosolids. Biosolids are beneficially used for soil amendment, whether in compost or in direct land application. CalRecycle should:

- Work with sanitation agencies to remove legislative and regulatory impediments to use of excess anaerobic digestion capacity for processing food waste. In utilizing existing anaerobic digestion facilities, it avoids the difficult and costly permitting process involved in siting new facilities, particularly in urban areas. CalRecycle could fund pilot studies to determine the optimum digestion or co-digestion conditions for food waste, and what the cost per ton would be to process food waste.
- Fund pilot programs where jurisdictions have identified the commercial sources of food wastes willing to participate, developed agreements with hauling companies for food waste collection, and have partnered with sanitation agencies for the processing of the food waste.

**Implementation in Rural Areas.** Composting facilities are more likely to be sited in rural areas, which could be in remote parts of urban or rural counties. Agricultural lands are a significant potential end market for composted material. Transportation of food wastes is an added cost that needs to be considered. CalRecycle should work with existing composting facilities on how food waste could be added to their feedstock, and continue to remove regulatory barriers for siting and permitting facilities. CalRecycle should also work with agricultural trade organizations to expand compostable organics programs in agricultural lands. In certain rural areas, anaerobic digestion and other technologies may be feasible and should be explored.

**Implementation of Market Development.** The State needs to support the development of robust markets for waste-derived products in order for food waste diversion to be financially sustainable. CalRecycle should assist in this endeavor by:

- Promoting development of local markets
- Coordinating with various state agencies to streamline overlapping or contradictory regulations
- Working to develop specifications for compost material used by state agencies, such as Caltrans, to include a minimum percentage of food waste or green waste in the compost mix
- Establishing a program where diversion credits could be given to local jurisdictions that use compost derived from food waste or green waste

**Strategy 3: Expand Product Stewardship and Extended Producer Responsibility (EPR) Programs to Reduce Wastes**

**Background.** Preventing waste from ending up in a landfill should start with the initial product itself and continue with those involved in the lifecycle of that product. Local government's public outreach can facilitate reducing, reusing and recycling to a certain extent, but ultimately products need to be recyclable to have a complete reuse cycle.

Producers should be responsible for designing, manufacturing, and packaging a sustainable recyclable product. Distributors and retailers should also be involved in establishing and managing end-of-life systems for difficult-to-recycle products as an integral part of their marketing and customer service. Product stewardship can be achieved in California but it requires a new approach, such as legislation that incentivizes manufacturers to make an investment in redesigning products that promote environmental sustainability while establishing a convenient way for consumers to return used or unwanted products to the manufacturer. Without legislative incentives to drive this shift in responsibility, many products will continue to be sent to a waste disposal facility at the end of their useful lives, placing the task of their final handling, diversion or disposal on local government, which is not always the most practical and cost effective approach.

**Implementation.** Recent legislative efforts to establish EPR programs for paints, carpets, batteries, and mattresses, are examples of the types of programs the LTF has supported in concept and hopes will continue. Thoughtful and collaborative legislation will be necessary so that unfunded burdens are not inadvertently placed on local governments. It is also important to carefully craft the programs such that the funds earmarked for recycling or EPR programs won't be diverted to other purposes by the Legislature.

Consideration should be given to establishing recognition-based EPR programs. For example, it is our understanding that the wine industry has historically opposed a surcharge to wine bottles to fund a statewide buyback recycling program. The state could work collaboratively with the wine industry to develop an alternative program that incentivizes consumers to return the empty bottles for processing and reuse, such as a discount on new purchases in exchange for returning used empty bottles or providing wine club members with prepaid postage so that they can return to the empty wine bottles in the same shipping box. The State could recognize wine industry participants with "green awards" and publicity.

## **BEYOND 75% DIVERSION**

### **Strategy 4: Utilize Lifecycle Analysis to Select Sustainable Technologies and Options That Will Achieve Greater Diversion**

**Background.** Lifecycle analysis is a technique used to assess the environmental and cost impacts associated with all the stages of a product's life from cradle to grave. It includes raw material extraction, materials processing, manufacture, distribution, use, repair and maintenance, recovery, recycling, and disposal. A robust lifecycle analysis can also be used to select new technologies that manage, recycle, or convert wastes based on understanding their net environmental benefits and costs.

To achieve a statewide diversion greater than 75%, alternatives, including emerging technologies that convert post-material recovery facility (MRF) wastes or source separated waste residuals into usable products, renewable energy, or non-fossil fuels, need to be carefully evaluated to determine their sustainability. If they are determined to be viable, given existing conditions, then legislation and regulation need to allow their implementation. Otherwise, these end-of-the-line wastes will be landfilled and the opportunity for environmentally-beneficial uses will be lost. Local jurisdictions should also be allowed to select and implement new technologies at any time, irrespective statewide diversion level.

**Implementation.** The LTF asks that CalRecycle:

- Finalize the June 2009 Draft Report titled “Life Cycle Assessment and Economic Analysis of Organic Waste Management and Greenhouse Gas Reduction Options” and use it as a starting point for analyzing new technologies and options for managing wastes.
- Provide diversion credits to technologies or facilities that produce renewable energy or fuels from solid waste.
- Secure a Cap-and-Trade exemption for diversion-related technologies and facilities producing renewable energy or fuels
- Work with the Legislature to remove the zero emissions criteria for renewable energy technologies and merely make them subject to the same air quality regulations as all other technologies, including landfills.

**Strategy 5: Support Continued Operations of Environmentally-Protective, Well-Designed Landfills to Manage Residuals and Post-MRF Wastes, and Diversion Programs at Landfills**

Although the state’s priority for waste management is diversion of wastes from landfills, some fraction of waste will still require disposal. Therefore, it is essential that environmentally protective, cost effective landfills be included in the alternatives for waste management. Because of the desire to divert recoverable materials from landfills, landfills have often been mischaracterized as being unsafe and even unnecessary. However, until sufficient infrastructure, markets, funds, and public and political support are in place to divert all wastes, landfills will continue to serve a critical role in managing solid waste in California. Today’s landfills are integrated facilities that are not just long-term repositories for solid waste that cannot be recycled. They are designed to protect the environment and public health, serve as a recycling alternative for beneficial reuse of waste materials, and allow production of significant renewable energy from methane capture. Adequate landfill capacity must continue to be a key component of any integrated waste management program.

**Implementation.** CalRecycle should:

- Support critical diversion programs that occur at landfills, such as the beneficial reuse of green waste, asphalt, and other materials, which reduce the need for virgin materials and soils. Many jurisdictions have invested in these diversion programs and rely on them for complying with AB 939 goals.
- Focus on market development for C&D wastes. As the economy recovers, more markets will be required.

**Closing Remarks**

The diversion, recycling and disposal infrastructure in place today were selected and financed by local jurisdictions. The SWANA LTF is concerned that this infrastructure will be supplanted by a state-imposed diversion system which may not be environmentally and

economically sustainable, and may have unintended long-term consequences should it fail (e.g., illegal disposal, wasted financial investments by local jurisdictions on unsustainable or inappropriate mandated programs). This concern needs to be part of the decision-making process in the development of new infrastructure and programs. The strategies proposed herein by the SWANA LTF expands upon the existing infrastructure and programs rather than take away or eliminate the diversion tools needed by local jurisdictions to achieve greater diversion.

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