Rural Counties' Environmental Services Joint Powers Authority
Board of Directors' & Technical Advisory Meeting
Agenda

1215 K Street, Suite 1650 Conference Room
Sacramento, CA

Thursday, October 19, 2017 9:00 a.m. – 3:00 p.m.

Only those items that indicate a specific time will be heard at the assigned time. All other items may be taken out of sequence to accommodate the Board, the staff, and the general public. Indicated time allocations are for planning purposes only and actual times will vary from those indicated.

I. Call to Order, Self-Introductions, and Determination of Quorum

II. Business Matters **Page 1**

Discussion and possible action related to the following:

A. Approval of Minutes from the Meeting of August 17, 2017 – Supervisor Kobseff, ESJPA Chair *(pp 3-9)*

B. Review and approval of the 2018 Meeting Schedule – Mary Pitto, ESJPA Program Manager *(pp 11-12; 5 minutes)*

III. Public Comment

Any person may address the Board on any matter relevant to the Authority's business, but not otherwise on the agenda.

IV. Legislative Update **Supplemental Packet**

(This item may be heard at any time during the meeting depending upon the availability of staff) Discussion of Legislation – Paul Smith, Vice President of Government Affairs *(15 minutes)*

A. Complete Text of Selected Bills

B. Summary Listing of All Solid Waste Related Bills

V. Presentations — Page 13

A. Mattress Recycling Council Program Updates – Liz Wagner, CA Territory Representative and Justine Fallon, Operations Manager, MRC *(20 minutes)*

B. The Future of Electronic Waste Management in California – Shirley Willd-Wagner, CalRecycle, Electronic Waste Recycling Program *(pp 15-40; 20 minutes)*

C. What Happens Next When Emergency Response to a Wildfire Winds Down? – Bill Mannel, Solid Waste Manager, Butte County *(30 minutes)*

D. Report from CalRecycle – Joe Rasmussen, Supervisor, Materials Management and Local Assistance Program, CalRecycle *(10 minutes)*

VI. Member County Concerns/Comments

VII. Solid Waste/Regulatory Update — Page 41

Discussion and possible action related to the following:

A. Air Resources Board
- Cap and Trade Program Update – Staci Heaton, RCRC Regulatory Affairs Advocate *(5 minutes)*
- 2017 Climate Change Scoping Plan Update – Mary Pitto *(5 minutes)*

B. CalRecycle
- SB 1383 Regulations – Mary Pitto *(pp 43-48; 5 minutes)*
- Beverage Container Recycling Program Processing Payment Emergency Rulemaking – Mary Pitto *(pp 49-52; 5 minutes)*
- AB 901 Regulations – Larry Sweetser, ESJPA Consultant *(pp 53-55; 5 minutes)*
- Packaging Reform Regulations – Larry Sweetser *(pp 57-76; 5 minutes)*

C. State Water Resources Control Board (SWRCB)
- Waste Discharge Permit Fees – Larry Sweetser *(pp 77-96; 5 minutes)*

D. Department of Toxic Substance Control
- Photovoltaic (PV) Modules Proposed Regulations – Larry Sweetser *(pp 97-102; 5 minutes)*
- Treated Wood Waste – Larry Sweetser *(5 minutes)*

E. Extended Producer Responsibility
- CA Product Stewardship Council Update – Heidi Sanborn, Executive Director, CPSC *(pp 103-118; 10 minutes)*
- Carpet America Recovery Effort (CARE) Update – Lisa Mekis, CA Senior Associate, CARE *(pp 119-125; 5 minutes)*
- PaintCare Update – Daria Kent, Northern California Regional Coordinator, PaintCare *(5 minutes)*
- Mattress Recycling Council Update – Liz Wagner, CA Territory Representative, MRC *(pp 127-134; 5 minutes)*

F. Grant Program Update – Larry Sweetser *(pp 135-146; 5 minutes)*

G. Highlights of September/October CalRecycle Meetings – Larry Sweetser *(pp 147-161; 5 minutes)*

H. Other Regulatory Announcements/Issues of Interest
- Forester University Preparing for China's Waste Ban *(pp 163-169)*
- CalRecycle E-Waste Updates *(pp 171-178)*
- Cal EPA CUPA Newsletters *(pp 179-185)*

VIII. Agenda Suggestions, Member County Presentation Volunteer, Workshop Topics for Next ESJPA Board Meeting Scheduled Thursday, December 7, 2017.

IX. Articles of Interest *(pp 189-200)* **Page 187**

X. Adjournment

12:00 PM Lunch

1:00 PM

Technical Advisory Group Breakout Session

This afternoon session will be a field trip to a mattress recycling facility. You are invited and encouraged to participate in this tour.

Facility Information:

DR 3 Recycling
1233 Commerce Ave, Woodland Ca

Directions:

Get on **I-5 N**
Follow I-5 N to **Exit 538, CA-113 N** toward Yuba City
Turn left onto **CA-113 S/N East St** in Woodland
Turn left onto **Commerce Avenue**

Meeting facilities are accessible to persons with disabilities. By request, alternative agenda document formats are available to persons with disabilities. To arrange an alternative agenda document format or to arrange aid or services to modify or accommodate persons with a disability to participate in a public meeting, please contact our offices at least 72 hours prior to the meeting by calling (916) 447-4806.

Agenda items will be taken as close as possible to the schedule indicated. Any member of the general public may comment on an agenda item at the time of discussion. In order to facilitate public comment, please let staff know if you would like to speak on a specific agenda item.

The final agenda for this meeting of the Board of Directors of the Rural Counties' Environmental Services Joint Powers Authority will be duly posted at its offices: 1215 K Street, 16th Floor, Sacramento, California at least 72 hours prior to the meeting.

Agenda Item II

BUSINESS MATTERS

Minutes of the Rural Counties' Environmental Services Joint Powers Authority Board of Directors Meeting 1215 K Street, Suite 1650, Sacramento, CA

Thursday August 17, 2017

MEMBERS REPRESENTED

Jim McHargue, Director Solid Waste	Amador County
Lynn Morgan, Supervisor	Amador County
Eric Miller, Solid Waste Manager	Butte County
Bill Mannel, Deputy Director	Butte County
Natalie Sauerland, Program Coordinator	Calaveras County
Mike Azevedo, Assistant Director	Colusa County
Greg Stanton, Division Director	El Dorado County
Barbara Houghton, Environmental. Health Manager	El Dorado County
Joe Bettencourt, Admin Services Analyst	Glenn County
Lars Ewing, Public Servicess Director	Lake County
Paula Wesch, Program Coordinator	Lassen County
Tom Valentino, Agency Manager	Lassen County
Ahmad Alkhayyat, Public Works Director	Madera County
Todd Storti, Solid Waste Manager	Mariposa County
Tony Dublino, Assistant CAO	Mono County
Justin Nalder, Solid Waste Supervisor	Mono County
David Garcia, Solid Waste Program Manager	Nevada County
Bob Perrault, Director of Public Works	Plumas County
John Heath, Supervising Engineer	Shasta County
Rachel Ross, Agency Manager	Tehama County
Paul Freund, Recycling Coordinator	Tehama County
Diane Rader, Deputy Director Solid Waste	Trinity County
John Fennley, Supervisor	Trinity County
Belinda Barlow, Solid Waste Manager	Tuolumne County
Diane Green, Solid Waste Technician	Tuolumne County

STAFF IN ATTENDANCE:

Mary Pitto, ESJPA Program Manager	RCRC Governmental Affairs
Larry Sweetser, ESJPA Consultant	Sweetser and Associates, Inc.
Paul Smith, VP Governmental Affairs	RCRC Staff
Lisa McCargar, CFO	RCRC Staff
Staci Heaton, Regulatory Affairs Advocate	RCRC Staff
Julie Lunn, RCRC Office Assistant	RCRC Staff

GUEST SPEAKERS:

Heidi Sanborn, CPSC
Nicole Dorr, PaintCare
Eloisa Hernandez, CalRecycle
Liz Wagner, MRC
Martina Johnson, CalRecycle

OTHERS IN ATTENDANCE:

Terry Brennen, CalRecycle
Keir Furey, CalRecycle
John Duke, CalRecycle
Deb Phillips, CA Conservation Corps
John Pabst, ACES Waste Services
Amy Velasco, Environ. Specialist
Jeremy Jones, PaintCare
Alex Souza, CalRecycle
Barbara Heinisch, CalRecycle
Curt Fujii, Fujii Civil Engineering
Jeanette Alonso, Gambi Disposal
Willy Carpenter, CalRecycle

MEMBERS NOT REPRESENTED

Alpine County, Del Norte County, Glenn County, Imperial County, Inyo County, Modoc County, Sierra County.

I. Call to Order, Determination of Quorum and Self Introductions

TAG Chair Jim McHargue Amador County called the meeting to order at 9:06 a.m. Self-introductions were made. A Quorum was Determined at 9:13 am

II. Business Matters

A. Approval of Minutes June 22, 2017.

TAG Chair Jim McHargue, Amador County, called for the approval of the minutes from the June 22, 2017, Board of Directors meeting. The motion to approve minutes was made by Greg Stanton, El Dorado County, and seconded by Bill Mannel, Butte County. The motion passed unanimously.

B. Discussion of ESJPA 2018 Meetings. Mary Pitto asked if members were interested in adding a sixth meeting to the yearly schedule. It was decided that the current regular schedule would continue.

III. Public Comment

Jim McHargue indicated that Amador County was deemed to be a Traditional Phase 2 Municipal Storm Water Permit (MS4). There is a September1, 2017 deadline to select track one or track two and wanted to see if others have experience with this permit or the tracks. The recent trash amendments may require capture of trash down to five-millimeter size particles. Mike Azevedo, Colusa County, indicated that they are trying to identify priority land use areas and drainage and monitor the material size. John Heath, Shasta County, is also working on compliance including structural controls, trash capture, and other program efforts. SWRCB had a presentation on that included implementing programmatic efforts which have a very high standard for compliance and could cost millions of dollars. Greg Stanton, El Dorado, looked at both tracks and found Tack 2 to be less onerous. They are using both county staff and inmates to target front end cleanup and education efforts. Jim indicated that track two has a requirement for treatment controls such as litter control. Some commercial facilities are implementing their own litter

capture devices. Larry Sweetser indicated that if counties are interested, the ESJPA could coordinate a subgroup to deal with the MS4 permit issues.

John Heath, Shasta County, asked if other counties are dealing with the reasonable accommodations aspect of the ADA. A resident had previously hauled their own trash a half mile down a private road for pickup and now unable to do so. He is available to discuss the issue.

IV. Legislative Update

Paul Smith, Vice President of Governmental Affairs, reported that the legislature would be going on recess on September 15th. Solid waste issues have not been the priority this session. There are 13 months until the end of this administration.

AB 1147, a solid waste franchise enforcement proposal, has stalled and will be a two-year bill. Mary and Paul met with the sponsors and haulers and they shared some potential language. AB 1288 which proposes a solid waste tip fee increase and generator fee, will also be a two-year bill. The bill, and discussions, still include the WDR fees for landfill. There is proposed discussion on solid waste fees that will occur in the fall with the bill introduced next year. There has been much discussion on bottle bill reform but no movement due to disagreements and other priorities. SB102 was intended as one vehicle but there was no movement. RCRC priorities have been to preserve the City/County payment system and handling fees that fund some recycling centers. Mary responded that RCRC has not taken a position on AB 1158, carpet bill.

V. Presentations

A. Farm and Ranch Clean Up Grant - Larry Sweetser provided an update on program changes to the Farm and Ranch Clean Up grant. This program has been undersubscribed with no applicants for several cycles. Grants are for a two-year period. There is a pilot program to prepare the application but add sites later. Funding for the program is from the $1.40 tip fee. One program component to consider is the need to determine if the pile is a legacy pile or if the landowner was knowingly aware of the dumping the site might not be eligible for funding or there might be need for cost recovery for the cleanup. Members should consider potential tie in of the grant to the Municipal Storm Water Permit efforts. Local Conservation Corps have expressed interest in working with this program and even potentially applying for funds on a jurisdiction's behalf. Bill Mannel, Butte County, discussed some of the projects they completed. Larry requested input from members on barriers to applying for these grants.

B. Beverage Container City/County Payment Reporting- Eloise Hernandez and Martina Johnson provided an overview of the new Beverage Container City/County payment program reporting system and addressed concerns from members that have been received to date. Jurisdiction reports are due September 1, 2017. Prior to the meeting, several members were queried as to their experiences with the reporting. This information was shared with CalRecycle staff. In addition, several members had suggestions for improving future reports but those suggestions will be discussed later do that this meeting can focus on the priority of the September 1, 2017 deadline. If jurisdictions have any questions or the deadline is an issue, they should contact your assigned CalRecycle staff.

Paul Freund, Tehama, asked about how to account for interest earned from the funds since reporting the interest would result in reporting on more than the awarded funds. Staff indicated they would get back to Larry on this issue.

After September 1st, there will be an opportunity for modifications in response to CalRecycle staff questions. If a report is not submitted, the jurisdiction will receive an invoice to pay back the funds with 30 days. If the funds are not returned, no further funding will be authorized until paid back. If jurisdictions know they have unused funds, they should await an invoice from the Department rather than submit reimbursement now.

Counties need to verify that their listed contacts are current otherwise notices may be delayed.

Jim McHargue, Amador County, asked about allowing payment for litter control, roadside cleanup, as indicate in the payment criteria. There is no criteria on how to determine allocation of payment funds.

C. Mariposa Solid Waste Operations-Todd Storti Solid Waste Manager, Mariposa County provided a report on current issues encountered by Mariposa County including the County's efforts to develop long term landfill options due to limited life remaining and how the County is making the $8 million in-vessel compost facility work making compost. In addition, the County is dealing with recent fire that came close to the landfill and the town. Mariposa County is very rural with a large portion occupied by Yosemite. There is no mandatory collection and no curbs. The landfill had previously been a burn dump. Blue Ridge Services used a drone to survey the site and assist in landfill planning. There are about eight years of permitted capacity remaining. The County has reviewed various options for the landfill including expansion, early closure, transfer station options, and how to address the funds needed for closure and postclosure of the landfill. Previously, the compost facility attempted to make compost from garbage. The compost facility is accepting material from Merced. The County charges for garbage and a reduced rate for compostables and recycling is free. Todd reviewed the composting operation features including efforts at using various feedstocks such as biosolids, ash, and wood from tree mortality projects. The County is also exploring dirty MRF options. Todd also mentioned the various community activities their department is involved with participating or sponsoring.

D. Report from CalRecycle-Joe Rasmussen, Supervisor Materials Management and local assistance Program, CalRecycle. Joe provided a handout with significant CalRecycle activities, which will be posted on the ESJPA website.

VI. Member County Concerns/Comments

Jim McHargue indicated Amador County's appreciation for the ESJPA's assistance with the Amador County Fair.

Greg Stanton, El Dorado County, asked if counties are looking for dirt. Caltrans gave El Dorado County 10,000 cubic yards of slide material to be used for landfill cover. Caltrans screened and hauled the material for free. There was no charge to El Dorado County. Members should contact Caltrans since they may have more dirt available.

Bill Mannel, Butte County, indicated that they are involved in two recent major wildfire events and working with the local Disaster Recovery Operations Center on a multi-departmental effort. The County waived all fees for Residential bins on site for fire clean up. Butte County can offer great resources for other counties.

VII. Solid Waste Regulatory Update

Discussion and possible action related to the following:

A. Air Resources Board

- Cap and Trade Program Update - Staci Heaton reported there have been a number of meeting in the administration and with interested parties on reviewing program implementation and renewal before its May sunset. The legislature approved the program for continued funding. As part of the approval, the SRA fee was repealed. The next step is development of the expenditure plan.
- 2017 Climate Change Scoping Plan Update - Mary Pitto reported that the new scoping plan was stalled primarily due to concerns from the Environmental Justice community which wants more money for urban projects and more stringent regulations.

B. CalRecycle

- SB 1383 Regulations- Mary Pitto reported on recent CalRecycle efforts. There will be a tie in to the AB 901 reporting regulations as a means of measuring compliance. Jurisdictions can expect more enforcement efforts especially since CalRecycle has announced that the recycling rate has decreased to 44%. CalRecycle will be looking at jurisdiction compliance efforts including any local ordinances. The ESJPA is promoting the need for Good Faith Effort considerations to compliance with SB 1383 regulations and wants comments from members. CalRecycle is also looking at jurisdiction efforts at education at large venues such as fairs. CalRecycle staff will be presenting on this topic in the afternoon session.

- AB 901 Regulations-Larry Sweetser reported that the AB 901 reporting system will rename the current Disposal Reporting System to the Recycling and Disposal Reporting System to integrate with SB 1383 reporting. Formal rulemaking is likely to start in September 2017 with expected adoption in early 2018. The first reports will be due in the first quarter of 2019. The current proposal is significantly better than past versions. There are many new definitions and some that still need clarification. The current proposal includes an exemption from installing scales if the transfer station accepts less than 100 tons per day with the rural exemption at less than 200 tons per day. Landfills that accept less than 4,000 tons per year (about 10 tons per day) of "contract" hauled material are also exempt. There is also an exemption if the facility is "located in an area prone to inclement weather for three or more months of the year, which would not allow for the adequate operation and maintenance of scales" or if "The disposal facility is so remote that the availability of an electric utility to power the scales is prohibitive." Volume conversions for these facilities will still be allowed but the conversions must be updated every three years rather than the current five-year update. The default

conversion is 500 pounds per cubic yard. Members should notify ESJPA staff if there are any concerns especially with the exemptions.

- Electronic Waste Fee Determination- Larry Sweetser reported that the covered electronic waste fee will increase effective January 1, 2018 (see packet attachment). CalRecycle will start a formal rulemaking on management of treatment residuals and civil liabilities on October 1, 2017. This effort will make the emergency regulations permanent.

C. State Water Resources Control Board (SWRCB)
- Storm Water Industrial General Permit-Larry Sweetser requested members to report any questions or issues with permit compliance or issues after the July reporting period. None were reported. The SWRCB will be starting the new round of Industrial Storm Water Permit changes soon so any feedback will be appreciated.
- Waste Discharge Water Quality Fee-Larry Sweetser reported the staff recommendation is to reduce the current WDR fees by 12.6% for landfills. The actual fees for the various levels of threats and complexities are not known yet. Storm water fees are recommended to decrease by 19.9%. There is also a new fee for cannabis operations.

D. Department of Toxic Substance Control
- Retail Waste Working Group-Larry Sweetser reported that the work group meetings are complete and that the final report to the Legislature is being prepared by DTSC. The report is expected to contain recommendations to make the return of retail products easier.
- Treated Wood Waste-Larry Sweetser reported that DTSC has started visiting sites that accept treated wood waste. There are still many questions to address about compliance with the current requirements including management of mixed loads of solid waste and treated wood waste. DTSC is preparing a report to the legislature on the status of program implementation.

E. Extended Producer Responsibility
- California Product Stewardship Council Update- Heidi Sanborn announced CPSC 10th Anniversary in September and that there is an event being planned. Heidi reported that AB 1158, carpet bill is going to the Senate appropriations committee. It requires 24% diversion by 2020. The current rate increased from 8% to 15% in three years. Although the Refuel your Fun campaign is experiencing the recall of some of the cylinders, the program remains popular. Tehama County has designed some cages for collecting "empty" cylinders and these cages will be available to others. There have been several MRF fires, including one in Michigan, that seems to be due to flammable gas cylinders or batteries. Santa Clara County has 29 medicine collection bins available ($1,100 value) for other communities. They just must arrange delivery. There is a grant available for collection of pharmaceuticals that includes Amador and San Joaquin Counties. Walgreens received an award for their hosting of pharmaceutical collection bins. Lab-Con is selling refillable and reusable lab equipment.
- Carpet America Recovery Effort (CARE) Update - No update was provided.
- PaintCare Update-Nicole Dorr indicated that PaintCare continues the large volume collection provided the facility has more than 200 gallons on site. There will be paint

and mattress collections in Truckee and Tehama County in September. Counties should call PaintCare if there is interest in having an event or partnering with PaintCare. Calaveras is getting on board with its own PaintCare program and will be adding three additional sites for paint collection. Signs are available for sites at no additional charge. Jeremy indicated that PaintCare is working on a program for Modoc's transfer stations.

- Mattress Recycling Council Update-Liz Wagner reported their First Annual Report for 2016 has been conditionally approved by CalRecycle. There were minor issues that the Mattress Recycling Council will need to address within 30 days. There have been events held in 49 of the 58 counties. In 2016, there have been 95,500 mattresses (29 million pounds) collected throughout the state. The goal is to serve every County. There is a program that paid $10 per each illegally dumped mattress with more participation needed. The program in Tulelake is not going to work out but Shasta County will be participating. Looking for feedback on compensation.

F. Grant Program Update - Larry Sweetser reported that the ESJAP assisted with fairs in Amador and Siskiyou counties and will be assisting with the Mariposa County fair over Labor Day weekend. The annual OPP report is due August 15th and the Beverage Container City/County Payment program report is due September 1st. The ESJPA may consider another USDA application to include trainings and management of organics especially food waste.

G. Highlights of March/April/May CalRecycle
Larry Sweetser reported on a few highlights not covered by Joe Rasmussen. Several counties did not apply for the latest City/County payments. CalRecycle released the latest draft scope of work for the 2018 Waste Characterization Study that will be used as the basis for many other programs including SB 1383. Tehama, Mariposa, Glenn, Lassen, and Siskiyou received household hazardous waste grants. There is a packaging workshop being held in September.

H. Other Regulatory Announcements/Issues of Interest

- CalRecycle E-Waste Updates
- Cal EPA CUPA Newsletters

VIII. Agenda Suggestions, Member County Presentation Volunteer, Workshop Topics for Next ESJPA Board Meeting Scheduled Thursday October 19, 2017

Butte County volunteered to provide the County Presentation at the next ESJPA Meeting October 19, 2017. The topic will be to review local efforts on the wildfires. There was discussion about a field trip to Mattress Recycler for the next meeting afternoon session.

IX. Articles of Interest - Mary Pitto directed Members to the Board packet.

X. Adjournment- was called at 12:17 PM

Respectfully submitted,
Julie Lunn, Office Coordinator

Rural Counties Environmental Services Joint Powers Authority

ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA
DEL NORTE, EL DORADO, GLENN, IMPERIAL, INYO, LASSEN
MADERA, MARIPOSA, MODOC, MONO, NEVADA, PLUMAS,
SHASTA, SIERRA, SISKIYOU, TEHAMA, TRINITY, TUOLUMNE

CHAIR – MICHAEL KOBSEFF, SISKIYOU COUNTY
VICE CHAIR – MICHAEL RANALLI, EL DORADO COUNTY
EXECUTIVE DIRECTOR – GREG NORTON

TECHNICAL ADVISORY GROUP (TAG)
TAG CHAIR – JIM MCHARGUE, AMADOR COUNTY
TAG VICE CHAIR – RACHEL ROSS, TEHAMA COUNTY
PROGRAM MANAGER – MARY PITTO

MEMORANDUM

To: **ESJPA Board of Directors**

From: **Mary Pitto, Program Manager**

Date: **October 11, 2017**

Re: **ESJPA Proposed Meeting Calendar – CY 2018**

The proposed ESJPA meeting schedule for the 2018 calendar year is shown on the following page and is presented for your consideration and adoption. Consistent with past years, the proposed meeting schedule includes five meeting dates commencing in March 2018.

We attempt to coordinate the ESJPA meeting being held the day after the RCRC Board meetings to the greatest extent possible to minimize the number of vehicle miles travelled by the ESJPA Chair and any other Supervisors that would like to attend our meetings. In doing so, this year, the meeting schedule coincides with four of RCRC Board meeting dates, in March, June, August, and December. We are proposing one ESJPA meeting in a month without an RCRC Board meeting, which is in October. Typically, the ESJPA meetings have been held the third Thursday of the month, with the exception December being the first Thursday.

ESJPA will begin its meetings at 9:00 a.m. and end by 3:00 p.m. Should a change to the meeting time occur, notifications will be sent out prior to the meeting date.

Recommendation:

Consistent with the requirements of Section 8 of the Joint Exercise of Powers Agreement, amended and restated December 16, 2004, it is recommended that the ESJPA Board adopt the 2018 Board meeting schedule as shown on the attached.

ESJPA BOARD OF DIRECTORS
2018 MEETING CALENDAR

Thursday, March 15th	RCRC Conference Room
Thursday, June 21st	RCRC Conference Room
Thursday, August 16th	RCRC Conference Room
Thursday, October 18th	RCRC Conference Room
Thursday, December 6th	RCRC Conference Room

** Note: Meeting times are anticipated to be held from 9:00 a.m. to 3:00 p.m. Lunch is provided.

Agenda Item V

PRESENTATIONS

AGENDA

FUTURE OF ELECTRONIC WASTE MANGAGEMENT IN CALIFORNIA
STAKEHOLDER WORKSHOP Part 4

Wednesday October 11, 2017; 1:00 – 4:30 p.m.

Second Floor, Coastal Hearing Room Cal/EPA
Headquarters 1001 I Street, Sacramento

The purpose of the Future of Electronic Waste Management in California project is to engage stakeholders in discussing current conditions and future options for electronic waste management in California. This is the fourth in a series of stakeholder workshops. The first workshop, held September 14, 2016, featured a panel of stakeholders representing a range of California perspectives followed by small group discussions to explore potential models and identify elements that are vital to the success of any program approach. The second workshop on March 15, 2017, explored what various potential models could look like using a particular product category as an example. The June 20, 2017 workshop focused on developing criteria by which various product categories could be evaluated for potential inclusion in the definition of a covered electronic device (CED). Materials from all workshops can be found on the Future of Electronic Waste Management in California webpage.

Today's workshop offers a discussion of approaches to analyzing currently non-covered products and presents more detailed descriptions of two major models for expanding the current e-waste management program: Enhancing the Current Fee and Payment System, and the Product Stewardship Model. Stakeholders are encouraged to actively participate in this discussion and are also invited to submit written comments

Background documents have been posted at the CalRecycle Public Notices website. **CalRecycle is presenting these documents for discussion purposes only and is not making any proposals at this time.** Also note that CalRecycle is separately considering whether and how to make other changes to the existing CEW program that do not require legislation, including whether and how to provide multiple payment rates for existing covered devices as well as continuing to address various documentation issues.

TIME	TOPIC	
1:00 – 1:15	Opening Remarks	• Welcome • Project status
1:15 – 2:00	Consideration of Adding New Products as Covered Electronic Devices	• Staff Presentation • Open Discussion
2:00 – 2:45	Concepts for Enhancing Existing Fee and Payment Model	• Staff Presentation • Open Discussion
2:45 – 3:00	Break	15 Minute Break
3:00 – 3:45	Concepts for Electronic Waste Product Stewardship Model	• Staff Presentation • Open Discussion
3:45 – 4:15	How Models Address Fundamental Goals and Essential Components	• Staff Presentation • Open Discussion
4:15 – 4:30	Wrap Up	• Wrap-up and next steps

General Information:

- For those unable to attend in person, you may participate via conference call:
  - Call Number: (888) 606-5929
  - Participant Code: 5765764#.

  It is very important that you mute your phone by pressing *6 during the workshop. You may unmute your phone to ask a question or make a comment by pressing *6 again.

- Comments and questions before, during and after the workshop can be addressed to EWaste@CalRecycle.ca.gov
- Project Contact Information – Shirley Willd-Wagner (916) 341-6229 or
- Shirley.Willd- Wagner@CalRecycle.ca.gov

FUTURE OF E-WASTE MANAGEMENT IN CA: BACKGROUND DOCUMENT

CALRECYCLE

Discussion Draft October 11, 2017 Stakeholder Workshop

Table of Contents

(Note – This document is for discussion purposes only. It is NOT a proposal or recommendation)

I. Introduction

The purpose of the Future of Electronic Waste Management in California project ("Futures") is to examine current conditions and future options for electronic waste management in California and engage stakeholders in exploring how various approaches could address future challenges. CalRecycle staff's vision places emphasis on resource recovery and the waste management hierarchy (reduce, reuse, recycle), ensures public health, and supports CalRecycle's 75% waste reduction goal. It entails a comprehensive e-waste management system that includes focusing on design to encourage product longevity. In addition, the vision is to move away from solely a hazardous waste emphasis and take into consideration a variety of factors such as material recovery value, market trends, current management, and prevalence in the waste stream.

The Electronic Waste Recycling Act of 2003 (SB 20) established a variety of measures intended to develop an infrastructure to provide convenient recycling opportunities, reduce the inappropriate disposal of certain electronic devices, and protect public and environmental heath by ensuring the responsible management of hazardous materials. Since its enactment, the resulting electronic waste management program has been highly successful in collecting and properly handling over 2.2 billion pounds of covered electronic waste generated in the state. The current program has fostered a robust collection and recycling network while significantly relieving local jurisdictions and businesses of the cost burden of managing these wastes and providing free and convenient collection opportunities for all generators.

However, the covered electronic waste (CEW) recycling program currently addresses only certain video display devices. While the CEW program has been successful at managing these devices, CA has one of the smallest scope of products as compared to other states, and there is a missed opportunity in reducing toxicity and waste, and supporting green jobs by not looking at updating the scope.

Newer technologies that are beginning to enter the waste stream often have less intrinsic material value, and are more difficult and costly to manage. Since payment rates in the CEW program are weight-based, payments to collectors and recyclers are decreasing, even as labor costs to dismantle the light-weight devices are increasing. Meanwhile, global economics are disrupting commodity markets and lowering scrap values.

Drawing from over a dozen years of program operational experience since the signing of the Electronic Waste Recycling Act of 2003, as well as the knowledge gained through collaborating with the many states that administer electronic waste management programs of their own, CalRecycle seeks to identify the strengths and weaknesses of current and alternative program approaches. As the Futures project has progressed, CalRecycle has worked with stakeholders to identify overarching goals to guide the development of any changes to the e-waste recycling system. Some of the key goals include ensuring responsible management of hazardous materials, maintaining free and convenient collection opportunities, encouraging environmentally sound design, encouraging reuse, and addressing illegal dumping.

In addition, CalRecycle staff looking at the concept of a circular economy, which has gained momentum over the past several years as an effective management strategy and is widely employed in Europe and Canada. The circular economy is a cycle in which materials flow continuously in the system. A circular economy keeps products, components, and materials in the economy at their highest utility and value for as long as possible to preserve the embedded labor, material and capital costs. It aims to minimize or eliminate waste systematically

throughout the life cycles and uses of products and their components, from raw materials extraction, to design, production/remanufacturing, distribution, consumption/use/re-use/repair, collection and recycling.

The remainder of this document is organized as follows. Section II describes approaches for adding new products to the definition of a covered electronic device. Section III describes potential enhancements to the existing CEW program. Section IV outlines what a Product Stewardship approach to e-waste collection and recycling could look like and Section V describes how the models could address the fundamental goals and essential program elements of a comprehensive e-waste management system.

II. Consideration of Adding New Products as Covered Electronic Devices
Product Selection Exercise Introduction

One of the key questions in looking at the future of the CEW program is considering whether new product categories should be added to the definition of a covered electronic device. The Electronic Waste Recycling Act of 2003 narrowly defines Covered Electronic Devices (CED) (Public Resources Code 42463(e)(1)) as follows: "Except as provided in paragraph (2), "covered electronic device" means a video display device containing a screen greater than four inches, measured diagonally, that is identified in the regulations adopted by the department pursuant to subdivision (b) of Section 25214.10.1 of the Health and Safety Code." The Program is now 14 years old and some of the electronic products of today were not even on the market when the law was written. Many stakeholders including local government officials and e-waste recyclers have stated that there is a strong need to expand the definition of CED in order to maintain the existing collection and recycling infrastructure, prevent illegal dumping and provide convenient opportunities for California residents.

Several approaches could be taken to select new devices to be covered in the program, as described below. Any approach has challenges including complex definitions and limited reliable data/information on products (e.g., toxicity), and any approach would require legislation to either define products or authorize a rulemaking process to do so. This draft paper presents two possible approaches for discussion at today's workshop:

1. Select an approach that is already used by other states or countries.
2. Undertake a process to define and select various product categories for a potential enhanced California program.

Information on approaches used in other states and countries was briefly discussed at the June 20, 2017 workshop, (see Attachment 2 "Potential Product Categories and Definitions). The Waste Electric and Electronic Equipment (WEEE) Directive defines e-waste as equipment which is dependent on electric currents or electromagnetic fields in order to work properly. Generally speaking (with a few exemptions), if a device has a battery or needs a power supply, it is included in the WEEE definition. In Canada, covered products vary by Province, but all include televisions, computer monitors, CPUs, keyboards, cables, mice, speakers, printers, laptops, notebook computers, and tablets. British Columbia has gone further by identifying an extensive list of covered products similar to the WEEE Directive. Twenty-four other U.S. states have e-waste recycling laws, and covered products vary widely among these. All states include monitors and all but three include televisions. Other commonly covered devices include desktop computers (22 states), e-readers (15 states), printers (14 states), keyboards and peripherals (9 states)[1]. If CalRecycle were to adopt one of these existing schemes, legislation would be required but an extensive evaluation and rulemaking process (i.e., the second approach) should not be required.

The second approach is much more complicated. In order to implement this approach, legislation would be needed to authorize it and then a rulemaking would be needed. To illustrate how this approach might be implemented, the remainder of this document and the associated E-Waste Product Selection Criteria Table describe a qualitative evaluation exercise recently undertaken by CalRecycle staff. CalRecycle staff presents this description and table as a starting point for analyzing product categories and **is not making a specific recommendation at this time**. Staff used the criteria discussed at the June workshop (i.e., current management, toxicity, prevalence in the waste stream, trends and material recovery value) to evaluate product categories. As part of the overall assessment, staff also considered additional factors such as compatibility with

[1] Electronics Recycling Coordination Clearinghouse. http://www.ecycleclearinghouse.org/DocRepository/rptProductScope.pdf

current collection and recycling infrastructure, technological challenges, ease of processing, timeline (when would the products become waste), support of the circular economy/resource recovery etc.

In undertaking the qualitative evaluation of product categories, staff gathered readily available data and information. However, more extensive information that could inform this exercise is not readily available in the public domain. Staff used available information to evaluate product categories as falling into one of three general classifications regarding whether or not they should be considered for inclusion in an e-waste management system: high, medium or low. The final column in the E-Waste Product Selection Criteria Table contains a brief explanation of why CalRecycle staff has considered that a product category falls into a particular classification.

This approach has many caveats and limitations, and the evaluation presented here is illustrative only. If the State were to implement this approach, determining how to best do so would require significant discussion with stakeholders and decision makers. Some of the issues arising during the evaluation exercise include:

1. Lack of product specific data regarding composition, toxicity, current recycling methods, sales and use trends, etc. The table is based only on information readily available to staff.
2. What is considered the "product" for the purposes of evaluation and the management system? Should emphasis be placed on a whole product or the component of concern, for example printer versus toner cartridge?
3. Should the product be targeted only at end of life or also further upstream (e.g., to address design/planned obsolescence issues)? This could be notable for some products; e.g., the average lifespan of small household appliances has been cut in half over the last decade.
4. Some categories are adequately covered by existing market, e.g. white goods retail take-back. This raises the question of what the difference is between the current management structure and the gains that could be realized from adding devices to the program.
5. Is collection and recycling of the product category feasible? If the product is added as a CEW, evidence of proper processing and residual flow becomes a relevant consideration. It would be necessary to define what constitutes sufficient processing.

Currently, CED determination requires Department of Toxic Substances Control (DTSC) to determine which covered devices exhibit hazardous characteristics when disposed. Depending on the scope of products targeted for inclusion in an expanded program, changes might be needed regarding how CED determinations are made. The authority to determine acceptable methods of disassembly and treatment also is within DTSC's purview, and DTSC decisions on this affect the economic feasibility of processing products. Expanding the scope of products in the program thus would require discussing many aspects of DTSC's role.

At the October 11, 2017 workshop, the attached E-Waste Product Selection Criteria Table will be used to initiate a dialogue with stakeholders. During the discussion, other approaches may be suggested and explored. Are some criteria more important than the others? For instance, how does consumer convenience compare to the amount of toxic materials used in a product? If there is high value in recovering materials from a device, does that mean that the product category should not be considered even if it can be handled in the same collection and recycling scheme?

Stakeholders are invited and encouraged to provide data that would fill in the gaps and assist in this evaluation. Stakeholders also are encouraged to submit written comments following discussion at the workshop. CalRecycle may present recommendations at a future Public Meeting.

III. Concepts for Enhancing Existing Fee and Payment Model

This section describes options for enhancing the current California Covered Electronic Waste (CEW) recovery and recycling program to in order to address challenges facing e-waste management now and into the future. By definition, the CEW recycling program currently addresses only certain video display devices. Increasingly complex technologies are being discarded, often with less intrinsic material value, which are more difficult to dismantle and contain components requiring special handling. Meanwhile, global economics are disrupting commodity markets.

Several program enhancements are discussed in this section: 1) add new devices to the definition of a covered electronic device (CED); 2) increase public education and outreach; 3) strengthen and increase manufacturer responsibilities; 4) provide incentives for repair and reuse of electronic devices; 5) establish new market development programs; 6) initiate new research activities; and 7) streamline the submittal of claim documentation.

Legislation would be needed to accomplish any of the seven program enhancements listed above and described in detail below. Legislation should include a stable funding mechanism sufficient to ensure that collectors and recyclers are fully reimbursed for appropriate collection and management activities. In addition, the legislation should include clear definitions of new CEDs, specific management standards for processing new CEDs, clear education and outreach goals, accountability and penalties for new manufacturer requirements, implementation provisions for repair and reuse incentives, and authority for grants and loans. A new structure for both fees charged at retail sale and recovery/recycling payment rates would need to be specified. Currently, CED determination requires the Department of Toxic Substances Control (DTSC) to find that covered devices exhibit hazardous characteristics when disposed. Depending on the scope of products targeted for inclusion, changes may be needed regarding how CED determinations are made. This would require coordination with DTSC to determine if Health and Safety Code (25141.10.1) also needs revision.

Pursuant to new enabling legislation, extensive regulatory revisions would be needed to include new products and establish processes for cancellation, residual management, recordkeeping, claims, etc. A rule making process for new statutory requirements would also be required.

There are several advantages, disadvantages and implementation challenges to this approach.

Advantages of Enhancing the Existing Fee and Payment Model

- Build on an existing successful program with no disruption to existing collection and recycling infrastructure; many collectors and recyclers currently accept non-CEWs as a part of doing business.
- Cost-free and convenient collection opportunities would be available for consumers.
- New CEDs and their residuals would be handled in a manner consistent with current CEW environmental oversight.
- Existing CEW public education and outreach materials can be easily expanded to include new devices; expanded education and outreach requirements would improve consumer understanding of e-waste management options and might influence purchasing behavior.
- CalRecycle internal claim review procedures would remain relatively intact; adding devices would require some new review procedures; tools and databases would require revisions.
- Increased involvement of manufacturers might help influence design for the environment.
- New incentives would help promote repair and reuse activities.

- Streamlined claim documentation submittal would save significant review time and greatly improve efficiency.

Disadvantages of Enhancing the Existing Fee and Payment Model

- Requires legislation and new/revised regulations.
- Requires identification of manufacturers and retailers subject to the CED fee collection system;
- Additional personnel may be needed for CalRecycle and the California Department of Tax and Fee Administration (DTFA, formerly Board of Equalization); may involve expansion of DTFA audits.
- Increased complexity for consumer fee and recycler and collector payment. Due to the potentially wide range of technologies, it would be difficult to obtain data on "average net cost to recycle" CEDs in order to determine appropriate payment rates.
- Depending on the universe of covered devices, it could be difficult to determine and enforce appropriate downstream management standards.
- Fees on today's possibly less hazardous devices cover costs to manage yesterday's more toxic devices.

Challenges and Issues to Address

- Potential challenge for DTFA to identify distribution chains and collect fees from new retail locations.
- Obtaining data on sales and costs to recover and recycle.
- Determining what constitutes cancellation for new CEDs in California.
- Researching and determining appropriate materials management standards and end use destinations for new CEDs and derived residuals claimed in the program.
- Determining appropriate documentation requirements; verification of CA-generated material.
- Coordinating with manufacturers to establish increased requirements that are both meaningful and achievable.

Roles and Responsibilities

- Manufacturers/Producers – Provide information to retailers to identify covered electronic products and have additional responsibility under the enhanced program.
- Retailers – Collect fee at point of sale. Provide consumer information about where to recycle CEDs. May act as a collector in the system.
- Collectors/Recyclers – Register with CalRecycle; follow all applicable statutes and regulations regarding handling of hazardous wastes including proper downstream handling and end-use destination; submit source documentation and payment claims per regulation.
- CalRecycle – Provides oversight and enforcement of program, establishes acceptable material management standards, establishes and communicates documentation requirements for new CEDs, develops (or contracts for) public education and outreach program.
- DTSC – Oversees and enforces the management of hazardous waste.
- Department of Tax and Fee Administration – collects the recycling fees
- Local Government entities – Continue to accept electronic waste at existing HHW collection facilities/events. May act as collector via contract with recycler.
- Consumers – Pay fee when purchasing a covered device. Responsibly handle electronic discards by delivering to authorized collector or recycler.

Detailed Description of Key Components

1. **Add New Products to the Definition of a Covered Electronic Waste**

Consideration of new products

- Staff conducted an informal, qualitative review of electronic products that could potentially be added to the definition of a covered product – (See separate section for detailed description.) Products were evaluated based on criteria including current management, toxicity levels, ease of processing, prevalence of product in the waste stream, trends, and material recovery value. Although staff recommends that a process be implemented to evaluate potential new CED, CalRecycle is not making a proposal for specific products or product categories to be added as a CED at this time.
- Covered entities – Households, schools, businesses, government entities, non-profit organizations.
- Includes all CED sold for use in California including internet sales.
- Includes all CED used by a person in California prior to its discard.
- Includes new, historic and orphan products (without an identifiable producer).

Implementation steps for CalRecycle once new products are identified

- Work with stakeholders to determine consumer fee
    - New categories of CED – Should fee on new covered devices be based on size, weight, unit, hazardous material in the device, difficulty of recycling, whether or not device can be repaired/reused, or another factor?
    - Consumer fee should closely reflect actual costs to collect and recycle CED.
    - Need data on current sales, projections, anticipated product lifespan, anticipated rate of entry into waste or repair stream, costs to collect and handle.
    - Modulated fees should be considered – provide cost relief for certain environmentally desirable design features (e.g. recycled content, upgradeability); or conversely, to add cost if environmentally undesirable features are present (e.g. amount of toxic materials).
- Work with stakeholders to determine recovery and recycling payments
    - New category of CEW – Should recovery and recycling payment rates be based on size, weight, unit, hazardous material in the device, difficulty of recycling or another factor?
    - Repair and reuse – how can the payment rates properly reimburse collectors and recyclers while incentivizing repair/reuse?
    - Base payments on net cost data collected and stakeholder input.
    - Differentiated payment rates may be established for new categories of CEWs.
    - Seek authority to adjust the payment rate for recyclers and collectors annually.
- Work with DTSC and other stakeholders as appropriate to establish materials management standards for new CEWs
    - What constitutes cancellation?
    - Determine minimum management standards for processing new CEWs to minimize negative environmental impacts from collecting and recycling activities; is compliance with DTSC-administered regulations sufficient?
    - Determine required or allowable cancellation methods and records.
    - Recyclers must cancel devices in California.
    - CEW should be managed for the highest and best use according to California's solid waste hierarchy.
    - Encourage domestic processing – see financial incentives section.

- Determine appropriate processing documentation for new CEW.
    - Identify documentation needed to determine if CEWs are generated from a California source. How to ensure material is eligible, properly weighed, dismantled and that residuals are properly handled?
    - Determine any new mechanisms to claim payments.

2. **Increase Public Education and Outreach**
    a. Require point of purchase information be provided to consumers (see manufacturer responsibility section for details).
    b. Re-establish funding for statewide public education program/materials per statute 42476 (c).
    c. Work with the Office of Education and the Environment to explore whether concepts of e-waste management could be included in the environmental education curricula.

3. **Strengthen and Increase Manufacturer Responsibility**
    a. Strengthen and clarify existing manufacturer reporting requirements to provide more enforcement authority and receive more consistent reports. Manufacturer responsibility and reporting requirements would be extended to new CEDs.
    b. Require manufacturers to label hazardous components (e.g. identify if battery or lamp is present and its location).
    c. Produce public outreach materials for retailers to distribute to consumers at point of purchase. Materials must inform consumer that the device is hazardous and illegal to dispose of in the trash, provide information on where and how device can be collected (website, app or phone number), and information on reparability of device.
    d. Mandatory take-back of certain products that are not conducive to collection at local events/facilities. Would be identified in coordination with manufacturers, collectors and local government HHW program managers.
    e. Manufactures should work towards enhancing durability of their products, promoting repair and reducing waste. Could work with a trade organization to develop durability and recyclability standards. (Like American Plastics Recyclers developed Design for Recyclability guidelines). In addition, have a base level guarantee on their products performance and life expectancy, similar to France's policy requiring manufacturers to have a 2 year warranty on products.

4. **Provide Incentives for Repair and Reuse**
    a. CalRecycle to facilitate partnerships with repair and reuse organizations such as Fixit Clinics, iFixit and The Repair Association
    b. Support "right to repair" legislation in California and at the federal level as appropriate.
    c. Update cancellation requirement to allow for reuse and repair.

5. **Establish New Market Development Programs including Grants and Loans**
    a. Develop new grant programs to support the e-waste collection and management system. Possible grants could include:
        i. Research into new recycling/processing methods.
        ii. Infrastructure grants to encourage domestic processing of non-hazardous e-waste.
        iii. Funding for non-profit repair and reuse organizations.

b. Research feasibility of low-interest loan, or loan guarantee program for recycling/processing.
c. Reinvigorate the Electronic Product Environmental Assessment Tool (EPEAT) state purchasing guidelines and provide information to state purchasing agents.
d. Promote EPEAT guidelines to local governments. Consider limiting CalRecycle grant and payment program funding to entities that follow EPEAT guidelines.
e. Investigate feasibility of adding a "bonus" payment to cover additional transportation costs in very rural areas.

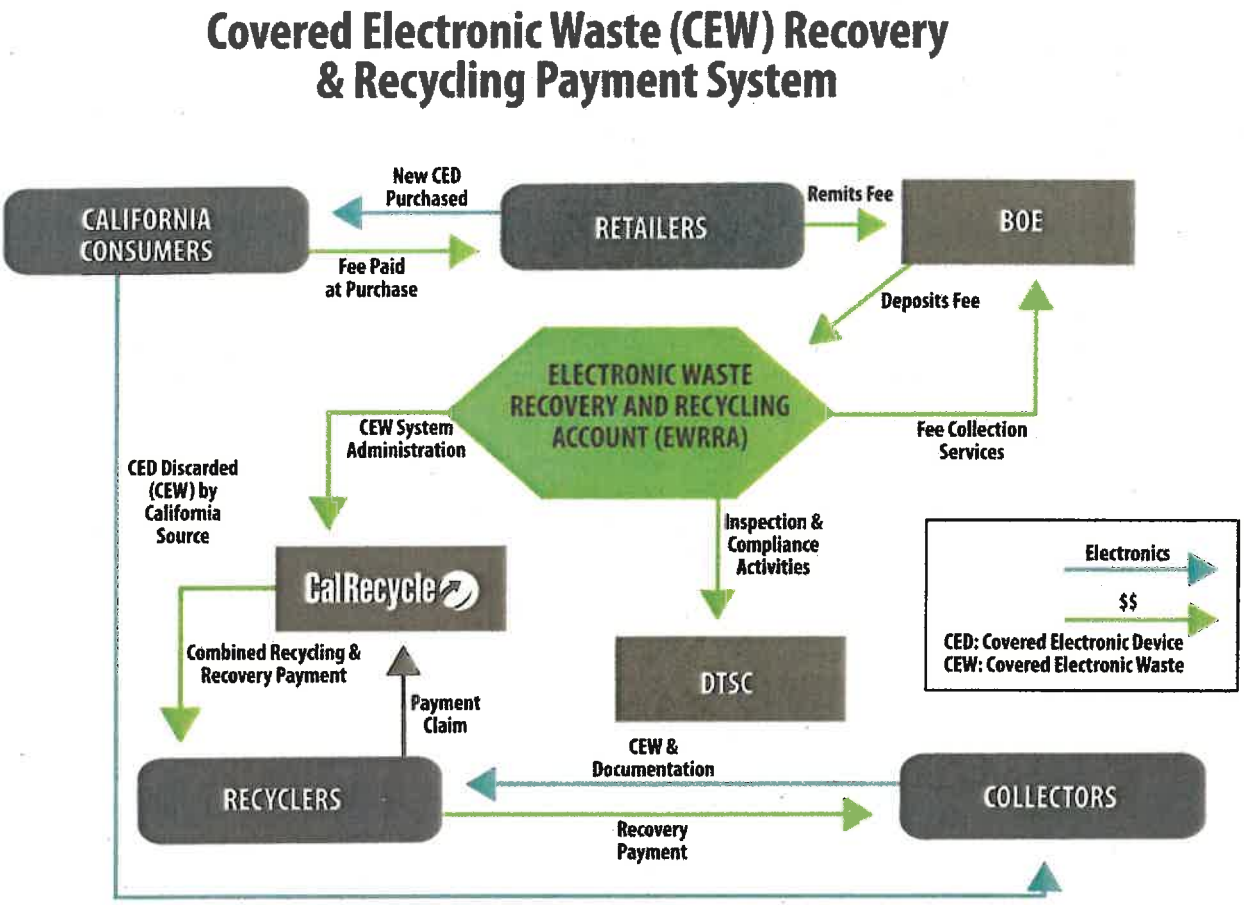
6. Initiate New Research Activities

a. Use the Local Conservation Corps Grant for e-waste management to undertake front line, labor-intensive research as appropriate to meet program needs and in keeping with contract provisions.
b. Partner with national and international organizations on more in-depth research regarding issues such as toxicity, material recovery feasibility, recycling technologies, reparability.
c. Investigate value of a "green seal" type of labeling system that would indicate the ease of disassembly, recycled content and hazardous material contained in the device.

7. Streamline Claim Documentation and Submittal Processes

a. Investigate the feasibility of electronic claim documentation submittal.

Image 1: Flow of material and money under the current CEW System



IV. Concepts for Electronic Waste Product Stewardship Model

This section describes a product stewardship approach to collecting and managing electronic waste in California. A comprehensive electronic waste management system based on a Product Stewardship model would have as its foundation CalRecycle's definition of product stewardship and the essential components of an effective stewardship program. Because this would be a new approach in California for the management of e-waste, and because e-waste product stewardship programs in other states do not have all the components that CalRecycle believes are needed to be successful, this document provides a detailed description of these key components.

Product Stewardship is a strategy to place a shared responsibility for end-of-life product management on the producers, users and all entities involved in the product chain, rather than on local government or the general public, to reduce the cradle-to-cradle impacts of a product and its packaging. If the responsibility is placed primarily on producers/manufacturers, then this would be known as Extended Producer Responsibility or "EPR", which has its own defined essential components. This allows the costs of treatment and disposal to be incorporated into the total cost of a product. It sends a market signal to reflect the true environmental impacts of a product, to which producers and consumers respond.

Product Stewardship programs are typically industry-run. Government agencies provide oversight and enforcement but producers are responsible for collecting and managing funds and implementing the program. The programs are not prescriptive and allow flexibility for industry to determine the most cost-effective solutions within parameters established by law or regulations promulgated by government. The most common model requires electronic manufacturers to submit a stewardship plan, either as part of a stewardship organization or as an individual manufacturer detailing their program. Another approach allows manufacturers to opt out by remitting to the Department a fee that is calculated to pay the net average cost of collecting, processing, and recycling hazardous electronic waste.

Sustainable funding is critical to the success of a product stewardship program. Funding must be sufficient to cover the costs of establishing and maintaining a comprehensive collection and management system. Legislation can either require costs to be internalized similar to other costs of doing businesses or authorize a point-of-purchase consumer fee.

Legislation would be needed to establish a comprehensive product stewardship model for electronic waste. It would have to include a sustainable funding mechanism, enforceable goals (or authorization for CalRecycle to establish goals by a specific date), anti-trust provisions, penalties for non-compliance, specific management standards for processing covered devices and residuals, and a number of other provisions that are described below in detail.

There are several advantages, disadvantages and implementation challenges to such a program.

Advantages of Product Stewardship Approach

- Manufacturers and producers (MFR/PR), rather than local governments and taxpayers, take responsibility for the management of their products.
- Those that profit from the sale of products, or that use products, cover the end-of-life management costs rather than the general public. Disclosing the true life cycle cost of a product might influence purchasing behavior.
- Cost-free and convenient collection opportunities would be available for consumers.
- State and local government oversight costs are minimized.

- A Stewardship Organization (SO) or individual Manufacturer/ Producer has the flexibility to design and implement a collection and recycling system that works best for their industry within rules regarding management standards and accountability.
- Discarded electronic devices and their residuals would be processed in an environmentally secure manner with appropriate oversight.
- SOs and MFR/PRs are held accountable for financial and performance practices through independent audits.

Disadvantages of a Product Stewardship Approach

- Requires new legislation and regulations.
- Today's MFR/PRs may have to assume responsibility for legacy devices (possibly with more toxic materials) made by other manufacturers that are no longer in business.
- Depending on how the program is designed, small recyclers and collectors could be at a competitive disadvantage.
- Depending on how the program is designed, local governments may lose control over which recycler they work with.
- Reuse and repair may be treated as a disadvantage towards the sale of new products.
- Without competition, a SO may be incentivized to keep costs as low as possible, potentially resulting in discarded products not being managed to their highest and best use.

Challenges and Issues to Address

- Potential impacts on existing businesses that were established under the E-Waste Recycling Program (SB 20); need to analyze jobs created or lost; avoided disposal costs; infrastructure impacts, etc.
- Transition impacts – Oversight required to ensure that all e-waste continues to be handled in a compliant manner during the transitional period and that collectors/recyclers are appropriately reimbursed for activities during the transition.
- Determining appropriate documentation requirements; verification of CA-generated e-waste.
- Identifying and including a new universe of MFR/PRs.
- Researching and determining appropriate materials management standards and end use destinations for variety of newly covered e-waste and derived residuals.
- Articulate clear, measurable and enforceable goals

Detailed Description of Key Components

Definitions

- Manufacturer/Producer (MFR/PR) is either 1) the person who manufactures the covered product and who sells, offers for sale, or distributes the product in the state; 2) imports the product into the state for sale or distribution; or 3) sells the product in the state.
- Stewardship Organization (SO) is an entity formed by a group of producers to act as an agent on behalf of the producers to administer a product stewardship program.

Scope

- Includes all MFR/PRs that sell electronic devices for use in CA.
- Covered products will be determined and established in statute or as part of a rule making process. CalRecycle could choose to adopt an existing product scheme used in other states and countries, or evaluate products using specified criteria.
- Covered entities: Households, schools, businesses, government entities, non-profit organizations.

- Includes new, historic, and orphan products (without an identifiable producer).
- Includes all sales into CA or for use in CA, including internet sales.
- Requires statewide coverage, both urban and rural.

Roles and Responsibilities

- Manufacturers/Producers – Design, finance and operate the program, either as individuals or as part of a Stewardship Organization (SO). Register with CalRecycle in order to sell covered products in CA. SO or individual MFR/PR submits plans describing how the goals of the program will be accomplished and subsequent reports as defined by CalRecycle. Individual manufacturer or SO ensures that all entities associated with program implementation (collectors, recyclers, local governments) are reimbursed for eligible activities, and provides outreach and education.
- Retailers – If a point of purchase fee is established in legislation, retailers collect the fee on sales of new covered products and remit it to the SO. May accept electronic devices from consumers as a collector and receive reimbursement from the SO. Assist with public outreach and education by providing point of purchase consumer information.
- Collectors, Recyclers/Processors – Multiple approaches can be taken: 1) collectors and recyclers contract with the SO to accept and appropriately handle covered electronic waste and receive reimbursement from SO; 2) SO selects smaller group of recyclers through a competitively bid process to appropriately handle e-waste on their behalf and receive reimbursement from the SO; or 3) the state (CalRecycle) approves recyclers to participate in the program who then contract directly with the SO to provide processing services. Other models are also possible, but any model must include the following elements:
    - Collectors and recyclers receive reimbursement from SO for appropriate and compliant collection and processing activities.
    - Collectors and recyclers must follow all applicable statutes and regulations for managing hazardous materials.
    - Recyclers must be certified by third party organization (R2 or e-Stewards) or equivalent operating standards.
    - Submit annual reports to SO and CalRecycle.
- CalRecycle – Provides oversight and enforcement of program; reviews and approves plans, budgets and reports from the SO to determine if program goals are being met. Ensures that independent third party audits are conducted for both financial and non-financial performance aspects of program implementation. Assesses fines and penalties if the stewardship organization is found to be out of compliance.
- DTSC – Oversees and enforces the management of hazardous waste.
- Local government entities – Continue to accept electronic waste at existing HHW collection facilities/events. May act as collector via contract with producers or SO and receive reimbursement for compliant collection activities from SO. Assist with public education and outreach.
- Consumers – Pay fee when purchasing a covered device if a visible fee is established in legislation. Responsibly handle electronic discards by delivering to authorized collector or recycler.

Financing – Legislation authorizes a financing mechanism that is sufficient to fully cover the costs of the SO's e-waste collection and recycling program, including state administrative costs and education/outreach efforts.

- Requires program costs to be internalized similar to other costs of doing businesses (see Image 2, page 15) or establishes a visible point-of-purchase consumer fee (See Image 3, page 16).

- Costs must be apportioned in an equitable manner determined by market share or a combination of market share (based on manufacturer share of current or recent sales) and return share (based on brands returned in the system plus a share of orphan products. Specific financing scheme is established in legislation. Several models are used in other states and countries; CalRecycle would analyze these approaches to determine the most effective model for California.
- Collectors, recyclers and local governments must be fairly compensated for appropriate collection and processing activities conducted under the program; including labor, transportation and processing costs.
- No end-of-life fee can be charged to consumers for discarding covered products.
- "Modulated fees" can be incorporated to provide cost relief for certain environmentally desirable design features (e.g. recycled content, upgradeability, longevity); or conversely, to add cost if environmentally undesirable features are present (e.g. amount of toxic materials).
- Authorizes an account at CalRecycle to accept fees/penalties dedicated to program-related enforcement and oversight activities.

Goals and Measurement

- Clear, measurable and enforceable goals are established in legislation or by CalRecycle if so delegated by legislation.
- Must include both performance goals (amount of material reused or recycled) and convenience goal (adequate recycling opportunities for public).
    - Performance goal concepts – Various approaches have been used. Examples include: 1) industry-wide weight-based collection and recycling goal (potentially pounds per capita); 2) recycling target allocated on a proportional "market share" for each registered MFR/PR based on sales of covered products; 3) proportional "return share" with recycling targets apportioned to MFR/PR for products of their own brands returned through the system over a certain number of years; 4) combination of market share and return share. One challenge with market share is light-weighting of devices. One approach that has been used elsewhere is establishing recycling target by unit rather than by weight or by weight of the specific material of concern (e.g. battery or lamp) rather than the whole device. Some countries have established a per pound penalty for not reaching the recycling target and allow, "trading or selling" of any excess pounds collected. In order to ensure rural coverage and encourage reuse, some states/countries provide "extra credit" for collection in very rural/remote communities or for donations to schools or non-profits.
    - Convenience goal – Collection opportunities must be provided year round and available to residents in rural areas. Examples of collection goals include: a minimum of one collection opportunity per 10,000 residents and one per county; 90% of population must reside within 15 miles of collection opportunity. Either of these approaches should be coupled with a rural/remote goal; either access to at least one annual collection; or a collection opportunity within 25 miles of miles of retailer selling similar device assumes that if consumer travels to retailer to purchase, they can travel same distance to recycle).

Stewardship Organization Plans, Budgets, and Annual Reports

- The SO or individual MFR/PR will conduct business in a transparent manner and is accountable to CalRecycle for implementation of their plan. Plans and reports will be approved by CalRecycle in a public meeting.
- The SO or individual MFR/PR submits a Stewardship Plan that describes the collection, processing and ultimate destination for covered products and demonstrates how the primary goals will be achieved. The Plan should also include strategies for managing and reducing the life cycle impacts of a covered product, for example: reduction in the use of hazardous substances; reuse, reparability and product longevity; the use of virgin material in the manufacture of a product; recycled content.

- Program performance must be demonstrated by the SO or individual MFR/PR via annual reports. Reports must contain sufficient data for CalRecycle to determine if the goals in the Stewardship Plan are being achieved and to enforce the requirements of the law including: pounds of e-waste collected; source of all devices collected and claimed; pounds transferred to another recycler; pounds recycled; and ultimate destinations (see also Environmental Responsibility section).
- The Stewardship program will include the establishment of an Advisory Committee comprised key stakeholders to provide input on the Stewardship Plan and ongoing feedback during program implementation.
- Budgets (submitted in stewardship plan for approval by CalRecycle) must be sufficiently detailed to describe how all program costs will be covered. Budget also must outline a contingency plan should anticipated revenue not cover program activities for the full year. Program must be offered on a continual basis and meet the convenience standard even after collection goals are realized.
- Budgets must provide transparency and verify that funds generated in California are spent on the California program.
- Independent, third party audits are required of the financial systems and the collection and processing systems including ultimate dispositions of e-waste and associated residuals.

Materials Management Standards – Program operations and materials management activities must be compliant with existing rules regarding hazardous and universal waste management for electronic devices (DTSC regulations) and must conform to US EPA regulations.

- SO is responsible for ensuring that products are managed for highest and best use according to California's solid waste hierarchy (e.g., address source reduction, product design, reuse and materials recovery in addition to recycling).
- Encourages domestic processing and utilization of recycled materials.
- Retain existing E-waste program's requirement that recyclers must dismantle device before claiming it toward their recycling target.
- SO ensures that downstream processors adhere to best management practices that minimize negative environmental outcomes within the state and elsewhere.
- Recyclers must certified by a third party organization such as R2 or e-Stewards or equivalent.
- Annual reports submitted by SO detail end use destinations for all material claimed in the program.

Enforcement – Legislation authorizes CalRecycle to take enforcement action for non-compliant activities including sales bans and the levying of fines and penalties.

- Provides enforcement provisions in conjunction with existing provisions and enforcement for management of hazardous and universal waste by DTSC.
- Ensures that any penalties assessed on SO or individual MFR/PR are not paid for using program fee assessments but rather paid for by MFR/PR.
- Administrative costs for state for oversight and enforcement activities are covered by MFR/PR registration fees; or otherwise reimbursed by the SO's financing plan.

Education & Outreach

- SO or individual MFR/PR has lead role for consumer outreach and education. Efforts should be coordinated with retail outlets to ensure that point-of-purchase information is provided to consumers purchasing electronic devices. Point of purchase information should include statement that device may be hazardous and must be disposed appropriately. Also must provide information on how/where to dispose of device.

Reuse, Repair and Design for the Environment

- MFR/PRs will work towards enhancing durability of their products, promoting repair and reducing waste. Could work with a trade organization to develop durability and recyclability standards. (e.g. American Plastics Recyclers developed Design for Recyclability guidelines.) Products should be designed to facilitate repair, recycling and minimize negative environmental impacts; e.g. longevity, ease of disassembly, recycled content, and reduced hazardous materials in products. One legislative approach is to incorporate "modulated fees" to provide cost relief for certain environmentally desirable design features (e.g. recycled content, upgradeability); or conversely, to add fees if environmentally undesirable features are present (e.g., amount of toxic materials).

Image 2: EPR model with Internalized Fee

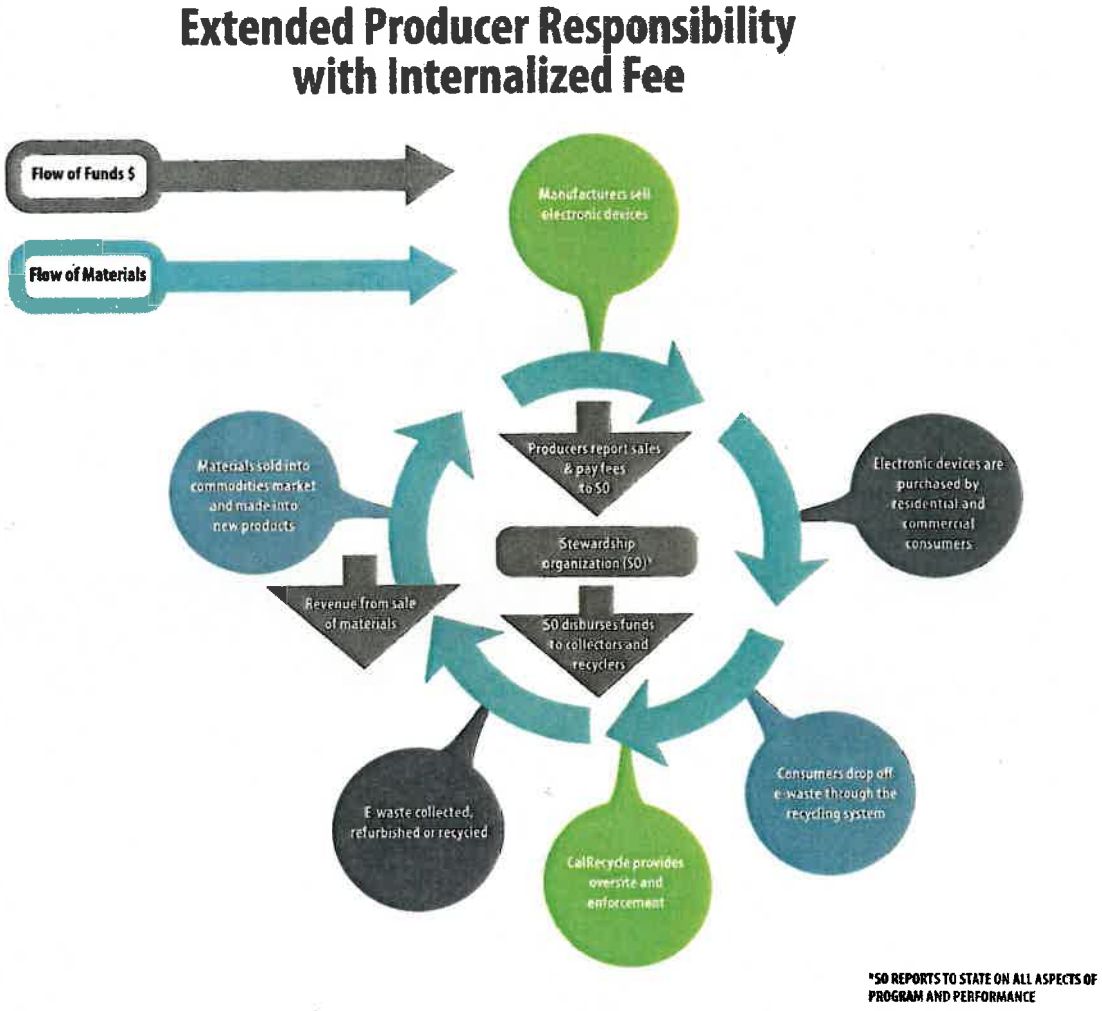
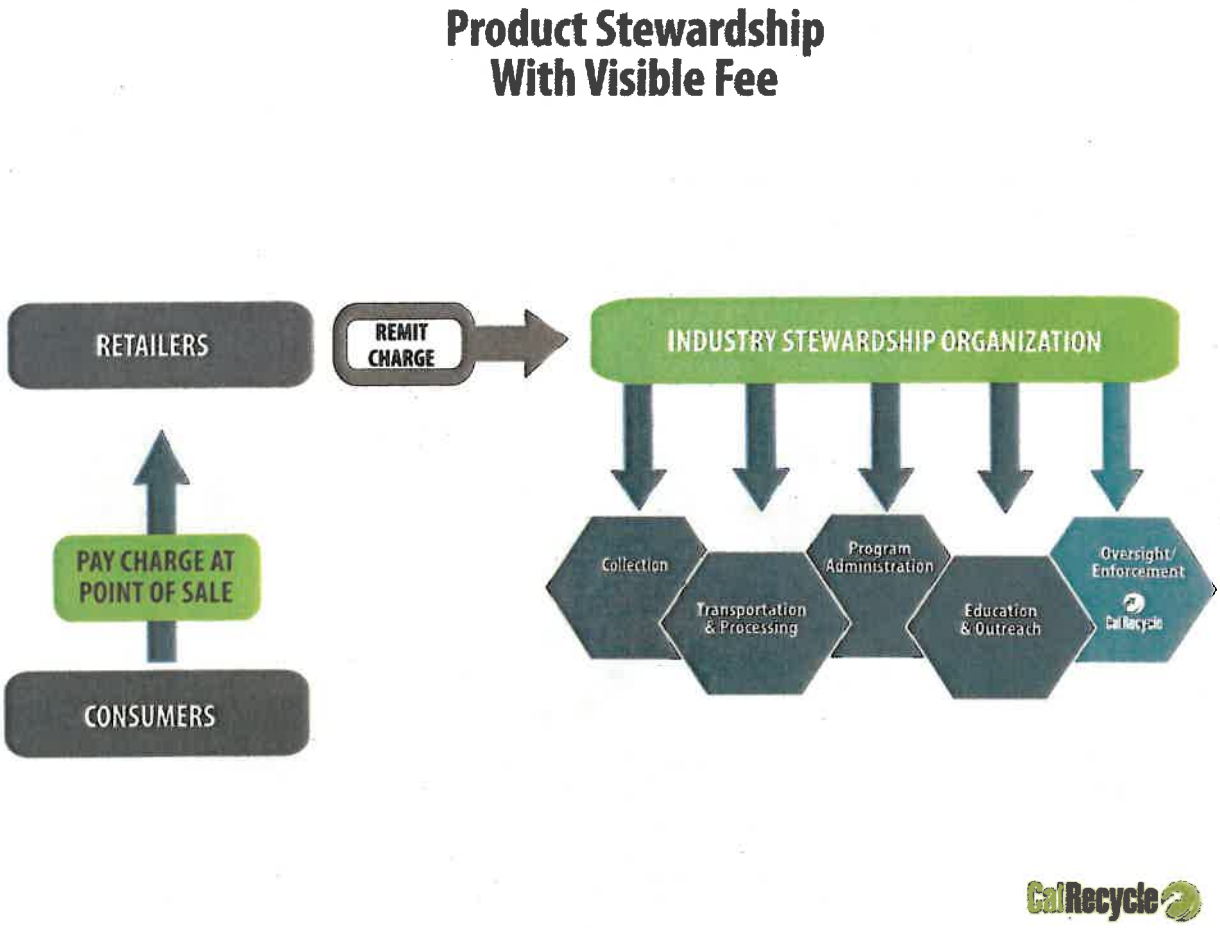


Image 3: Product Stewardship Model with Visible Fee



19

V. How the Models Address Fundamental Goals and Essential Components

This section describes overall goals and program components of an effective e-waste management system and discusses how the two major models (Enhancing the Existing Fee and Payment System; and the Product Stewardship Model) might address these factors. In July 2016, CalRecycle conducted a stakeholder survey to solicit input on the Futures project. Among other topics, stakeholders were asked to discuss concerns facing the e-waste collection system, identify fundamental goals for the program, and describe essential components or elements of a comprehensive e-waste management system. Discussion at the September 2016 workshop further refined these goals and program elements.

The previous sections described two models for expanding the current e-waste management program. Regardless of the model, all of the following program elements identified by stakeholders as essential can be addressed with careful program design.

Essential Program Elements of Any Model:

1. Sustainable funding for program implementation;
2. Flexibility in program rules to accommodate changing markets;
3. Collection and convenience goals that are clear and measurable;
4. Ensuring a level playing field;
5. Enforcement, inspection and oversight;
6. Regular required reporting on collection, processing, recycling methods and destination; and
7. Consumer education.

Fundamental Goals of an Expanded E-Waste Program

Stakeholders also identified key fundamental goals. CalRecycle staff have taken that input and propose that the following goals should be key to any new legislation:

1. Ensure responsible management of hazardous materials;
2. Foster innovative and environmentally sound recycling technologies;
3. Provide free and convenient collection opportunities for consumers;
4. Maximize efficient recovery of materials;
5. Encourage environmentally sound product design practices – design for recycling, recycled content material in product and packaging, reduce planned obsolescence, less hazardous material;
6. Encourage reuse;
7. Promote and encourage processing within California; and
8. Address illegal dumping.

The table on the following page compares staff's assessment of how the current fee and payment system, an enhanced fee and payment model, and a product stewardship model each fare in terms of their ability to include these fundamental goals.

How the Models Address the Goals

FUNDAMENTAL GOALS	Current Fee and Payment Program	Enhanced Fee and Payment Model	Product Stewardship Model
1. Ensure responsible management of hazardous materials	Yes, cancellation required and no payment made until glass is shipped and end destination is identified	Yes, keep existing controls	Yes, build requirements into legislation; certified recyclers must provide downstream destination
2. Foster innovative and environmentally sound recycling technologies	Not directly	Can be built into program design	Yes, can be built into program design
3. Provide free and convenient collection opportunities for consumers	Yes, currently free for CEWs	Yes, keep existing free collection	Yes, would be mandated - otherwise consumers pay twice (both the internalized cost as well drop off)
4. Maximize efficient recovery of materials	Not directly, but nothing in the current system prevents this from happening	Depends on program design and markets	Depends on program design and markets; manufacturers will likely want to do bare minimum to meet their goals
5. Encourage environmentally sound product design practices – design for recycling, recycled content material in product and packaging, reduce planned obsolescence, less hazardous material	No	Could be encouraged through modulated fees and incentives	Yes, could be encouraged through modulated fees and incentives
6. Encourage reuse	No, existing rules require cancellation	Yes, build incentives into program design	Yes, build incentives into program design
7. Promote and encourage processing within California	Yes, require cancellation in CA	Yes, keep existing controls	No, not particularly; could design incentives
8. Address illegal dumping	Current rules makes it cumbersome to collect illegally disposed devices	Could be encouraged through local government funding such as grants	Would need to mandate that manufacturer account for it in their plan

CalRecycle E-Waste Product Selection Criteria

THIS DOCUMENT IS FOR DISCUSSION PURPOSES ONLY

	Product	Current Management	Toxicity levels	Ease of Processing	Prevalence in Waste Stream	Trends	Material Recovery Value	Overall Staff Assessment
Computer Related Electronics	Computer CPU	Strong resale markets, especially for used devices from business	The CPU contains toxic substances, lead in circuit boards. Metal plates and housings may contain chromium. Motherboards and connectors often contain beryllium. Cadmium is commonly found in chip resistors, semi-conductors, infrared detectors, stabilizers, cables and wires. Circuit boards, switches and relays contain mercury as well chromium. Brominated flame retardants are used in many components, including circuit boards and plastic casings. (CHRON Small Business: http://smallbusiness.chron.com/toxic-components-computers-monitors-69693.html)	Hand disassembly (e.g., battery, Hg lamps); degree of disassembly or component recovery will vary with organization based on their business model; Shred and sort	0.1% of waste stream (CA Waste Char Study; definitions slightly different); " Computer-Related Electronics". High quantity per local government input.	Steady; units steady or increasing, while weight is declining	Market value for common and precious metals; medium to high	MEDIUM Currently reuse value or commodity revenues cover the proper collection and processing but margins are lower. Declining weight of newer products, miniaturization of components and/or substitution of materials will negatively impact revenues. Requires same collection and recycling infrastructure as CEW material.
	Organic LED	Similar to CED/LCD (non-CRT) devices, even mistakenly claimed at times	Low	Difficult		Increasing	Decreasing	HIGH Already comes into HHW and e-waste collection system; convenient for consumer to discard with other e-waste. Testing protocol too burdensome to be practical for processors. Requires same collection and recycling infrastructure as CEW material.
	Printer/Copiers/Faxes/ Scanners	Voluntary manufacturer takeback program	May contain lead, cadmium, copper, and chromium; designated as U-waste	Hand disassembly (e.g., Hg lamps and batteries); shred		Steady	Very low (unused blank paper has more value than printer per recyclers)	HIGH Voluntary programs insufficient for amount generated and usually focus on collection rather than processing with little oversight of downstream management. Backlight/lamp/battery/ink cartridge are the concern.
	Printer Ink	Voluntary takeback programs	MSDS shows moderate to serious risk for health and flammability			Steady		Definitional challenges. Lifespan of products poor/planned obsolescence.
	Keyboard/ Mouse/Computer Peripherals	HHW/landfill	7.2% of devices tested above threshold limits for bromine	Hand disassembly hazardous materials (e.g., batteries); shred			Little to no value; metal very small portion and large number of low-end mixed plastics	MEDIUM A material stream that is hard to target effectively and is not always hazardous. Material comes along with CEW. Requires same collection and recycling infrastructure as CEW material.
Other Small Electronics	Non-CEW DVD/VCR Players and Peripherals	HHW/landfill	Analytical data for suggests hazardous levels of copper, lead, nickel, and/or antimony; circuit boards and lasers may contain toxic materials	Information not available	information not readily available	Decreasing	Little to no value; metal very small portion and large number of low-end mixed plastics	MEDIUM Material stream trending down, likely not to remain a prevalent waste stream in future. Requires same collection and recycling infrastructure as CEW material.
	Wearables (smartwatch, Fitbit)	Information not available	NA	NA	information not readily available	Increasing	Little to no value for mixed plastics	LOW Will become waste in future. Monitor. Likely to come in mixed loads with other non-covered e-waste and would be difficult to separate between the two. Risk of hoarding; challenging to collect them.
	Cell phones	Directly recycled, reuse market, or in storage; has existing state law	NA	NA	NA	NA	Market value for common and precious metals	LOW Mandatory retail takeback already in place, high reuse value.
	Cameras	Information not available	NA	NA	information not readily available	Decreasing	Low	LOW Declining market due to cell phones integrating these functions.
	GPS		NA	NA	information not readily available			
	E-readers	Thrift stores, HHW/landfill	NA	NA	information not readily available	Steady	information not readily available	MEDIUM Material comes along with CEW. Requires same collection and recycling infrastructure as CEW material.
	Game systems	Re-sale HHW/landfill	Printed circuit boards, metals	Hand disassembly (e.g., battery removal); shred	information not readily available	Steady, but technology changes frequently	Small amount of metal; little to no value for mixed plastics	MEDIUM Related to keyboard/mouse/computer peripherals

* NA cells indicate that the product is considered a low priority (e.g.cell phones).

	Product	Current Management	Toxicity levels	Ease of Processing	Prevalence in Waste Stream	Trends	Material Recovery Value	Overall Staff Assessment
Small Household Appliances	**Vacuum cleaners, microwaves, toasters**	Secondary market through both direct reuse and refurbishment through warranty programs	Plastics - possible toxicity issues in plasticizers, phthalates	Hand-disassembly for hazardous material; shred	0.3% (CA Waste Char Study; definitions slightly different). "Brown Goods" category; Vacuum cleaners problematic waste in HHW stream Per ESJPA	Increasing (vacuum cleaners 3% increase)	Little to no value.	**MEDIUM+** Since small appliance life spans have been cut in half, end of life management has become further burdened. Requires same collection and recycling infrastructure as CEW material.
	Personal care (hair dryer, electric toothbrush, etc.)	HHW/landfill	Plastics - possible toxicity issues in plasticizers, phthalates	information not readily available		Steady	Low	**MEDIUM** Less weight than other small household appliances and primary concern is the cord.
Large Household Appliances	**Refrigerator, Washer/Dryer, Dishwasher**	White goods retail takeback	CFC, HFC, mercury	Recyclers remove hazardous material and recycle Recyclers remove hazardous material and recycle	information not readily available	Steady	Medium	**LOW** Existing separate collection and recycling infrastructure in place is sufficient.
Electric Car Battery	**Electric Car Battery**	Auto Recyclers and Dismantlers / Recycling Facilities	NiMH=Nickel (harmful to human health in high doses, group 1 or 2B); Li-ion=Cobalt (toxic in high exposures - Group 2B, decreasing use due to cost). Lithium may be toxic to humans with prolonged exposure.	Hydrometallurgy & Pyro metallurgy	341,000 in 2020 1,273,000 in 2030 Reaching end of first life, but given size and current commodity value, probably not in waste stream.	Increasing	High value (nickel, cobalt); battery designs changing to contain less-valuable materials; concerns for economics of future recycling	**LOW** Will become waste in future. Likely managed by industry. Monitor.
Solar Panels	**Photo Voltaic Modules**	Evolving recycling techniques relate to rapid advances in the technology. Manufacturers want to recycle their own panels, not comingle with other brands with different specs	Manufacturing process uses dangerous chemicals/procedures (elsewhere) Concerning toxics in products at end of life include: Cadmium, Hexavalent chromium coatings, Arsenic, Copper, Selenium	Disassemble and dismantling; Separation	2% breakage/malfunction rate currently. New product and waste stream will kick into high gear in 2030s.	Increasing Not only large scale commercial products, but offerings at the residential level. Longer lifespans, with some 25 years lifespan guarantees (https://www.enfsolar.com/directory/panel);	Can be positive; Glass over 90%, challenging end-use markets; Reduction in material use	**MEDIUM+** Large expansion of product occurring means increased future waste stream. Many manufacturers of PV panels are no longer in business, so orphan material (where the original manufacturer cannot be identified or is no longer in business) needs to be addressed. Likely to require dedicated collection and recycling infrastructure to manage the various materials included in waste products.
Commercial & Medical Devices	**Retail Register screens, Bowling Alley terminals, etc. Hospital/Medical Devices**	Sometimes found in the CEW payment system material.	information not readily available	information not readily available	Information not readily available	Increasing	information not readily available	**LOW** Some jurisdictions have small business clauses (50 or less employees) that cover the cost to properly manage commercial devices. Possible imbalance between total weight of device and the much smaller weight of the actual component of concern in the device. If the component is removed, it may fall under one of the other covered categories (e.g. LCD monitor from medical device would become CEW per current CEW definition.) Medical devices have health and safety concerns.
Toys, Leisure & Sporting Equipment	**Toys with batteries**	Thrift stores/landfill	Batteries should be taken out prior to disposal. (some are imbedded)	Dismantled by hand, shredded, or landfilled whole.	Information not readily available	Steady	None	**LOW** Category not associated with e-waste by consumers. Probably requires a different infrastructure focused on managing batteries.
	Elliptical and Cardio Machines		PVC on power cords may have small amounts of lead.		Information not readily available	Information not readily available		
Household Tools	**Drills, Electric Saws, Leaf Blowers**	Thrift stores/landfill	Information not available	Dismantled by hand, shredded, or landfilled whole.	Information not readily available	An uptick in cordless (re-chargeable batteries) items are being sold over corded ones.		
	Data Sources:	NCER The Electronics Recycling Landscape 2016; CA waste characterization; US EPA; Miller 2015; Euromonitor International						

* NA cells indicate that the product is considered a low priority (e.g.cell phones).

Agenda Item VII

SOLID WASTE REGULATORY UPDATES

September 26, 2017

Mr. Hank Brady
Senate Bill 1383 Manager
California Department of Resources
Recycling and Recovery
1001 I Street
Sacramento, CA 95814

Transmittal Via E-mail: SLCP.Organics@calrecycle.ca.gov

RE: Comments on Senate Bill 1383 Regulation Concepts

Dear Mr. Brady:

The Rural Counties' Environmental Services Joint Powers Authority (ESJPA), consisting of twenty-three rural counties, exists to assist counties in their efforts to comply with State and Federal solid waste requirements. We appreciate the opportunity to provide input into the development of Senate Bill 1383 (Lara, 2016) regulations for organics diversion from our landfills. Our counties' solid waste managers are dedicated to providing meaningful, environmentally conscious, and cost-effective solid waste services to their residents and businesses.

The ESJPA counties contain only 3.8 percent of the state's population and contributes only 4.2 percent to California's disposal tonnage. These counties contain nearly 32 percent of California's square miles. The average population density of the ESJPA member counties is 34 persons per square mile, with nine counties having less than ten persons per square mile. Most of the population in each county is concentrated within a few population areas. In contrast, the state's average population density is 240 persons per square mile with the major populous areas having population densities of over 5,000 persons per square mile. The economies of scale are vastly different and often prohibitive for rural California compared to the urban areas.

1215 K STREET, SUITE 1650 SACRAMENTO, CA 95814 PHONE: 916-447-4806 FAX: 916-447-1667
WEB: WWW.ESJPA.ORG

CalRecycle has held several workshops outlining various concepts under consideration for drafting the organics regulations, and we have appreciated our discussions with CalRecycle staff. The ESJPA would like to offer some thoughts and comments related to the proposed concepts. However, the central premise is that a vast majority of rural California cannot economically meet the same level of service for organics diversion as urban California. The ESJPA recommends that the regulation be tiered based upon population density, travel distances, and infrastructure capacity.

Local Organic Waste Collection

Draft Organic Waste Recycling Collection Program Concepts for Jurisdictions:
1. Mandatory Organics Recycling Services Provided to Generators. By January 1, 2022, jurisdictions should:

a. Provide mandatory organics recycling services to all generators of organic waste. These services should be designed to meet the needs of the generator.

Nineteen low-population counties of California have been granted the extension to the requirements of AB 1826, Mandatory Commercial Organics Recycling (MORe), until 2020 when the program will be reevaluated. This extension recognized the unique needs of rural areas and the limited impact of rural programs on the statewide numbers. If the extension ends in 2020, those counties will need additional time to meet any mandates. These counties should be considered on a different tier with separate lower goals and allowed to select programs from a suite of programs that are suitable for the jurisdiction, such as education and outreach and encouraging backyard and small-scale community composting. In addition to the 19 above mentioned counties, there are an additional six counties without any urban areas (cities of 50,000 or greater), as defined by the US Census. These counties should also be considered for the different tier. Because most counties have rural areas that are similarly constrained as the 19 low-population counties in the MORe, those areas of the counties should be considered for a separate tier as well. In most rural areas, there is not mandatory or voluntary curbside recycling programs. Self-hauling waste and recyclables to drop-off locations is the common pracitice. It is economically infeasible to collect from residential development in these areas due to the low density and travel distances.

For those counties that are subject to MORe, not all have processing facilities within an economical range. In the MORe requirements, the effects of small geographic size, low-population density, the availability, or lack thereof, of sufficient organic waste processing infrastructure, organic waste recycling facilities and other nondisposal opportunities and markets needs to be considered during a jurisdiction's performance review. These same considerations will be necessary in the SB 1383 regulations.

We also recommend that even in the urban areas there be a population density and distance to a processing facility requirement before a jurisdiction is mandated to collect

organics for processing. Once a facility is located within the acceptable distance and the jurisdiction is of such a density to economically collect the organics, the jurisdiction could then be required to use the facility.

In addition, rural organics typically tend to be more brush and pine needles than grass which imposes different considerations than urban organics management. Rural wastewater treatment plants were not designed or permitted to accept food waste. The limited number of composting facilities in rural areas are reluctant to add food waste due to additional CalRecycle and Regional Water Board permit requirements. Other organics issues facing rural areas are dealing with the amount of organic wastes from tree mortality and the marijuana industry. These factors further limit rural implementation of organics programs.

2. Other Programmatic Elements for jurisdictions proposed by CalRecycle.

   a. Meet or exceed 2016 California Building Standards Commissions' CALGreen requirements (or subsequently adopted CALGreen standard for residential and nonresidential construction.
      These requirements are already in California Building Codes and under the jurisdiction of a different department within the counties. Therefore, any regulation dealing with these codes should only reflect working cooperatively to obtain the data necessary for annual reporting.
   b. Ensure organic recycling is available in public locations.

There are many outdoor public places that provide recycling bins (such as sidewalks, parks, campgrounds, etc.) that it is impractical to maintain organic bins. Recycling bins that are not monitored receive significant contamination. Adding another bin for organics would increase the contamination problem, would attract vermin and scavenging animals (including bears), produce foul odors from the heat, and be costly to service. However, programs to require large events to recycle their organics could be developed.

Solid Waste Facilities

There are 27 solid waste landfills with the ESJPA member counties, with 17 landfills that are only permitted for less than 200 tons per day. Seven counties have no active landfills and must export all solid waste. There are 124 transfer stations including 67 Limited Volume Transfer Stations. These Limited Volume Transfer Stations serve the more remote rural areas and are only permitted to accept less than 15 tons per day. These facilities will not have ability to accept and segregate organics and transport that segregated waste to facilities that are not within reasonable distances. The facilities are minimally staffed and it would not be feasible to load check for monitoring contamination at these sites especially given the limited amount of source segregated organics loads.

Edible food recovery

This is a complex issue mostly outside the jurisdiction of our solid waste managers. There are many stakeholders involved, including but not limited to generators, recovery organizations, churches, and Environmental Health Officers. Rural solid waste managers should be limited to having the various stakeholders identified and providing the information to the generators, with the generators (or recovery organizations) reporting back to the jurisdiction.

Reporting

Utilizing the existing annual report and proposed AB 901 regulations is the most practical means of reporting for activities within the control of a local jurisdiction. The ESJPA spent considerable time working with CalRecycle staff on development of the draft AB 901 regulations. We recognize that changes may be needed to the current AB 901 regulations proposal but are concerned if there will be significant changes to the current draft language by additional reporting entities and source sectors, additional material types, or revised definitions. The current proposed rural exemptions on scales and volume conversions need to be maintained. Jurisdictions are not always in control of collection or facility operations and may not have ready access to obtaining operational data including data on contamination. We support CalRecycle's proposed role in ensuring reporting by state agencies, federal agencies, and schools/universities with even more accountability than local jurisdictions since local jurisdictions are impacted by the amount of wastes from these state and federal agencies and their participation in local programs. Local jurisdiction solid waste managers can identify and report on available edible food recovery options but are not in a position to provide detailed data from these programs or impose operational program changes.

Compliance and Enforcement

It is the responsibility of the jurisdiction to document their compliance efforts including unsuccessful efforts. RCRC believes the "good faith effort" provisions are imperative to compliance with the SB 1383 regulations being developed and have proven successful in determining compliance with Integrated Waste Management pan compliance.

Local jurisdictions do not have direct oversight of many generators and stakeholders. The state should take direct responsibility for those federal and state agencies located within a jurisdiction, such as tribal lands, federal parks and forests, and state agencies including prisons and school facilities. These are significant generators of food waste, especially in rural counties, that the local jurisdiction has no control but significantly impact jurisdiction waste generation and disposal.

Nearly 60 percent of the ESJPA rural counties' land is owned by the federal government and member counties have limited control over the waste management activities. Alpine and Inyo counties contain 92 percent federally owned lands and Mono

County has 86 percent federal ownership. Yosemite National Park had over 5.2 million visitors in 2016 which is equivalent to 78.5 percent full time residents of Mariposa's population. Most of the solid waste generated from these forest and parks are attributed to the counties. There are also 24 casinos located in 14 ESJPA rural counties. Food wastes and other solid wastes generated at these casinos are typically disposed of within that county. Rural agencies cannot impose recycling mandates on these federal facilities despite the significant impact on waste generation.

These concepts seem to expand the solid waste managers' role within a county's infrastructure. The solid waste manager does not have the authority for oversight of the Building or Environmental Health Departments. In addition, the local jurisdiction, while being able to work cooperatively with various organizations, does not have direct oversight of many of the service organizations and churches used in food recovery.

Capacity Planning

Given the short time available for meting these SB 1383 goals, CalRecycle needs to develop more effective permit streamlining mechanisms. The CalRecycle developed program EIR for anaerobic digesters is an example of a successful tool that has saved considerable time and money to permit and implement these facilities. This concept needs to be expanded to other types of organic facilities as well as develop best practices and other resources for local jurisdictions and private organizations can utilize to expedite development of the needed facilities.

Market Development

CalRecycle should play a critical role in the realistic implementation of SB 1383. Public education and outreach needs to be developed at the state level so that terms, symbols, and factual information is universally accepted. Without the infrastructure capacity in place now, a concentrated effort should be focused on a robust education campaign. This will be necessary to convince the general public that there is a need for these facilities.

Local agencies and rural solid waste managers would enjoy meeting or exceeding the state's goals and expectations. However, reality dictates what, where, and how new or expanded facilities will be built. The "when" is a wild card based upon the public's participation.

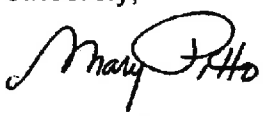
Some other potential mechanisms that may assist in market development the state could implement are:

- Utilizing the existing RMDZ program and even expanding the program to nonparticipating areas.
- The state should take the lead and require state procurement of recycled products prior to mandating local agencies to do the same.

- Provide local agency incentives for hosting regional facilities (e.g. build a facility twice size needed for the local jurisdiction – the host jurisdiction is deemed to have met their goals)
- CalRecycle develop a program EIR for other organics facilities

Thank you for the opportunity to provide initial input into the informal process, and we look forward to continue working with CalRecycle on realistic organics programs for rural communities. If you have any questions, please contact me at mpitto@rcrcnet.org or (916) 447-4806.

Sincerely,



MARY PITTO
Regulatory Affairs Advocate

Beverage Container Recycling Program

Workshop on Processing Payment Emergency Rulemaking

Monday, October 9, 2017, 1 PM
Coastal Hearing Room, 1001 I St., Sacramento

Contact: DORRegulations@calrecycle.ca.gov

Necessity for Emergency Regulations

- Economic conditions:
  - Worldwide, scrap values for beverage container material and most other scrap commodities have been low. Scrap values may fall further.
  - Cost-saving efforts in the recycling industry lower the statewide average cost of recycling. As the average cost falls, processing payments are reduced.
  - Losses in scrap-related industries are reflected in the reasonable financial return, which also leads to lower processing payments.
  - The beverage industry has been using more PET (which has a lower scrap value) and less aluminum (which has a higher scrap value), possibly reducing consumer demand for redemption opportunities, since many centers pay extra for valuable materials.
- The recent legislative session ended without any measures enacted to alter the economics for the state's recycling industry.
- The department is moving forward to propose, via emergency regulations, a higher reasonable financial return than would result under current law.

Reasonable Financial Return (RFR)

- An RFR is established annually every January 1.
  - Under current regulations, RFR is based on an industrywide "return on cost" value provided by Dunn and Bradstreet.
- The RFR impacts the processing payment, a subsidy provided to certified recycling programs for handling beverage container materials for which the cost of recycling exceeds the market value.
- The RFR is applied as a percentage to the cost of recycling used to determine the processing payment.

Processing Payment = Cost of Recycling × (1 + RFR) × (1 + COLA) – Scrap Value

Goals

- Maintain a marketplace where it is profitable to establish sufficient recycling centers and locations that provide consumers with convenient recycling and redemption opportunities.
- Support recycling and allow the industry and the department to be more effective, fair, beneficial, and convenient.
- Mitigate higher costs of operating recycling centers in rural areas.
- Balance impacts and costs to the Fund.

Reassessing the Reasonable Financial Return

- The 2016 RFR was 0.94%.
- The 2017 RFR was -5.85%.
  - Due to overall depressed recycling market and low scrap values
- The 2018 RFR, if calculated according to the current regulations, could again be low resulting in possibly further cost-cutting measures and undermining convenient opportunities for redemption of beverage containers by consumers who want to redeem.

Proposal

- Under emergency rulemaking authority, the proposed change will be effective for one year.
  - Unless non-emergency rulemaking or a statutory change occurs, in 2019, the RFR *calculation* will revert to what is has been.
- Establish an RFR for 2018 and provide a separate, higher RFR for rural recycling centers to address the lack of convenience and higher costs in rural areas.
  - 6.4% RFR for all certified recycling programs, except...
  - 11.5% RFR for recycling centers located in rural areas
- This change will help support beverage container recycling in California.

Proposal

- The percentages reflect, in part, recent and expected state minimum wage increases that would otherwise not be captured until the department's next periodic survey of recycling center costs.
  - Specifically, values are built on *base RFR rates* that the department adjusted to account for the minimum wage increase.
  - From a base RFR of 5% and an RFR of 10% for rural recycling centers, the department calculated:

    (100% + base RFR) × (100% + expected growth in labor costs) – 100%

Proposed Changes to the Text
§ 2975. Reasonable Financial Return Calculation

(a) The statewide average reasonable financial return for recycling centers shall be equal to the statewide average allowable costs calculated in section 2960 of this subchapter, multiplied by the average return on costs for the scrap and waste materials industry as determined from data contained in the most recent Dun and Bradstreet Standard Three Year Norm Report (Published by Dun and Bradstreet Credit Services).

(b) Notwithstanding paragraph (a), for the period of January 1, 2018 to December 31, 2018, the reasonable financial return shall be calculated as follows:

(1) The reasonable financial return shall be equal to six and four-tenths percent (6.4%) of the statewide average allowable costs calculated in section 2960 of this subchapter, except as follows:

(A) The reasonable financial return for recycling centers located in rural regions, as defined by Public Resources Code Section 14571(b)(2)(A), shall be equal to eleven and one half percent (11.5%) of the statewide average allowable costs calculated in section 2960 of this subchapter.

Rural Regions

- Defined in CCR § 2000 (41.1):
  - "Rural Region" means a non-urban area identified by the Division on an annual basis using Farmers Home Administration criteria. Such criteria for area include, but are not limited to, places, open country, cities, towns, or census designated places with populations less than 10,000. Areas with populations between 10,000 and 50,000 may be designated as rural unless identified as part of, or associated with, urban areas, as determined by the Department on a case by case basis.
- 300 recycling centers currently operational in rural regions comprise about 18% of all recycling centers statewide.
- Rural recycling centers handle about 6% beverage container volume of all certified recycling programs statewide.

Rural Region Map

Estimated Fiscal Impact Compared to Current Law 6.4% RFR (and 11.5% for rural)

Processing Payment

$6.3 million increase to certified recycling programs

$0.7 million increase to rural recycling centers

$7.0 million total increase

Processing Fee

$1.6 million increase in revenue from beverage manufacturers

Processing Fee Offset

$5.9 million increase in transfers from BCRF to processing fee accounts

Note: these are based on the department's estimate of the average cost of recycling and scrap values that will determine rates in January of 2018, recycling rates, container-per-pound rates, and other factors. Many of these factors may change, which would change the results.

Alternatives the Department is Considering for Discussion Purposes

The department is considering two *alternative* sets of values for the RFR, as defined in § 2975 (b)(1) and § 2975 (b)(1)(A):

Alternative 1:

- For all other recycling programs other than rural recycling centers: **11.5%**
- For rural recycling centers: **16.6%**

Alternative 2:

- For all other recycling programs other than rural recycling centers: **6.4%**
- For rural recycling centers: **21.6%**

Estimated Fiscal Impact Compared to Current Law Alternative 1: 11.5% RFR (and 16.6% for rural)

Processing Payment

- $11.6 million increase to certified recycling programs
- $ 1.1 million increase to rural recycling centers
- $12.7 million total increase

Processing Fee

- $2.5 million increase in revenue from beverage manufacturers

Processing Fee Offset

- $10.8 million increase in transfers from BCRF to processing fee accounts

Note: these are based on the department's estimate of the average cost of recycling and scrap values that will determine rates in January of 2018, recycling rates, container-per-pound rates, and other factors. Many of these factors may change, which would change the results.

13

Estimated Fiscal Impact Compared to Current Law Alternative 2: 6.4% RFR (and 21.6% for rural)

Processing Payment

- $6.3 million increase to certified recycling programs
- $1.4 million increase to rural recycling centers
- $7.7 million total increase

Processing Fee

- $1.7 million increase in revenue from beverage manufacturers

Processing Fee Offset

- $6.5 million increase in transfers from BCRF to processing fee accounts

Note: these are based on the department's estimate of the average cost of recycling and scrap values that will determine rates in January of 2018, recycling rates, container-per-pound rates, and other factors. Many of these factors may change, which would change the results.

14

Summary of Proposal and Alternatives

The proposed RFR

- 6.4% RFR (and 11.5% for rural)
- $7.0 million estimated increase in processing payment
- Approximately $194/month average additional processing payment to rural RCs

Alternative 1

- 11.5% RFR (and 16.6% for rural)
- $12.7 million estimated increase in processing payment
- Approximately $305/month average additional processing payment to rural RCs

Alternative 2

- 6.4% RFR (and 21.6% for rural)
- $7.7 million estimated increase in processing payment
- Approximately $389/month average additional processing payment to rural RCs

15

You May Give Feedback Now or by Email

The department specifically seeks feedback from beverage consumers, industry, and other stakeholders on the impacts of different RFR rates on the viabilities of businesses and on the convenience of redemption opportunities. For example, **would the proposed changes to the RFR influence closure decisions or change convenience in your area? And what information do you base your views on?**

Please send your thoughts or information to: DORRegulations@calrecycle.ca.gov by **October 13, 2017**.

The department plans to adopt these emergency regulations by December 2017. A public comment period will be held during the formal emergency rulemaking process.

16

REQUEST FOR APPROVAL

To:	Scott Smithline Director
From:	John Sitts Environmental Program Manager, Knowledge Integration Section, Policy Development and Analysis Office
Request Date:	September 19, 2017
Decision Subject:	Approval of Modified Regulations Text and to Formally Notice Proposed Recycling and Disposal Facility Reporting Regulations
Action By:	October 3, 2017

Summary of Request:
Staff requests approval of the changes to the proposed text of the regulations approved in May 2017, to begin the formal rulemaking process, and to formally notice the Proposed Recycling and Disposal Facility Reporting Regulations.

Recommendation:
Staff recommends approval of the modified Proposed Regulations for Recycling and Disposal Facility Reporting so that the regulations may be submitted to the Office of Administrative Law to initiate the formal rulemaking process under the California Administrative Procedures Act.

Action:
On the basis of the information and analysis in this Request for Approval, I hereby approve the Proposed Regulations for Recycling and Disposal Facility Reporting and direct staff to submit the regulatory packet to the Office of Administrative Law to initiate the formal rulemaking process under the California Administrative Procedures Act.

Dated: _____

_____

Scott Smithline, Director

Attachments:

1. **Proposed Regulations for Recycling and Disposal Facility Reporting**
2. **May 16, 2017 Request for Approval**
3. **Explanation of Changes from May 2017 to September 2017**

Background Information:
Chapter 746, Statutes of 2015 (Assembly Bill 901, Gordon) dramatically improves the Department's and local jurisdictions' ability to achieve and measure legislatively mandated tasks by expanding reporting to include reporting on recycling and composting and creating an enforcement mechanism. The proposed regulations implement the mandates of AB 901 in order to accomplish three important goals. First, the proposed regulations will facilitate collection of data required by AB 901 in order to inform CalRecycle's understanding of material flows within the State's recycling infrastructure; allow CalRecycle to better estimate total recycling and composting; and assist CalRecycle to track progress towards several state goals and programs, including the 75% recycling goal, mandatory commercial recycling, and organics diversion programs. This information will allow CalRecycle to implement various improvements in areas such as increased responsiveness to changes in the recycling landscape, operational efficiencies, and targeting of state resources to recycling infrastructure. Second, the regulations detail procedures for implementing the Department's enforcement authority, which was created by AB 901 to ensure accurate reporting. Third, the regulations will provide additional tools to enhance and expand the ability of local jurisdictions and the Department to ensure the accuracy of reported information.

These regulations will enhance the Department's ability to comply with other mandates regarding solid waste and recycling in the state, including mandatory commercial recycling (California Global Warming Solutions Act, AB 32, Nunez, Chapter 488, Statutes of 2006 and AB 341, Chesbro, Chapter 476, Statutes of 2011), mandatory commercial organics recycling (AB 1826, Chesbro, Chapter 727, Statutes of 2014), and short-lived climate pollutants reductions from landfills (SB 1383, Lara, Chapter 395, Statutes of 2016).

Staff held 9 workshops from April 2016 to December 2016 to obtain stakeholder input on regulatory issues. Workshops were webcast to allow participation of stakeholders not able to attend in person. Staff developed initial draft regulatory text in June 2016. Based on stakeholder input at workshops and written comments, second draft regulations were released in November 2016, and third draft regulations in February 2017. Stakeholder input was also obtained through surveys conducted in January 2017.

Director Smithline approved a previous version of the Proposed Regulations for Recycling and Disposal Facility Reporting in May 2017. Subsequently, Staff recommended clarifications to some of the language in the draft regulations. Please see the document "Explanation of Changes from May 2017 to September 2017" for more details. Staff recommends adoption of the modified regulatory text.

Analysis and Findings:

Staff completed revisions to proposed regulations based on stakeholder comments in April 2017. Staff have added clarifications and corrections since the CalRecycle May 2017 monthly meeting. Staff have determined that the attached proposed draft regulations are ready for the formal rulemaking process and submittal to the Office of Administrative Law.

Staff anticipate adoption of final regulations by mid-2018. Development of the Recycling and Disposal Reporting System (RDRS) will continue through 2017 and early 2018. By mid to late 2018, staff anticipate database testing and stakeholder training to begin. Registration should begin in November 2018 with the first official RDRS reports to be submitted for the first quarter of 2019.

CalRecycle Packaging Reform Workshop

October 10, 2017

For Remote Participants:

- Please send all questions, comments, or technical issues via e-mail to: packaging@calrecycle.ca.gov
- The live video stream (webcast) is available at: http://www.calrecycle.ca.gov/Broadcast/
- A recording of the webcast will be posted on CalRecycle's website: http://www.calrecycle.ca.gov/ReduceWaste/Packaging/Events/default.htm

Opening Remarks

Scott Smithline
Director, CalRecycle

Howard Levenson
Deputy Director, Materials Management and
Local Assistance Division

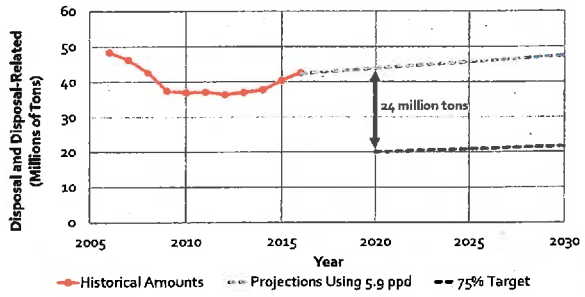
Staff Presentation: Approaches for Managing Packaging

Karen Morrison
Senior Environmental Scientist
Policy Development and Analysis

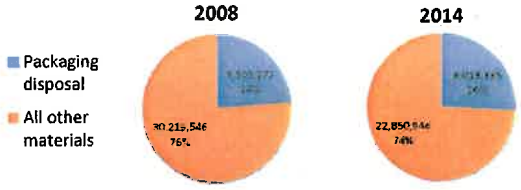
Packaging Reform
Policy Model Development Process

- What is CalRecycle doing and why?
- What are the goals of today's workshop?
- What are the next steps?

Statewide Projected Disposal Rate



Packaging in California's Disposal Stream (tons)

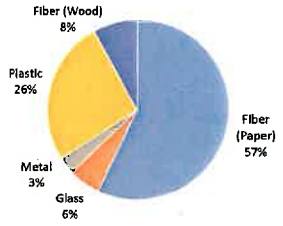


Based on data from CalRecycle 2008 & 2014 waste characterization studies

Packaging Material Types Disposed

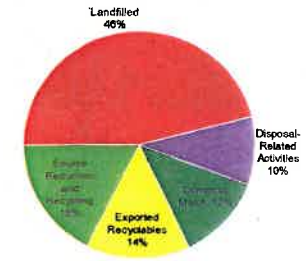
Most prominent packaging material types:

- Fiber (paper) – 5.1 million tons
- Plastic –2.3 million tons



Based on data from CalRecycle 2008 & 2014 waste characterization studies

Export Market and China's Import Ban



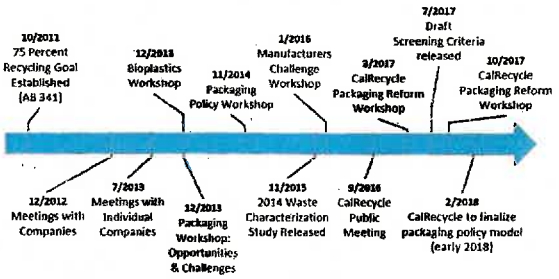
- Roughly 1/6 of all waste generated in CA is exported
- Export markets have declined significantly
- Recent changes to China's import policies will likely impact CA recycling

Estimated 76.5 million tons generated – AB 341

CalRecycle's Goals for Packaging Reform

- Divert a significant amount of packaging from landfill
- Promote source reduction, recycling, and higher uses of packaging
- Address other environmental impacts of discarded packaging (GHG, marine debris, etc.)
- Develop in-state and in-country infrastructure to manage post-consumer packaging

CalRecycle's Packaging Activities



What does a mandatory, comprehensive policy mean?

- Strategy to manage all packaging in California
- Includes enforceable metrics and goals
- Manage significant amounts of material currently going to landfills
- Authority to identify priority products and implement appropriate tools

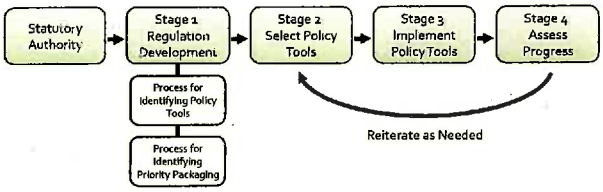
What is included in packaging?

- All packaging material types, unless otherwise specified, that are placed into the California market
- Primary, secondary, and tertiary packaging

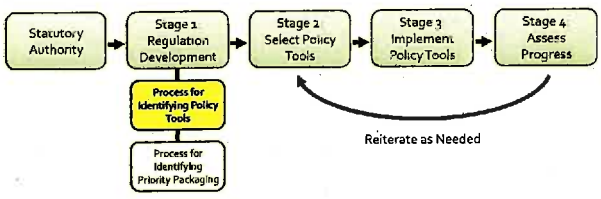
CalRecycle's Essential Components for a Statewide Policy for Packaging

- Comprehensive
- Flexible
- Consistent process
- Transparent with robust public participation
- Specific and enforceable goals and metrics
- Recognizes prior innovations and efforts
- Addresses pre- and post-consumer life of packaging

Statewide Packaging Framework



Statewide Packaging Framework



Stage 1A: Identifying Policy Tools

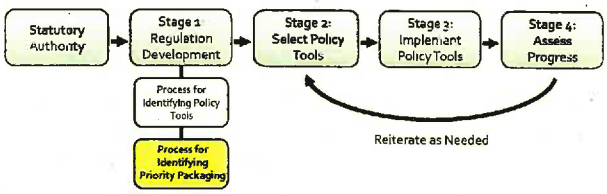
1. Source Reduction
2. Labeling Requirements
3. Recyclable/Compostable Design
4. Standard List of Recyclable/ Compostable Packaging
5. Minimum Postconsumer Recycled Content
6. Producer Responsibility
7. Landfill Ban
8. Deposit System
9. Increasing Landfill Tipping Fee
10. Packaging Product Sales Ban
11. Pay-As-You-Throw
12. Advanced Recycling Fees
13. Materials Management Fees

Summary of Policy Tools

- Variation in complexity
- Variation in likely impact
- Variation in utility as a stand-alone tool
- Variation in effectiveness based on packaging type

There is no single tool that will manage all packaging.

Statewide Packaging Framework



Stage 1B: Identifying Priority Packaging

Draft Screening Criteria

- Solicited stakeholder feedback in July and August on nine draft screening criteria
- Received 26 comment letters
- Nine new criteria were suggested

Draft Screening Criteria Response

- Clarified and condensed screening criteria into six categories
- Incorporated other feedback into analysis of policy tools and pairing of tools with packaging, rather than for screening

Stage 1B: Identifying Priority Packaging

Screening Criteria

1. Prevalence in Disposed Waste Stream
2. Usage Trends
3. Current Collection Infrastructure
4. Current Processing Infrastructure
5. Greenhouse Gas Impacts of Recycling
6. Waterway and Marine Debris

Stage 1B: Identifying Priority Packaging

Example application of screening criteria to three plastic categories:

	Film plastic	PET containers	HDPE containers
1. Prevalence in Disposed Waste Stream	1	0	-1
2. Usage Trends	1	1	1
3. Current Collection Infrastructure	1	-1	-1
4. Current Processing Infrastructure	1	-1	-1
5. Greenhouse Gas Impacts of Recycling	0	0	-1
6. Waterway and Marine Debris	1	0	-1
Final Prioritization	5	-1	-4

For individual criteria, priority is assigned as 1 (high), 0 (medium), or -1 (low).

Summary of Priority Packaging

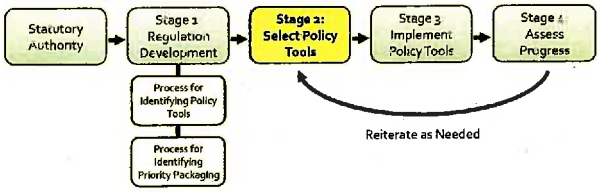
Fibers

- Uncoated corrugated cardboard
- Waxed cardboard
- Aseptic containers and cartons

Plastics

- Film Plastic
- Expanded Polystyrene
- Pouches

Statewide Packaging Framework



Stage 2: Selection of Policy Tools

Tools for All Packaging

Identified 8 tools that could apply to all packaging:

- Source reduction
- Producer responsibility
- Pay as you throw
- Landfill tipping fee
- Advanced recycling fee
- Statewide list of recyclables
- Recyclable or compostable design
- Labeling requirements

Stage 2: Selection of Policy Tools

Tools for All Packaging

- Take advantage of economies of scale
- Allow for consistent education and material management
- Can provide broad funding to support efforts
- Provide benefits to a range of products

Stage 2: Selection of Policy Tools

Tools for Specific Packaging

- Allows for specific challenges to be addressed
- For example, different recyclability for UCC versus waxed cardboard, and the high volumes of UCC
- For example, the gap between recycling collection and market development for cartons
- For example, the difficult in separating multiple material layers in pouches for recycling

Stage 2: Selection of Policy Tools

Example – Film Plastic

- Challenges:
  - Economics of collection and transport can be limiting
  - Food packaging can result in contamination
  - Curbside collection leads to contamination and damage to MRFs
  - Wide variety of materials

Stage 2: Selection of Policy Tools

Example – Film Plastic

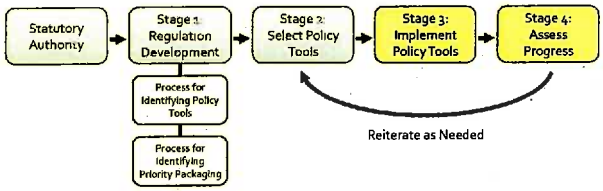
- Opportunities to ensure cleaner material and manage collection:
  - Establish stable funding sources (advanced recycling fees, PAYT, increased landfill tipping fees, or EPR)
  - Minimize generation (source reduction)
  - Ensure clean streams (source separation)
  - Establish consequences (labeling requirements for "not recyclable in California")

Stage 2: Selection of Policy Tools

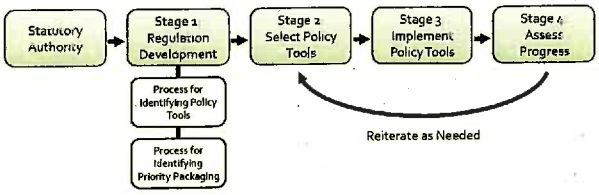
Examples of Tools for Specific Packaging

- **Uncoated Corrugated Cardboard:** Source reduction, PAYT, increased tipping fees, minimum content requirements
- **Waxed Cardboard:** Mandating recyclable or compostable design, source reduction
- **Aseptic Containers and Cartons:** Deposit systems, labeling
- **Expanded Polystyrene:** EPR, labeling, sales ban
- **Pouches:** Advanced recycling fees, minimum content requirements, labeling requirements

Statewide Packaging Framework



Summary



General Discussion

Remote participants, please use packaging@calrecycle.ca.gov to ask questions and share comments.

Discussion on Stage 1: Policy Tools and Priority Packaging

- Are there any policy tools that should be included in a packaging management strategy that were not listed?
- Are there other pros or cons for individual policy tools that should be considered?
- In the context of a broader packaging framework, are there any additional screening criteria that should be added, and if so, what data should be used to evaluate that criterion?
- Should certain criteria be prioritized in determining priority packaging?
- Are there other data sources the Department should consider?

Discussion on Stage 2: Pairing Policy Tools with Packaging

- Staff proposed 8 tools that could be applied to all packaging.
  - Are there other policy tools identified in Stage 1 that could be applied to all packaging?
  - Are there tools that should not be applied to all packaging?
- Staff identified 6 priority packaging types.
  - Are there other barriers or challenges that should be addressed?
  - Are there policy tools that should or should not be considered?

Stakeholder Feedback on Stage 3: Implementing Policy Tools

- How could the Department recognize previous investments by companies to optimize packaging or divert it from landfills to higher and better uses?
- How should changes in the marketplace be incorporated into a packaging framework?
  - For example, how would changes in scrap prices for materials be reflected in priority packaging or program goals?

Stakeholder Feedback on Stage 4: Assessing Progress

- In a framework approach, specific metrics and enforceable goals would be established as a part of the public process. How might progress and success be measured?
  - For example, 50% reduction in packaging in disposed waste.
  - For example, XX fewer units of a specific packaging type.
  - For example, YY% of containers must be reusable.

General Discussion

Remote participants, please use
packaging@calrecycle.ca.gov
to ask questions and share comments.

Next Steps

- Invite written comments through Tuesday, October 31. Please send to packaging@calrecycle.ca.gov.
- Welcome individual meetings through December 1, 2017 to discuss recommendations. Please coordinate through packaging@calrecycle.ca.gov.
- Formal recommendation presented in early 2018.

Draft Screening Criteria for Determining Priority Packaging Types

Released: July 20, 2017

Revised: July 26, 2017

CalRecycle has extended the date for initial comments to August 4, 2017. Please note that comments received after August 4, 2017 and before the September 19, 2017 workshop will still be considered, but may not be reflected in the documents for the September 19, 2017 workshop. However, one purpose of the workshop is to further discuss the screening criteria.

In preparation for the September 19, 2017, public workshop on this topic, CalRecycle is soliciting stakeholder input on potential screening criteria, which are listed below along with the data sources that will be used to evaluate each criterion. CalRecycle will consider revising these criteria based on feedback received by August 4, 2017.

Background

Over the last four years, CalRecycle hosted several public workshops on best approaches to handle packaging in the waste stream. At the September 2016 public meeting, CalRecycle's Director instructed staff to develop a comprehensive statewide mandatory packaging model. In March 2017, CalRecycle hosted a workshop soliciting stakeholder feedback on mandatory policy models that the Department could explore.

Given that there is not a one-size-fits-all policy solution for all packaging, the Department is choosing to evaluate which mandatory policy models (e.g., Extended Producer Responsibility, etc.) and instruments (e.g., minimum content, etc.) might be best suited to increasing collection and recovery of specific packaging types. In order to do this, staff are developing a set of screening criteria to determine which packaging types could be prioritized for analysis relative to different mandatory policy approaches.

CalRecycle will use the criteria to evaluate different packaging types to determine their relative priority. After that, CalRecycle will evaluate each packaging type relative to mandatory policy models and instruments, including those discussed at the March 22, 2017 public workshop. The results of these analyses will be shared at the September 19, 2017, public workshop.

Draft Screening Criteria

Criteria Name	Criteria Description
Waste-Related Criteria	
1. Prevalence in waste stream	Does the packaging product/product category contribute significantly to the overall waste stream?
	Data sources could include: • 2014 Disposal-Facility-Based Characterization of Solid Waste in California • City of San Diego Waste Characterization Study 2012-2013 • 2009/2010 Oregon Solid Waste Characterization and Composition Study

Note: Revised on July 21, 2017 to number draft screening criteria. Revised on July 26, 2017 to extend the deadline to August 4, 2017 and to provide links to proposed data sources.

2. Increasing or steady usage trend	Is the product usage holding steady or increasing?
	Data sources could include: • US EPA Advancing Sustainable Materials Management: Facts and Figures Fact Sheet • Industry publications and other data sources
3. Current collection infrastructure	Is the packaging product/product category not collected by California curbside programs?
	Data sources could include: • 2015-2016 Centralized Study on Availability of Recycling • 2014 Disposal-Facility-Based Characterization of Solid Waste in California
4. Current processing infrastructure	Are material recovery facilities unable to feasibly process the packaging product/product category collected by California curbside programs?
	Data sources could include: • 2016-2017 Materials Recycling and Processing in the United States, Data available for purchase from Governmental Advisory Associates
5. Contamination of material	Is the packaging product/product category highly contaminated in the collection process? Is it a significant contaminant for other material streams?
	Data sources could include: • Composition of Commingled Recyclables Before and After Processing, Oregon Department of Environmental Quality • CalRecycle Rate Determination Bale Study
6. Reusability and Recyclability CalRecycle is specifically seeking feedback on this criteria by August 4, 2017.	Is the packaging product/product category designed to be reused and/or recycled?
	Data sources could include: • Association of Plastic Design Guide for Plastics Recyclability • Existing statutes defining reusability in other programs (eg, RPPC and SB 270)
Other Environmental Criteria	
7. Greenhouse gas impacts	Does reducing, reusing, or recycling the package product/product category represent a potential net greenhouse gas savings compared to landfilling?
	Data sources could include: • California ARB Waste Diversion GHG Emission Reductions • US EPA WARM Model
8. Waterway and marine debris	Does the packaging product/product category contribute to trash-related water concerns and/or negatively impact the waterway and marine environment?
	Data sources could include: • California Coastal Cleanup Day Results • Ocean Conservancy trash index • California Ocean Plan • Total Maximum Daily Load data for State and Regional Water Boards

Note: Revised on July 21, 2017 to number draft screening criteria. Revised on July 26, 2017 to extend the deadline to August 4, 2017 and to provide links to proposed data sources.

Staff is seeking initial feedback on the draft screening criteria by August 4, 2017. In particular:

1. Are there other criteria the Department should consider? If so, why?
2. Are there criteria listed above that the Department should *not* consider? If not, why?
3. Are there criteria that the Department should prioritize in the screening process?
4. What limitations to the proposed criteria should the Department be aware of?
5. Are there other data sources the Department should consult when evaluating the criteria?

Staff is also seeking feedback on the point of generation of discarded packaging (draft criteria #9) as a potential screening criteria. For example, should the Department differentiate between discarded packaging generated at residential, commercial, or industrial sources? What data sources should be used to quantify the point of generation of discarded packaging?

This is a first opportunity to comment on the screening criteria. Stakeholders will have an additional chance to comment on the screening criteria and their impact on the selected priority packaging products at the September 19, 2017, public workshop.

Please send comments to packaging@calrecycle.ca.gov.

For more information: http://www.calrecycle.ca.gov/ReduceWaste/Packaging/

Note: Revised on July 21, 2017 to number draft screening criteria. Revised on July 26, 2017 to extend the deadline to August 4, 2017 and to provide links to proposed data sources.

August 4, 2017

Cynthia Dunn
Department of Resources Recycling and Recovery
1001 I Street
PO Box 4025, MS 13A
Sacramento, CA 95812
Submitted via email: packaging@calrecycle.ca.gov

SUBJECT: Comments on Draft Screening Criteria for Determining Priority Packaging Types

Dear Ms. Dunn:

On behalf of the 23 rural county members, the Rural Counties' Environmental Services Joint Powers Authority (ESJPA) appreciates the opportunity to provide the attached comments on the Draft Screening Criteria for Determining Priority Packaging Types.

Thank you again for the opportunity to comment on the proposed regulations. Please contact me at (510) 703-0898 or lsweetser@rcrcnet.org with any questions.

Sincerely,

Larry Sweetser
ESJPA Consultant

Enclosure

cc: Members, Rural Counties' Environmental Services Joint Powers Authority
Mary Pitto, Program Manager, Rural Counties' ESJPA

1215 K STREET, SUITE 1650, SACRAMENTO, CA 95814 PHONE: 916-447-4806 FAX: 916-447-1667
WEB: WWW.ESJPA.ORG

1. Prevalence in waste stream

The Rural Counties' Environmental Services Joint Powers Authority (ESJPA) appreciates and agrees with one of the criteria to be based upon the prevalence of packaging and products in the waste stream. We would request that part of those evaluation criteria also include several other factors including:

- Consider the differences in rural versus urban waste streams as alluded to in previous waste characterization studies. What may be prevalent in an urban environment may not be prevalent in a wastes disposed of from rural areas. This difference is somewhat recognized in the Background section of the Draft Screening Criteria as "there is not a one-size-fits-all policy solution for all packaging" but can be broadened to include "or areas".
- The prevalence of a material in the waste stream may not be a full indicator that the material is an appropriate candidate for diversion. For example, grease stained pizza boxes require a different management program than cleaner cardboard.
- Some materials that are prevalent in the waste stream, such as cardboard, already have available mechanisms for diversion but could benefit from manufacture incentives since market conditions often dip below the economical threshold for diversion and can cost more to divert than dispose of as waste.
- It is not clear if the proposed prevalence criterion is based upon weight or volume. For example, plastic sheeting can look like a large volume of material but weighs far less and is more difficult to recycle than metal. Jurisdictions are required to reduce disposal of solid waste by weight and this should be part of the criterion.

3. Current collection infrastructure

Rural areas tend to not have curbside collection programs except for a few instances of curbside programs in populated areas. Often, these curbside programs are not mandatory and thus imposing new material types could jeopardize that fragile program unless there are robust markets for the material within a reasonable distance to rural areas.

4. Current processing infrastructure

As noted above, rural areas tend to have a different solid waste management structure than urban areas. Most rural areas do not have material recovery facilities and thus cannot process any packaging material. Rural areas tend to rely on recycling drop-off programs or limited floor sorting of material received by the facility.

7. Greenhouse gas impacts

Management of packaging material has less quantity of associated greenhouse gas impacts in rural areas than urban areas. That difference in impact should be incorporated in the criteria.

Additional criteria for consideration

Several additional criteria might be appropriate for consideration including:

- Ensuring that packaging materials proposed for the program will integrate with the local existing solid waste structure. Collection and processing activities will need to fit within the requirements of any local contracts or franchise agreements.
- Targeting packaging materials for inclusion as a Priority Packaging Types should include consideration as to whether there is existing infrastructure to accept and recycle the products or require the development of viable markets for the material. This issue has recently been observed with the Carpet Stewardship program.

REPUBLIC SERVICES

October 4, 2017

Ms. Cynthia Dunn
California Department of Resources Recycling and Recovery
1001 I Street Mail Stop 13A, P.O. Box 4025
Sacramento, CA 95812-4025
Cynthia.Dunn@CalRecycle.ca.gov

Re: Comments - CalRecycle Draft Screening Criteria for Determining Priority Packaging Types

Dear Ms. Dunn:

Thank you for the opportunity to comment on CalRecycle's Draft Screening Criteria for Determining Priority Packaging Types. We appreciate the deliberative process used by the Department and the extensive and informative packaging workshops held over the past several years.

Republic Services believes that a sustainable recycling solution must be economically viable. Despite the challenges recycling poses, we can make it sustainable by working together with state and local government. By fairly covering the cost of collection and processing, and by educating residents on proper recycling methods we can achieve both environmental and economical sustainability.

Over the past few decades Republic Services has invested heavily in recycling programs and infrastructure in California. Therefore, we have high degree of interest and concern in CalRecycle's proposed policies around packaging and how they will ultimately impact our customers and our operations.

Before focusing on the Screening Criteria, we would like to offer general comments regarding the packaging initiative.

- Republic Services has supported Extended Producer Responsibility (EPR) programs selectively, for example, to protect our employees with a sharps EPR program or to help eliminate prohibited materials from our landfills (e.g., batteries, pharmaceuticals and household hazardous wastes).

- We also believe strongly that landfill bans don't work. They don't create markets, they don't encourage recycling, and they are extremely difficult to enforce.

- We are proponents of a strong franchise system. California's complex and effective waste and recycling system has been built through the AB 939 franchise system. We are not proponents of third-party EPR models. Unless these models honor existing franchise agreements and collection contracts, we will be ignoring and potentially undermining the franchise system that is the backbone of California's very successful recycling programs and infrastructure. Collection and processing activities will need to fit within the requirements of any local contracts or franchise agreements.

- We encourage CalRecycle not to focus entirely on end-of-life recycling as its top priority, and to shift the focus to upstream prevention to reduce waste downstream. The goal should not necessarily be to recycle everything, but to recycling more of the right things, and more importantly, to generate and waste less.

- Healthy market demand is critical. Minimum content legislation, when supported by lifecycle assessment, should be considered in the State to help drive stable, domestic demand.

- Targeting packaging materials for inclusion as a "priority" should include consideration as to whether there is existing infrastructure to accept and recycle the material or if there are viable markets for the product. This issue has been a significant problem with the Carpet Stewardship program.

- Finally, any packaging program must recognize the critical need to educate consumers on environmentally preferable purchasing decisions. By working with brands and retailers, CalRecycle can shape the future of consumer purchasing and materials management for future generations.

Regarding the Draft Screening Criteria for Determining Priority Packaging Types, we offer the following comments:

1. **Prevalence in the Waste Stream** – The prevalence of a material in the waste stream must be balanced with other considerations before it is deemed an appropriate "priority" candidate for diversion. Food contaminated containers will require a different management program than clean paper, cardboard or plastics. Further, some materials that are prevalent in the waste stream, such as cardboard, already have available

mechanisms for diversion but could benefit from manufacture incentives. Market conditions often dip below the economical threshold for sustainable diversion and can cost more to divert than to dispose. CalRecycle should evaluate each individual potential "priority" material based on a combination of prevalence in the waste stream, recyclability and the GHG emissions reduction benefits.

2. **Increasing or Steady Usage Trend** – As in item 1 above, while this can be a strong indicator for designation as a "priority", this standard should also be balanced by other standards such as prevalence, recyclability and GHG benefits.

3. **Current Collection and Processing infrastructure** - As mentioned above, these criteria are critically important since recyclers in California have invested hundreds of millions of dollars in the processing infrastructure that has been developed to meet the State's current recycling requirements of AB 939, AB 341, AB 1826 and SB 1383. That investment and the demands of those statutes on our recycling infrastructure should not be ignored. The addition of materials to curbside programs may add to contamination issues and inhibit our ability to achieve the program goals and requirements of the aforementioned statutes. This is particularly true if there are no strong markets and processing infrastructure to assure the new processing costs are supported by markets, tangible energy benefits and emissions savings.

4. **Contamination of material** – Contaminated materials are more expensive to process in order to achieve a cleanliness standard that meets market demands. If it isn't clean, it will be hard to sell or prices won't support the expense of recycling. Contamination is often the result of a lack of public education or a lack of enforcement. If a material will add significantly to contamination and inhibit our ability to recycle other materials, perhaps it is a better candidate for upstream management or prevention rather than downstream mandates.

5. **Reusability and Recyclability** – Incentivizing reusable packaging may be a better approach than mandating reusability standards. Recyclability should be a very high priority. If in fact material is not easily recyclable, it should not be a "priority".

6. **Greenhouse gas impacts** – Republic supports an emphasis on the use of lifecycle thinking, including the assessment of GHG impacts of both

products and packaging as a key element of CalRecycle's screening criteria. By shifting to a GHG emission reduction emphasis, CalRecycle can focus on those materials that help meet the goals of SB 1383 and AB 1826.

7. **Waterway and Marine Debris** – Republic recognizes the significant environmental impacts of marine debris. Republic works very closely with our local government clients and our collection customers to minimizing the litter that causes waterway and marine debris in California and across the U.S. Customer education on litter reduction is critical. Again, incentives for strong education programs and front of the waste stream programs would be the best approach for products identified as "priorities under this standard.

We appreciate this opportunity to comment and look forward to working with the Department as this initiative advances.

Chuck Helget

Chuck Helget
Director
Government Affairs
Republic Services

State Water Resources Control Board

NOTICE OF PROPOSED EMERGENCY RULEMAKING

Annual Waste Discharge Permit Fees

Amendments to Division 3 of Title 23 of the California Code of Regulations

Required Notice of Proposed Emergency Action
Government Code section 11346.1, subdivision (a)(2) requires that, at least five working days prior to submission of a proposed emergency action to the Office of Administrative Law (OAL), the adopting agency provide a notice of the proposed emergency action to every person who has filed a request for notice of regulatory action with the agency. After submission of the proposed emergency to OAL, the OAL shall allow interested persons five calendar days to submit comments on the proposed emergency regulations as set forth in Government Code section 11349.6.

The State Water Resources Control Board (State Water Board) sent out to interested parties via electronic mail on September 12, 2017 the proposed changes to Title 23, Division 3, Chapter 9, Article 1, Sections 2200, 2200.5, 2200.6, and 2200.7 of the California Code of Regulations on September 19, 2017. This notification satisfies the notification requirements of Government Code section 11346.1(a)(2).

Proposed Emergency Action
Water Code section 13260(f) requires the State Water Board to adopt emergency regulations revising and establishing fees to be deposited in the Waste Discharge Permit Fund in the State Treasury. Water Code section 13260(f)(1) requires the State Water Board to adjust the fee schedule each fiscal year to conform to the revenue levels set forth in the annual Budget Act. At its September 19, 2017 meeting, the State Water Board will consider adopting emergency regulations that adjust waste discharge permit fees to conform to the revenue levels set forth in the Budget Act for Fiscal Year (FY) 2017-18.

Proposed Text of Emergency Regulations
The proposed text of the emergency regulations is attached. The State Water Board may revise the proposed emergency regulations based on comments received prior to and during its September 19 board meeting. The State Water Board is not required to provide any additional public notice prior to adopting revisions to the proposed emergency regulations.

Finding of Emergency (Gov. Code, § 11346.1, subd. (b))
The State Water Board has a mandatory legal duty to adopt emergency regulations revising the fees as necessary each fiscal year pursuant to Water Code section 13260(f). Water Code section 13260(f)(2) states that "[t]he adoption of these regulations is an emergency and shall be considered by the Office of Administrative Law as necessary for the immediate preservation of

the public peace, health, safety, and general welfare. Notwithstanding Chapter 3.5 (commencing with section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, any emergency regulations . . . shall remain in effect until revised by the State Water Board."

Authority and Reference (Gov. Code, § 11346.5, subd. (a)(2))
Water Code section 13260(f).

Informative Digest (Gov. Code, § 11346.5, subd. (a)(3))
Under Water Code section 13260(d)(1)(A), any person discharging waste, or proposing to discharge waste, that could affect the quality of the waters of the state must pay an annual fee in accordance with the fee schedule adopted by the State Water Board.

The proposed emergency regulations will maintain fees for waste discharge permit holders at the FY 2016-17 amounts with the following exceptions:

Land Disposal – section 2200(a) – As a result of a reduction in staff costs and program expenditures, a one-time fee reduction of 12.6 percent will be applied to all Land Disposal fee categories.

Oil and Gas Surcharge – section 2200(a) – Modify the fee schedule to move from a surcharge based on the actual number of barrels of waste water discharged to a structure based on threat to water quality (TTWQ) and complexity (CPLX) rating with a factor for barrels of waste water produced.

Water Quality Certification (WQC) – section 2200(a)(3) – Based on budgeted expenditures and forecasted revenue, a net fee increase of approximately 20 percent will be applied along with the following changes:

- 2200(a)(3)(A) – Fill and Excavation Discharges
  - As a result of stakeholder and staff concern over the disparity between the existing linear and acre fee calculations, eliminate the linear fee calculation
  - Increase the minimum application fee from $720 to $1,500
  - Combine the Annual Active Discharge Fee and Annual Post-Discharge Monitoring Fee into one annual fee category and increasing the annual fee from $720 to $1,500
  - Increase the per acre fee multiplier by 30 percent from $10,206 to $13,268
  - Increase the project maximum by 8 percent from $120,000 to $130,000
- 2200(a)(3)(B) – Dredging Discharges
  - Increase the minimum application fee from $720 to $1,500
  - Increase the per cubic yard multiplier by 30 percent from $0.252 to $0.328
  - Increase the project maximum by 8 percent from $120,000 to $130,000
  - Combine the Annual Active Discharge Fee and Annual Post-Discharge Monitoring Fee into one annual fee category and increase the minimum annual fee from $720 to $1,500, equal to the application fee.
- 2200(a)(3)(C) – Sand Mining Dredging Discharges
  - Increase the minimum application fee from $720 to $1,500
  - Combine the Annual Active Discharge Fee and Annual Post-Discharge Monitoring Fee into one annual fee category and leaving the annual fee at $720

- 2200(a)(3)(D) – Ecological Restoration and Enhancement Projects
  - Increase the minimum application fee from $200 to $400.
  - Combine the Annual Active Discharge Fee and Annual Post-Discharge Monitoring Fee into one annual fee category and leaving the annual fee at $200
- 2200(a)(3)(E) – Low Impact Discharges
  - Increase the minimum application fee from $720 to $1,500
  - Combine the Annual Active Discharge Fee and Annual Post-Discharge Monitoring Fee into one annual fee category and leaving the annual fee at $200
- 2200(a)(3)(F) – Emergency Projects Authorized by a Water Board General Order
  - Increase the minimum application fee from $720 to $1,500.
  - Implement an annual fee component of $200

Storm Water – section 2200(b) – To bring revenue and expenditures into alignment with each other, lower fees across all segments of the Storm Water program as follows: Municipal – lower by 11.0 percent, Industrial – lower by 21.8 percent, and Construction – lower by an average of 15.5 percent. Raise the cap on construction fees from 100 to 150 acres to reflect the staff time spent on large project. Reduce the No Exposure Certification (NEC) fees from $200 to $150 to reflect staff time spent on these certifications.

Confined Animal Facilities (CAF) – section 2200(c) – Implement a new fee methodology for poultry facilities that will move from a per-animal count to an animal equivalent unit (AEU). Increase the maximum animal count for feedlot tiers that do not pay an annual fee. Both changes are being made to correspond to the new Poultry and Bovine general orders adopted by the Central Valley Regional Water Quality Control Board.

Agricultural (Ag) Lands – section 2200.6 – Increase fees by approximately 16 percent, from $0.75 to $0.87 per acre, to cover the $1.0 million increase resulting from a budget change proposal in the Governor's Budget.

Cannabis Cultivation – section 2200.7 – Implement a new fee schedule for dischargers that will be enrolling in a new statewide general order for cannabis cultivation that is scheduled to be adopted in FY 2017-18.

There is no comparable federal statute or regulation.

Other Matters Prescribed by Statute (Gov. Code, § 11346.5, subd. (a)(4))
No other matters are prescribed by statute or regulation applicable to the State Water Board.

Local Mandate (Gov. Code, § 11346.5, subd. (a)(5))
The proposed emergency regulations do not impose a mandate on local agencies or school districts because they do not mandate a new program or a higher level of service of an existing program. The fee schedule applies equally to public and private entities and is not unique to local government. No state reimbursement is required by part 7 (commencing with section 17500) of division 4 of the Government Code.

Estimate of Cost or Savings (Gov. Code, § 11346.5, subd. (a)(6))
Under the proposed emergency regulations for this fiscal year, most local and state agencies will pay increased fees over last year. The amended fee schedule will result in a total estimated decrease to state agencies of about $123,404. There is no cost to any local agency or school district for which reimbursement is required or other nondiscretionary cost of savings imposed on local agencies. There is no cost or savings in federal funding to the state.

September 12, 2017
Date

Jeanine Townsend
Clerk to the Board

2016-17-18 Fee Schedules

CALIFORNIA CODE OF REGULATIONS
TITLE 23. Division 3. Chapter 9. Waste Discharge Reports and Requirements
Article 1. Fees

Section 2200. Annual Fee Schedules.

Each person for whom waste discharge requirements have been prescribed pursuant to Section 13263 of the Water Code shall submit, to the state board, an annual fee in accordance with the following schedules. The fee shall be submitted for each waste discharge requirement order issued to that person.[1]

(a) The annual fees for persons issued waste discharge requirements (WDRs), except as provided in subdivisions (a)(3), (a)(4), (b), and (c), shall be based on the discharge's threat to water quality (TTWQ) and complexity (CPLX) rating according to the following fee schedule, plus applicable surcharge(s). For Fiscal Year 2017-18, Land Disposal dischargers will receive a 12.6 percent fee reduction of the calculated fee, prior to the addition of any applicable surcharge.

ANNUAL FEE SCHEDULE FOR WASTE DISCHARGE REQUIREMENTS				
Threat to Water Quality (TTWQ)	Complexity (CPLX)	Type of Discharge		
		Discharge to Land or Surface Waters[2]	Land Disposal[3]	
			Not Paying a Tipping Fee[4]	Paying a Tipping Fee[5]
1	A	$109,095	$70,781[6]	$59,252[6]
1	B	$68,901	$57,168	$47,856
1	C	$37,178	$36,751	$30,766
2	A	$24,833	$30,625	$25,638
2	B	$14,929	$24,502	$20,510
2	C	$11,195	$18,376	$15,383
3	A	$8,823	$12,250	$10,256
3	B	$4,699	$9,188	$7,690
3	C	$2,088	$4,082	$3,419

[1] Federal facilities will generally not be invoiced for the portion of the annual fee that is attributable to the state board's ambient water monitoring programs. See *Massachusetts v. United States* (1978) 435 U.S. 444.

[2] For this table, discharges to land or surface waters are those discharges of waste to land or surface waters not covered by NPDES permits that are regulated pursuant to Water Code Section 13263 that do not implement the requirements of Title 27 of the California Code of Regulations (CCR). Examples include, but are not limited to, wastewater treatment plants, erosion control projects, and septic tank systems. It does not include discharge of dredge or fill material, discharges from agricultural lands, including irrigated lands, or discharge from animal feeding operations.
Dischargers covered by a WDR for municipal and domestic discharges with permitted flows of less than 50,000 gallons per day in categories 2-B, 2-C, 3-B and 3-C will receive a 50 percent fee discount. The design flow shall be used where no permitted flow is present. Municipal and domestic discharges receiving the discount are defined as discharges from facilities that treat domestic wastewater or a mixture of wastewater that is predominately domestic wastewater. Domestic wastewater consists of wastes from bathroom toilets, showers, and sinks from residential kitchens and residential clothes washing. It does not include discharges from food preparation and dish washing in restaurants or from commercial laundromats. Dischargers covered by a Landscape Irrigation General Permit issued by the state board will be assessed a fee associated with TTWQ/CPLX rating of 3B.

[3] For this table, land disposal discharges are those discharges of waste to land that are regulated pursuant to Water Code Section 13263 that implement the requirements of CCR Title 27, Division 2, except Chapter 7, Subchapter 2, §22560-22565 (confined animal facilities). Examples include, but are not limited to, discharges associated with active and closed landfills, waste piles, surface impoundments, and mines.

[4] For this table, Not Paying a Tipping Fee are those land disposal dischargers not subject to Public Resources Code (PRC) § 48000 et seq.

[5] For this table, Paying a Tipping Fee are those land disposal dischargers subject to PRC § 48000 et seq.

[6] A surcharge of $12,000 will be added for Class I landfills. Class I landfills are those that, during the time they are, or were, in operation, are so classified by the regional board under 23 CCR Chapter 15, have WDRs that allow (or, for closed units, allowed) them to receive hazardous waste, and have a permit issued by the Department of Toxic Substances Control under 22 CCR Chapter 10, § 66270.1 et seq.

~~2016~~-17-18 Fee Schedules

Oil and gas produced water storage and disposal facilities regulated by waste discharge requirements are subject to a surcharge according to the following ~~formula~~ schedule:

~~Surcharge equals $0.00083 multiplied by the number of barrels of waste water discharged in the prior 12 months. The minimum annual surcharge amount is $500.~~

TTWQ & CPLX Rating	Surcharge per Barrels of Waste Water Discharged in the Prior 12 Months		
	No Barrels	1 to 999,999 Barrels	1,000,000 or more Barrels
1A	$600	$1,000	$50,000
1B	$600	$1,000	$50,000
1C	$600	$1,000	$50,000
2A	$600	$1,000	$40,000
2B	$600	$1,000	$30,000
2C	$600	$1,000	$10,000
3A	$600	$1,000	$4,000
3B	$600	$1,000	$2,000
3C	$600	$600	$600

(1) Threat to water quality (TTWQ)[7] and complexity (CPLX) of the discharge is assigned by the regional board in accordance with the following definitions:

THREAT TO WATER QUALITY

Category "1" – Those discharges of waste that could cause the long-term loss of a designated beneficial use of the receiving water. Examples of long-term loss of a beneficial use include the loss of drinking water supply, the closure of an area used for water contact recreation, or the posting of an area used for spawning or growth of aquatic resources, including shellfish and migratory fish.

Category "2" – Those discharges of waste that could impair the designated beneficial uses of the receiving water, cause short-term violations of water quality objectives, cause secondary drinking water standards to be violated, or cause a nuisance.

Category "3" – Those discharges of waste that could degrade water quality without violating water quality objectives, or could cause a minor impairment of designated beneficial uses as compared with Category 1 and Category 2.

COMPLEXITY

Category "A" – Any discharge of toxic wastes; any small volume discharge containing toxic waste; any facility having numerous discharge points and groundwater monitoring; or any Class 1 waste management unit.

[7] In assigning a category for TTWQ, a regional board should consider duration, frequency, seasonality, and other factors that might limit the impact of the discharge.

Category "B" – Any discharger not included in Category A that has physical, chemical, or biological treatment systems (except for septic systems with subsurface disposal), or any Class 2 or Class 3 waste management units.

Category "C" – Any discharger for which waste discharge requirements have been prescribed pursuant to Section 13263 of the Water Code not included in Category A or Category B as described above. Included are dischargers having no waste treatment systems or that must comply with best management practices, dischargers having passive treatment and disposal systems, or dischargers having waste storage systems with land disposal.

(2) For dischargers covered under Statewide General WDRs for Sanitary Sewer Systems, the TTWQ and CPLX designations are assigned based on the population served by the sanitary sewer system. The table below describes the correlation between population served and TTWQ and CPLX designations to determine the appropriate annual fee:

Population Served[8]	Threat and Complexity Designation
Less than 50,000	3C
50,000 or more	2C

(3) The fees for discharges of dredge and fill material shall be as follows.[9]

[8] Assumes 2.5 persons per equivalent dwelling unit (EDU).

[9] ~~i. For "excavation" the area of the discharge is the area of excavation; if the excavated material is then discharged to waters, an additional "fill" fee will be assessed.~~

~~ii. When a single project includes multiple discharges within a single dredge and fill fee category, the fee for that category shall be assessed based on the total area, volume, or length of discharge (as applicable) of the multiple discharges. When a single project includes discharges that are assessed under multiple standard fee categories, the total application fee shall be the sum of the application fees assessed under each applicable fee category; however only a single annual active discharge fee or annual post-discharge monitoring fee, if required, shall be assessed for the project. The single annual active discharge fee and the single annual post-discharge monitoring fee for the project shall be based on the higher of the applicable fee categories. Single projects qualifying for a special/flat fee or amended order fee shall only be assessed the applicable special/flat fee or amended order fee.~~

~~iii. Fees shall be based on the largest discharge size specified in the original or revised report of waste discharge or Clean Water Act (CWA) Section 401 water quality certification application, or as reduced by the applicant without any state board or regional board intervention.~~

~~iv. If water quality certification is issued in conjunction with dredge or fill WDRs or is issued for a discharge regulated under such preexisting WDRs, the current annual WDR fee as derived from this dredge and fill fee schedule shall be paid in advance during the application for water quality certification, and shall comprise the fee for water quality certification.~~

~~v. Discharges requiring water quality certification and regulated under a federal permit or license other than a US Army Corps of Engineers CWA Section 404 permit or a Federal Energy Regulatory Commission License shall be assessed a fee determined from CCR 23, Section 2200(a).~~ Fees shall be based on impact amounts to be authorized by the order. Impacts include both the excavation and fill area and the dredging area. If water quality certification is issued in conjunction with dredge or fill WDRs or issued for a discharge regulated under preexisting WDRs for the same project, the project will be assessed a single fee derived from this dredge and fill fee schedule. Discharges requiring certification and regulated under a federal permit or license other than a US Army Corps of Engineers Clean Water Act Section 404 permit or a Federal Energy Regulatory Commission License shall be assessed a fee determined from Section 2200(a).

2016-17-18 Fee Schedules

STANDARD FEE[10]			
Discharge Category	**Application Fee[11]**	**~~Annual Active Discharge~~ Project Fee[12]**	**Annual ~~Post-Discharge Monitoring~~ Fee[13]**
(A) Fill and Excavation[14] Discharges ~~Discharges will be assessed as the higher fee of "discharge length in feet" and "discharge area in acres." The size of the discharge area shall be rounded to two decimal places (0.01 acre = 436 square feet).~~ Discharge area expressed in acres rounded to two decimal places (0.01 acre)	~~Discharge length in feet x $8.10 -or- Discharge area in acres x $10,206 Whichever is higher, up to a maximum of $120,000. The minimum application fee is $720~~$1,500	~~$720~~Impact area in acres x $13,268, minus application fee, up to a maximum of $130,000 (if balance equals less than the application fee, no fee is required).	$360~~1~~,500
(B) Dredging[15] Discharges (except Sand Mining-see (C) below) Dredge volume expressed in cubic yards.	$720~~1~~,500	~~Annual dredge volume in cubic yards x $0.252, up to a project maximum of $120,000. The minimum annual active discharge fee is $720.~~ N/A	~~$360~~Annual dredge volume in cubic yards x $0.328, up to a project maximum of $130,000. The minimum annual fee is $1,500.
SPECIAL/FLAT FEE[16]			
Discharge Category	**Application Fee[10]**	**Annual ~~Active Discharge~~ Fee[11]**	**~~Annual Post-Discharge Monitoring~~ Fee[12]**
(C) Sand Mining Dredging Discharges Aggregate extraction in marine waters where source material is free of pollutants and the dredging operation will not violate any basin plan provisions.	$720~~1~~,500	$720	~~$360~~

[10] Fees shall be based on the sum of project impacts. Projects that include both category (A) and category (B) discharges shall be subject to the category (A) application and project fees. A single annual fee shall be assessed based on the higher of the applicable annual fee categories.

[11] Dischargers shall pay a one-time application fee for each project at the time that the application or report of waste discharge is submitted. ~~Notwithstanding section 2200.2, if discharges commence in a fiscal year other than the fiscal year in which the application or report of waste discharge is submitted, the application fee is in addition to the first annual active discharge fee for the project. If discharges commence in the same fiscal year as the application or report of waste discharge is submitted, the discharger shall pay only the greater of the application fee or the first annual active discharge fee. The application fee for category (A) fill and excavation discharges will be based on the discharger's estimate of project length and area. If, upon completion, the actual length or area is larger than the estimate, the discharger may receive an additional application fee invoice that is based on the actual project length and area, minus the application fee that was previously paid.~~

[12] ~~Dischargers shall pay an annual active discharge fee each fiscal year or portion of a fiscal year during which discharges occur until the regional board or state board issues a Notice of Completion of Discharges Letter to the discharger. The annual active discharge fee for category (B) dredging discharges will be invoiced after the annual dredge volume has been determined.~~

[13] ~~Dischargers shall pay an annual post-discharge monitoring fee each fiscal year or portion of a fiscal year commencing with the first fiscal year following the fiscal year in which the regional board or state board issued a Notice of Completion of Discharges Letter to the discharger, but continued water quality monitoring or compensatory mitigation monitoring is required. Dischargers shall pay the annual post-discharge monitoring fee each fiscal year until the regional board or state board issues a Notice of Project Complete Letter to the discharger.~~ Consistent with Section 2200.2, the sum of the Application Fee and the Project Fee shall serve as the first annual fee. If the submittal of this first annual fee does not coincide with the current fiscal year billing cycle, then the next, and only the next, fiscal year billing shall be adjusted to account for the payment of the Application Fee and the Project Fee. The annual fee for category (B) dredging discharges will be calculated using the annual dredge volume authorized in the applicable Order.

[14] "Excavation" refers to removing sediment or soil in shallow waters or under no-flow conditions, ~~where impacts to beneficial uses are best described by the area of the discharge. It~~ typically ~~is done~~ for purposes other than navigation. Examples include, but are not limited to, trenching for utility lines~~,~~; other earthwork preliminary to discharge~~,~~; removing sediment to increase channel capacity~~,~~; and other flood control and drainage maintenance activities (e.g., debris removal, vegetation management and removal, detention basin maintenance and erosion control of slopes along open channels and other drainage facilities).

[15] "Dredging" ~~generally~~ refers to removing sediment or aquatic vegetation in deeper water, typically for navigation purposes. ~~to increase depth. The impacts to beneficial uses are best described by the volume of the discharge and typically occur to facilitate navigation.~~ For fee purposes, ~~it~~ this fee category also includes aggregate extraction within stream channels, where the substrate is composed of coarse sediment (e.g., gravel) and is reshaped by normal winter flows (e.g., point bars)~~,~~ ~~where natural flood disturbance precludes establishment of significant riparian vegetation, and where extraction timing, location and volume will not cause changes in channel structure (except as required by regulatory agencies for habitat improvement) or impair the ability of the channel to support beneficial uses.~~

[16] To qualify for a special/flat fee category, the whole of a project must meet the fee category description (i.e., all project discharges are limited to those defined by the fee category).

(D) Ecological Restoration and Enhancement Projects Projects undertaken for the sole purpose of restoring or enhancing the beneficial uses of water. This schedule does not apply to projects required under a regulatory mandate or to projects that are not primarily intended for ecological restoration or enhancement, e.g., land development. This category does not include mitigation banking or in-lieu fee programs.	~~$200~~400	$200	~~$100~~
(E) Low Impact Discharges Projects may be classified as low impact discharges if they meet all of the following criteria: 1. The discharge size is less than all of the following: (a) for fill, 0.1 acre, and 200 linear feet, and (b) for dredging, 25 cubic yards. 2. The discharger demonstrates that: (a) all practicable measures will be taken to avoid impacts; (b) where unavoidable temporary impacts take place, waters and vegetation will be restored to pre-project conditions as quickly as practicable; and (c) where unavoidable permanent impacts take place, there will be no net loss of wetland, riparian area, or headwater functions, including onsite habitat, habitat connectivity, floodwater retention, and pollutant removal. 3. The discharge will not do any of the following: (a) directly or indirectly destabilize a bed of a receiving water; (b) contribute to significant cumulative effects; (c) cause pollution, contamination, or nuisance; (d) adversely affect candidate, threatened, or endangered species; (e) degrade water quality or beneficial uses; (f) be toxic; or (g) include "hazardous" or "designated" material.	~~$720~~1,500	$200	~~$100~~
~~**(F) General Orders for CEQA Exempt Projects**~~ ~~Projects which are CEQA exempt and which are required to submit notification of a proposed discharge to the state and/or regional board pursuant to: (1) a general order authorizing impacts for the qualifying project CEQA exemption (e.g. Small Habitat Restoration General Permit); or (2) a general water quality certification permitting discharges authorized by a U.S. Army Corps of Engineers general permit (e.g., nationwide permit). Applies ONLY if a general order or general water quality certification was previously granted.~~	~~$200~~	~~N/A~~	~~N/A~~
(G) Emergency Projects Authorized by a Water Board General Order	~~$720~~1,500	$200	~~$100~~
(H) Amended Orders Amendments of WDRs or water quality certifications previously issued. (a) Minor project changes, not requiring technical analysis and involving only minimal processing time. (b) Changes to projects eligible for flat fees (fee categories C and D) where technical analysis is needed to assure continuing eligibility for flat fee and that beneficial uses are still protected. (c) Project changes not involving an increased discharge amount, but requiring some technical analysis to assure that beneficial sues are still protected and that original conditions are still valid, or need to be modified. (d) Project changes involving an increased discharge amount and requiring some technical analysis to assure that beneficial uses are still protected and that original conditions are still valid, or need to be modified. (e) Major project changes requiring an essentially new analysis and re-issuance of WDRs or water quality certification.	(a) No fee required (b) $300 flat fee (c) $200 flat fee (d) Additional standard fee assessed per increased amount of discharge(s) (e) New standard fee assessed		

(b) The annual fees for persons issued NPDES permits shall be based on the following schedules, plus any applicable surcharge(s).

(1)(A) Each public entity that owns and/or operates a storm water conveyance system, or part of such a system, that is subject to a NPDES permit for storm water discharges from a municipal separate storm sewer system (MS4) shall pay an annual fee according to the following schedule. The fee shall be based on the population of the public entity according to the most recently published United States Census. For public entities other than cities or counties (Non-Traditional Small MS4s[17]), shall pay an annual fee according to the following schedule, based on the average daily population[18] using the entities' facilities, unless otherwise provided in the schedule. Flood control districts or other special districts named as co-permittees to MS4 permits and school districts, serving students between kindergarten and fourteenth grade, shall not pay an annual fee if the city or county within whose jurisdiction the district lies, pays an annual fee. ~~For Fiscal Year 2016-17, dischargers paying this fee will receive a 6.4 percent reduction of the total fee.~~

ANNUAL FEE SCHEDULE FOR AREAWIDE MUNICIPAL STORM WATER SEWER SYSTEM PERMITS AND CO-PERMITEES	
Population equal to or greater than 250,000	~~$63,956~~56,921
Population between 200,000 and 249,999	~~$55,961~~49,805
Population between 150,000 and 199,999	~~$48,285~~42,974
Population between 100,000 and 149,999	~~$39,974~~,35,577
Population between 75,000 and 99,999	~~$31,979~~28,461
Population between 50,000 and 74,999	~~$23,982~~21,344
Population between 25,000 and 49,999	~~$15,989~~14,230
Population between 10,000 and 24,999	~~$9,594~~8,539
Population between 1,000 and 9,999	~~$6,395~~5,692
Less than 1,000 population	~~$3,199~~2,847
Statewide Permit Holders	~~$255,822~~227,682
High Speed Rail Authority	~~$150,000~~133,500

(B) Dischargers applying for the Small MS4 Waiver of a General Permit to Discharge Storm Water Associated with Small Municipal Activity issued by the state board shall pay an application fee of $200.

(2) Any entity or entities submitting a watershed improvement plan to the regional board for review pursuant to Section 16102 of the Water Code shall reimburse the regional board for its costs[19] to review and oversee the implementation of the plan, which shall be calculated using a rate of $150.00 per hour.

(3) Facilities that discharge storm water associated with industrial activities that are regulated by a state board or regional board general NPDES storm water permit shall pay an annual fee of $1,~~791~~400. An amount equal to the fee prescribed shall be submitted with the discharger's Notice of Intent (NOI) to be regulated under a general NPDES permit and will serve as the first annual fee. For the purposes of this section, an NOI is considered to be a report of waste discharge. ~~For Fiscal Year 2016-17, dischargers paying this fee will receive a 6.4 percent reduction of the total fee.~~

[17] Non-Traditional Small MS4s are facilities that have systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. (40 C.F.R. § 122.26(b)(16)(iii)).

[18] Total daily population must include resident and commuter populations. For community services districts, total daily population must include resident population and non-residents regularly employed in the areas served by the district.

[19] These costs include labor, state board and regional board administrative costs, and overhead costs.

(4)(A) Storm water discharges associated with construction activities that are regulated by a general NPDES storm water permit other than those covered under (b)(5), including those issued by a regional board, shall pay an annual fee of $512400 plus $5142 per acre (rounded to the nearest whole acre and dollar amount), to a maximum fee of $5,6126,700, based on the total acreage to be disturbed during the life of the project as listed on the NOI. An amount equal to the fee prescribed shall be submitted with the discharger's NOI to be regulated under a general NPDES permit and will serve as the first annual fee. For the purposes of this section, an NOI is considered to be a report of waste discharge. ~~For Fiscal Year 2016-17, dischargers paying this fee will receive a 6.4 percent reduction of the total fee.~~

(B) Dischargers applying for the Small Construction Rainfall Erosivity Waiver of a General Permit to Discharge Storm Water Associated with Construction Activity issued by the state board shall pay an application fee of $200.

(5) Discharges associated with mosquito and vector control activities[20] that are regulated by an individual or general NPDES permit adopted specifically for these purposes, including those issued by a regional board, shall pay a fee of $241. Dischargers filing an application for a mosquito and vector control permit shall pay a fee of $241. The fee shall be paid each time an application for initial certification or renewal of certification is submitted. Mosquito and vector control fees are not subject to ambient water monitoring surcharges.

(6) Planned and emergency discharges from community water systems that are regulated by a general NPDES permit adopted specifically for this purpose shall pay an application fee and subsequent annual fees (if applicable) based on the number of service connections for the public water system in accordance with the following schedule. The application fee shall be submitted with the discharger's NOI to be regulated by the general NPDES permit. For purposes of this section, an NOI is considered to be a report of waste discharge.

Dischargers with a Single System		
Service Connections	**Application Fee**	**Annual Fee**
15 – 999	$100	No Annual Fee
1,000 – 9,999	$500	$500
10,000+	$2,062	$2,062
Transmission System or Water Wholesaler	$2,062	$2,062

Dischargers with Multiple Systems		
Total Number of Service Connections	**Application Fee**	**Annual Fee[21]**
15 – 999	$100	No Annual Fee
1,000 – 9,999	$500	$500 per Primary System fee plus $100 per Secondary System
10,000+	$2,062	$2,062 per Primary System fee plus $100 per Secondary System
Transmission System or Water Wholesaler System	$2,062	$2,062 per Primary System fee plus $100 per Secondary System

[20] A mosquito and vector control activity involves discharge of pesticides into a designated area for the maintenance and control of mosquito larva for the protection of public health from the outbreak of lethal diseases. A mosquito and vector control agency discharges pesticides into surface waters for the control of mosquito larva.

[21] All Transmission Systems and Water Wholesaler Systems are Primary Systems. If the Discharger does not have a Transmission System or a Water Wholesaler System, the Discharger's individual water system with the highest number of service connections will be designated as the Primary System. All systems that are not Primary Systems are designated as Secondary Systems.

(7) Discharges from public wastewater treatment facilities that are regulated by a general NPDES permit adopted specifically for this purpose and ~~A~~all other NPDES permitted discharges, except as provided in (b)(8), (b)(9), and (c), shall pay a fee according to the following formula:

Fee equals $2,062 plus 3,646 multiplied by the permitted flow, in mgd, with a maximum fee of $515,537 plus any applicable surcharge(s).

If there is no permitted effluent flow specified, the fee shall be based on the design flow of the facility.

NPDES permitted industrial discharges[22] with a threat/complexity[23] rating of 1A, 1B, or 1C are subject to a surcharge as follows:

Threat/Complexity Rating 1A - $15,000
Threat/Complexity Rating 1B - $10,000
Threat/Complexity Rating 1C - $5,000

Public wastewater treatment facilities with approved pretreatment programs are subject to a surcharge of $10,000. Agencies with multiple facilities under one approved pretreatment program shall pay a $10,000 surcharge per program.

(8)(A) Flow for wet weather municipal facilities[24] will be based on the previous five years' actual monthly average flow[25], as of the date the permit is issued.

(B) Notwithstanding (8)(A), the minimum annual fee for wet weather municipal facilities shall be $20,000.

(9) All other general NPDES permits and de minimis discharges[26] that are regulated by an individual or general NPDES permit, including those issued by a regional board, shall pay a fee as follows:

Category 1 – Discharges that require treatment systems to meet priority toxic pollutant limits and that could impair beneficial uses if limits are violated: $11,877

---

[22] NPDES permitted industrial discharger(s) means those industries identified in the Standard Industrial Classification Manual, Bureau of Budget, 1967, as amended and supplemented, under the category "Division D-Manufacturing" and such other classes of significant waste producers as, by regulation, the U.S. EPA Administrator deems appropriate. (33 USC Sec. 1362).

[23] Threat/complexity categories are listed under (a)(1) of this document.

[24] Wet weather municipal facilities are intermittently operated facilities that are designated specifically to handle flows during wet weather conditions.

[25] The actual monthly average flow is defined as the average of the flows during each of the months that the discharge occurred during the previous five-year period.

[26] De minimis discharge activities include, but are not limited to, the following: aquaculture activities (as defined in Chapter 40, Section 122.25(b) of the Code of Federal Regulations) defined as managed water areas that use discharges of pollutants into that designated area for maintenance or reproduction of harvestable freshwater, estuarine, or marine plants or animals including fish hatcheries; geothermal facilities that utilize, extract, or produce energy from geothermal fluids for heating, generating power, or other beneficial uses, and discharge geothermal fluids to surface waters; aquatic pesticide applications; evaporative condensate; swimming and landscape pool drainage; discharges from fire hydrant testing or flushing; discharges resulting from construction dewatering; discharges associated with supply well installation, development, test pumping, and purging; discharges resulting from the maintenance of uncontaminated water supply wells, pipelines, tanks, etc.; discharges resulting from hydrostatic testing of water supply vessels, pipelines, tanks, etc.; discharges resulting from the disinfection of water supply pipelines, tanks, reservoirs, etc.; discharges from water supply systems resulting from system failures, pressure releases, etc.; discharges of non-contact cooling water, not including steam/electric power plants; discharges resulting from diverted stream flows; water treatment plant discharges; and other similar types of wastes that have low pollutant concentrations and are not likely to cause or have a reasonable potential to cause or contribute to an adverse impact on the beneficial uses of receiving waters yet technically must be regulated under an NPDES permit.

Category 2 – Discharges that require treatment systems to meet non-priority pollutant limits, but are not expected to impair beneficial uses if limits are violated. Examples of non-priority pollutants include, but are not limited to, nutrients, inorganic compounds, pH, and temperature: $7,177

Category 3 – Discharges that require minimal or no treatment systems to meet limits and pose no significant threat to water quality: $2,062

(c) The annual fees for waste discharge requirements and waivers of waste discharge requirements for discharges from confined animal facilities shall be based on the following schedules.

FEEDLOTS (not at a dairy)	
Type of Facility	
Number of Animals	**Fee**
Cattle or Cow/Calf Pairs	
100,000 or more	$9,937
10,000 to 99,999	$4,968
5,000 to 9,999	$2,649
1,000 to 4,999	$1,324
~~5~~100 to 999	$663
0 to 499	$0
Calves	
10,000 or more	~~$9,937~~4,968
5,000 to 9,999	~~$4,968~~2,649
1,000 to 4,999	~~$2,649~~1,324
300 to 999	~~$1,324~~663
~~50 to 299~~	~~$663~~
0 to 4299	$0
Heifers	
10,000 or more	$9,937
5,000 to 9,999	$4,968
1,000 to 4,999	$2,649
300 to 999	$1,324
~~5~~100 to 299	$663
0 to 4299	$0
Finishing Yards/Auction Yards	
1,000 or more	$2,649
300 to 999	$1,324
~~5~~100 to 299	$663
0 to 4299	$0

DAIRIES	
Type of Facility	
Number of Animals	**Fee**
Mature Dairy Cattle	
3,000 or more	$13,248
1,500 to 2,999	$8,279
700 to 1,499	$3,974
300 to 699	$1,987
150 to 299	$994
50 to 149	$497
0 to 49	$0
Goat Dairies	
1,000 or more	$1,324
550 to 999	$663
0 to 549	$0
OTHER	
HOGS	
Swine (> 55 pounds)	
5,000 or more	$4,968
2,500 to 4,999	$2,649
750 to 2,499	$1,324
150 to 749	$663
0 to 149	$0
Swine (< 55 pounds)	
20,000 or more	$4,968
10,000 to 19,999	$2,649
3,000 to 9,999	$1,324
300 to 2,999	$663
0 to 299	$0
Horses	
500 or more	$2,649
150 to 499	$1,324
75 to 149	$663
0 or 74	$0
Sheep or Lambs	
10,000 or more	$2,649
3,000 to 9,999	$1,324
550 to 2,999	$663
0 to 549	$0

POULTRY		
Number of Animals	On-Site Discharge Fee	Off-Site Discharge Fee
Layers or Broilers (liquid manure system)		
120,000 or more	$6,623	$2,319
60,000 to 119,999	$3,313	$1,656
30,000 to 59,999	$2,485	$1,159
9,000 to 29,999	$1,324	$663
400 to 8,999	$663	$332
0 to 399	$0	$0
Non-layers (other than liquid manure system)		
500,000 or more	$6,623	$2,319
250,000 to 499,999	$3,313	$1,656
125,000 to 249,999	$2,485	$1,159
37,500 to 124,999	$1,324	$663
1,500 to 37,499	$663	$332
0 to 1,499	$0	$0
Layers (other than liquid manure system)		
350,000 or more	$6,623	$2,319
165,000 to 349,999	$3,313	$1,656
82,000 to 164,999	$2,485	$1,159
25,000 to 81,999	$1,324	$663
1,000 to 24,999	$663	$332
0 to 999	$0	$0
Ducks (other than liquid manure system)		
120,000 or more	$6,623	$2,319
60,000 to 119,999	$3,313	$1,656
30,000 to 59,999	$2,485	$1,159
10,000 to 29,999	$1,324	$663
500 to 9,999	$663	$332
0 to 499	$0	$0
Ducks (liquid manure system)		
20,000 or more	$3,313	
5,000 to 19,999	$2,485	
1,500 to 4,999	$1,324	
60 to 1,499	$663	
0 to 59	$0	
Turkeys		
200,000 or more	$6,623	$2,319
100,000 to 199,999	$3,313	$1,656
55,000 to 99,999	$2,485	$1,159
16,500 to 54,999	$1,324	$663
750 to 16,499	$663	$332
0 to 749	$0	$0

POULTRY		
Number of Animal Equivalent Units (AEU)	Discharges with Low Threat to Water Quality[27]	All Other Discharges
2000+	$2,319	$6,623
700 - 1,999	$1,656	$3,313
300 - 699	$1,159	$2,485
10 - 299	$663	$1,324
2 - 9	$332	$663
0 - 1	$0	$0

Animal Count to Animal Equivalent Unit (AEU) Conversion Matrix		
Animal Type	AEU Multiplier	Number of Animals per AEU
Chicken - layer	0.004	250
Chicken - broiler	0.005	200
Duck	0.008	125
Turkey	0.015	67

(1) Facilities that are certified under a Quality Assurance Program approved by the state board or under a County regulatory program approved by the appropriate regional board, will receive a 50 percent fee reduction. Any facility that is issued a notice of violation by a regional board for an off-property discharge shall not be eligible to receive this fee reduction for a minimum of one billing cycle, and for all subsequent billing cycles until recertification and all corrective actions are complete as determined by the regional board.

(2) Facilities that pose no potential to discharge, as determined by a regional board, shall pay a fee of $200. The fee shall be paid each time an application for initial certification or renewal of certification is submitted.

(3) Facilities that are required to submit a report of waste discharge (ROWD) while the facility is under construction and remains so subsequent to the billing cycle will have the annual fee waived until the facility is in operation and animals are present at the facility.

(4) Facility closures that are required to maintain a permit until all requirements are met shall continue to be assessed a fee based at the same rate as when the facility was in operation.

(5) Facilities covered under a waste discharge requirement or waiver of waste discharge requirement that do not pay annual fees shall pay an application fee for initial coverage and renewals of coverage of $200. The fee shall be paid each time an application for coverage or report of waste discharge is submitted.

Note: Authority cited: Sections 185 and 1058 of the Water Code. Reference: Section 13260 of the Water Code.

[27] These fees apply to discharges from poultry operations that are identified as posing a "low threat to water quality" in the applicable waste discharge requirements or waiver of waste discharge requirements.

Section 2200.1.

The state board shall notify each discharger annually of the fee to be submitted, the basis upon which the fee was calculated, and the date upon which the fee is due.

Note: Authority cited: Sections 185 and 1058 of the Water Code. Reference: Section 13260 of the Water Code.

Section 2200.2.

Persons proposing a new discharge shall submit to the state board or regional board a report of waste discharge. Unless Section 2200 provides otherwise, or the discharger is specifically instructed otherwise by the state board, a fee equal in amount to the annual fee based on the fee schedules in Section 2200 shall be submitted with the discharger's report of waste discharge. Except as otherwise provided in Section 2200, this fee shall serve as the first annual fee. If the submittal of this first annual fee does not coincide with the current fiscal year billing cycle, then the next, and only the next, fiscal year billing shall be adjusted to account for the payment of a full annual fee that accompanied the discharger's report of waste discharge. Persons proposing a material change in an existing discharge are not required to submit a fee with the report of waste discharge.

Note: Authority cited: Sections 185 and 1058 of the Water Code. Reference: Section 13260 of the Water Code.

Section 2200.3.

Failure to pay the annual fee is a misdemeanor and will result in the state board or regional board seeking the collection of fees through the enforcement provisions provided pursuant to Water Code Section 13261.

Note: Authority cited: Sections 185 and 1058 of the Water Code. Reference: Section 13261 of the Water Code.

Section 2200.4.

Any refund made pursuant to Water Code Section 13260(e) or for any other reason, shall withhold sufficient funds to cover actual staff time spent in reviewing the report of waste discharge, which shall be calculated using a rate of $100.00 per hour.

Note: Authority cited: Sections 185 and 1058 of the Water Code. Reference: Section 13260 of the Water Code.

Section 2200.5. No Exposure Certification.

Dischargers filing an application for a No Exposure Certification (NEC) shall pay a fee of $~~200~~150 for each facility for which an application is submitted, as prescribed in a general industrial storm water permit. The fee shall be paid each time an application for initial certification or renewal of certification is submitted. NEC fees are not subject to any surcharges.

Note: Authority cited: Sections 185 and 1058 of the Water Code. Reference: Section 13260 and 13260.2 of the Water Code.

Section 2200.6. Annual Agricultural and Irrigated Lands Fee Schedule.

(a) Annual fees for waste discharge requirements and waivers of waste discharge requirements for discharges from agricultural lands[1], including irrigated lands, shall be as follows:

(1) Tier I: If a discharger is a member of a group that has been approved by the state board to manage fee collection and payment, then the fee shall be $100 per group plus $0.7587 per acre of land.

(2) Tier II: If a discharger is a member of a group that has been approved by the state board but that does not manage fee collection and payment, then the fee shall be $100 per farm plus $1.247 per acre of land.

(3) Tier III: If a discharger is not a member of a group that has been approved by the state board, the following fee schedule applies:

Acres	Fee Rate	Min Fee	Max Fee
0-10	$40469 + $13.505.66/Acre	$40469	$539625
11-100	$1,010172 + $6.707.77/Acre	$1,084257	$1,680949
101-500	$2,6923,123 + $3.4094/Acre	$3,035521	$4,3925,095
501 or More	$5,3846,245 + $2.703.13/Acre	$6,7377,815	No Max Fee

(b) Upon approval by the regional board to join a group subject to waste discharge requirements or waivers of waste discharge requirements for discharges from agricultural lands, including irrigated lands, the discharger shall submit to the state board an application fee, unless such fee is not required by the regional board. The application fee is a one-time fee of $200 for dischargers that have received a written request to submit an application or report of waste discharge, and $50 for all other dischargers. This application fee shall not apply to dischargers who were members of a group on or before June 30, 2008.

(c) For purposes of this section, the words "agricultural lands," "irrigated lands," "farm," and "discharger" have the meaning contained in the applicable regional board or state board waste discharge requirements or waiver of waste discharge requirements for discharges from agricultural lands, including irrigated lands. These fees shall apply whether or not a regional board or the state board has previously waived the payment of fees for the discharge of waste.

[1] As used in this section, the acreage on which the fee is based refers to the area that has been irrigated or cultivated by the farmer or discharger at any time in the previous five years.

Note: Authority cited: Sections 185 and 1058 of the Water Code. Reference: Section 13260 and 13269 of the Water Code.

2200.7. Annual Fee Schedule for ~~Marijuana~~ Cannabis Cultivation.

(a) Annual fees for waste discharge requirements and waivers of waste discharge requirements for discharges associated with ~~marijuana~~ cannabis cultivation shall be as follows:

(1) Category 1: If a discharger is not a member of a group that has been approved by the appropriate regional board, the following fee schedule applies:

Tier	Discharge Threat[1]	Annual Fee
1	Low Threat to Water Quality	$1,000
2	Moderate Threat to Water Quality	$2,500
3	Elevated Threat to Water Quality	$10,000

(2) Category 2: If a discharger is a member of a group that has been approved by the appropriate regional board, the following fee schedule applies:

Tier	Discharge Threat[1]	Annual Fee[2]
1	Low Threat to Water Quality	$700
2	Moderate Threat to Water Quality	$1,750
3	Elevated Threat to Water Quality	N/A

[1] As assigned by the appropriate regional board.
[2] Dischargers in Tier 3 may join a third-party group, but must pay the Category 1 fee unless the regional board subsequently assigns the Discharger to a lower tier. Any Discharger that is required by the regional board to take corrective action shall be subject to the fee schedule in Category 1 for a minimum of one billing cycle, and for all subsequent billing cycles until all corrective actions are complete as determined by the regional board.

(b) Annual fees for dischargers covered under Statewide General Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation shall be as follows:

(1) Tier 1 – Dischargers that have a disturbed area greater than 2,000 square feet and less than one acre:

Risk Designation	Annual Fee
Low Risk	$600
Moderate Risk	$1,800
High Risk	$4,800

(2) Tier 2 – Dischargers that have a disturbed area equal to or greater than one acre:

Risk Designation	Annual Fee
Low Risk	$1,000
Moderate Risk	$3,000
High Risk	$8,000

(3) Waiver of Waste Discharge Requirements – Dischargers with indoor cultivation sites or conditionally exempt sites shall pay a one-time registration fee of $600.

Note: Authority cited: Sections 185 and 1058 of the Water Code. Reference: Sections 13260 and 13269 of the Water Code.

2200.8. General Requirements for the Use of Recycled Water.

Any person who serves as an Administrator under a General Order authorizing the use of recycled water shall pay an annual fee in accordance with the threat/complexity ratings in Section 2200(a)(1) for each recycled water program that the person administers. The first annual fee shall be submitted with the Notice of Intent to be covered by the General Order.

Note: Authority cited: Sections 185 and 1058 of the Water Code. Reference: Section 13260 of the Water Code.

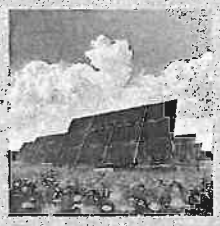
2200.9. Annual Fee Schedule for Waivers of Waste Discharge Requirements.
(a) Any person for whom waste discharge requirements have been waived pursuant to Section 13269 of the Water Code shall submit an annual fee to the state board if a fee is specified for the waiver in this section. These fees shall apply whether or not a regional board or the state board has previously waived the payment of fees for the discharge of waste.

(b) [reserved]

Note: Authority cited: Sections 185 and 1058 of the Water Code. Reference: Section 13260 and 13269 of the Water Code.

DTSC Workshop

Proposed Regulations
Photovoltaic (PV) Modules



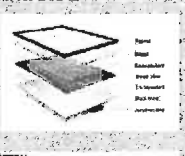
August 22, 2017

Megan Cambridge and Neena Sahasrabudhe
DTSC Policy and Program Support Division

Agenda

- Review of PV Module Law (Health and Safety Code, Section 25259)
- Draft of Proposed Regulations
- Rulemaking Schedule
- Open Discussion

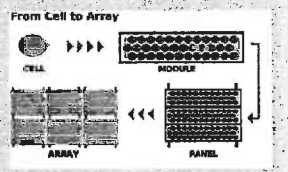
What is a PV Module?



Solar Cell
- made of semiconductor material that absorbs photons of sunlight
- below anti-reflective surface

PV modules
- solar cells soldered together in a series

Solar Panels made up of PV modules → Panels form array



Health and Safety Code, Section 25259
(*SB 489 - Monning, Chapter 419, Statute 2015*)

- HSC – Division 20, Chapter 6.5 Hazardous Waste Control Law, ARTICLE 17. Photovoltaic Modules
- Effective Jan. 1, 2016

"The department may, by regulation, designate end-of-life photovoltaic modules that are identified as hazardous waste as a universal waste and subject those modules to universal waste management."

Edits to Proposed Regulations

- Applicability
- Definitions
- Notification
- UW Standards
- Labeling
- Personal Training
- Treatment

§ 66273.7.1- Applicability Section

Replaced term Class I landfill with Permitted Hazardous Waste Disposal Facility

(Page no.5, Line no.20)

§ 66273.9 - Definitions

Photovoltaic (PV) Modules

- Identified as a hazardous waste
- The modules exhibit the characteristic of toxicity as specified in article 3 of chapter 11 of this division

(Page no.6, Line no.15-21)

§ 66273.9 - Definitions

- Deleted the term "Intact" PV modules to broaden eligible.

§ 66273.9 - Definitions

Edited "PV modules- does not mean"

- Physically - damaged, fractured or fragmented PV modules, that are no longer recognizable as PV modules
- Solar-powered electronic devices with photovoltaic cells in their structures (e.g., calculators, or solar front yard lamps)

(Page no.6, Line no 22-26)

§ 66273.32 - Notifications

Updated subsections

- Universal handler of PV modules notifies the Department now under subsection (g)
- New subsection (h) to notify via e-mail (*PVmodules@dtsc.ca.gov*)

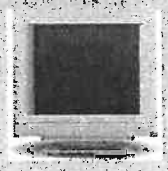
Notification shall include

- Name of universal waste handler (UWH)
- ID Number of UWH
- Telephone number of UWH
- Mailing address physical address of UWH
- Name, telephone number and e-mail address of the contact person at UW site AND
- Model number of PV modules

(Page no.7, Line no 23-39)

Universal Waste Management Standards for PV Modules

- Moved from section 66273.33 (batteries, lamps, mercury)
- To Section 66273.33.5 (electronic devices, CRTs)



§ 66273.33.5 - Universal Waste Management Requirements for Electronic Devices, CRTs, CRT Glass and PV Modules

- UWH for PV modules complies with all applicable requirements
  - Handler prohibited from disposing UW
  - Notify the Department and other applicable authorities
  - Manage the UW appropriately – avoid releases
  - Labeling
  - Accumulation time limits
  - Personnel training
  - Responses to releases
  - Offsite shipments
  - Tracking UW shipments

§ 66273.33.5

- Authorization requirements for UWH
- Required to comply with Article 7 – treatment
- Exempt from article 7, if UWH manages the intact PV modules accordingly

§ 66273.34. Labeling/Marking

- Section (g) will be removed from the proposed PV modules regulations - it does not apply to PV modules
- Added Subsection (h) and (i) applicable to PV modules

§ 66273.36. Personnel Training

- Slight language modification "(e.g., hazards due to leaded glass in CRT devices or CRTs, and hazards *such as* cadmium, lead, or selenium in PV modules),"

(Page no 12, Line no 22-24)

§ 66273.51 Prohibitions

- Subsection (e)
- (f) Prohibited from transporting more than 100 kilograms or 220 pounds of PV modules at any one time unless the PV modules are contained as described in section 66273.33.5, subsection (d)(1)(B).

(Page no 14, Line no. 17-18)

Article 7: Authorization Requirements for UWH of PV modules

- Section 66273.70. Applicability- to PV modules.
  - ❖(c)(2)(E) Dismantling PV modules as specified in section 66273.72
  - ❖(c)(3)(C) Treating PV modules as specified in section 66273.73

Article 7 – Disassembling/Draining Activities (66273.72)

Added subsection (f) - dismantling PV modules authorized if complies with:

- Dismantles or manual segregation of components
- Complies with notification & recordkeeping
- Protects person managing and prevent releases

Article 7 – Authorization for Treatment Activities (66273.73)

- Handler deemed to be the generator of hazardous waste if exhibits waste criteria except
  - Scrap metal exclusion
- Complies with notification and recordkeeping

Article 7 – Requirements

- Closure Plan and Financial Requirements
- Closure of Universal Waste Treatment Facilities
- Closure inspection including verification through sampling

Department of Toxic Substances Control

8/31/2017

Rulemaking Schedule

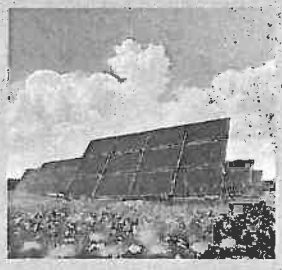
Public notice	Fall 2017
Public hearing following 45- day comment period	
Response to public comments	January 2018
DTSC submits for OAL Review	Spring 2018
Effective date (*maximum of one year from notice*)	

Department of Toxic Substances Control

8/31/2017

More Information

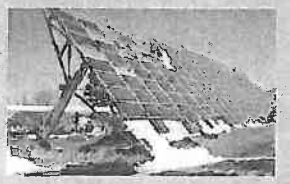
- Web site: http://www.dtsc.ca.gov/HazardousWaste/PVRegs.cfm
- Questions to: PVModules@dtsc.ca.gov



Department of Toxic Substances Control

8/31/2017

Open Discussion



Department of Toxic Substances Control

8/31/2017

Mary Pitto

To: Intern
Subject: RE: Announcing CPSC's 2017 Arrow Award Winners

August 21, 2017

CELEBRATE THE 2017 ARROW AWARD WINNERS!

The California Product Stewardship Council (CPSC) Arrow Awards are given to California businesses that demonstrate outstanding leadership, innovation and partnerships in product stewardship and green design.

Golden Arrow Award

Overall Excellence in Product Stewardship

Green Arrow Award

System & Design Innovations

Labcon is a company based in Petaluma that produces labware consumables with 100% recycleable packaging. Also committed to on-site energy production, 33% of Labcon's power needs are produced by rooftop solar panels and have committeed to be 100% solar powered by 2020. They use only vegetable based soy inks, and since 2000 have reduced their water use by 71%, waste by 86%, energy by 52% and Greenhouse Gas emissions by 83%. Some of their manufacturing processes even sequester CO2 from the atmosphere!

Smart Planet Technologies us based in Newport Beach is an intellectual property and materials engineering company that developed reCUP, the first commercially available paper cup that's engineered for recycling. reCUPs use 51% less plastic than traditional poly-coated paper cups and can be processed through existing paper recycling equipment as if there is no coating applied at all through the use of their EarthCoating technology, a highly mineralized resin alternative to 100% plastic coatings for paper based packaging.

Bow & Arrow Award

Coalition Building

Planet Recycling, Inc. is a carpet and pad recycling company that services all of San Diego County. In the recycling business for over 50 years, Planet Recycling collaborates with producers, distributors, retailers, public agencies and other stakeholders to improve the solutions for the carpet recycling industry.

Infinity Arrow Award

Service & Take-Back

Walgreens Medication Disposal Program provides safe medication disposal kiosks at 603 24-hour locations in 45 states, 53 of which are located in California. Since program inception in February 2016, the Walgreens' kiosks have collected over **72 tons** of medications at no cost to the public. Walgreens' program is the

first ongoing national effort by a retailer.

Associate of the Year

Kreigh Hampel
Recycling Coordinator
City of Burbank

A CPSC Board Member since 2011, Kreigh has been instrumental in forwarding producer responsibility in California, especially safe needle disposal with his compelling testimony to protect his staff from needlesticks!

Partner of the Year

Jeff von Kaenel
CEO and President
Sacramento News & Review

Jeff has been a strong supporter of CPSC and product stewardship, helping to educate the public through his publication, Sacramento News & Review, writing articles and producing newspapers inserts on the subject.

Please join us at the 8th Annual Awards Ceremony to celebrate the winners!

When: Tuesday, August 22, 2017 - 5:45 PM

Where: California Resource Recovery Association 41st Annual Conference at Paradise Point in San Diego, CA

More than 600 local and state government representatives, state legislators and industry representatives are expected to attend.

Pictured: 2016 Arrow Awards Ceremony

Each winner will receive a custom-designed award made of re-purposed glass by Sonoma-based artist, Ellen Blakeley.

Mary Pitto

From: cpsc-associates-listserv@googlegroups.com on behalf of Jordan <Jordan@calpsc.org>
Sent: Thursday, September 28, 2017 9:29 AM
To: Jordan
Subject: Refuel Your Fun Newsletter September 2017

September 28, 2017

ReFuel Your Fun Campaign

Exchange a 1 lb. Disposable for a FREE Refillable at the Yosemite Facelift Clean-Up This Saturday, September 30, 8 AM to 4 PM at Yosemite National Park!

Yosemite National Park's Zero Landfill Initiative Promotes Refillable 1lb. Propane Cylinders on Sat, Sept 30th at the Visitor's Center

Bring an empty 1lb. disposable propane cylinder to the Zero Landfill Booth in the Valley Visitor Center to exchange for a FREE refillable.

Click HERE to watch refillable cylinders featured in the Yosemite Zero Waste Video

Plan Your Own Cylinder Exchange:

Exchanges are fun, engaging & easy to do -
Host your own cylinder exchange today!

Call CPSC for help planning your exchange event (916) 706-3420

Think about local parks or retailers near you that would want to participate in an exchange event to collect 1 lb. disposable cylinders and offer **FREE** refillables!

Help Us Help You! Refillable propane cylinders in the news - please encourage similar press in your area!

Yosemite Has a Trash Problem. What's Being Done About It?
– NPR of Central California, September 2017

CPSC now offers **FREE** video customization for CSPC funders.

To watch the video on refillable propane cylinders, click on the photo below:

We currently offer the following videos about using refillables:

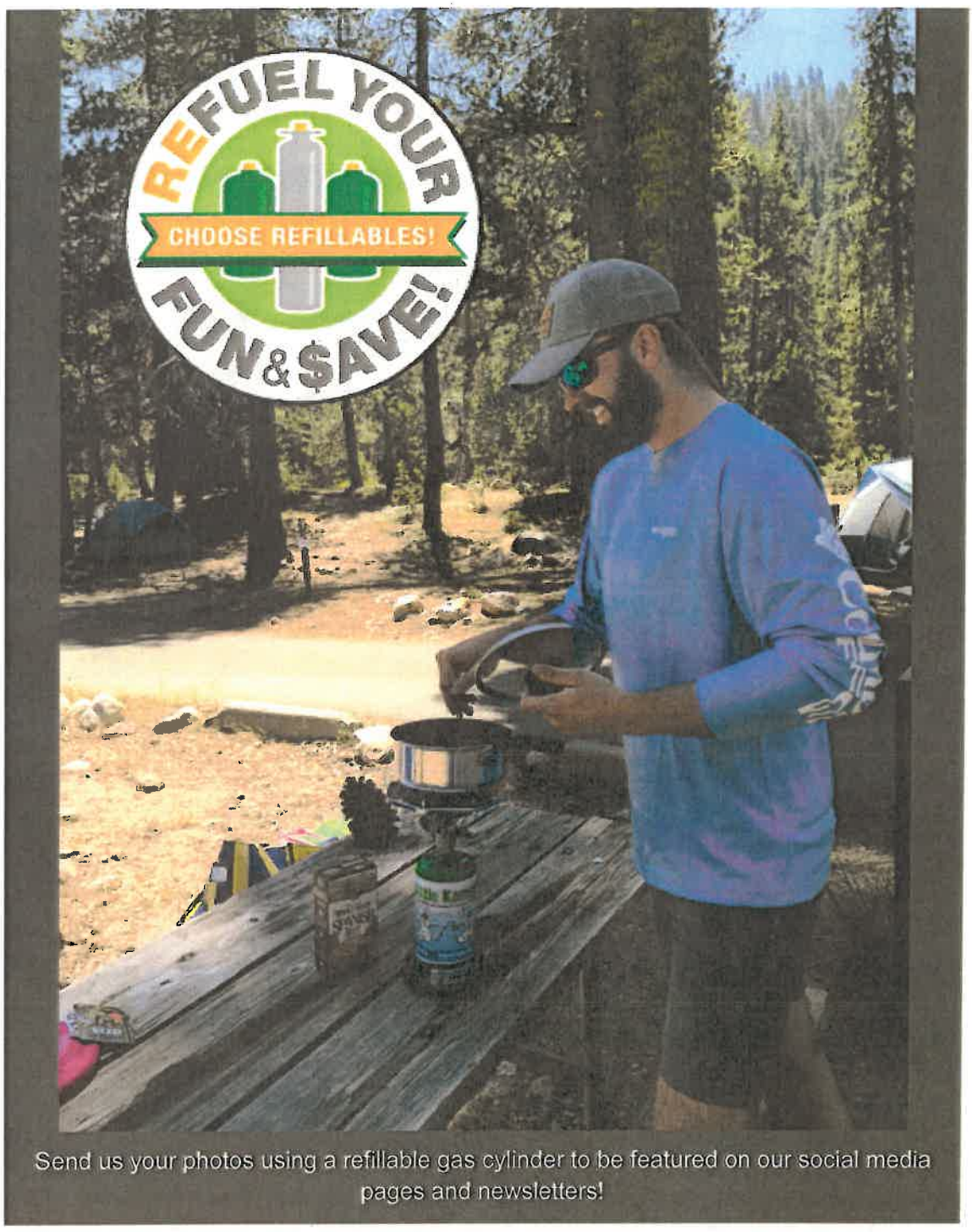
1. General video about common uses
2. Specific video about using refillables while boating
3. Coming soon: Camping specific video!

"The City of Palo Alto is partnering with Hassett Ace Hardware (the only seller of refillable cylinders in Palo Alto) to offer City residents highly discounted refillable cylinders during Spring 2018."
-City of Palo Alto Zero Waste Team

New Disposable Gas Cylinder Collection Bin Locations:

3 bins at the Woodson Bridge State Recreation Area in Tehama County
1 bin at Los Molinos Hardware
2 bins at Red Bluff RV Park
4 bins at Buckhorn Campgrounds in Black Butte

More to come soon. Let us know if you want a collection bin near you!



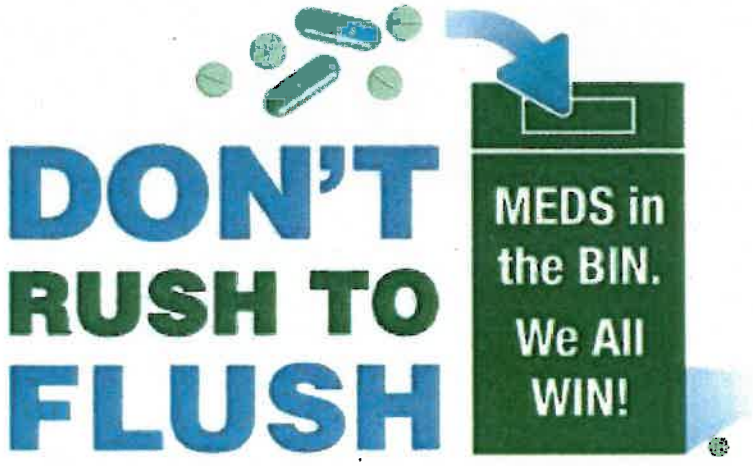
For more information on how to get involved, contact: info@calpsc.org
Connect with us on Facebook to view regular updates

Mary Pitto

From: cpsc-pharmaceuticals-listserv@googlegroups.com on behalf of Jordan <Jordan@calpsc.org>
Sent: Tuesday, September 05, 2017 1:03 PM
To: Jordan
Cc: Heidi Sanborn
Subject: CPSC's Don't Rush to Flush Newsletter, September 2017

Importance: High

September 5, 2017



In this newsletter we highlight new reports, studies, developments, and resources you can use to promote and enhance your pharmaceutical collection programs and support our efforts to implement sustainably funded collection and public education programs throughout California and beyond! If you have information you want to share in our next newsletter please email jordan@calpc.org.

Pharmaceutical Stewardship Success in Santa Clara County

CPSC and partners, the City of San Jose and the County of Santa Clara, completed a three year grant project funded by Santa Clara Valley Water District (SCVWD) to expand Don't Rush to Flush in Santa Clara County in June 2017. The project was immensely successful, resulting in

29 new medication bins resulting in the collection almost 5 tons of medicine since November 2015! Click here to view a project fact sheet.

May 2015 Photo Op Event at Wellness Pharmacy of Los Gatos
Pictured (L to R): Chris Lester, CPSC; Wade Blackard, SCVWD; Heidi Sanborn, CPSC; Santa Clara County Supervisor Ken Yeager; Pharmacist Cuong Trihn; Tammy Green, County of Santa Clara; Eric Dunlavey, City of San Jose; Bill Grimes, County of Santa Clara

With the County of Santa Clara's Safe Drug Disposal pharmaceutical EPR ordinance well into implementation, the bin locations recruited through the project will soon be transitioning to the industry-funded MED Project program. MED Project has opted not to use the bins purchased through the grant, so CPSC expects to have 29 bins available for local governments who are starting their own collection programs for free or reduced cost. Please contact CPSC at (916) 706-3420 for more information.

Walgreens Receives CPSC 2017 Infinity Arrow Award for Take Back

CPSC recognized Walgreens with the 2017 Infinity Arrow Award at the CRRA Conference in recognition of Walgreens' immensely successful medication take back program. Walgreens became the first national pharmacy chain to provide this service on an ongoing basis in February 2016 and has since installed over 600 collection bins in some of the 24-hour stores. In its first

year, the program has resulted in the collection and disposal of 72 tons of unwanted medication, helping to protect public health and the environment.

Pictured (L to R): Jennifer Kurrie, Walgreens; Hayley Park, Walgreens; Heidi Sanborn, CPSC with the 2017 Infinity Arrow Award. Medicine bin in background at the San Diego store.

CPSC applauds Walgreens for voluntarily providing year-round safe disposal opportunities for the public and encourages pharmacies and other members of the product chain to help better unwanted medication waste.

Walgreens

CPSC's Summary and Response to California State Auditor Report on Home-Generated Sharps and Pharmaceutical Waste

California State Auditor

Home-Generated Sharps and Pharmaceutical Waste

By Designating a Lead Agency, the State Could Increase Proper Disposal

Report 2016-123

As highlighted in the May 2017 newsletter, the Auditor's report was released on May 9th, 2017 following a year of research and interviews with stakeholders.

CPSC commends the efforts of the Auditors team. Please see our responses and comments here.

Click to view the Full Report; Report Summary; Fact Sheet

Monterey County Partnership Places 5 New Bins and Facilitates the Installation of 4 More

CPSC and partners, Monterey Regional Waste Management Agency (MRWMD) and Salinas Valley Solid Waste Authority, completed a 1-year grant project from the Rose Foundation in June 2017. The partners established 5 new bins in Monterey County through the grant, while working with the Prescribe Safe Initiative of Monterey to place 4 bins in South Monterey County outside of the grant scope, nearly doubling the number of medication drop-off locations in the County in one year! Click here to view a project fact sheet. If you would like to help doing the same please contact us at info@calpsc.org.

Pictured (L to R): All Care Pharmacy pharmacists Akshai Patel and Donna Ferguson;

Board of Pharmacy Pharmacy Take Back Regulations Adopted June 8, 2017

The California Board of Pharmacy (BOP) adopted their long-awaited Prescription Drug Take-Back Services regulations on June 8, 2017, which went into effect immediately. The regulations provide a regulatory framework that BOP licensees *must* follow in order to provide take back services for unwanted medications.

The regulations closely parallel the DEA Final Rule on Collection of Controlled Substances for the most part, but in some instances will exceed what is required by DEA.

CPSC prepared a comparison summary highlighting sections where the BOP regulations differ from those of the DEA as a resource for entities interested in providing drug take back services. The summary is available for download here. Please contact CPSC with questions and/or for technical assistance to comply with the new regulations.

Don't Rush to Flush Expands to Amador and (hopefully) San Joaquin Counties

Following successful expansions into Monterey County and Santa Clara County, resulting in 37 new medication bins, CPSC has received grant funding from the Rose Foundation for Communities and the Environment to expand the Don't Rush to Flush program to Amador County through a 1-year grant to place up to 5 bins and to San Joaquin County through a 2-year grant to place up to 20 bins. We look forward to working with our local government partners, local businesses, law enforcement, and other community stakeholders to help increase access to this important service!

MED Project Bin Placement Update

The pharma industry-operated MED Project continues to place new bins in California counties per their obligation under each jurisdiction's respective pharmaceutical Extended Producer Responsibility (EPR) ordinances.

To date, there are 115 bins paid for by drug companies and more scheduled for placement soon. Below is a list of existing bins:

- City/County of San Francisco - 31 bins
- County of Alameda - 27 bins
- County of San Mateo - 35 bins
- County of Marin - 15 bins
- County of Santa Cruz - 8 bins
- County of Santa Clara - 12 bins expected late 8/2017

San Francisco, San Mateo, Marin, and Santa Cruz also have numerous locations distributing mailback envelopes through MED Project.

Pictured (Above) - MED Project Print Ad in the SF Chronicle, 6/23/17

Kaiser Permanente Hosts Med Bins

Kaiser Permanente has agreed to participate in the MED Project program and is now hosting bins at certain Kaiser pharmacies in the San Francisco Bay Area. A total of 40 locations are placed or will be coming soon!

We have confirmed Kaiser will host bins in the following number of locations by jurisdiction:

- Alameda County - 13
- Marin County - 3
- San Francisco City/County - 3
- San Mateo County - 7
- Santa Clara County - 12

KAISER PERMANENTE

- Santa Cruz County - 2

Pictured - MED Project Bin at Kaiser Medical Center of Plesanton's Pharmacy (Photo Credit - County of Alameda)

Next Up? Model EPR Ordinance for Rural Local Governments

CPSC is working with several local governments to introduce pharmaceutical EPR ordinances and has developed model legislation tailored for the needs of rural jurisdictions. If you are considering an ordinance, we can provide the technical assistance and know-how to get it done! Please contact Heidi Sanborn (Heidi@calpsc.org) or call (916)706-3420.

National Academies of Sciences, Engineering and Medicine Recommend Improving Access to Drug-Take Back

In a new study titled Pain Management and the Opioid Epidemic: Balancing Societal and

Individual Benefits and Risks of Prescription Opioid Use, by the National Academies of Sciences, Engineering and Medicine recommends expanding access to year-round, convenient drug-take back to help raise awareness of the issue and prevent misuse:

> ***Restricting supply***
> See Recommendation 5-1
> Drug take-back programs allow people with unused medications to bring them in for proper disposal. These programs can increase awareness of the need for the safe disposal or return of many unused drugs. Access to these programs should be expanded, with states convening public-private partnerships to implement take-back programs year-round rather than the standard occasional take-back event.

The study also highlights the success of Walgreens drug collection program and producer-funded efforts in Canada such as British Columbia's Medications Return Program.

Read more: Report Highlights; Recommendations; Full Study

Our mailing address is:
California Product Stewardship Council
1822 21st Street, Suite 100
Sacramento, CA 95811

Mary Pitto

From: California Carpet Stewardship Program <info@carpetrecovery.ccsend.com> on behalf of California Carpet Stewardship Program <bjensen@carpetrecovery.org>
Sent: Wednesday, August 16, 2017 1:01 PM
To: Mary Pitto
Subject: August News: Micro Grants Awarded; Spanish Installer Video Released

Having trouble viewing this email? Click here

Like

California Carpet Stewardship Program
August 2017 Update

California Carpet Stewardship Program
An initiative of CARE: Carpet America Recovery Effort

Grant Cycle 1M Awards Announced

CARE has awarded grants of $10,000 each to five companies for its Cycle 1M Micro-Grants for Collections/Reuse Programs pilot. Funds were awarded for infrastructure projects and/or purchase of equipment that supports the operational logistics of properly collecting and/or reusing California post-consumer carpet (PCC) under a new or established program. Projects must be completed by the end of 2017, and are expected to support over 15 million net new pounds of collection annually.

Grantees include:

- **A-1 Planet Recycling**, Chula Vista: To purchase four 40-yard roll-off containers for San Diego localized collection at retail sites.
- **CLEAR**, Lincoln: To purchase 20 sea containers for Sacramento localized collection at small and medium retailers.
- **Green Waste Recovery**, San Jose: To purchase a MicroPHAZIR gun to identify PCC types more rapidly and increase throughput into the facility.
- **Napa Recycling and Waste Services**: To purchase a rain/weather cover to increase PCC diversion by 30%.
- **Zanker Recycling**, San Jose To purchase a rain/weather cover and cement pad at the Florin Perkins site in Sacramento to increase PCC diversion by about 33%.

To learn more, visit the Grants webpage.

SPC Accepts Council Recommendations for New Plan

After meeting in July, the California Council on Carpet Recycling presented a list of nine recommendations to CARE's Stewardship Planning Committee (SPC) for suggested incorporation into the revised 5 Year Plan currently in preparation. After deliberation, the SPC accepted 8 of the 9 recommendations and offered modifications to the ninth. The recommendations of the Council are available here.

Installer Outreach: Spanish Language Video and On-Sites

Installer-focused video, Spanish version

As part of its installer outreach efforts, CARE has created a new video in Spanish to inform carpet installers about the need to recycle carpet and how to prepare carpet properly for recycling. The video will be shown at on-site visits to installer supply houses and retailers. The goal of the video is to raise awareness about drop-off sites that accept carpet for recycling, while emphasizing the need for proper preparation of the carpet. See the Spanish and English versions here.

In June, CARE's outreach team began conducting on-site visits to flooring supply houses to inform carpet installers and retailers about carpet recycling opportunities in their area. To date, CARE has conducted over 20 outreach events at supply houses in Orange, Sacramento, Los Angeles, San Bernardino, Sonoma and Marin Counties, reaching more than 400 installers.

A Carpet Seaming Workshop for Installers will be held on Friday, August 31 in Carson, CA. Recycling information will be included as part of the workshop. CARE is partnering with trade association International Certified Floorcovering Installers to include instruction on carpet recycling in their California trainings this year. California-based installers receive a $50 discount, provided by CARE, when they register here.

New Drop-Off Sites Welcomed

See the map at CarpetRecovery.org/CA

CARE welcomes two new drop-off sites:

- **Fremont Recycling and Transfer**, Fremont, Alameda County
- **Robinson's Interiors**, Hanford, Kings County

CARE supports drop-off sites by providing:

- A container for collection
- Third party hauling to bring carpet material to recyclers
- Promotional materials for local government and the hosting facility
- Technical assistance from CARE staff.

To see if there is a CARE sponsored drop-off site in your county, visit the drop-off site map here. If you would like to set up a carpet recycling drop-off site, please contact CA@carpetrecovery.org.

CARE on the Road

CARE will be exhibiting at the California Resource Recovery Association (CRRA) Conference, August 21-23 in San Diego. We invite local government representatives and other attendees to stop by the CARE table.

CARE is Hiring!

CARE is currently recruiting for a full-time California Program Director. The position announcement is available here.

STAY CONNECTED:

Follow us on twitter

Carpet America Recovery Effort, 100 S. Hamilton Dr., Dalton, GA 30720

Mary Pitto

From: California Carpet Stewardship Program <info@carpetrecovery.ccsend.com> on behalf of California Carpet Stewardship Program <bjensen@carpetrecovery.org>
Sent: Wednesday, September 27, 2017 2:45 AM
To: Mary Pitto
Subject: Sept News: New Subsidy; AB 1158 Passes

Having trouble viewing this email? Click here

Like

California Carpet Stewardship Program
September 2017 Update

California Carpet Stewardship Program
An initiative of CARE: Carpet America Recovery Effort

New Subsidy to Encourage Nylon Recycling

CARE has announced that a new Tier 2 pilot subsidy for Nylon 6 of 10 cents/pound will be offered to manufacturers of products made from Nylon 6 starting October 1. The subsidy is expected to increase demand for Nylon 6 for use in recycled content products, as did the PET subsidy that was instituted in 2013. The announcement was made in a notice sent to participants and stakeholders earlier this month.

The notice also announced that no reductions will be made to any existing subsidies at this time and that several new or modified subsidies are under consideration as part of the new 5-Year Plan to be submitted to CalRecycle.

California Legislature Passes AB 1158, Revised Carpet Bill

The California Assembly passed AB 1158, a revised carpet recycling bill, on Friday, September 15 and sent the bill to Governor Brown. At this time it is anticipated the Governor will sign it into law by October 15. AB 1158 is intended to modify the original carpet stewardship bill, AB 2398, passed in 2010. The new law's changes include:

- Requiring a recycling goal of 24% by January 1, 2020 (changed from end of 2020 in CARE's Plan)
- Requiring the Director of Resources Recycling and Recovery, the Speaker of the Assembly and the Senate Rules Committee to appoint members to an Advisory Committee.

- Requiring the carpet stewardship organization to submit to the director, in writing, its reasons for rejecting any specific recommendations made by the Advisory Committee.
- Requiring Department of General Services (DGS) to ensure that post-consumer carpet removed from state buildings is managed in a manner consistent with carpet stewardship laws and that carpet purchased by a state agency contains a minimum amount of post-consumer content to be determined by DGS by July 1, 2018.

The California Council on Carpet Recycling met on September 20 to discuss the implications of AB 1158's passage on the pending 5 Year Plan. The full text of AB 1158 can be found here. CARE is working to incorporate changes into its new Plan in light of the AB 1158 development.

CalRecycle Recommends Disapproval of 2016 CARE California Annual Report

At its public meeting on September 19, CalRecycle staff recommended the disapproval of the California Carpet Stewardship Program's 2016 Annual Report, citing lack of continuous, meaningful improvement toward the goals set out in the legislation. CalRecycle Director Smithline approved the recommendation in an action signed on September 21, directing the Waste Evaluation and Enforcement Branch (WEEB) to verify noncompliance findings and other potential violations, and consider action(s) including but not limited to imposition of civil penalties, a compliance schedule or other options.

Aquafil To Open Carpet Deconstruction Facility in Arizona

In an encouraging sign for recycled carpet demand, Italian company Aquafil has announced plans to build a new $10 million carpet deconstruction facility in Arizona. The facility will generate Nylon 6 for Econyl yarn, which is used in the production of a range of textile products, including swimwear and carpet. The plant is scheduled to come online in mid 2018, and is projected to collect and process 35 million pounds of carpet per year.

New Drop-Off Sites Welcomed

CARE welcomes two new drop-off sites:

- **North County Recycling Center and Sanitary Landfill**, Lodi, San Joaquin County
- **Yolo County Central Landfill**, Woodland, Yolo County

There are currently 43 CARE-supported drop-off sites in the state. CARE supports drop-off sites by providing:

- A container for collection
- Third party hauling to bring carpet material to recyclers
- Promotional materials for local government and the hosting facility
- Technical assistance from CARE staff.

See the map at CarpetRecovery.org/CA

To see if there is a CARE sponsored drop-off site in your county, visit the drop-off site map here. If you would like to set up a carpet recycling drop-off site, please contact CA@carpetrecovery.org.

Outreach Team Surveys, Informs Installers

CARE continues outreach to carpet installers across the state. To date this year, CARE outreach staff have conducted 30 outreach events at supply houses and retailers, and reached over 700 installers. Installers are surveyed on current recycling practices and are encouraged to learn about and use drop-off sites in their area.


Installer-focused video, Spanish version

CARE also shows a how-to video for installers in English and Spanish - videos can be viewed here.

STAY CONNECTED:

Follow us on twitter

Carpet America Recovery Effort, 100 S. Hamilton Dr., Dalton, GA 30720

Mary Pitto

From: Mattress Recycling Council <ispa@sleepproducts.ccsend.com> on behalf of Mattress Recycling Council <info@mattressrecyclingcouncil.org>
Sent: Tuesday, September 26, 2017 12:24 PM
To: Mary Pitto
Subject: September Program Update

MRC Program Update

Mattress Recycling Council

September 26, 2017

[HOME] [ABOUT] [CONTACT]

In This Issue

New Mailing Address for Payments by Check

Please note that the address to which to send payments (collected recycling fees) by check will change, as of October 2, 2017. The new PO Box for Mattress Recycling Council is:

PO Box 223594
Chantilly, VA 20153-3594

We will not begin processing payments at this location until Monday, October 2, 2017. For payment questions, please contact us at 1-888-646-6815, or support@mattressrecyclingcouncil.org.

MRC NEWS: Welcome MRC's New Northeast Program Coordinator, Kate Caddy

New Collection Sites

COLLECTION SITES:
Verify Your Locator Listing

California Illegally Dumped Mattress Collection Initiative

In Every Issue

Customer Education
Reporting & Payment Deadlines
Publicity Toolkits
Recyclers in Your Area

FOR RETAILERS

Customer Education Materials

Online Order Form

Samples:
Information Card
Customer Q & A
Customer Q & A Spanish

Request artwork or logos

Reporting & Payment Deadlines

Collection Period	Due
Aug. 1-31	Sep. 30
Sep. 1-30	Nov. 30
Nov. 1-30	Dec. 30
Dec. 1-31	Jan. 30

Kate Caddy, MRC Northeast Program Coordinator

MRC selected **Kate Caddy to join the Connecticut and Rhode Island Operations team**. She is replacing Justine Fallon, who was recently promoted to MRC's Operations Manager. Like Fallon, Caddy is based in Connecticut. **Caddy will be the new primary point of contact for Connecticut and Rhode Island collection sites and recycling participants**, and will be responsible for a variety of program tasks including working with recyclers and haulers, expanding the mattress recycling collection network, and conducting public outreach and education about mattress recycling.

Caddy's previous experience includes five years working in quality and regulatory affairs at Henkel Corporation and more than two years working in environmental services with several Connecticut based environmental organizations. Her previous roles have given her experience with ensuring compliance with various domestic and international regulations, remaining current on industrial regulations and conducting various site visits for enforcement and cleanup purposes. Caddy holds a bachelor's degree in Business Administration from Colby-Sawyer College, along with a master's degree in Environmental Studies from Antioch University of New England.

"Kate demonstrates a strong passion for environmental concerns and has robust experience in ensuring law and regulatory compliance on local, state and federal levels," said Mike O'Donnell, managing director of MRC. "We are pleased to have her join our team and look forward to expanding the program to more communities throughout Connecticut and Rhode Island."

You can reach Kate at kcaddy@mattressrecyclingcouncil.org.

MATTRESS INDUSTRY: New State Role Category Available, Institutional Seller

MRC has included a new state role category called **Institutional Seller**. This change allows manufacturers and renovators of mattresses and box springs who sell only to institutions (and therefore have to remit recycling fees), to be differentiated from retailers who sell to individuals.

You may want to consider this category if you sell only to institutions and have concerns about being labeled a "retailer" when we provide registration lists to state authorities.

Submit Reports & Payments via MRCreporting.org

PUBLICITY TOOLKITS

Collection Site Hosts:
Find press releases, flyers, site signage and more!
Site Host Toolkit

Event Hosts:
Media alerts, flyers, posters, signage and more!
Event Host Toolkit

Recyclers in Your Area

CALIFORNIA:
Businesses need to make arrangements directly with recyclers.

Blue Marble-Commerce
Blue Marble - Fresno
Blue Marble-San Leandro
Cleaner Earth Company
Cristal Materials
DR3 Oakland
DR3 Woodland
Goodwill of Silicon Valley
R5 Recycling

CONNECTICUT & RHODE ISLAND
*Businesses should contact our Northeast Program Coordinator **Kate Caddy** for arrangements.*

Park City Green-CT

Ace Mattress Recycling-RI

It is easy to make this change and can be done at any time by contacting MRC's Technical Support at 1-888-646-6815, or support@mattressrecyclingcouncil.org.

It is **completely optional**.

For information on how to make changes to your account and profile, please review the **Registration and Reporting Guidelines**.

MATTRESS INDUSTRY: Thank You For Your Feedback

Thank you to everyone who participated in taking our industry survey. We value your feedback and appreciate you taking the time to provide it. We have been reviewing responses and will use them to improve our Customer Service and Communications Department, update the customer education materials and improve the user experience with our websites.

Congratulations again to our raffle winners!
Dana Helms with MicroD
Merle Wink with HomeLife Furniture
Akrum Sheikh with Layla Sleep

We are constantly working to improve our program, so your feedback is welcome at any time by contacting info@mattressrecyclingcouncil.org.

MATTRESS INDUSTRY: New Customer Education Materials Coming Soon

New and Improved Customer Education Materials are coming

Express Mattress Recyclers-RI

Get SleepSavvy Today!

Sleep Savvy is the go-to, hands-on resource for mattress retailers who want to sell more and better bedding. With features, tips and ideas, it's designed to make your business grow.

Check out the latest issue at sleepsavvymagazine.com

Subscriptions are FREE!

your way. Thanks to your feedback, we have been able to improve our Customer Education Materials to better fit your needs and communicate the Program more effectively to consumers. These redesigned materials will **debut next year**, so stay tuned! More updates will follow. To give you a preview, here is Rhode Island's updated poster.

In the meantime, if you need to order more materials, please complete this form.

IN THE COMMUNITY: MRC's PSA is Now Airing

Our latest PSA is now airing and it builds awareness of our Bye Bye Mattress Program. In our TV and Radio spots, Sandman is informing the public about how they can find their nearest recycling location.

Help spread the word, ask your local media to use our PSA. This will drive volume to collection sites and collection events keeping mattresses out of landfills and helping to combat illegal dumping.

MRC diverted 1 million mattresses from landfills in California, Connecticut and Rhode Island last year, let's recycle 1 million more!

Check out the :60 TV PSA here.

You can view and download our print, radio and TV media from our redesigned Media Center here.

COLLECTION LOCATIONS: Join the California Illegally Dumped Mattress Collection Initiative

The California Illegally Dumped Mattress Collection Initiative continues to grow. More than 90 California sites have joined the initiative, and so far **20,585 units have been collected in 2017**.

This initiative allows agencies responsible for the collection of illegally dumped mattresses from public spaces and rights-of-way to receive payment from MRC for the collection of illegally dumped mattresses. MRC has allotted $750,000 to fund this effort for 2017.

Eligible entities that wish to receive reimbursement must register and begin tracking the number of illegally dumped mattresses collected.

The following organizations recently signed up for the program in 2017: **City of El Monte, City of Highland, City of Palmdale and City of Vallejo.** We hope to see many more.

If interested in participating in the program or looking for more information and eligibility requirements, check out https://connect.re-trac.com/registration/mrc-idp or contact Mark Patti.

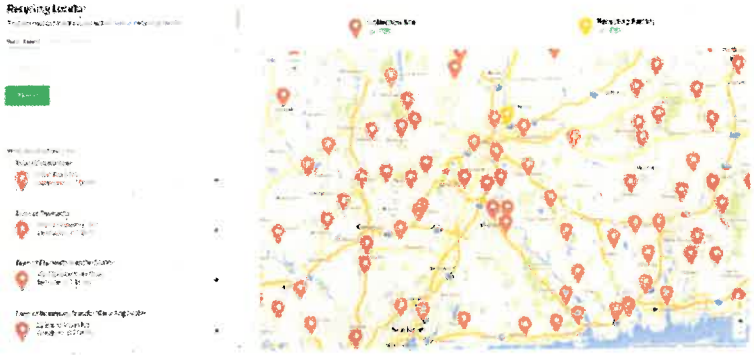
MATTRESS INDUSTRY: Recycling Fee Changes

CalRecycle approved MRC's proposal to decrease California's recycling fee from $11 to $10.50. It will go into effect January 1, 2018.

As a reminder, Rhode Island's fee increase from $10 to $16 is effective October 1, 2017.

For more information visit MattressRecyclingCouncil.org.

COLLECTION LOCATIONS: Is Your Listing Accurate in Our Locator?



To ensure we have the latest details about your location, please complete this form.

Upcoming Events

Southern California Waste Management Forum Annual Conference & Exhibit

November 8
Sheraton Fairplex Hotel and Conference Center
Pomona, CA 91768
Event website

Each year, the Forum puts on an Annual Conference at which our members meet to hear presentations about trends in the field of environmental stewardship in general, and waste management in particular. Mark Patti, MRC's Southern California Program Coordinator, will be attending and we have a booth. If you plan to attend, be sure to stop by.

Southern California Furniture & Accessory Market

November 9-10
Long Beach Convention Center
Long Beach, CA
Event website

Take advantage of incredible beginning-of-the-year promotions offered by the many furniture, bedding, and home decor/accessory companies on display. The Market is for the trade only and open to individuals that are involved on a professional basis in the furniture, bedding, interior design and home decor industry. MRC will be exhibiting, so be sure to stop by our booth.

Northeast Recycling Council (NERC) Fall Conference

November 13-14
Lord Jeffery Inn
Amherst, MA
Event website

NERC's events are designed to provide attendees with the opportunity to learn, share ideas, discuss the issues, and network with others. The events are focused on the most timely topics in the source reduction, reuse, recycling, composting, and green purchasing industry sectors.

Connecticut Conference of Municipalities (CCM) Annual Convention

November 28-29
Foxwoods Resort Casino
Mashantucket, CT
Event website

The Convention is CCM's marquee event bringing together Connecticut municipal and state personnel of all levels. The events allow attendees to share experiences and discuss current regional, state, and national trends affecting their communities. MRC will be exhibiting, so be sure to look out for us.

WELCOME: New Collection Sites

We are always adding new sites to the program. Visit the recycling locator at ByeByeMattress.com for the latest details. If you would like to become a collection site, please contact MRC today.

Here are some recent additions to our locator directory:

California

Guerneville Transfer Station
Guerneville, CA 95446

Mattress Recycling Council (MRC) is a non-profit organization formed by the industry to operate recycling programs in states which have enacted mattress recycling laws. Connecticut's program launched on May 1, 2015, California launched December 30, 2015 and Rhode Island began May 1, 2016. Each state's program is funded by a recycling fee that is collected when a mattress or box spring is sold. The fees pay for the transportation and recycling of the mattresses.

CalRecycle

Cap and Trade Funding for Recycling Infrastructure

Statewide Goals

Reduce the amount of solid waste going to landfills by 75 percent by 2020 (AB 341).

Reduce the amount organic material going to landfills by 75 percent by 2025 and recover at least 20 percent of disposed edible food by 2025 (SB 1383).

Infrastructure Needs

We will need to move about 20 million tons a year (including more than 10 million tons of organics) out of the disposal stream to meet these goals. CalRecycle estimates that roughly 50 to 100 new and expanded organics recycling facilities, at a cost of approximately $2-3 billion in capital investment, are needed to handle this amount of material.

Environmental and Public Health Benefits

- Reduce greenhouse gas emissions from landfills
- Improve health of agricultural soils, decrease soil erosion, and increase storage of carbon
- Reduce air pollutants and odors
- Conserve water and improving water quality
- Decrease synthetic fertilizer use

Economic Benefits

- Reduce greenhouse gas emissions cost-effectively
- Increase recycling manufacturing and associated jobs in California
- Increase energy independence and reducing dependence on foreign fossil fuel
- Reduce transportation costs (by siting new facilities closer to markets)
- Help address food insecurity

What Has Cap and Trade Funded So Far?

CalRecycle has received $65 million from Cap and Trade funding. For FY 16-17, $40 million was appropriated and is being used for:

Food Waste Prevention and Rescue Grant Program – (new) $5 million for projects (including food banks and food pantries) that keep edible food out of landfills by reducing the amount of food waste that is generated or rescuing edible food from the waste stream.

Organics Grant Program – $24 million for organics recycling and digestion projects to expand existing capacity or establish new facilities to reduce the amount of California-generated green materials and/or alternative daily cover sent to landfills.

Recycled Fiber, Plastic, and Glass Grant Program – $9 million for projects to build new or expanded infrastructure for manufacturing products with recycled fiber (paper, textiles, carpet, or wood), plastic, or glass.

Disadvantaged and Low-Income Communities

Current law requires at least 25 percent of funds go to projects within and benefitting disadvantaged communities and at least an additional 10 percent for low-income households or communities.

- For FY 14/15, 100 percent of organics grant projects funding benefit disadvantaged communities, such as job training and diversion to food waste prevention or rescue projects. In the current cycle, 100 percent of projects recommended for funding will benefit disadvantaged communities.
- In FY 14/15, 100 percent of Recycling Manufacturing Grants projects recommended for funding will benefit disadvantaged communities. The current cycle has yet to be determined.

Greenhouse Gas Reductions

CalRecycle's Waste Diversion projects were among the most cost-effective, where the grants had a range of $9-$15 per metric ton of CO_2 equivalent reduced and the loans had about $5 per metric ton of CO_2 equivalent reduced. CalRecycle expects that these figures will be higher for Cycle 2 because of changes between cycles in the GHG quantification method.

Organics Grants

Cumulative statistics for implemented funds for the first grant solicitation show a reduction of nearly 1.7 million metric tons of CO_2 equivalent and for the second grant solicitation are nearly 800,000 metric tons of CO_2 equivalent.

Recycling Manufacturing Grants (Recycled Fiber, Plastic, or Glass)

Cumulative statistics for implemented funds for the first grant solicitation show a reduction of more than 322,000 metric tons of CO_2 equivalent and still to be determined for the second grant solicitation.

Food Waste Prevention and Rescue Grants

As the grants have not been awarded yet, the GHG Benefits for this program are still to be determined.

Demand for these programs is greater than available funding.

- For Cycle 1, 54 applicantions were submitted to CalRecycle seeking $155 million in funding. There was enough funding for 8 projects.
- For Cycle 2, 111 applications were submitted to CalRecycle seeking $142 million in funding. There will be enough to fund about 60 projects. Some cycles are still in the evaluation and scoring process.

2016 – 2017 Grant Award Timeline

Grant Types	Application Release Date	Due Date	Award Date
Organics	January 2017	March 2017	August 2017
Recycled Fiber, Plastic, or Glass	March 2017	May 2017	October 2017
Food Waste	May 2017	July 2017	November 2017

REQUEST FOR APPROVAL

To: **Scott Smithline**
Director

From: **Howard Levenson**
Deputy Director, Materials Management and Local Assistance Division

Request Date: August 8, 2017

Decision Subject: Awards for the Greenhouse Gas Reduction Organics Grant Program (Greenhouse Gas Reduction Fund, FY 2016-17)

Action By: August 15, 2017

Summary of Request:
Staff requests approval of grant awards for the Organics Grant Program, fiscal year (FY) 2016–17. The Department of Resource Recycling and Recovery (CalRecycle) received 35 eligible applications (12 anaerobic digestion, 17 compost, and 6 rural compost), for a total of $88,672,383 (this amount includes a performance payment portion) for this competitive grant program. This request seeks approval for 10 grant awards to those passing applicants with the highest scores, totaling $24,000,000 (see Table 1). Awards include 3 anaerobic digestion projects and 7 composting projects, including 3 in rural areas. Two projects are partially funded due to insufficient funds. The remaining passing applications, reflected in rank order in Table 2, may be funded in that order if additional funds allocated from FY 2016-17 for the corresponding project type become available. In addition, if funds are allocated to this program in FY 2017–18, CalRecycle may use FY 2017–18 funding to fund the remaining passing applications, in rank order in Table 2, subject to the Funding Guidelines issued by the Air Resources Board for such funding.

Recommendation:
Staff recommends approval of 10 grant awards, as listed in Table 1 below, for $24,000,000.

Table 1. Organics Grant Program Recommended Award – List A

Applicant	County	Total Award
Anaerobic Digestion Projects		
County Sanitation Districts of Los Angeles County	Los Angeles	$4,000,000
HZIU Kompogas SLO, Inc.	San Luis Obispo	$4,000,000
Rialto Bioenergy Facility, LLC	San Bernardino	$4,000,000
	Subtotal	**$12,000,000**
Compost Projects		
City of San Diego	San Diego	$3,000,000
Mid Valley Recycling, LLC	Fresno	$1,875,000
Salinas Valley Solid Waste Authority	Monterey	$1,341,865
Recology Yuba-Sutter *(partially funded)*	Yuba	$2,783,135
	Subtotal	**$9,000,000**
Rural Compost Projects		
Napa Recycling & Waste Services, LLC	Napa	$541,700
South Lake Refuse Company, LLC	Lake	$1,218,026
West Coast Waste *(partially funded)*	Madera	$1,240,274
	Subtotal	**$3,000,000**
	Grand Total	**$24,000,000**

Table 2. Organics Grant Program Recommended Award – List B

Applicant	County	Total Award Requested*
Anaerobic Digestion Projects		
CR&R Incorporated	Riverside	$4,000,000
Contra Costa Waste Services	Contra Costa	$4,000,000
City of Manteca	San Joaquin	$1,500,000
Santa Barbara County	Santa Barbara	$4,000,000
Subtotal		**$13,500,000**
Compost Projects		
Recology Yuba-Sutter *(partially funded)*	Yuba	$216,865
Agromin OC, LLC	San Bernardino	$600,000
Waste Management of Alameda County, Inc.	Alameda	$3,000,000
GreenWaste Recovery, Inc.	Santa Clara	$1,700,000
Burrtec Waste Industries, Inc.	Riverside	$3,000,000
Arakelian Enterprises Inc. DBA Athens Services	San Bernardino	$3,000,000
Best Way Disposal Company, Inc. DBA Advance Disposal Co.	San Bernardino	$2,481,250
Kern County	Kern	$3,000,000
City of Oceanside	San Diego	$1,178,351
Subtotal		**$18,176,466**
Rural Compost Projects		
West Coast Waste *(partially funded)*	Madera	$161,326
Upper Valley Disposal Service	Napa	$1,250,000
Subtotal		**$1,411,326**
	Grand Total	**$33,087,792**

**Amount requested subject to CalRecycle staff verification of eligible expenditures prior to issuance of an award.*

Funding:
The FY 2016–17 Budget Act allocated $24,000,000 to the Greenhouse Gas Reduction Fund (GGRF) for the Organics Grant Program.

Fund Source	Amount Available	Amount to Fund Item	Amount Remaining	Line Item
Greenhouse Gas Reduction Fund (FY 2016-17)	$24,000,000	$24,000,000	$0	Local Assistance/Grants
Total	$24,000,000	$24,000,000	$0	

Director Action:
On the basis of the information and analysis in this Request for Approval and the findings set out herein, I hereby conditionally approve the grant awards for the Organics Grant Program as listed in Table 1. Each proposed grantee's award is conditional upon:

1. The recommended grantee must pay all outstanding debts due to CalRecycle, or bring current any outstanding payments owed to CalRecycle, within 60 days of the date of the award email.
2. The recommended grantee's Signature Authority (or where delegation is authorized, his or her Designee) must sign and return the Grant Agreement to CalRecycle. The signed Grant Agreement must be received by CalRecycle within 60 days of the date of the award email.
3. If the proposed grantee is a preprocessor of organic waste, a fully executed agreement between the applicant and the facility or facilities that will compost or digest the preprocessed organic waste must be submitted within 90 days of the date of the award email. The term of this agreement must cover the entire grant period and account for all of the tons listed in the application.

Dated: _____

_____
Scott Smithline
Director

Background and Findings:
Statutory Authority
The Budget Act (Act) of 2016 (Chapter 23, Statues of 2016) and Public Resources Code (PRC) section 42999, authorize CalRecycle to award grants to provide financial incentives for capital investments that expand waste management infrastructure resulting in greenhouse gas (GHG) emission reductions, with a priority in disadvantaged communities. The Act provided $38,000,000 for grants, and CalRecycle allocated $24,000,000 of this amount to the Organics Grant Program and the remainder to the Recycled Fiber, Plastic, and Glass Grant Program and the Food Waste Prevention and Rescue Grant Program. An additional $2,000,000 was allocated for administrative costs. This investment in organics management infrastructure is focused on reducing GHG emissions by diverting more materials from landfill disposal to composting and digestion in support of the State's greenhouse gas and 75 percent solid waste recycling goals.

Program Background
The purpose of the Organics Grant Program is to lower overall GHG emissions by expanding existing capacity or establishing new facilities in California to reduce the amount of California-generated green materials, food materials, or organic-derived alternative daily cover being sent to landfills. This is consistent with and supportive of the goals of several important legislative policy drivers, including AB 32 (greenhouse gas emissions), AB 341 (establishing a 75 percent solid waste reduction goal), AB 1826 (mandatory commercial organics recycling), and SB 1383 (short-lived climate pollutants, including methane).

Of the materials going to landfills, about 40 percent is compostable and/or digestible organic material (grass, yard waste, food waste, lumber and wood waste). As it pertains to CalRecycle, SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025, and an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025. Methane emissions resulting from the decomposition of organic waste in landfills are a significant source of GHG emissions contributing to global climate change. From a climate change perspective, significant methane emission reductions can be achieved by redirecting organic materials from landfills to composting and digestion facilities. Projects can benefit disadvantaged communities by resulting, where locally acceptable, in new or upgraded facilities that reduce GHG emissions, improve water and air quality, create jobs, and rescue food. In general, the development of additional composting and digestion infrastructure in the state has many co-benefits including job creation, potential for biofuel/bioenergy production, and water conservation and soil improvement from the application and compost.

Criteria and Process

The Program Eligibility Criteria, and Evaluation Process was discussed at the November 8, 2016, CalRecycle public meeting and subsequently approved by the Director. The Notice of Funds Available was placed on the CalRecycle web site on January 4, 2017. Stakeholders were notified via listserv announcement.

Eligible applicants included cities, counties and other local agencies, private, for-profit entities, state agencies, the University of California, the California State University, or California Community Colleges, nonprofit organizations, and Qualifying Indian Tribes. Qualifying entities were allowed to submit up to two applications for the Organics Grant Program; these could be in the form of an individual, regional, or cooperative application.

Eligible projects included: construction, renovation or expansion of facilities in California that compost or digest green or food materials into value-added products. This includes the purchase of equipment, machinery, and real estate improvements associated with the installation thereof. A food waste rescue component is not considered a separate project. Projects must be located in California and result in permanent, annual, and measurable:

1. Reductions in GHG emissions compared to existing practice of landfilling of California-generated green or food materials; and
2. Increases in the quantity (tons) of California-generated green materials, or food materials, newly diverted from landfill disposal or alternative daily cover use, and composted or digested.

Applications were due March 9, 2017, with a secondary due date of March 30, 2017, for submissions of required Resolutions and Environmentally Preferable Purchasing and Practices Policy Notifications. On March 8, 2017, the application due date was extended to March 16, 2017, to allow applicants additional time to formulate their proposals.

The most important criteria categories in terms of scoring were: greenhouse gas reductions, tons of organic materials diverted, benefits to disadvantaged communities, and project readiness. Additional key criteria categories included fiscal soundness, air and water quality benefits, budget, and work plan.

In an effort to address concerns of siting facilities in disadvantaged communities, CalRecycle asked applicants to describe their outreach efforts to meaningfully address an important community need, which could include factors in CalEnviroScreen that caused an area to be defined as a disadvantaged community; hosting community meetings to get local input; or receiving documentation of community support (e.g., letters or emails). To ensure adequate public disclosure of proposed eligible projects, CalRecycle generated a disadvantaged community notification that was sent via two CalRecycle Listservs (Environmental Justice and Greenhouse Gas Reduction) informing the environmental justice community of proposed eligible projects and their locations. As CalRecycle receives comments in regards to the disadvantaged community notification, CalRecycle will consider how they may be incorporated into the proposed grant agreements.

Digestion projects were allocated $12,000,000 with a maximum grant award of $4,000,000 per applicant. Compost projects were allocated $12,000,000 with a maximum grant award of $3,000,000 per application. Rural projects were allocated $3,000,000 from the $12,000,000 compost allocation with a maximum grant award amount of $3,000,000. Each recommended award includes an additional twenty-five percent of the eligible amount requested to be allotted for performance payments. Applications were evaluated and scored separately based on their project type (compost or digestion). The compost projects applying under the rural program were scored separately from the standard compost applications.

CalRecycle received 46 applications requesting a total of $97,811,307, not including performance payments. Subsequently, 2 applicants withdrew their applications and 9 applications were disqualified; 3 of these were determined to be incomplete and six proposed projects were ineligible. Staff reviewed the remaining 35 applications in accordance with the approved evaluation and scoring criteria. With $24,000,000 available, 10 applications can be funded. CalRecycle will accept requests to hold applicant debrief meetings for up to four months after the RFA is approved to discuss application scores.

Out of the 10 applications being proposed for funding, 8 applicants can be fully funded and 2 can be partially funded. Fifteen additional applications received a passing score of 70 (listed in Table 2), and 13 did not receive a passing score. If additional monies become available, staff recommends that CalRecycle first fund any partially funded projects before funding the next eligible project on the B List, regardless of the project type. I.e., Recology Yuba-Sutter and West Coast Waste would receive additional funds first, and subsequently applications would be funded in the order listed in Table 2 Organics Grant Program Recommended Award – B List, based on the funds being available for the designated project type. Of the 10 projects that are proposed to be funded, all meet the disadvantaged community and community needs criteria outlined in the Air Resources Board (ARB) Cap-and-Trade Auction Proceeds Funding Guidelines.

Project Summaries for Recommended Awards

The projects with proposed grant awards are briefly summarized below. Please note that estimated GHGs and tons are verified by CalRecycle and ARB and are cumulative for the grant period, which is almost four years. In some instances, applicants' GHGs and tons were modified by CalRecycle and ARB.

Applicant: **County Sanitation Districts of Los Angeles County**
Project Type: **Anaerobic Digestion with Food Rescue**
County: **Los Angeles**
Project Provides Benefits to a DAC: **Yes**
Grant Funds Recommended for Approval: **$4,000,000**
Estimated GHGs (MTC02e) Total Project: **26,393**
Estimated Diversion (Tons) Total Project: **93,048**

County Sanitation Districts of Los Angeles County proposes to design and build an integrated organic food waste pre-processing and anaerobic digestion system to divert additional food waste from the landfill and convert it to renewable natural gas for transportation fuel. The project will install a DODA (de-packager) bio-separator at its Puente Hills Material Recovery Facility that will convert source-separated food waste into a liquid slurry. The slurry will be injected into the existing anaerobic digesters at the Joint Water Pollution Control Plant in Carson to generate biomethane. Biomethane will be upgraded for distribution at its existing compressed natural gas fueling station. The project includes a food rescue component in which the County Sanitation Districts of Los Angeles County will provide funds to a local food rescue entity to either expand or develop their food rescue program. The project provides benefits to disadvantaged communities. The project will create full time jobs. The food rescue component will benefit the residents of disadvantaged communities.

Applicant: **HZIU Kompogas SLO, Inc.**
Project Type: **Anaerobic Digestion with Food Rescue**
County: **San Luis Obispo**
Project Provides Benefits to a DAC: **Yes**
Grant Funds Recommended for Approval: **$4,000,000**
Estimated GHGs (MTC02e) Total Project: **14,558**
Estimated Diversion (Tons) Total Project: **49,452**

HZIU Kompogas SLO, Inc. proposes to design, build, and operate a Kompogas anaerobic digestion facility. The facility will digest mixed food and green waste to produce renewable electricity and marketable compost. The project includes a food rescue component led by Valley Food Bank to divert fresh food. The food rescue component will benefit a disadvantaged community by distributing edible food to residents of disadvantaged communities.

Applicant: **Rialto Bioenergy Facility, LLC**
Project Type: **Anaerobic Digestion with Food Rescue**
County: **San Bernardino**
Project Provides Benefits to a DAC: **Yes**
Grant Funds Recommended for Approval: **$4,000,000**
Estimated GHGs (MTC02e) Total Project: **45,393**
Estimated Diversion (Tons) Total Project: **134,022**

Rialto Bioenergy Facility proposes to install a high solids anaerobic digester to process food waste into renewable electricity. An Organics Extrusion and Organics Polishing System will also be installed at the Athens Services Materials Recovery Facility in La Puente. The project includes a food rescue component led by Helping Hands Pantry to divert edible food to people in need. The project provides benefits to disadvantaged communities. The food rescue component is located in and benefits residents of disadvantaged communities.

Applicant: **City of San Diego**
Project Type: **Compost with Food Rescue**
County: **San Diego**
Project Provides Benefits to a DAC: **Yes**
Grant Funds Recommended for Approval: **$3,000,000**
Estimated GHGs (MTC02e) Total Project: **16,018**
Estimated Diversion (Tons) Total Project: **64,478**

The City of San Diego proposes to upgrade their current windrow composting facility co-located at the Miramar Landfill to a Covered Aerated Static Pile (CASP) compost system. The CASP compost system will allow the city to expand its food waste composting program, which is currently wait-listed, while reducing air emissions and protecting water quality. The project includes a food rescue component led by Kitchens for Good, who will expand food recovery collections and divert edible food from California landfills to those in need. The food rescue component will provide benefits to a disadvantaged community in San Diego County. It will increase food access by preparing and delivering prepared meals to residents of disadvantaged communities. The residents will also benefit from culinary industry job training, education, and outreach.

Applicant: **Salinas Valley Solid Waste Authority**
Project Type: **Compost with Food Rescue**
County: **Monterey**
Project Provides Benefits to a DAC: **Yes**
Grant Funds Recommended for Approval: **$1,341,865**
Estimated GHGs (MTC02e) Total Project: **7,085**
Estimated Diversion (Tons) Total Project: **22,201**

Salinas Valley Solid Waste Authority proposes to upgrade their current organics chip and grind operation to a full-scale food waste composting operation, and install de-packaging equipment to separate organic materials from packaging to be composted. The project includes a food rescue component led by the Food Bank for Monterey County to divert edible food from commercial agriculture and retail outlet for distribution to residents of disadvantaged communities. The food rescue component will benefit disadvantaged communities by increasing food access to residents of disadvantaged communities of Monterey County and food insecure communities through pop-up markets, farmers markets, and Food Bank for Monterey County's established food assistance programs.

Applicant: **Mid Valley Recycling, LLC**
Project Type: **Compost**
County: **Fresno**
Project Provides Benefits to a DAC: **Yes**
Grant Funds Recommended for Approval: **$1,875,000**
Estimated GHGs (MTC02e) Total Project: **15,402**
Estimated Diversion (Tons) Total Project: **53,480**

Mid Valley Recycling, LLC proposes to expand their current covered aerated static pile composting facility. The expanded facility will support new organic recycling programs for local jurisdictions, school districts, industrial businesses, a large metropolitan hospital, a baseball stadium, and the Fresno fair. It will provide benefits to disadvantaged communities by diverting waste materials from landfills in those communities. The project will create construction jobs and full-time permanent positions for compost operations in the City of Kerman.

Applicant: **Recology Yuba-Sutter *(partially funded)***
Project Type: **Compost with Food Rescue**
County: **Yuba**
Project Provides Benefits to a DAC: **Yes**
Grant Funds Recommended for Approval: **$2,783,135**
Estimated GHGs (MTC02e) Total Project: **20,511**
Estimated Diversion (Tons) Total Project: **78,167**

Recology Yuba-Sutter proposes to construct a new composting facility at their Ostrom Road Landfill. The grant money will pay for phase one of a three-phase project by constructing infrastructure for water quality protection that will allow the facility to begin operations. At full build out, which includes a covered aerated static pile system, this will be a regional composting facility with the capacity to handle compostable waste materials from surrounding cities. The project will benefit disadvantaged communities via a food rescue and prevention component by supporting local nonprofits in Yuba County which will divert food waste from California landfills. The project will prioritize hiring for both permanent and temporary jobs for residents of disadvantaged communities.

Applicant: **Napa Recycling & Waste Services, LLC**
Project Type: **Rural Compost with Food Rescue**
County: **Napa**
Project Provides Benefits to a DAC: **Yes**
Grant Funds Recommended for Approval: **$541,700**
Estimated GHGs (MTC02e) Total Project: **8,656**
Estimated Diversion (Tons) Total Project: **22,615**

Napa Recycling & Waste Services proposes to purchase and install food waste de-packaging equipment in its existing material recovery facility. The recovered materials, including food waste from commercial sources and food residuals from industrial food processors, will be blended with green materials and composted at their existing compost site adjacent to the materials recovery facility (MRF). The project includes a food rescue component led by the Emergency Food Bank of Stockton, which will benefit disadvantaged communities by expanding rescue efforts and diverting food waste from California landfills. The food rescue component will be located in and will increase food access to residents of disadvantaged communities.

Applicant: **South Lake Refuse Company, LLC**
Project Type: **Rural Compost with Food Rescue**
County: **Lake**
Project Provides Benefits to a DAC: **Yes**
Grant Funds Recommended for Approval: **$1,218,026**
Estimated GHGs (MTC02e) Total Project: **11,252**
Estimated Diversion (Tons) Total Project: **49,223**

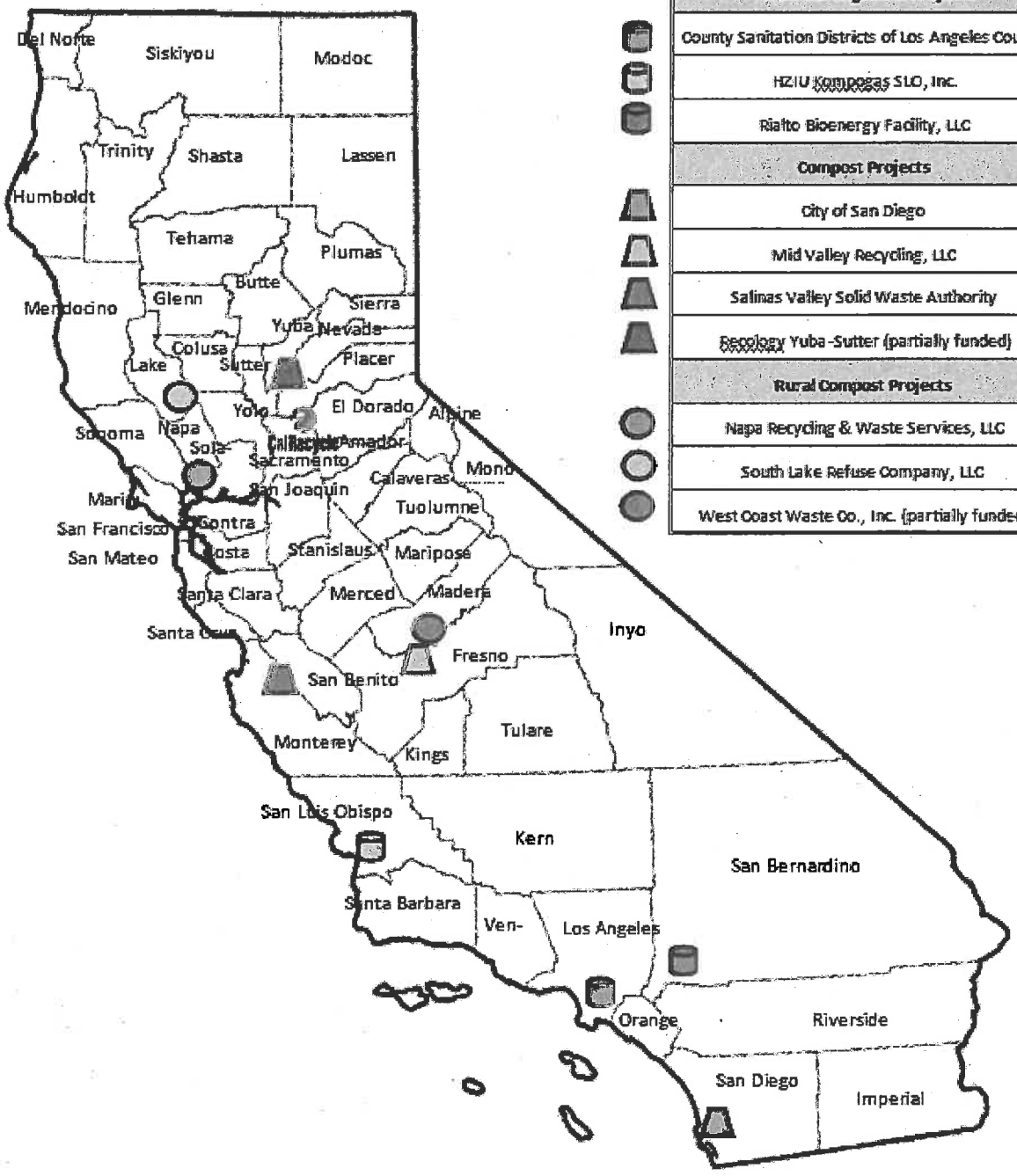
South Lake Refuse Company (SLRC) proposes to install water-quality-protection infrastructure at an existing greenwaste composting site that will allow them to compost food materials for the first time. In addition to a low-permeability four-acre pad and concrete-lined ditches, SLRC will purchase an electric grinder to handle green materials that were formerly disposed and used as alternative daily cover. The installation of the electric grinder will reduce nitrous oxide emissions compared to a diesel engine. The project includes a food rescue component led by the Sacramento Food Bank and Family Services that will benefit disadvantaged communities by diverting food waste by efficiently repackaging government surplus food to appropriate sizes for

distribution and use. The food rescue component will be located in a disadvantaged community in Sacramento County and will increase food access to community residents.

Applicant: **West Coast Waste *(partially funded)***
Project Type: **Rural Compost**
County: **Madera**
Project Provides Benefits to a DAC: **Yes**
Grant Funds Recommended for Approval: **$1,240,274**
Estimated GHGs (MTC02e) Total Project: **9,900**
Estimated Diversion (Tons) Total Project: **55,000**

Waste Coast Waste proposes to build a new green materials composting facility in Madera County using a positive aerated static pile system designed by Engineered Compost Systems. The facility will compost green waste that is currently being landfilled and used as alternative daily cover. The covered aerated static pile system reduces emissions of volatile organic compound and ammonia compared to windrow composting. This project will create jobs for local residents. The facility will benefit disadvantaged communities by diverting material from landfills in the communities of Madera and Tulare counties, and will provide an outlet for materials generated within the host community that would otherwise be combusted. An on-site learning center is also planned.

Organics Grant Program Projects FY 2016-17



Anaerobic Digestion Projects	County
County Sanitation Districts of Los Angeles County	Los Angeles
HZIU Kompogas SLO, Inc.	San Luis Obispo
Rialto Bioenergy Facility, LLC	San Bernardino
Compost Projects	**County**
City of San Diego	San Diego
Mid Valley Recycling, LLC	Fresno
Salinas Valley Solid Waste Authority	Monterey
Recology Yuba-Sutter (partially funded)	Yuba
Rural Compost Projects	**County**
Napa Recycling & Waste Services, LLC	Napa
South Lake Refuse Company, LLC	Lake
West Coast Waste Co., Inc. (partially funded)	Madera

FY 2016-2017 *ORG2*

CalRecycle

Monthly Public Meeting

CalRecycle
10:00 A.M., September 19, 2017
Cal/EPA Building – Byron Sher Auditorium

A. DIRECTOR'S REPORT

Presentations or discussions by the Director and/or Executive Offices regarding department matters, legislative updates, public affairs or 75% initiative/legislative report.

B. PUBLIC COMMENT*

People may speak on any matter concerning CalRecycle with the exception of items appearing elsewhere on this agenda or items related to pending adjudicative (certification or enforcement) proceedings.

*Please note that while CalRecycle affords members of the public the opportunity to participate by Webcast, CalRecycle strongly encourages public comments to be made in person.

C. SOLID WASTE AND TIRE FACILITIES

Possible decisions or reconsiderations to petitions for a facility or landfill permit or modification; and, possible determinations of enforcement actions, clean-up requirements; or LEA training.

Action Items

1. Sycamore Landfill – City of San Diego, Modified Solid Waste Facilities Permit, Action Needed September 29, 2017
   Department Staff Contact: Patrick.Snider@CalRecycle.ca.gov
   Public Notice

2. Yolo County Central Landfill – Yolo County, Revised Solid Waste Facilities Permit, Action Needed October 2, 2017
   Department Staff Contact: Alyssa.Gagnon@CalRecycle.ca.gov
   Public Notice

3. Bishop Sunland Solid Waste Site – Inyo County, Revised Solid Waste Facilities Permit, Action Needed October 7, 2017
   Department Staff Contact: Margaret.Comotto@CalRecycle.ca.gov
   Public Notice

4. Waste Recovery West, Inc. - San Joaquin County, Major Waste Tire Facility Permit, Action Needed January 2, 2018
   Department Staff Contact: Christine.Karl@CalRecycle.ca.gov
   Public Notice

Information Items

Nothing to report at this time

D. GRANT AND LOAN PROGRAMS

Possible decisions or overview regarding matters related to the used oil and household hazardous waste programs.

Action Items

1. Eligibility Criteria and Evaluation Process for the Local Government Waste Tire Enforcement Grant Program (Tire Recycling Management Fund, Fiscal Year 2017–18 and 2018–19)
   Department Staff Contact: Phanessa.Fong@CalRecycle.ca.gov
   Public Notice

Information Items

Nothing to report at this time

E. POLICY MANDATES/WORKSHOPS/RULEMAKING PROCEEDINGS

Possible decisions or discussions by department staff regarding any order instituting a rulemaking proceeding to develop and adopt regulations and/or policy guidelines specifying the procedures to implement or revise program guidelines or requirements such as Product Stewardship, Commercial Recycling, Organics Roadmap or the 75% initiative.

Action Item

1. Approval of Annual CalRecycle Architectural Paint Stewardship Administrative Fee, July 1, 2016 - June 30, 2017
   Department Staff Contact: Allyson.Williams@CalRecycle.ca.gov
   Public Notice

2. Consideration of the Mattress Recycling Council Proposed 2018 Annual Budget
   Department Staff Contact: Nicole.Castagneto@CalRecycle.ca.gov
   Department Staff Contact: Heather.Beckner@CalRecycle.ca.gov
   Public Notice

3. Consideration of the Carpet America Recovery Effort 2016 Annual Report
   Department Staff Contact: Faridoon.Ferhut@CalRecycle.ca.gov
   Public Notice

Information Items

1. Workshop on Informal Rulemaking Stakeholder Workshop for SB 1383 Short-Lived Climate Pollutants (SLCP)
   September 20, 2017 10:00AM – 3:00PM (Sacramento)
   Department Staff Contact: Christopher.Bria@CalRecycle.ca.gov
   Department Staff Contact: Marshalle.Graham@CalRecycle.ca.gov

2. CalRecycle Packaging Reform Workshop
   October 10, 2017 9:00AM - 12:30PM (Sacramento)
   Department Staff Contact: Cynthia.Dunn@CalRecycle.ca.gov

3. Public Hearing -- Proposed Regulations Amending the Electronic Waste Recycling Program
   October 11, 2017 9:0AM - 12:00PM (Sacramento)
   Department Staff Contact: Andrew.Hurst@CalRecycle.ca.gov

4. Future of Electronic Waste Management in California - Part 4
   October 11, 2017 1:00PM - 4:30PM (Sacramento)
   Department Staff Contact: Shirley.Willd-Wagner@CalRecycle.ca.gov

5. Workshop on Informal Rulemaking Stakeholder Workshop for SB 1383 Short-Lived Climate Pollutants (SLCP)
   October 30, 2017 10:00AM – 3:00PM (Sacramento)
   Department Staff Contact: Christopher.Bria@CalRecycle.ca.gov
   Department Staff Contact: Marshalle.Graham@CalRecycle.ca.gov

F. PROGRAM AND ISSUE UPDATES

Action Items
Nothing to report at this time

Information Items
Nothing to report at this time

G. BEVERAGE CONTAINER RECYCLING PROGRAM

Possible decisions or announcements regarding BCRP matters including fund condition, rates, approval of new/renewed certifications, or enforcement actions.

Action Items
Nothing to report at this time

Information Items
Nothing to report at this time

H. ELECTRONIC WASTE RECYCLING PROGRAM

Possible decisions or overview regarding the reuse, recycling, and handling of covered electronic devices; including matters related to fees, recyclers, enforcement, claim reviews and adjustments.

Action Items
Nothing to report at this time

Information Items
Nothing to report at this time

I. LOCAL ASSISTANCE

Possible approval or discussion of locally adopted planning documents, bi-annual reviews, compliance and enforcement actions, or other program-related proceedings.

Action Items
Nothing to report at this time

Information Items
Nothing to report at this time

J. OTHER

Possible decisions or discussions regarding the development or implementation of a new or an amendment to policies and procedures for grants, loans and contracts. Please note that grants, loans, or scopes of work will be agendized specific to program area unless otherwise noted here.

Action Items
Nothing to report at this time

Information Items
Nothing to report at this time

K. COMPLIANCE AND ENFORCEMENT HEARINGS

Hearings for Compliance and Enforcement matters and Administrative Appeals which are required to have a public hearing prior to the Department taking action

Action Items
Nothing to report at this time

Information Items
Nothing to report at this time

We want to assure all of our stakeholders that transparency and stakeholder involvement remains a high priority for CalRecycle. In keeping with a history of providing stakeholders with information about programs, activities, and departmental decisions, CalRecycle has a public noticing site. To review Final CalRecycle Decisions and other department activities, please go to: http://www.calrecycle.ca.gov/Actions/ or http://www.calrecycle.ca.gov/BevContainer/Notices. For meeting participation, listserv, and feedback information, please go to: http://www.calrecycle.ca.gov/PublicMeeting/.

2016 CARE ANNUAL REPORT
REQUEST FOR APPROVAL

To:	Scott Smithline Director
From:	Howard Levenson Deputy Director, Materials Management and Local Assistance Division
Request Date:	September 19, 2017
Decision Subject:	Consideration of the Carpet America Recovery Effort 2016 Annual Report
Action By:	September 21, 2017

Summary of Request:
Carpet America Recovery Effort (CARE) submitted the *CARE California Carpet Stewardship Program Annual Report, January 2016 – December 2016* (hereafter referred to as the "*2016 Annual Report,*" see Attachment 1) on June 30, 2017. This item requests the Director's compliance determination regarding the *2016 Annual Report.* Overall, staff found that efforts in 2016 did not result in a demonstration that CARE had achieved its goals; the recycled output rate at 11 percent is below the 16 percent goal set by CARE.

Options:
1. Based on the Statewide Technical and Analytical Resources (STAR) staff findings that several key aspects of the Program reported in CARE's *2016 Annual Report* are non-compliant, direct the Waste Evaluation and Enforcement Branch (WEEB) to verify these findings and other potential violations of the statute and regulations. If warranted, WEEB then should consider action(s) including but not limited to imposition of civil penalties, a compliance schedule, or other options to achieve compliance.

2. Find that CARE achieved continuous meaningful improvement.

Staff Recommendation:
CalRecycle staff recommend Option 1. Therefore, staff recommend WEEB further investigate STAR's finding and proceed with enforcement actions as appropriate as described in Option 1.

Action:
On the basis of the information, analysis, and findings in this Request for Approval, I hereby direct the Waste Evaluation and Enforcement Branch to commence enforcement evaluation as described in Option 1 above.

Dated: _____

_____
Scott Smithline, Director

Attachments:

1. *Annual Report to CalRecycle, January 2016 – December 2016*: http://www.calrecycle.ca.gov/Carpet/AnnualRpts/2016/CARE2016.pdf
2. *California Carpet Stewardship Plan Revised*, January 2014, version 3.2.2.: http://www.calrecycle.ca.gov/Carpet/Plans/PlanJun2014.pdf
3. *California Carpet Stewardship Plan, Addenda #1, #2 and #3* – links to the individual documents may be found at: http://www.calrecycle.ca.gov/Carpet/Plans/default.htm
4. CalRecycle Response to Independent Audit section of *2016 Annual Report*, August 14, 2017: http://www.calrecycle.ca.gov/Actions/PublicNoticeDetail.aspx?id=2181&aiid=1990
5. Stakeholder Comment Letter on the *2016 Annual* Report: http://www.calrecycle.ca.gov/Carpet/AnnualRpts/Comments/default.htm

---

BACKGROUND

Assembly Bill 2398 (Chapter 681, Statutes of 2010) established the first mandatory carpet stewardship program in the country (Public Resources Code [PRC] §42970), with the purpose of increasing the amount of postconsumer carpet that is diverted from landfills and recycled into secondary products or otherwise managed in a manner that is consistent with the state's hierarchy for waste management practices pursuant to PRC §40051. AB 2398 mandated an extended producer responsibility (EPR) or product stewardship approach. EPR is a strategy to place a shared responsibility for end-of-life product management on the producers, and all entities involved in the product chain, instead of on the general public and local governments, with oversight and enforcement provided by a governmental agency. EPR seeks to encourage product design changes, allows the costs of recycling to be incorporated into the total cost of a product, and places primary responsibility on the producers who make design and marketing decisions to collectively determine the most cost-effective way to implement the recycling program.

Due to the nature of the carpet legislation, it is Carpet America Recovery Effort's (CARE) responsibility to design and implement the California Carpet Stewardship Program on behalf of participating carpet manufacturers to achieve continuous meaningful improvement in landfill diversion and recycling of postconsumer carpet. CARE has considerable flexibility in developing strategies to achieve this broad goal.

While CalRecycle does not dictate the specific design of the Program, it is responsible for evaluating the Program to determine if the requirements mandated by statute, regulation, and the approved Plan are fulfilled. Specifically, CalRecycle has the responsibility to approve or disapprove carpet stewardship plans submitted by manufacturers or their designated carpet stewardship organization (PRC §42973); review annual reports to verify the objectives of the plan are being met (PRC §42975); and provide oversight and enforcement to ensure a level playing field among carpet manufacturers (PRC §42974 and §42978). For manufacturers to be in compliance, they must have an approved plan (PRC §42973(b)), or be part of a stewardship organization with an approved plan, and demonstrate achievement of continuous meaningful improvement in the rates of recycling and other goals included in an approved stewardship plan (PRC §42975(a)). The statute provides for CalRecycle to impose civil penalties on any person who violates any provision of the Product Stewardship for Carpet law (PRC §42970 et seq, and specifically §42978). The Office of Administrative Law approved regulations on January 26, 2012, to add clarity to statute.

CARE is implementing its California Carpet Stewardship Plan, titled *California Carpet Stewardship Plan Revised, version 3.2.2* (Attachment 2). CARE also submitted three Addenda to the Plan (Attachment 3), most recently Addendum #3, approved by the Director in January 2016. These documents are collectively referred to as the Plan. Although the Plan expired on December 31, 2016, CalRecycle has allowed CARE

to manage the Program pending the submission of a new Carpet Stewardship Plan (by CARE or by other entities) by October 19, 2017. CalRecycle has sixty days after receiving the Plan by October 19, 2017 to review CARE's new Plan.

In 2016, CalRecycle found the California Carpet Stewardship Program out of compliance because the 2015 Annual Report demonstrated that the Program was not making continuous meaningful improvement as required by statute. At that time CalRecycle's Waste Evaluation and Enforcement Branch (WEEB) was directed to verify CalRecycle's Statewide Technical and Analytical (STAR) staff findings, contained in the 2015 CARE Annual Report Request for Approval, and other potential violations of the statute and regulations and, if warranted, consider action(s) including but not limited to imposition of civil penalties, a compliance schedule, or other options to achieve compliance.

On June 30, 2017, CARE submitted the Carpet Stewardship Program's fourth Annual Report, titled *CARE California Carpet Stewardship Program Annual Report, January 2016 – December 2016,* as required by PRC §42976.

Additionally, the *2016 Annual Report* includes independent financial audit information. Appendix 10.10, *Audited Financial Statements*, prepared by the independent auditor, Nichols, Cauley & Associates, LLC, covers the *CARE 2016 Audited Financial Statement* (section 10.10.a), *CA Carpet Stewardship Plan 2016 Audited Financial Statement* (section 10.10.b), and *Performance Audit 2016* (section 10.10.c). As required by regulation, CalRecycle's Audit staff separately reviewed these audit reports and the findings were communicated in a letter sent to CARE on August 14, 2017 (Attachment 4). Staff determined that all unresolved audit findings from previous years have been resolved and there are no new audit findings.

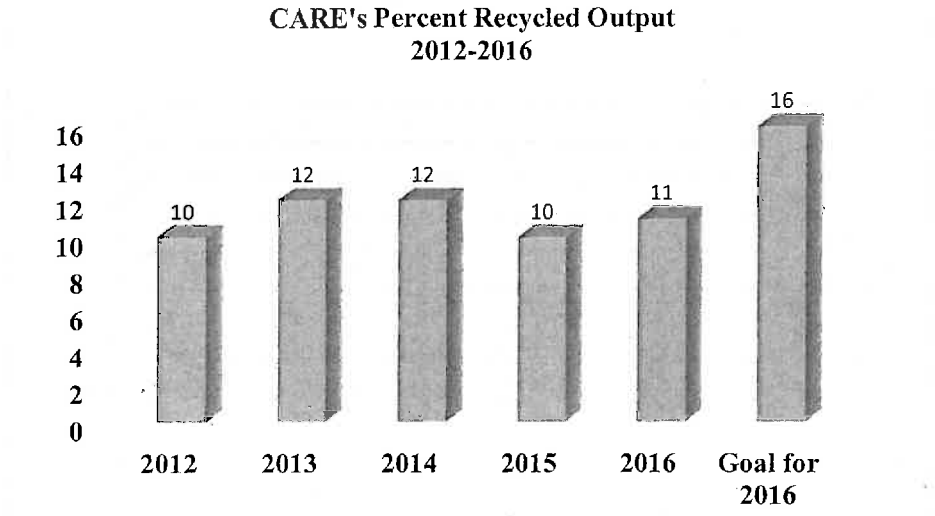
FINDINGS AND ANALYSIS OF CARE'S 2016 ANNUAL REPORT

The *2016 Annual Report* describes CARE's performance data for 2016, as well as the actions CARE took in response to CalRecycle's noncompliance determination in September 2016 (regarding the *2015 Annual Report*). CalRecycle acknowledges CARE made several changes to the Program with respect to the determination that it was noncompliant based upon the *2015 Annual Report*. However, the 2016 Annual Report does not demonstrate that CARE is meeting critical performance goals outlined in its approved plan and in statute, in particular relative to recycled output and "continuous meaningful improvement."

Although there may be other violations of statute and regulations, the following key findings regarding the *2016 Annual Report* support the conclusion that CARE is noncompliant:

FINDING 1: ***CARE failed to meet the recycling goal set forth in its Plan and failed to demonstrate continuous and meaningful improvement in diversion and towards the other Plan goals.***

- *Requirements:* PRC §42975(a) states an Annual Report must demonstrate "continuous meaningful improvement in the rates of recycling and diversion of postconsumer carpet" and meet other goals presented in the statute, regulations, and approved Plan. The Plan goal was to achieve a recycling rate of 16% by 2016.
- *Analysis:* The *2016 Annual Report* shows that the key measures of recycled output, along with diversion, are lower than the goals outlined in the approved Plan and that other key goals also did not improve in 2016. [CARE reported a 16% recycled output rate in Q1 of 2017, but this is not relevant to the 2016 timeframe].
    - Goals with trend information are presented below:
        - **Recycling rate:** The baseline in 2011/2012 of recycled output was 8%. CARE has shown recycled output at 10% for 2012, 12% for 2013, 12% for 2014, 10% for 2015, and 11% for 2016 (see chart below). CARE failed to achieve the Plan goal of 16%.



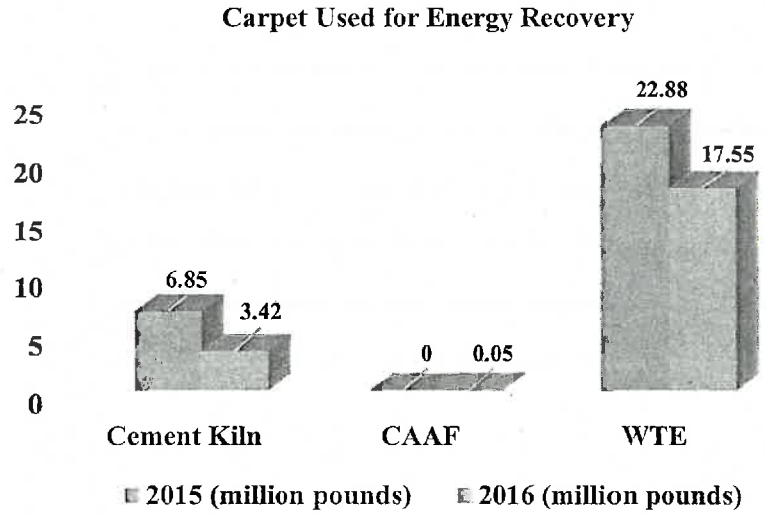
- **Source reduction:** The Program uses the average weight of carpet as its primary source reduction metric. Beginning in the third quarter of 2016, source reduction was negatively impacted, because the average weight of carpet increased from 4.20 to 4.39 pounds per square yard.
- **Recyclability:** CARE defined recyclability in its Plan as; 1) The ease by which carpets can be recycled (accessibility to recycling and processing facilities), and 2) The ease by which carpets can be separated into component parts to be recycled (processing technology). In the 2016 Annual Report CARE did not report on improvements to accessibility to recycling and processing facilities in the section on recyclability, nor did it address the ease by which carpets can be separated into component parts. CARE specifically stated that design improvements to increase the recyclability of carpet and carpet tile are outside of CARE's purview and under the control of the carpet mills.

  With respect to increasing the recyclability of carpet, CARE's Plan states it will publish best practices for the recycling of carpet and describe in the Annual Report how AB 2398 subsidy funds are spent and invested by member companies on an aggregate basis. The 2016 Annual Report did not include best practices for the recycling of carpet nor did it describe how subsidy funds are spent and invested on an aggregate basis.

  One metric CARE uses to monitor recyclability is yield. Yield is calculated as the percent of gross collections converted to recycled output. Yield increased slightly in 2016 to 35.1 percent of gross collections, compared to 33.8 percent in 2015. However, this rate is 6 percent below the high of 41.1 percent achieved in 2013.
- **Reuse:** Reuse increased by 51 percent in 2016 to 926,000 pounds compared to 602,000 pounds in 2015. While an improvement, this represents 0.27 percent of the carpet discarded during the year. This minor success in the 2016 Annual Report does not overshadow the significant lack of improvement in recycled output.
- **Diversion:** Reported diversion decreased from 73 million pounds (21 percent of discards) in 2015, to 61 million pounds (18 percent of discards) in 2016.

Reported diversion is calculated by the sum of reuse, recycled output (Type 1 + Type 2 + calcium carbonate + Carcass), carpet as an alternative fuel (CAAF) and Kiln, waste-to-energy (WTE) and exported whole carpet.

- **Energy recovery:** Energy recovery decreased in 2016. Energy recovery, under AB 2398, is considered diversion. The different methods used to recover energy are CAAF, cement kiln, and WTE. Only CAAF and cement kiln received subsidies. No subsidies were paid for WTE. The following chart illustrates the amount of carpet used for energy recovery in 2015 and 2016:



FINDING 2: ***Consumers purchasing carpet do not have reasonable access to recycling services in all counties.***

- *Requirements:* Title 14 of the California Code of Regulations (CCR) §18943(a)(5)(E) requires carpet consumers to have reasonably convenient opportunity(ies) in each county to manage their post-consumer carpet.
- *Analysis:* The number of counties served has increased, but many counties still lack carpet recycling services.
  - The *2016 Annual Report* indicates 33 official CARE drop-off sites in the state compared to 23 official sites in 2015. Each is in a different county, so CARE now serves 33 counties out of 58 counties. (Note: CARE drop-off sites are locations where CARE has set up and provided direct funding for carpet collection containers and transportation of those containers to a recycling facility. Independent sites are those operated by collector-sorter entrepreneurs operating within the CARE program.) While the increase in drop-off sites demonstrates improvement towards the requirement of service in each county, CARE has failed to achieve the reasonably convenient opportunities required under the regulation.
  - CARE estimates that there are approximately 200 additional private carpet collection containers statewide that feed into the CARE program via independent collector-sorter entrepreneurs, but these are not set up directly by CARE nor do they receive assistance from CARE. It is not clear what type and quantities of carpet are accepted at these sites, and what level of convenience these sites offer consumers. The Annual Report does not

provide adequate information on the types and quantities of carpet that are accepted at these sites, therefore their performance cannot be evaluated nor can these sites be counted as part of assessable convenience sites.

OTHER ISSUES TO CONSIDER: ***CARE should provide additional details regarding its methodology and evaluation of Marketing, Education and Outreach activities.***

- *Requirements:* Among other things, CCR §18944(a)(8) requires the carpet stewardship organization to "List educational outreach activities in the stewardship plan. Provide a description of educational materials that were provided to retailers, consumers, carpet removers/installers, contractors, during the reporting period. Identify the method used to determine the effectiveness of educational and outreach surveys."
- *Analysis:* CARE did expand its Marketing, Education and Outreach efforts and funding in 2016, taking a number of actions to increase education and outreach, especially to retailers. Additionally, CARE awarded grants and made other market development efforts to expand use of postconsumer carpet materials in new products. Actions included:
    - Expanded face-to-face retailer visits. By the end of 2016, 72% of retailers had been contacted, exceeding the 2016 goal.
    - Expanded contacts with local government recycling coordinators and procurement officials to raise awareness of program activities such as local drop-off sites and the availability of recycled carpet content products.
    - Expanded outreach to installer/contractors involved in the tear-out and disposal/recycling of carpets.

  However, it is not clear how CARE is measuring the effectiveness of its education and outreach activities, or how CARE would tie these activities to improvements in operational performance. CARE should evaluate the effectiveness of each of its targeted outreach activities such as retailer visits, installer/contractor engagement, contacts with local governments, efficacy of drop-off sites in carpet collection, etc. Additionally, CARE should start a specific education and outreach campaign for Tier 2 manufacturers to develop additional markets for post-consumer carpet materials.

STAKEHOLDER COMMENTS

CalRecycle received one comment letter from a local government representative regarding the *2016 Annual Report*. The commenter suggests that the approach of the CARE program is fundamentally flawed and has not worked, because it relies on incentives offered to third party recyclers, rather than a circular economy approach where manufacturers of carpet continuously recycle old carpet into new products. The commenter supported CalRecycle utilizing all enforcement tools available and making necessary program adjustments to encourage the carpet industry to recycle carpet themselves. Attachment 5 is a webpage link that provides the full text of this letter.

CalRecycle
10:00 A.M., October 17, 2017
Cal/EPA Building – Byron Sher Auditorium

A. DIRECTOR'S REPORT

Presentations or discussions by the Director and/or Executive Offices regarding department matters, legislative updates, public affairs or 75% initiative/legislative report.

B. PUBLIC COMMENT*

People may speak on any matter concerning CalRecycle with the exception of items appearing elsewhere on this agenda or items related to pending adjudicative (certification or enforcement) proceedings.

*Please note that while CalRecycle affords members of the public the opportunity to participate by Webcast, CalRecycle strongly encourages public comments to be made in person.

C. PROGRAM AND ISSUE UPDATES

Action Items
Nothing to report at this time

Information Items
1. 2nd Quarter 2017 Disposal Reporting Status
Department Staff Contact: Eileen.Nathaniel@CalRecycle.ca.gov

D. SOLID WASTE AND TIRE FACILITIES

Possible decisions or reconsiderations to petitions for a facility or landfill permit or modification; and, possible determinations of enforcement actions, clean-up requirements; or LEA training.

Action Items

1. Johnson Canyon Sanitary Landfill – Monterey County, Revised Solid Waste Facilities Permit, Action Needed October 29, 2017
   Department Staff Contact: Eric.Kirjura@CalRecycle.ca.gov
   Public Notice

2. Lake County Waste Solutions - Lake County, New Solid Waste Facilities Permit, Action Needed October 31, 2017
   Department Staff Contact: Reinhard.Hohlwein@CalRecycle.ca.gov
   Public Notice

3. Yolo County Central Landfill – Yolo County, Revised Solid Waste Facilities Permit, Action Needed November 1, 2017
   Department Staff Contact: Alyssa.Gagnon@CalRecycle.ca.gov
   Public Notice

4. California Olive Ranch Composting Facility – Glenn County, New Solid Waste Facilities Permit, Action Needed November 4, 2017
   Department Staff Contact: John.Loane@CalRecycle.ca.gov
   Public Notice

5. Kirby Canyon Recycling and Disposal Facility – City of San Jose, Modified Solid Waste Facilities Permit, Action Needed November 6, 2017
   Department Staff Contact: Eric.Kiruja@CalRecycle.ca.gov
   Public Notice

6. Kern Valley Recycling and Transfer Station – Kern County, Modified Solid Waste Facilities Permit, Action Needed November 14, 2017
   Department Staff Contact: Christine.Karl@CalRecycle.ca.gov
   Public Notice

7. Central Processing Facility – Contra Costa County, Modified Solid Waste Facilities Permit, Action Needed November 15, 2017
   Department Staff Contact: Beatrice.Poroli@CalRecycle.ca.gov
   Public Notice

8. Active Recycling Material Recovery Facility and Transfer Station – City of Los Angeles, Revised Solid Waste Facilities Permit, Action Needed November 18, 2017
   Department Staff Contact: Megan.Emslander@CalRecycle.ca.gov
   Public Notice

9. Construction and Demolition Recycling – Los Angeles County, Revised Solid Waste Facilities Permit, Action Needed November 19, 2017
   Department Staff Contact: Benjamin.Escotto@CalRecycle.ca.gov
   Public Notice

10. Waste Recovery West, Inc. - San Joaquin County, Major Waste Tire Facility Permit, Action Needed January 2, 2018
    Department Staff Contact: Christine.Karl@CalRecycle.ca.gov
    Public Notice

11. Lakin Tire West, Inc. Building #3 – Los Angeles County, Major Waste Tire Facility Permit, Action Needed March 18, 2018
    Department Staff Contact: Jeff.Hackett@CalRecycle.ca.gov
    Public Notice

Information Items
Nothing to report at this time

E. GRANT AND LOAN PROGRAMS

Possible decisions or overview regarding matters related to the used oil and household hazardous waste programs.

Action Items
Nothing to report at this time

Information Items
1. Awards and Distribution of Payments for the Used Oil Payment Program (Used Oil Recycling Fund, Fiscal Year 2017–18)
   Department Staff Contact: Linda.Dickinson@CalRecycle.ca.gov
   Public Notice

F. POLICY MANDATES/WORKSHOPS/RULEMAKING PROCEEDINGS

Possible decisions or discussions by department staff regarding any order instituting a rulemaking proceeding to develop and adopt regulations and/or policy guidelines specifying the procedures to implement or revise program guidelines or requirements such as Product Stewardship, Commercial Recycling, Organics Roadmap or the 75% initiative.

Action Item

1. Consideration of Approval of Local Government Representative to Serve on the Mattress Recycling Organization Advisory Committee
   Department Staff Contact: Nicole.Castagneto@Calrecycle.ca.gov
   Department Staff Contact: Heather.Beckner@Calrecycle.ca.gov
   Public Notice

Information Items

1. Solicitation for Carpet Stewardship Program Advisory Committee Applications (Pending Governor's Signature on AB 1158)
   Department Staff Contact: Faridoon.Ferhut@CalRecycle.ca.gov
   Public Notice

2. Informal Rulemaking Workshop for SB 270 Reusable Grocery Bag Certification Fee
   October 25, 10:00AM – 2:00PM (Sacramento)
   Department Staff Contact: Paulina.Kolic@CalRecycle.ca.gov

3. Workshop on Informal Rulemaking Stakeholder Workshop for SB 1383 Short-Lived Climate Pollutants (SLCP)
   October 30, 2017 10:00AM – 3:00PM (Sacramento)
   Department Staff Contact: Christopher.Bria@CalRecycle.ca.gov
   Department Staff Contact: Marshalle.Graham@CalRecycle.ca.gov

4. Informal Workshop on a Rulemaking Under the Electronic Waste Recycling Act
   November 15, 2017 1:00PM – 4:30PM (Sacramento)
   Department Staff Contact: Jason.Smyth@CalRecycle.ca.gov

5. Workshop to Discuss Eligibility, Scoring Criteria, and Evaluation Process for CalRecycle's Greenhouse Gas Reduction Fund Grant Program Appropriation for FY 2017-18
   December 19, 2017 1:00PM – 4:00PM (Sacramento)
   Department Staff Contact: Michelle.Martin@CalRecycle.ca.gov

G. BEVERAGE CONTAINER RECYCLING PROGRAM

Possible decisions or announcements regarding BCRP matters including fund condition, rates, approval of new/renewed certifications, or enforcement actions.

Action Items

Nothing to report at this time

Information Items

1. Update from DOR
   Department Staff Contact: James.Nachbaur@CalRecycle.ca.gov

H. COMPLIANCE AND ENFORCEMENT HEARINGS

Hearings for Compliance and Enforcement matters and Administrative Appeals which are required to have a public hearing prior to the Department taking action

Action Items

1. Public Hearing to Consider the Issuance of Compliance Order CO 017-001 for the City of Colton; Compliance Order CO 017-002; for the City of Ripon, and Compliance Order CO 017-003 for the City of Commerce Regarding each jurisdiction's compliance with the Mandatory Commercial Recycling (MCR) law (Public Resources Code Sections 42649-42649.7 – Recycling of Commercial Solid Waste.)
   Department Staff Contact: Mark.Umfress@CalRecycle.ca.gov
   (Public Notice to Follow)

Information Items

Nothing to report at this time

I. ELECTRONIC WASTE RECYCLING PROGRAM

Possible decisions or overview regarding the reuse, recycling, and handling of covered electronic devices; including matters related to fees, recyclers, enforcement, claim reviews and adjustments.

Action Items

Nothing to report at this time

Information Items

Nothing to report at this time

J. LOCAL ASSISTANCE

Possible approval or discussion of locally adopted planning documents, bi-annual reviews, compliance and enforcement actions, or other program-related proceedings.

Action Items

Nothing to report at this time

Information Items

Nothing to report at this time

K. OTHER

Possible decisions or discussions regarding the development or implementation of a new or an amendment to policies and procedures for grants, loans and contracts. Please note that grants, loans, or scopes of work will be agendized specific to program area unless otherwise noted here.

Action Items

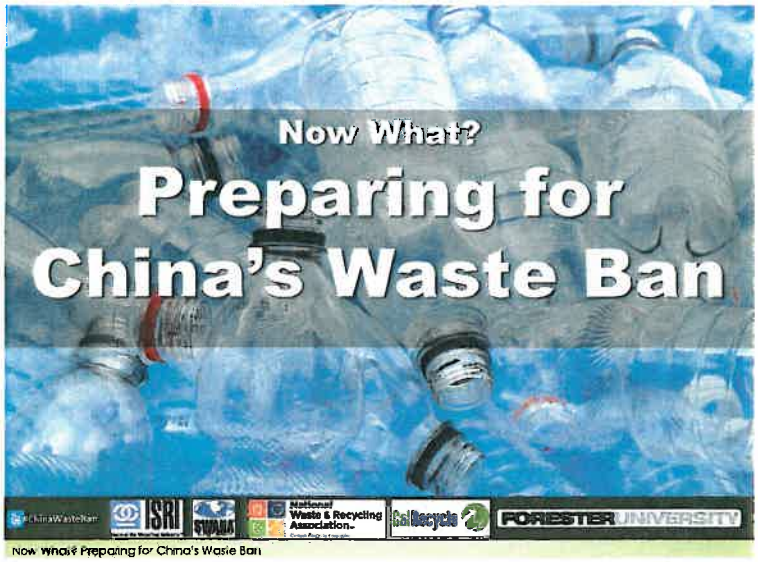
Nothing to report at this time

Information Items

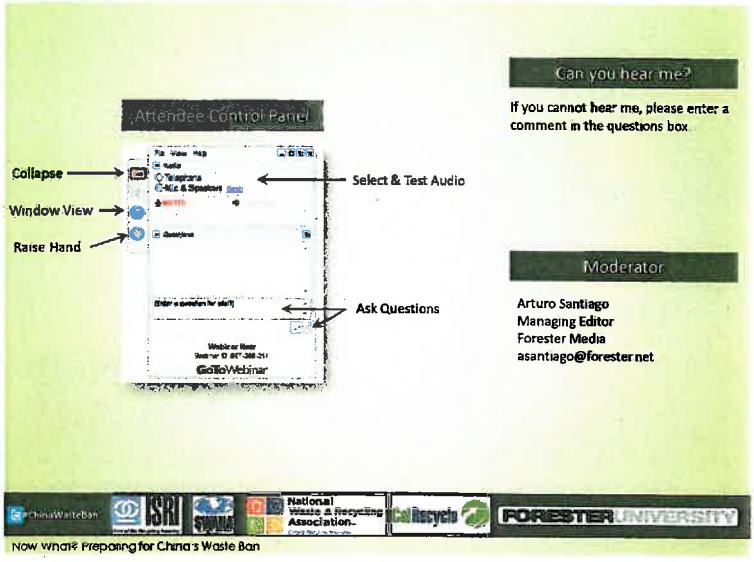
Nothing to report at this time

We want to assure all of our stakeholders that transparency and stakeholder involvement remains a high priority for CalRecycle. In keeping with a history of providing stakeholders with information about

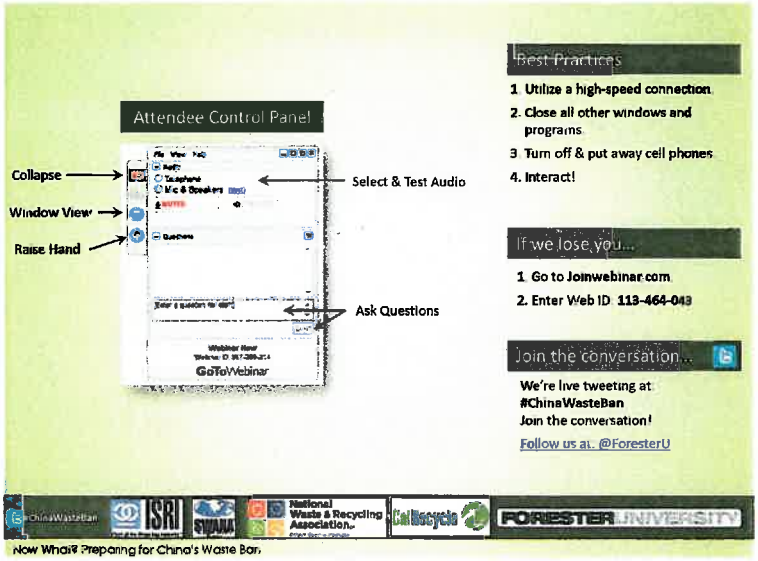
programs, activities, and departmental decisions, CalRecycle has a public noticing site. To review Final CalRecycle Decisions and other department activities, please go to: http://www.calrecycle.ca.gov/Actions/ or http://www.calrecycle.ca.gov/BevContainer/Notices. For meeting participation, listserv, and feedback information, please go to: http://www.calrecycle.ca.gov/PublicMeeting/.



Now What? Preparing for China's Waste Ban



Now What? Preparing for China's Waste Ban



Now What? Preparing for China's Waste Ban

Now What? Preparing for China's Waste Ban

Robin K. Wiener
President
ISRI

ISRI
Voice of the Recycling Industry™

Now What? Preparing for China's Waste Ban

ISRI: Voice of the Recycling Industry

1,300+
Member companies

4,000+
Recycling facilities worldwide

34
Countries

Full Range of Commodities ...

Ferrous & non-ferrous metals | Paper | Plastics | Glass | Tire & Rubber | Textiles | Electronics

Now What? Preparing for China's Waste Ban

Today's Recycling Industry: A Snapshot

$117 Billion Industry

155,000 Direct Employment plus 378,000 jobs throughout the economy indirectly supported by recycling

130,000,000+
Tons processed annually

Iron/Steel	67.0	Copper	1.8	Plastics	3.5
Paper	47.2	Lead	1.2	Electronics	5.0
Aluminum	5.0	Zinc	0.17	Tire (#)	122

In millions of tons (or other unit shown)

Now What? Preparing for China's Waste Ban

Recycling Industry & Exports

Part of the Global Industry

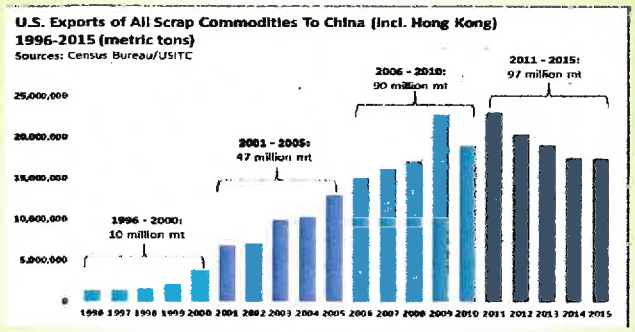
37
Total exported from U.S. (million metric tons)

$16.5B
Value of U.S. materials exported

155
Destination countries to which recyclables were sold

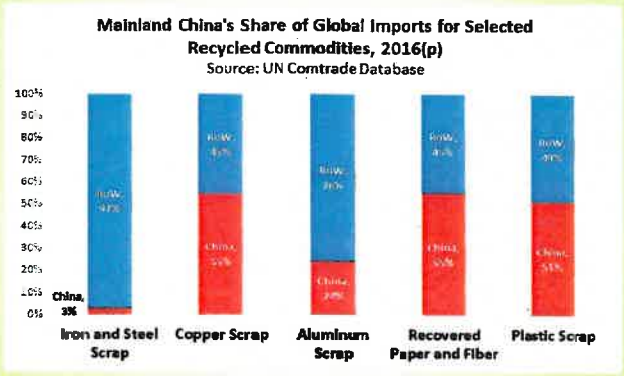
- ***The U.S. is the largest exporter of scrap commodities in the world***
  - **Global scrap exports: 160 million tons worth $70 billion**
  - **Both Quantity and Quality are key to the Strength & Success of that Link in the Supply Chain (scrap sold according to globally recognized specifications)**
- ***With approximately 30% of scrap processed in US destined for export in recent years, the health of the US recycling industry is directly tied to the health of the global economy***

Now What? Preparing for China's Waste Ban



In 2016, Last year, the US recycling industry exported $5.6 billion of scrap to China

Why is China so Important to the Recycling Industry?



China: Scrap Paper

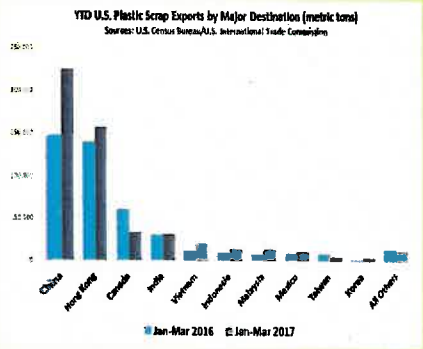
For recovered fiber, China is by far our most important market

U.S. Recovered Paper and Fiber Export Volume
Top 15 Destinations (short tons)

Country	2014	2015	2016	% Change 2015 to 2016
China	14,292,148	14,979,164	14,527,207	-3.00%
India	1,747,162	1,664,495	1,728,272	4.60%
Mexico	1,321,655	1,298,741	1,646,529	26.80%
Korea	1,112,355	1,129,781	1,140,405	1.80%
Canada	710,905	650,515	717,540	10.30%
Indonesia	368,863	318,984	419,563	31.60%
Thailand	202,428	308,477	324,618	5.20%
Taiwan	257,226	191,092	281,739	47.40%
Vietnam	74,237	111,118	133,807	20.40%
Italy	89,894	112,536	102,709	-8.70%
Japan	51,910	84,342	101,228	20.00%
Netherlands	80,373	90,650	88,467	-2.40%
Colombia	73,428	81,788	88,309	8.00%
Germany	36,122	53,761	52,949	-1.50%
Chile	65,279	43,963	45,048	2.50%

China: Scrap Plastics

1. For plastics, China accounts for 67% of exports, although declining year over year
2. (Japan is the 2nd largest exporter to China at 19%, followed by Germany at 15%, UK at 9%, and Belgium at 4%)



What is Going on in China?????

2014: AQSIQ Export & Import Licensing Requirements introduced

2016/7: Green Fence & National Sword initiated to focus on quality

July 2017:

- WTO Notification G/TBT/N/CHN/1211 (" the ban")
- WTO Notification G/TBT/N/CHN/1211 (identification standard)
- Revised GB Standards Proposed (failed to notify WTO)
- *"Implementation Plan to Enhance Solid Waste Import Management System by Prohibiting the Entry of Foreign Waste"*

Within China:

- Country-wide inspection/enforcement actions
- Restrictions on quotas import license

Why??

Multi-Prong Strategy by China to:

1. Prohibit import of "solid waste with major environmental hazards & intense public reaction by the end of 2017"
   → Mixed paper, post-consumer plastics
2. Halt imports that can be replaced w/ domestic resources by end of 2019
   → Mixed metals/category 7 materials?
3. Raise thresholds for importation
   → Proposed 0.3% "carried waste" threshold for all imports
4. Greater customs enforcement to reduce smuggling/illegal wastes
   → 100% inspection
5. Refine laws, regulations & related systems → reductions in import licenses
6. Increase domestic recycling

Now What? Preparing for China's Waste Ban

Industry Advocacy

Messages:

US: $6.6 billion in US exports & 40k+ jobs at stake in US China

- ***Need for clarity & transparency***
- ***Support of responsible recycling & shutting down of irresponsible recycling operations***
- ***Need to adopt standards consistent with global recycling industry***
- ***Scrap versus waste***
- ***Revenues at risk within China***
- ***Needs of manufacturers for high quality scrap***

Now What? Preparing for China's Waste Ban

David Biderman
President/Executive Director
SWANA

SWANA
SOLID WASTE ASSOCIATION of North America

Now What? Preparing for China's Waste Ban

Key Points

- China's import ban could have significant adverse impacts on municipal recycling programs in the United States and Canada
- SWANA submitted comments to WTO raising concerns about scope, clarity and timing of the Import Ban, and has offered to work with the Chinese government to address these issues
  - Can't just "turn off" municipal curbside recycling programs
  - Not enough lead time to permit/construct/expand recycling facilities in North America

Key Points

- SWANA will continue to work with ISRI and other stakeholders and the relevant U.S. government agencies (e.g., Department of Commerce and Office of U.S. Trade Representative (USTR)) to raise concerns and develop reasonable solutions acceptable to all sides.
  - Recommend a 5 year phase in to allow governments, suppliers, and customers to adapt
  - Discussing issue with European counterparts at WASTECON/ISWA World Congress next week
  - Have contacted solid waste associations in Australia and Asia to coordinate response

Chaz Miller
Director, Policy and Advocacy
National Waste and Recycling Association

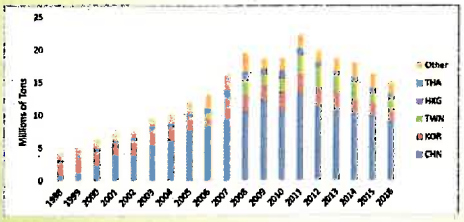
NWRA

- Impact on American Recyclers
- Impact on Chinese end markets
- Clarity
- Realistic Standards
- Time to adjust

Zoe Heller
Policy Director,
CalRecycle

Slide Title

- Exports and the State or Recycling in California
- Impact on Existing CA Programs and Infrastructure
- Workshops Addressing Changing Commodity Prices
- CalRecycle's Current and Upcoming Initiatives



Now What? Preparing for China's Waste Ban

Constance Hornig, Esq.
Law Offices,
MSW Contracts Counsel

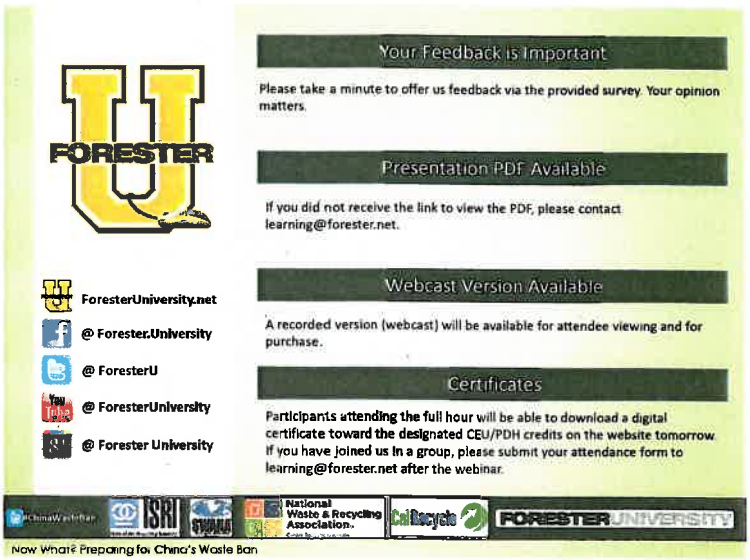
Now What? Preparing for China's Waste Ban

Key Points

- Economic feasibility of MRF processing contracts threatened
  - Operating revenues
  - Additional capital investment
- Compliance with performance standards doubtful
  - Guaranteed minimum revenue shares
  - Recovery/residue percentages
  - Quality
  - Disposal prohibitions
- Disputes Likely
  - Uncontrollable circumstances / change in law
  - Change orders
- Risk Allocation in future contracts reconsidered

Now What? Preparing for China's Waste Ban

Now What? Preparing for China's Waste Ban



Now What? Preparing for China's Waste Ban

Robin K. Wiener
President
ISRI
robinwiener@isri.org

David Biderman
President
SWANA
dbiderman@swana.org

Chaz Miller
Director, Policy & Advocacy
National Waste &
Recycling Association
cmiller@wasterecycling.org

Zoe Heller
Policy Director
CalRecycle
zoe.heller@calrecycle.ca.gov

Constance Hornig, Esq.
Law Offices,
MSW Contracts Counsel
hornig@mswesq.com

Arturo Santiago
Managing Editor
Forester Media
asantiago@forester.net

ISRI
SWANA
National Waste & Recycling Association.
CalRecycle
FORESTER UNIVERSITY

Now What? Preparing for China's Waste Ban

Mary Pitto

From: CalRecycle Electronic Waste Management ListServ <EWaste@calrecycle.ca.gov>
Sent: Monday, September 18, 2017 5:13 PM
To: Mary Pitto
Subject: California E-Waste Updates: Implementing the Electronic Waste Recycling Act

September 18, 2017

Dear Electronic Waste Stakeholder:

This electronic newsletter is an update on the implementation of California's Electronic Waste Recycling Act of 2003 (Act) and other electronic waste (e-waste) management developments in California.

==========

In this issue:

==========

Reminder: CEW Program Proposed Regulatory Action - Written Comment Period

The Department of Resources Recycling and Recovery ("CalRecycle") proposes to amend California Code of Regulations, Title 14, Division 7, Chapter 8.2 commencing with Section 18660.5. The proposed regulations address issues such as eligibility, documentation, compliance, and accountability with respect to the implementation and administration of the Covered Electronic Waste (CEW) program. CalRecycle intends to adopt the proposed regulations described herein after considering all recommendations, comments and objections regarding the proposed action.

Any interested person, or his or her authorized representative, may submit to CalRecycle written comments relevant to the proposed regulations. **The written comment period for this rulemaking closes at 5:00 p.m. on October 10, 2017. CalRecycle will consider only comments received by CalRecycle by that time.** Comments may be submitted via the contact information below. CalRecycle will also accept written comments during the public hearing described below. Please submit your written comments to:

Andrew Hurst or Ana-Maria Stoian-Chu
Materials Management and Local Assistance Division
California Department of Resources Recycling and Recovery
P.O. Box 4025
Sacramento, CA 95812-4025
FAX: (916) 319-7609
E-mail: ewaste@calrecycle.ca.gov

All documents pertaining to this rulemaking are posted on the CalRecycle website:
http://www.calrecycle.ca.gov/Laws/Rulemaking/EWasteFinal/default.htm

Reminder: CEW Program Proposed Regulatory Action – Public Hearing

A public hearing to receive public comments is scheduled for 10/11/2017. The hearing will be held at the:

Joe Serna Jr., Cal EPA Building
Coastal Hearing Room
1001 I Street, 2nd Floor
Sacramento, CA 95814

The hearing will begin at **9:30 a.m. on October 11, 2017**, and **will conclude at 12:00 p.m.,** or after all testimony is given. Any person may present statements or arguments, orally or in writing, with respect to the proposed action. CalRecycle requests that persons making oral comments also submit a written copy of their testimony at the hearing. The hearing room is wheelchair accessible. If you have any questions, please contact:

Andrew Hurst -- Phone: (916) 323-2872
or
Ana-Maria Stoian-Chu -- Phone: (916) 341-6368

Materials Management and Local Assistance Division
California Department of Resources Recycling and Recovery
P.O. Box 4025
Sacramento, CA 95812-4025
FAX: (916) 319-7609
E-mail: ewaste@calrecycle.ca.gov

All documents pertaining to this rulemaking are posted on the CalRecycle website:
http://www.calrecycle.ca.gov/Laws/Rulemaking/EWasteFinal/default.htm

Reminder: Next Future of Electronic Waste Management in California Stakeholder Meeting

CalRecycle will be holding a 4th stakeholder workshop in relation to the ongoing "Future of Electronic Waste Management in California" project. This event is scheduled from **1:00PM – 4:30PM on October 11, 2017**, in the Coastal Hearing Room at the CalEPA Headquarters Building, 1001 I Street, Sacramento, CA. An agenda and supporting documents will be available on the CalRecycle Public Notice website in advance of this event.

In the meantime, general information about the "Future of Electronic Waste Management in California" project, including links to past workshops and activities, can be found here:

http://www.calrecycle.ca.gov/Electronics/Future/Default.htm

Other Resources

Covered Electronic Waste (CEW) Recycling Program Information:
http://www.calrecycle.ca.gov/Electronics/Act2003/

CEW Recycling Payment System Regulations:
http://www.calrecycle.ca.gov/Laws/Regulations/Title14/Chap08pt2/default.htm

DTSC Universal Waste Electronics Handler and Recycler Information:
http://www.dtsc.ca.gov/HazardousWaste/EWaste/

California Statutes and Bills, including Public Resources Code (PRC) and Health and Safety Code (HSC):
http://leginfo.legislature.ca.gov/

==========

Please note that e-mail correspondence with the Department of Resources Recycling and Recovery (CalRecycle) related to e-waste management in general, and implementation of the Electronic Waste Recycling Act in particular, should be directed to ewaste@calrecycle.ca.gov

Also note that an archive of past distributions of this newsletter is available at:

2004 to Present:
http://www.calrecycle.ca.gov/listservs/archive/?ListID=10

Pre-2004:
http://www.calrecycle.ca.gov/Electronics/Act2003/Stakeholder/Updates/

Thank you for your interest in shaping California's e-waste management future.

==========

To subscribe to or unsubscribe from the E-Waste listserv or other listservs, please go to http://www.calrecycle.ca.gov/Listservs/. For information on California`s Electronic Waste Recycling Act of 2003 (SB 20) implementation efforts, as well as other relevant developments go to http://www.calrecycle.ca.gov/Electronics/.

Mary Pitto

From: CalRecycle Electronic Waste Management ListServ <EWaste@calrecycle.ca.gov>
Sent: Wednesday, October 04, 2017 4:14 PM
To: Mary Pitto
Subject: California Electronic Waste Recycling – Regulatory Hearings and Stakeholder Workshops

October 4, 2017

Dear Electronic Waste Stakeholder:

This electronic newsletter is an update on the implementation of California's Electronic Waste Recycling Act of 2003 (Act) and other electronic waste (e-waste) management developments in California.

==========

In this issue:

==========

CEW Program Proposed Regulatory Action - Written Comments and Public Hearing

The Department of Resources Recycling and Recovery ("CalRecycle") proposes to amend California Code of Regulations, Title 14, Division 7, Chapter 8.2 commencing with Section 18660.5. The proposed regulations address issues such as eligibility, documentation, compliance, and accountability with respect to the implementation and administration of the Covered Electronic Waste (CEW) program. CalRecycle intends to adopt the proposed regulations described herein after considering all recommendations, comments and objections regarding the proposed action.

All documents pertaining to this rulemaking can be found on the CalRecycle website:

http://www.calrecycle.ca.gov/Laws/Rulemaking/EWasteFinal/default.htm

Any interested person, or his or her authorized representative, may submit to CalRecycle written comments relevant to the proposed regulations. **The written comment period for this rulemaking closes at 5:00 p.m. on October 10, 2017. CalRecycle will consider only comments received by CalRecycle by that time.** Comments may be submitted via the contact information below. CalRecycle will also accept written comments during the public hearing described below. Please submit your written comments to:

Andrew Hurst or Ana-Maria Stoian-Chu
Materials Management and Local Assistance Division
California Department of Resources Recycling and Recovery
P.O. Box 4025

Sacramento, CA 95812-4025
FAX: (916) 319-7609
E-mail: ewaste@calrecycle.ca.gov

A public hearing to receive public comments will begin at 9:30 a.m. on October 11, 2017, and will conclude at 12:00 p.m., or after all testimony is given. The hearing will be located at:

Joe Serna Jr., Cal EPA Building
Coastal Hearing Room
1001 I Street, 2nd Floor
Sacramento, CA 95814

Supplemental document formats comprised of the proposed regulations and two associated existing emergency rules can be found at the Public Notice webpage, along with a hearing agenda:

http://www.calrecycle.ca.gov/Actions/PublicNoticeDetail.aspx?id=1978&aiid=1804

Any person may present statements or arguments, orally or in writing, with respect to the proposed action. CalRecycle requests that persons making oral comments also submit a written copy of their testimony at the hearing. The hearing room is wheelchair accessible.

If you have any questions, please contact:

Andrew Hurst -- Phone: (916) 323-2872
or
Ana-Maria Stoian-Chu -- Phone: (916) 341-6368

Materials Management and Local Assistance Division
California Department of Resources Recycling and Recovery
P.O. Box 4025
Sacramento, CA 95812-4025
FAX: (916) 319-7609
E-mail: ewaste@calrecycle.ca.gov

Future of Electronic Waste Management in California Stakeholder Meeting

CalRecycle will hold a 4th stakeholder workshop in relation to the ongoing "Future of Electronic Waste Management in California" project. **This event is scheduled from 1:00PM – 4:00PM on October 11, 2017,** in the Coastal Hearing Room at the CalEPA Headquarters Building, 1001 I Street, Sacramento, CA.

The purpose of the project ("Futures") is to examine current conditions and future options for electronic waste management in California and engage stakeholders in exploring how various approaches could address future challenges.

An agenda and associated documents can be found on the CalRecycle Public Notice website in support of this event:

http://www.calrecycle.ca.gov/Actions/PublicNoticeDetail.aspx?id=2033&aiid=1855

General information about the "Future of Electronic Waste Management in California" project, including links to past workshops and activities, can be found here:

http://www.calrecycle.ca.gov/Electronics/Future/Default.htm

Save the Date: Informal Rulemaking Workshop – Designations

Stakeholders are hereby noticed of an informal workshop to be held prior to the initiation of formal rulemaking under the Electronic Waste Recycling Act.

workshop will be held **November 15, 2017, from 1:00 p.m. to 4:30 p.m.** at the Cal/EPA Building, Coastal Hearing Room, 2nd floor, 1001 I Street, Sacramento, CA 95814.

The workshop will focus on Article 7 within Chapter 8.2 of Division 7 of Title 14 of the California Code of Regulations, more commonly known as the Covered Electronic Waste (CEW) recycling program's Designated Approved Collector provision. The eventual rulemaking will serve as a vehicle to modify, as necessary, existing emergency regulations adopted on March 16, 2017.

There is no cost to attend the workshop however the courtesy of an RSVP is requested for planning purposes. Please see the workshop Public Notice for more information:

http://www.calrecycle.ca.gov/Actions/PublicNoticeDetail.aspx?id=2218&aiid=2025

Please visit CalRecycle's Designated Approved Collector webpage for additional information about the Designation provision.

http://www.calrecycle.ca.gov/Electronics/Locals/Designations/default.htm

Other Resources

Covered Electronic Waste (CEW) Recycling Program Information:
http://www.calrecycle.ca.gov/Electronics/Act2003/

CEW Recycling Payment System Regulations:
http://www.calrecycle.ca.gov/Laws/Regulations/Title14/Chap08pt2/default.htm

DTSC Universal Waste Electronics Handler and Recycler Information:
http://www.dtsc.ca.gov/HazardousWaste/EWaste/

California Statutes and Bills, including Public Resources Code (PRC) and Health and Safety Code (HSC):
http://leginfo.legislature.ca.gov/

==========

Please note that e-mail correspondence with the Department of Resources Recycling and Recovery (CalRecycle) related to e-waste management in general, and implementation of the Electronic Waste Recycling Act in particular, should be directed to ewaste@calrecycle.ca.gov

Also note that an archive of past distributions of this newsletter is available at:

2004 to Present:
http://www.calrecycle.ca.gov/listservs/archive/?ListID=10

Pre-2004:
http://www.calrecycle.ca.gov/Electronics/Act2003/Stakeholder/Updates/

Thank you for your interest in shaping California's e-waste management future.

==========

To subscribe to or unsubscribe from the E-Waste listserv or other listservs, please go to http://www.calrecycle.ca.gov/Listservs/. For information on California`s Electronic Waste Recycling Act of 2003 (SB 20) implementation efforts, as well as other relevant developments go to http://www.calrecycle.ca.gov/Electronics/.

CalEPA
California Environmental Protection Agency

Edmund G. Brown Jr.
Governor
Matthew Rodriquez
Secretary for Environmental Protection

UNIFIED PROGRAM NEWSLETTER - SEPTEMBER 2017

IN THIS ISSUE:

CalEPA- California Environmental Protection Agency

NEW Refinery Safety Regulations (Program 4) Effective October 1, 2017

On October 1, 2017, new refinery safety regulations, also known as "Program 4" will take effect. These regulations implement key recommendations of the Governor's Interagency Working Group on Refinery Safety and are part of the California Accidental Release Prevention (CalARP) Program. A parallel set of requirements was also added by the California Division of Occupational Safety and Health (DOSH), better known as CalOSHA.

Please visit the California Office of Emergency Services website (http://www.caloes.ca.gov/cal-oes-divisions/fire-rescue/hazardous-materials/California-Accidental-Release-Prevention) to view the following documents associated with the new refinery safety "Program 4" regulatory rulemaking:

- Initial Statement of Reasons
- Final Statement of Reasons
- Governor's Interagency Refinery Task Force Report (February 2017)

For additional information, please visit http://www.oesnews.com/new-regulations-improve-safety-at-oil-refineries/.

Questions regarding the new refinery safety regulations can be directed to Stephanie Ogren (CalOES Legal) at (916) 845-8322, or Jack Harrah (CalOES Hazmat) at (916) 845-8759.

In June 2017, CalEPA established the following annual Unified Program Refinery Safety surcharge component: based on daily barrel capacity:

Unified Program Refinery Safety Surcharge		
	Daily Barrel Capacity	Annual Surcharge Amount
Tier 1	≥ 200,000	$45,000
Tier 2	100,000 to 199,999	$27,500
Tier 3	50,000 to 99,999	$13,750
Tier 4	< 50,000	$3,500

Though the Unified Program Refinery Safety surcharge component is set and approved, it cannot be assessed nor collected from subjected facilities until it is adopted in California Code of Regulations (CCR), Title 27, §15240. CalEPA is currently developing a rulemaking package for CCR, Title 27, §15240, which is scheduled to be submitted to the Office of Administrative Law late 2017 for an anticipated effective date of January 1, 2018. Once the Refinery Safety surcharge component is incorporated into CCR, Title 27, §15240, the established Refinery Safety surcharge can be assessed and collected from refineries.

Questions regarding the new refinery safety surcharge can be directed to the CalEPA Unified Program (CUPA@calepa.ca.gov).

NEW Features for the CalEPA Complaint System
The CalEPA online Environmental Complaint System allows Californians to easily report an environmental concern anywhere in the state, whether it affects the quality of air or water, the handling of hazardous or solid waste, or the use of pesticides. Complaints received through the CalEPA online Environmental Complaint System (https://calepacomplaints.secure.force.com/complaints/Complaint) are referred to the appropriate state and local environmental agencies that enforce environmental laws. Over the past 18 months, CalEPA has identified 160 complaints reported into the CalEPA online Environmental Complaint System that have resulted in the identification of environmental regulatory violations by local agencies.

In September, the CalEPA online Environmental Complaint System will have the following features available:

- a revised version of the online "Findings Form" that is streamlined and shortened to limit the amount of time and effort necessary for local agencies to complete relative to a referral. It focuses on obtaining information necessary to track the outcome of complaints, while eliminating requests for information that is not necessary for determining how local agencies handle referred complaints.
- a new "External Local Agency Partner Portal" will provide local agencies the ability to manage all complaints referred by CalEPA and the status of each complaint referred. Local agencies can also access specific complaints and submit Findings Forms to CalEPA through the portal.

CERS Central Gets an Upgrade: October 2017
The CERS Technical Support Unit has completed the development of a new look for CERS Central webpages. The CERS Central redesign will mirror the current website design standards used by the majority of state boards, departments, and offices set forth by the California Office of Technology. The Unified Program website has already been updated with the revised state department template: http://www.calepa.ca.gov/CUPA.

While most of the content in CERS Central will remain the same, including the CERS Central URL (http://cers.calepa.ca.gov/), the location of many commonly used links and the organization of frequently accessed documents will change. In time, new information will also be available, such as the revised CERS 3.0 Enhancement schedule as well as CERS Release Plans, which detail the application changes made within CERS Central, the business portal and the regulator portal.

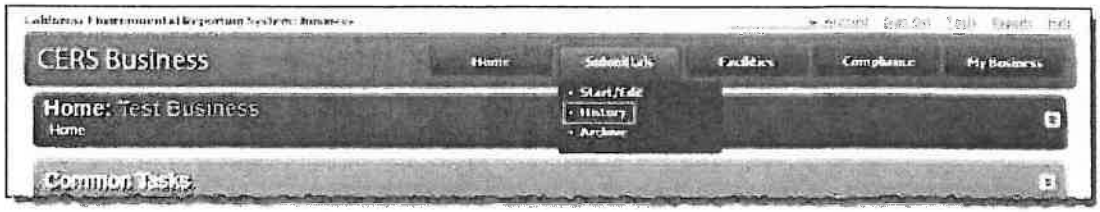
To promote familiarity and ease with using the redesigned CERS Central webpages, beginning ***October 2, 2017***, a link to the redesigned CERS Central webpages will be available on the current CERS Central homepage. A complete transition to the new CERS Central webpage design is scheduled for ***October 23, 2017***. For questions or additional help, please contact CERS@calepa.ca.gov.

CERS Tips and Tricks
CERS Tips and Tricks includes helpful explanations and resolutions regarding current issues recently received by the CERS Technical Support Team. If you have questions or concerns please email the CERS Technical Support Team at cers@calepa.ca.gov.

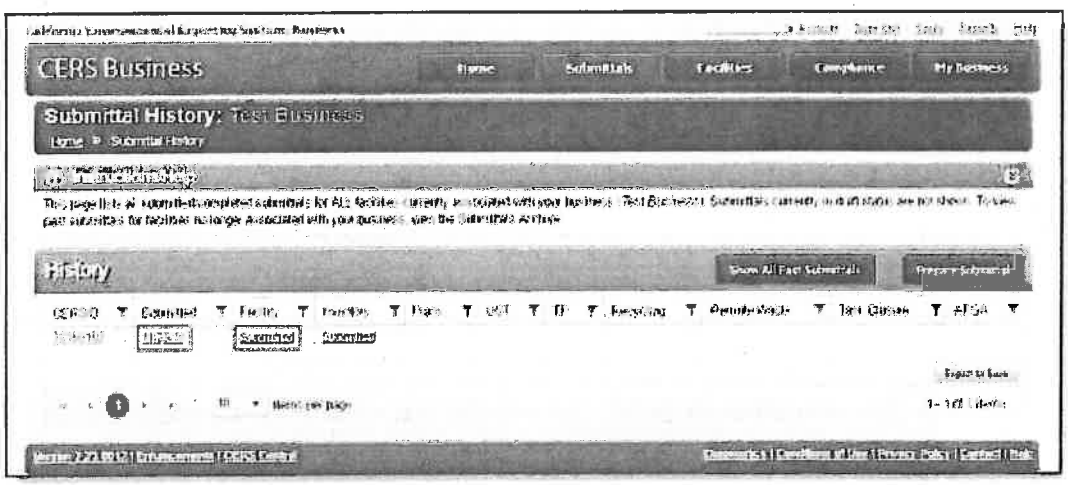
How to View Submittal Element History, Print a Submittal and Download Documents and Forms Associated with Submittals

- Sign in to the CERS Business Portal and select the "Submittals" button from the top menu.

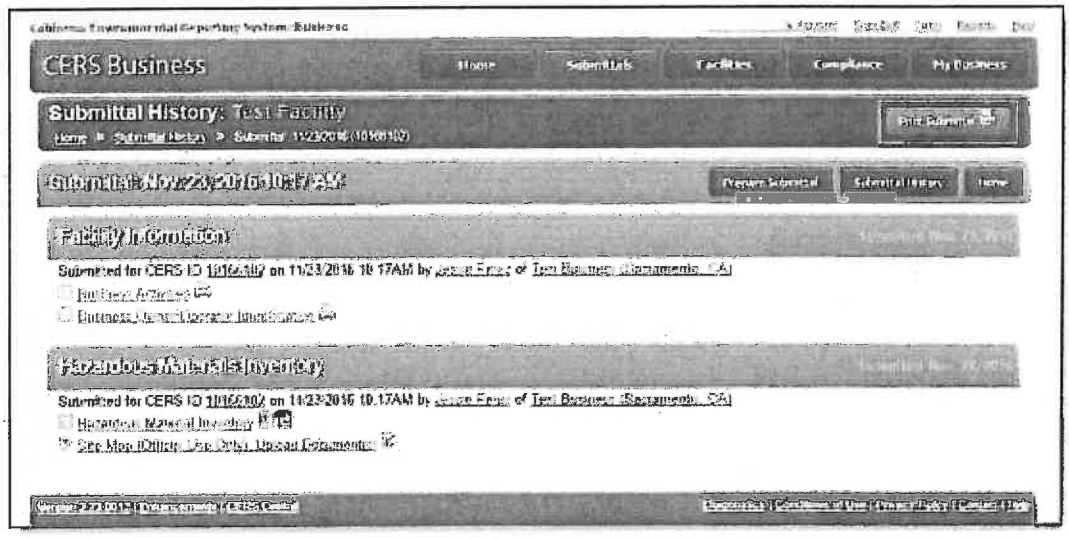
- From the "Submittals" drop down menu, select "History."



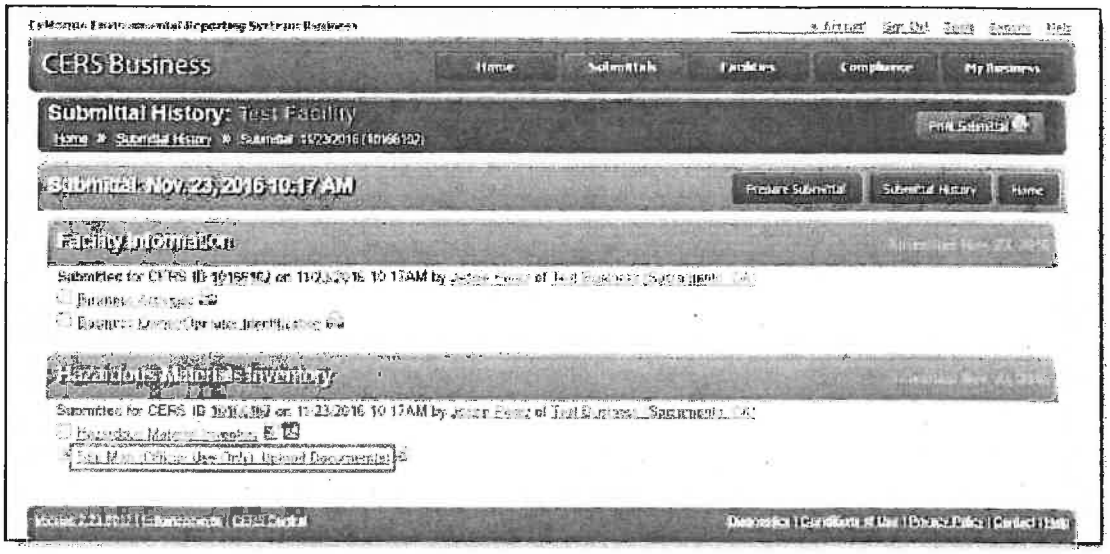
- Within the "History" section, in the "Submitted" column, select the date link or in the "Facility" column, select the status link (i.e. Submitted, Under Review, Not Accepted, or Accepted).



- Select the "Print Submittal" button to create a PDF (printable) version of the selected submittal.



- When viewing a submittal, download a copy of an uploaded document or form by selecting the document or form link.



- In the "Document Upload(s)" section, select the "Document Title' link to download a copy of the document or form.

CAL FIRE- Office of the State Fire Marshal

Tanks in Underground Areas
Proposed regulations for tanks in underground areas were incorporated into the California Code of Regulations Title 24 rulemaking (California Building Standards Code) and submitted to the California Building Standards Commission (CBSC) at the end of December 2016. The public comment period has passed; no comments were received regarding the sections on tanks in underground areas. CBSC reviewed and adopted the rulemaking at their meeting on August 14-15, 2017. The final express terms may be viewed online at CBSC's website (http://www.bsc.ca.gov/Rulemaking/adoptcycle/2016InterveningCodeAdoptionCycle/ApprovedStandardsAugust2017.aspx). Refer to the approved amendments to the 2016 California Fire Code (Cal. Code Regs., Title 24, Part 9) under the Office of the State Fire Marshal section.

The approved standards will be included in the 2016 California Building Standards Code, an Intervening Code Supplement, which is scheduled for publication on or before January 1, 2018, and has an effective date of July 1, 2018. The full definition of a tank in an underground area, as amended by Senate Bill 612 (Jackson, Stats. 2015, Ch. 452), also becomes effective July 1, 20187.

DTSC- Department of Toxic Substances Control

Clarification of the Use of DTSC Form 1430
California law requires that a Certified Appliance Recycler (CAR) must remove the materials that require special handling (MRSH) prior to processing major appliances. Pursuant to Health and Safety Code Section 25211 et seq., a CAR is required to complete DTSC Form 1430 (Form 1430) in order to document that the MRSH was removed from discarded major appliances before being crushed, baled, shredded, sawed, sheared apart or otherwise processed in a manner that could result in the release of MRSH. Health and Safety Code Section 25211.2(a) instructs that when a CAR transports discarded major appliances to a scrap recycling facility, Form 1430 is required at the initial transaction certifying that the CAR has removed and properly managed the MRSH. There is no requirement than an additional Form 1430 be completed during a subsequent transaction between two scrap recycling facilities after the MRSH have been removed.

Form 1430 documents that MRSH have been removed from discarded major appliances. CARs who remove hazardous materials from appliances must complete Form 1430. Form 1430 is not required when removal of MRSH and shredding or other processing occur at the same facility. Form 1430 must accompany the processed appliances to the next destination, even if it is owned by the same company. Form 1430 must be retained for three years by the destination facility and made available for inspection upon request by DTSC or the local Certified Unified Program Agency (CUPA).

State Water Board- State Water Resources Control Board

UST Surcharge Increase
Effective June 2, 2017 the Underground Storage Tank (UST) surcharge increased from $15 to $20. Unified Program Agencies (UPAs) must assess and collect the new UST surcharge starting August 1, 2017.

The UST surcharge is an assessment on each regulated UST and is used to fund necessary and reasonable costs of the State Water Resources Control Board (State Water Board) for program implementation, ongoing maintenance and oversight of the Unified Program. The State Water Board will propose a secondary surcharge increase in the near future. The Unified Program UST surcharge is authorized by the California Health and Safety Code, Division 20, Chapter 6.11, section 25404.5(b), and the California Code of Regulations, Title 27, Division 1, Subdivision 4, Chapter 1, Section 15240.

For more information, please contact Ms. Melinda Blum with CalEPA at (916) 327-9560 or melinda.blum@calepa.ca.gov.

Abandoned Underground Storage Tank Inspections
The State Water Resources Control Board (State Water Board) has addressed compliance inspection requirements for abandoned underground storage tanks (AbUSTs) in a letter to the Unified Program Agencies (UPAs) dated August 15, 2017. California Health and Safety Code requires all USTs be inspected annually, including AbUSTs. Minimum inspection criteria has been developed for documenting and reporting compliance of AbUSTs at facilities with limited or no site access. The semiannual Report 6 includes the number of UST compliance inspections conducted, significant operational compliance determinations, and number of active USTs. UPAs are required to include AbUSTs inspections data in the next Report 6, due March 1, 2018. The letter also addresses AbUST requirements for the California Electronic Reporting System (CERS).

The letter and inspection checklist can be found on the State Water Board website at http://www.swrcb.ca.gov/ust/docs/abandoned_storage/abust_inspection_letter_and_checklist.pdf.

For questions regarding the AbUST requirements, please contact Mr. Tom Henderson at (916) 319-9128 or tom.henderson@waterboards.ca.gov.

Updated CERS Frequently Asked Questions Posted
The CERS frequently asked question (FAQ) "Reporting Abandoned USTs" has been revised to reflect the appropriate actions a Unified Program Agency (UPA) must take when an abandoned underground storage tank (AbUST) is discovered containing product. The United States Environmental Protection Agency has determined a UST is considered to be in use if it contains an inch or more of petroleum. Therefore, it must be treated as a regulated tank. All regulated tanks require a CERS entry.

The link to the updated CERS FAQs can be found at https://cersbusiness.calepa.ca.gov/Help and/or http://waterboards.ca.gov/water_issues/programs/ust/cers/faqs.shtml.

For more CERS information, please contact Mr. Dan Firth at daniel.firth@calepa.ca.gov or (916) 445-5049. For information on AbUST reporting, please contact Mr. Tom Henderson at (916) 319-9128 or tom.henderson@waterboards.ca.gov.

Agenda Item IX

ARTICLES OF INTEREST

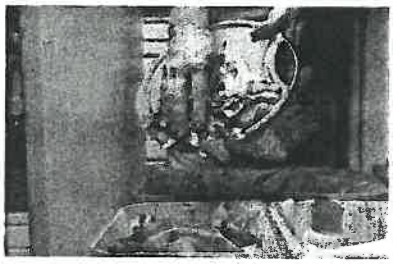
(https://www.resource-recycling.com/recycling)

RESOURCE RECYCLING
Your trusted source for recycling news and analysis

Food scrap efforts developing in surprising locales (https://resource-recycling.com/recycling/2017/09/12/food-scrap-efforts-developing-surprising-locales/)

Posted on September 12, 2017

by Colin Staub (https://resource-recycling.com/recycling/author/colinstaub/)



The Massachusetts Institute of Technology found that 40 percent of municipalities included in a research set have programs aimed at diversion of food material. And those cities are not all in regions considered hotbeds of environmentalism.

The findings come from a study titled "Patterns in municipal food scrap programming in mid-sized U.S. cities (http://www.sciencedirect.com/science/article/pii/S0921344917301829)" that is being published this fall.

The research project examined 115 cities across the country, and determined that 46 of them have some sort of food scrap recycling program in place. That doesn't mean each of those communities collects food materials, as the study defined a "program" as including educational programs and support for home composting in addition to drop-off facilities and curbside collection of food waste.

Curbside collection of food scraps was present in 18 percent of the surveyed cities.

Nonetheless, the finding that 40 percent of studied cities were looking to increase food scrap diversion helps to quantify the growing interest in capturing that segment of the waste stream.

The study also yielded some surprising results about the characteristics of communities active in this area.

Often, food scrap diversion programs are considered a luxury a community can implement only after it has developed strong programs targeting other materials.

But researchers noted that even communities without strong traditional recycling programs were found in many cases to have food scrap collection efforts in place. In the southern U.S., more than 35 percent of the cities surveyed had an active food scrap program.

"The places deploying food-scrap recycling programs are located throughout the country, not just in well-off coastal areas with popular environmental movements," an MIT news report (https://news.mit.edu/2017/study-food-waste-recycling-policy-key-0817) summarized.

Along similar lines, the study found that socioeconomic factors, including income level, had a "negligible correlation with a place's tendency to adopt food-scrap recycling."

So which factors are associated with communities that have launched food scrap programs? For one, many also utilize pay-as-you-throw systems, according to the study. These programs naturally encourage residents to think more about their disposal habits, making them a good precursor to targeting new materials for diversion.

Greater population density was also found to correlate with higher frequency of curbside food scrap collection, though population density did not prove to be a reliable indicator of the likelihood of other food scrap initiatives.

More stories about organics

- Closed Loop Foundation awards food waste prevention grants (https://resource-recycling.com/recycling/2017/07/18/closed-loop-foundation-awards-food-waste-prevention-grants/)
- Canadian startup chops to it on wood recovery (https://resource-recycling.com/recycling/2017/07/05/canadian-startup-chops-to-it-on-wood-recovery/)
- 'Public action' essential for successful curbside programs, experts say (https://resource-recycling.com/recycling/2017/05/31/public-action-essential-successful-curbside-programs-experts-say/)

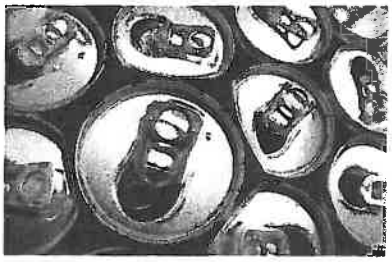
(https://www.resource-recycling.com/recycling)

RESOURCE RECYCLING
Your trusted source for recycling news and analysis

Walmart underpaid millions in California deposits (https://resource-recycling.com/recycling/2017/09/12/walmart-underpaid-millions-california-deposits/)

Posted on September 12, 2017

by Colin Staub (https://resource-recycling.com/recycling/author/colinstaub/)



The world's largest retailer underreported the number of containers it distributed over a three-year period in California, leading to $7.2 million in unpaid deposits to the state. The balance was paid in full late last year after it was revealed during an audit.

Walmart operates more than 250 retail locations and 14 distribution centers in California. The company distributes beverage containers, meaning the company is subject to beverage distributor requirements under California's container redemption laws.

In California's unique deposit program (http://www.lao.ca.gov/reports/2015/res/recycling/beverage-container-042915.aspx), consumers pay a 5- or 10-cent surcharge on drink containers to the retailer, with the amount depending on container size. This is known as California Refund Value (CRV). The retailer passes that money to beverage distributors, and those distributors then move it on to Calrecycle.

The state agency places the money in a state fund that pays container processors for each container they handle, and the processor pays recycling collection centers. The collection centers pay consumers for redeeming their containers, completing the CRV cycle.

Last year, CalRecycle conducted an audit of Walmart's compliance with distributor deposit regulations from 2011 through 2014. Auditors found (https://resource-recycling.com/recycling/wp-content/uploads/sites/3/2017/09/Walmart-audit.pdf) that during that period, Walmart underreported the number of CRV-covered beverage containers it distributed. That meant the company did not submit payments to the state for the deposit or processing fee values on those containers.

In total, the company failed to report 129.9 million CRV-covered beverage containers it distributed to retailers during the audited period. That equated to more than $7.2 million that the company should have submitted in deposit values but did not. The volume was about 15 percent of the total number of containers Walmart reported distributing during that period (837.8 million containers, totaling nearly $48 million in CRV).

Walmart also did not pay processing fees, a much smaller required charge that is used to offset the impact of fluctuating commodities markets on processors, on 27 million containers during that time, which came to about $8,500.

With all balances and interest included, CalRecycle determined Walmart owed $7,488,200 to clear up the deficiency, which Walmart paid in full (https://resource-recycling.com/recycling/wp-content/uploads/sites/3/2017/09/Walmart-review.pdf) late last year. The company was not assessed any fines for the underreporting.

"Wal-Mart was very cooperative and addressed the issue in a timely manner, so CalRecycle does not believe penalties were warranted," said CalRecycle spokesman Mark Oldfield. "However, interest was charged on the balances due."

Besides collecting interest, CalRecycle required Walmart to submit a plan for how it would avoid the same problem in the future. The company presented a plan along with its payment last year.

"The company has established additional internal processes and reviews for CRV compliance," Oldfield said. "CalRecycle believes these adequately address the issues found during our audits."

Walmart did not respond to a request for comment by deadline.

More stories about container deposits

- In My Opinion: PepsiCo shortchanges container deposits (https://resource-recycling.com/recycling/2017/08/29/opinion-pepsico-shortchanges-container-deposits/)
- Maine leaders battle over adding 'nips' to deposit program (https://resource-recycling.com/recycling/2017/05/23/maine-leaders-battle-adding-nips-deposit-program/)

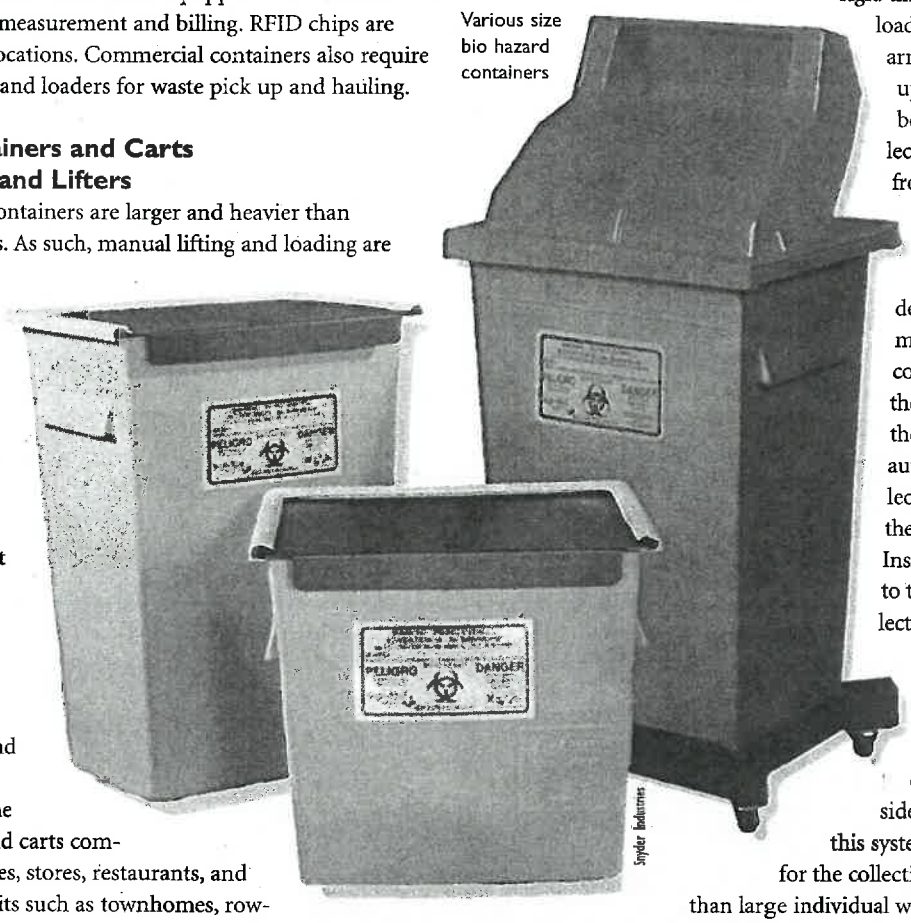
It's Not Just a Matter of Size

Commercial containers made for specific kinds of waste loads BY DANIEL P. DUFFY

Commercial waste pick up is not just a matter of size. Though certainly larger than residential carts and waste cans, commercial containers come with additional features made necessary by the volume and weight of their waste loads. Commercial containers are made with different materials, often with reinforced structures to manage greater load weights. Given the large volume of often putrescible wastes (commercial containers are necessity for grocery stores and restaurants) commercial containers can also be equipped with odor suppression systems. Secure covers and lids are a typical feature, and not just in remote rural areas where bears and other species are looking for an easy meal. Commercial containers often come equipped with onboard scales for ease of weight measurement and billing. RFID chips are also used to track their locations. Commercial containers also require specially designed lifters and loaders for waste pick up and hauling.

Commercial Containers and Carts —Design, Loaders, and Lifters

Obviously commercial containers are larger and heavier than residential cans and carts. As such, manual lifting and loading are out of the question. Mechanical hydraulic systems are required. These come in three varieties: front-end loader attachments, automated side loader arms, and semi-automatic cart tippers. Each is designed for a different work environment and loading application.



Various size bio hazard containers

The most common equipment used for the loading commercial containers is the front-end loader apparatus. These are especially useful in the handling of large bins and carts commonly found at businesses, stores, restaurants, and multi-family housing units such as townhomes, rowhomes, apartment complexes, and condominiums. Basically, a front-end loader is a very large articulated forklift operating at the front of the truck under direct visual observation by the driver or operator. The truck moves slowly forward and the tines of the front-end loader's forklift arms are slid forward into specially designed reinforced loops welded to the sides of the waste container. Once securely in place, the arms lift the container up and over the driver's cab flipping its contents into the open hopper located in the rear body of the collection truck. Inside the hopper, the waste is compacted by a "packer blade" to increase its density and free up additional capacity for the next load. Though directly controlled by the in-cab operator, he is assisted by ground spotters to ensure that there has been no spillage of waste outside the truck during the loading process. This is just a safety precaution since the opening of the waste container top usually matches the opening of the truck's hopper.

Automated side loaders use completely different methods to perform the same function as front-end loaders. On the front-end loader, the automated side loader is an extension of the in-cab driver or operator who operates it from his driver's seat via a joystick similar to those used in video games. The joystick allows for articulated control of the side arm instead of the simple, direct, and flip action of the rigid tines of the front-end loader. The side loader arm is able to reach out up to 9 feet from the body of the waste collection truck. Unlike the front-end loader with its brute strength, the finesse of the side arm loader is designed to manage medium sized waste containers. But like the front-end loader, the side arm loader automates the waste collection process, reducing the need for labor. Instead of a crew of up to three men, waste collection can be performed by a single driver or operator.

The grapple truck is a variation of the automated side loader. However, this system is designed more for the collections of loose debris than large individual waste objects such as appliances or furniture. The system utilized a hydraulically operated clamshell bucket set on the end of a swinging boom that can extend out and allow for prices placement of the bucket. Once in place, the open clamshell bucket descends into the waste, closes on a loose load, and is swung back to the rear of the truck so it can deposit the waste into the truck's hopper. The hopper itself is usually equipped with a compactor blade that sweeps the waste forward against the front of the hopper to compact it and achieve high levels of density.

Cart tippers (or lifters) automate what has been the exclusively manual operation of lifting waste cans and depositing their contents

into the rear of a residential waste collection truck. Its function is to grab, lift, tip, empty, and turn the waste cart to its initial position and location. Though cart tippers are designed to handle up to twice the standard weight of a typical waste cart (350 pounds), it is not the weight of the cart and its contents that matter to the proper operation of the tipper. Instead, a cart has to be designed so that its body mates with the tipper's arms. This often involves the augmentation of the cart with a saddle attachment designed to receive the tipper arms. At minimum, there must be at least a 3 feet clearance from the ground to the lifter saddle.

The cart tipper's lifting power is provided by either a hydraulic lift cylinder or a rotary actuator. The hydraulic lift cylinder is less expensive and will represent a lower initial capital costs, but tends to wear out sooner. The more expensive rotary actuator has a longer operating lifetime and lower operating and maintenance costs. Rotary actuators come in two versions: a simple dual rack and pinion or the more complicated and more expensive helical design. When choosing between rotary actuator types, the operator must once again choose between higher up-front costs or lower maintenance costs and longer operation lifetime.

Waste Collection Containers and Carts —Sizes and Designs

Commercial containers are only one size and type of waste cart. Waste cans come in many sizes. Single and duplex family residences utilize 32-gallon and 64-gallon carts. Multi-family apartment complexes and small commercial operations can be serviced by 96-gallon carts. Standard container size specifications are shown in the Table 1.

There are also specialized carts designed for compost waste, medical waste, secure documents and shredded waste, and containers for recyclable materials.

Compost waste (organic and food waste, or green waste) containers come with perforations on the sides of the containers. These allow air to infiltrate into the stored wastes and helps to thoroughly aerate the organic waste to prepare it for the formal composting process. The aeration generates heat that kick starts the decomposition process, accelerates the evaporation of moisture and free liquids, and reduces odors. As a further aid to liquid removal, at the bottom of the bin is a grating installed above the bin floor of the containers to allow for continuous water drainage. The green waste is kept above the accumulated (or drained moisture) at the container bottom. The design should allow for easy cleaning of the grates to prevent long-term clogging of its openings.

Medical waste is unique in that it is often not dumped out of the container. Instead the entire container is picked up and stacked in open bay hauling trucks. This is done to prevent the accidental spillage of potentially dangerous bio-hazard waste or medical sharps that have come into contact with infected individuals. As such, the design of the medical waste and sharps containers should allow for safe and easy stacking of the containers and efficient storage arrangement within the trucks so they must be relatively lightweight and usually have a slimmer design than bulk waste containers. Larger medical waste operations may utilize carts as large as 150 gallons in size. The top lids are usually locked (padlocked or integral roto-lock) to prevent access or spillage.

Documents and shredded waste generated by businesses and

governments must be handled in a safe and secure manner in order to protect the sensitive nature of these documents. These carts are often integrated with shredding machinery or include special inserts (either of cloth or plastic) to keep this material segregated from the main waste stream.

Containers for recyclable materials include all those waste materials that are not designated as "green" organic waste but are recycled for reuse. These include: aluminum foil and trays, cardboard, food and drinks cans, food and beverage cartons (tetrapak type containers, aka "juice boxes"), paper of all kinds including news print, plastic bottles, and other containers made from plastic. Usually the dumpsters and carts designated to receive recyclables accept all of the above materials in a mixed recycling stream. Recycled materials are usually not compacted for shipping until after they have been processed at the material recovery facility (MRF). As such recyclable materials tend to be low density. Therefore it is often more economical to collect recyclable materials in larger dumpsters for pick up.

Table 1. Container Specifications

Container	Width	Depth	Height	Reading Clearance Required	Cubic Yards	Equivalent Container(s)
32 gal can	25 in.		27 in.		.16	35 gallon cart
35 gal cart	21 in.	23 in.	40 in.		.16	32 gallon can
65 gal cart	27 in.	29 in.	41 in.		.32	2 cans or 2–35 gal carts
95 gal cart	29 in.	34 in.	46 in.		.47	3 cans or 3–35 gal carts
1.5 yd³ dumpster	81 in.	34 in.	46 in.	56 in.	1.5	3–95 gal carts
2 yd³ dumpster	81 in.	40 in.	52 in.	57 in.	2	4–95 gal carts
3yd³ dumpster	81 in.	48 in.	60 in.	59 in.	3	6–95 gal carts
4 yd³ dumpster	81 in.	55 in.	67 in.	61 in.	4	8–95 gal carts

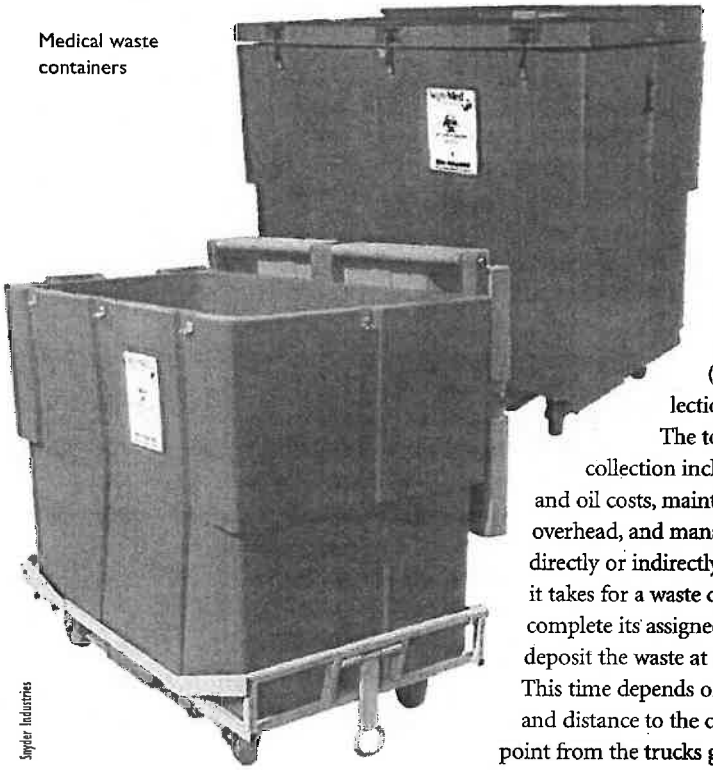
(Source: "Trash and Recycling Enclosure Design Guide," City of Santa Barbara, revised July 2016)

Commercial Collection Operations—Time and Money

As with every other business endeavor, time is money. The industry standard for measuring waste collection efficiency is the amount of time it takes to load the contents of a single waste bin of standard size and weight. In the real world, the amount of weight in each waste bin can vary widely. The resultant cycle time required for actual waste pick up varies depending on the weight of waste being loaded and the methods used for loading. Manual loading is the most inefficient method of loading waste, though it naturally requires no capital investment for lifting equipment. Human muscles have limitations which can only be overcome by mechanical means. The highest productivity is achieved by fully automated mechanical systems that require no human labor and only one human operator (usually the waste collection truck's driver).

The total costs of waste collection include labor costs, fuel and oil costs, maintenance and repair, overhead, and management. Each of these directly or indirectly related to the time it takes for a waste collection truck to complete its assigned collection routes and deposit the waste at its regional landfill. This time depends on the following: time and distance to the collection route start point from the trucks garage or parking area, length and time needed to reach each designated collection point on the route, the time needed to drive from the collection route end point to the landfill for final disposal at the working face (included time in queue, weighing, spotting and unloading), and those multiple items that make up non-task time (return from the landfill to the storage area, crew meals and breaks, truck refueling, etc.).

The key to minimizing waste collection costs is to minimize the amount of time that must be spent at each pick up point. Given a fixed collection route that has been already optimized by route planners, it is the reduction of the time spent picking up and collecting the waste that becomes critical. And that is often a function of the type of waste container. Less routing time means less wear and tear on the collection truck fleet, reduced fuel consumption, and the least number of trucks for servicing the largest number of customers.



Medical waste containers

Snyder Industries

Major Suppliers

IPL Inc., Saint-Damien, Québec, is more than just a waste cart manufacturer. IPL offers a full range of injection-molded containers for municipal, commercial, and industrial recycling, solid waste, and organic management, all available with options and graphics tailored to the client's specifications. They have also integrated their entire waste collection process including assembly and delivery of the IPL waste cart solution. IPL developed its own proprietary software for cart delivery to ensure best routing for door-to-door cart distribution. All carts can also be equipped with a Radio Frequency Identification (RFID) tag. Each number can be customized to fit customer specifications. Each cart will be

delivered and placed curbside at every address required by their customers.

One such customer is the Regional Municipality of Peel, the second largest municipality in Ontario after Toronto. In less than three months, IPL delivered 1.2 million rolling carts and kitchen containers to 317,000 homes in this region. This project also involved the manufacturing, distribution, and 10-year maintenance of three kinds of carts for Peel Region's residents: waste carts, organics carts, and recycling carts. They employed a new smart technology utilizing smart phone scanning for distribution. With this system, each cart was initialized with a unique RFID chip containing the cart's serial number, GPS coordinates and the home address files of its customer. By using a smart phone, their delivery teams could scan each cart, know exactly where and how to deliver each cart. Simultaneously, the IPL management team performed live monitoring of the delivery process.

"This project allowed us to position ourselves a notch above any North American competition", says Paul Palazzo, vice president, sales and marketing at IPL Environmental, the division responsible for this project. "Not only were we faster and more efficient than any of our competitors, but the technology used in this project will also help us manage the Region's ongoing growth and 10-year maintenance and service agreement that is part of the project."

Snyder Industries Inc. manufactures special containers for medical and hazardous waste disposal, select refuse equipment, and community recycling. Snyder containers are designed to be reusable "point-of-use" containers. This allows them to safely handle and transport large quantities of medical sharps, needles, lab waste, IV bags, and tubing. Not only do these containers reduce disposal costs, they meet the demanding standards of both the UN and US Department of Transportation for the transport of certain types of hazardous waste.

E-Pak Manufacturing's Refuse Container is E-Pak's lightest variety of rectangular containers. It can manage waste that is bulky but light in weight, and can be easily maneuvered with a light capacity lift hoist. Built with hefty 12-gauge sides and reinforced by 3-inch structural cross members, its interior is fully welded and it comes with a sealed tailgate to prevent leakage. E-Pak can provide containers that vary in size from 10 cubic yards to 90 cubic yards (12 feet to 40 feet in length).

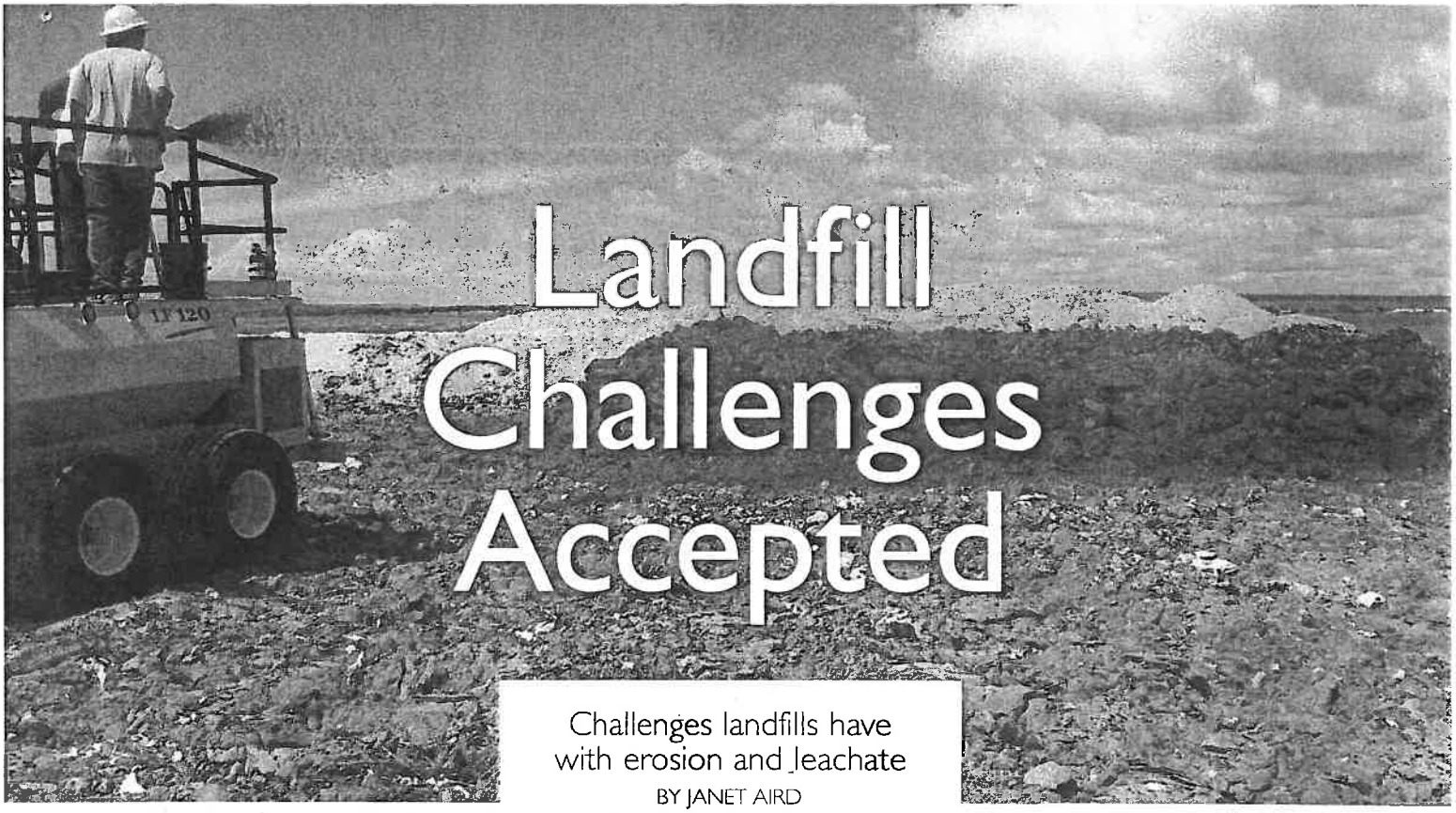
Rehrig Pacific Company's Roll-out Carts are designed to withstand both fully and semi-automated collection systems. They come in a wide range of sizes, curbside applications (including refuse, organic waste, and recyclables), and load capacities. Easy maneuvering is facilitated by a continuous one-piece handle with a strong gripping area and the wide wheelbase. A wide ground base keeps these carts upright and stable. The Roll-out Carts can be specialized to specific customer needs. Optional features include internal and external locking lids, slots for collecting confidential documents, and cutouts for recyclable beverage containers. Collection vehicles with side loader arms can securely grasp, dump, and replace these containers without drivers leaving their cabs. Weighted bases provide stability; gravity locks open at 90 degrees of tilt, and textured surfaces help speed automated collection. Wide opening lids and a reusable injection molded plastic liner, which can be used with or without bags, make manual collection quick and easy.

Rehrig Pacific's new EnviroGuard 35 gallon Organics Cart is a 100% ANSI compliant container (Type B and G) designed with a unique locking mechanism that can operate in both manual and automated collection systems. In addition to the EnviroGuard's rodent-resistant features, it also allows the hauler to optimize their collections, improve safety, and reduce workers' injuries by utilizing a fully automated collection method. EnviroGuard makes this method of collection possible and it does not require the resident to unlock the container prior to collection—making it easy for residents to use while guarding the material from rodents until it is collected.

Rehrig Pacific Company is a global leader in providing logistics optimization solutions for 11 vertical industries: Bakery, Beverage, Dairy, Environmental, Foodservice, Fresh Produce, Protein, Beer Wine & Spirits, Retail, Automotive Aftermarket & Home Improvement, and Upstream Supply Chain for CPGs. Rehrig Pacific's optimization solutions derive from the belief in challenging the status quo on how products and ideas move. **MSW**

Daniel P. Duffy, P.E., writes frequently on the topics of landfills and the environment.

For related articles:
www.mswmanagement.com



Landfill Challenges Accepted

Challenges landfills have with erosion and leachate

BY JANET AIRD

Photo: Estancia Valley Landfill

Today's municipal solid waste (MSW) landfills are much more than places to dump household trash. They're engineered facilities that are designed to hold and isolate the trash from the environment and are governed by both federal and state regulations.

Landfill designers and operators face two main challenges to the integrity of their landfills. One occurs on the face of landfills, where they have to control windblown litter; landfill gases; rodents, birds, and insects that scavenge and transmit disease; and potential fires.

The other challenge occurs because of water within the landfill. Precipitation penetrates the surface on landfills where the daily cover is permeable. Moisture may exist in the waste, and groundwater may come in contact with the waste. The water in the landfill ponds or moves horizontally and through side seeps. As it comes into contact with the trash, it picks up contaminants. If the contaminated water, or leachate, seeps out of the landfill, it can contaminate both surface waters and groundwater.

Both these challenges must be handled without creating a threat to human health or to the environment.

To control the problems on the surface of landfills, managers use daily cover on the landfill cell, the specific area of the landfill where waste is dumped and compacted. Traditionally daily cover has consisted of a 6-inch layer of soil, either from onsite or imported by dump trucks. When compacted, the soil may be relatively impermeable.

Alternative materials for daily cover (ADC) are permitted by many states as long as they perform to the same standard as 6 inches of soil. These materials often save a combination of airspace, money, and time.

Permeable ADC includes hydromulch and waste products such as shredded tires, glass aggregate mixed with soil or shredded tires, and foundry sand. Because these covers are permeable, water passes through the landfill cell. Without proper management, leachate may become a major problem. Impermeable daily cover materials include tarps, geosynthetic films, and sprayed foams.

Leachate is a more complex problem. In landfills that contain organic matter such as food scraps, water begins a chain reaction. Along with the oxygen that remains in the landfill after compaction, water helps bacteria and fungi decompose the organic matter, producing gases such as methane and carbon dioxide.

Leachate is typically a cloudy black, yellow, or orange liquid and has a sharp, biting smell or a strong smell of rotten eggs. When it reaches bodies of water, decomposition increases and oxygen decreases. The lack of oxygen kills vegetation and aquatic life, which decompose, leading to further depletion of the oxygen levels and further loss of aquatic life.

Leachate also may contain a high concentration of toxic substances and hazardous organic chemicals. The substances may include suspended solids; inorganic macro components such as sulfates, chloride, iron, aluminum, zinc, and ammonia; heavy metals; and organic compounds such as PCBs and dioxins.

Landfill engineers often design a drainage system to contain and remove the leachate within the landfill. A drainage layer of sand or gravel or a geonet collects the leachate and allows it to drain by gravity to the pipe system. There may be one pipe or a network of them that conveys the leachate to sumps that transport it to a collection or treatment location. These pipes lie on a liner at the bottom of the landfill.

The EPA and some states specify design standards for bottom liners, which must cover the entire bottom and sides of the landfill. The liner forms a barrier to the leachate and helps prevent the escape of landfill gases.

Liners have either two separate layers or one composite layer. Liners with two layers

consist of a flexible, impermeable geomembrane, typically constructed of high-density polyethylene (HDPE), above a 2-foot layer of compacted clay. Composite liners, called geosynthetic clay liners (GCLs), are manufactured as a single mat where a geomembrane incorporates a layer of compacted clay soil. The liner lies on structural fill or bedrock.

The final cover, or cap, on a closed landfill seals the waste from the air and reduces the amount of water infiltrating into the landfill. The EPA and some states specify design standards for final covers and for providing for their long-term care.

The cap generally consists of several sloped layers over the compacted landfill. The first is an impermeable layer of either 18 inches of clay or one or more geosynthetic liners. These prevent excess precipitation from entering the landfill and help prevent the escape of landfill gases.

Next is a drainage layer of sand or gravel, or a geonet to promote rain runoff. A geotextile fabric may be placed on top of this layer to separate it from the top layer: 6 inches of topsoil.

The topsoil retains moisture and provides nutrients to the vegetation—often native grasses and shrubs—that is planted to stabilize the underlying layers of the cover and to be visually pleasing. Often the closed landfill is used as open space—for example, as a public park.

According to the EPA, closed landfills must be monitored and maintained, and the groundwater must be monitored, for 30 years to ensure that waste is not escaping.

The first profile below, of the Estancia Valley Regional Landfill in New Mexico, shows how one method of ADC, hydromulch, can be very successful in covering an MSW landfill in terms of saving money, time, and airspace. It also shows many potential uses for hydromulch as cover in landfills.

The second profile shows a large landfill expansion project in Bethlehem, PA. The use of mechanically stabilized earth (MSE) walls created 2.5 acres of additional airspace in the footprint of the existing landfill.

Estancia Valley Landfill

Hydromulch mixes typically contain a combination of wood fibers, polyester and/or cotton textile fibers, shredded paper, and a polymer to make the hydromulch fluffy, sticky, and more durable.

Estancia Valley Regional Landfill

Andy Miller stepped into his new job as manager of landfill operations at the Estancia Valley Regional Landfill in May 2016.

"I inherited a fantastic operation," says Miller. "It was well run and it had great people. But I needed to replace one million dollars of equipment: a scraper to move soil. I also had received a notice of violation for windblown trash."

The MSW landfill is in Torrance County, NM, one of the most productive agricultural counties in the US. It serves the county and as far east and north as Santa Rosa and Las Vegas, NM, approximately 100 miles away. The area receives only 10 to 12 inches of rain per year.

The MSW cell at the landfill is approximately 10 acres and receives some 60 tons of trash per day, or 1,800 tons per month.

Miller had worked with hydroseeding machines before and wanted one that had the capacity and the horsepower the landfill required, as well as a mechanical mixer. He purchased a Finn LF120 Landfill Machine for $60,000.

Because of the cost of the machine, the state and Miller's organization required him to put the request out to bid. Finn met the specifications and was also the low bidder.

"The hydromulcher really makes good sense," he says. "I'm very happy with it. It does everything I was expecting it to do."

State and federal regulations require MSW landfills to apply cover material at the end of each day. Traditionally, 6 inches of soil has been used as daily cover to any open face. New Mexico state law allows the use of ADC, including hydromulch, as long as it meets a set of ASTM specifications, which include

For related articles:
www.mswmanagement.com

Eccanta Valley Landfill

A new load of trash being dumped on the previous day's daily cover

requirements regarding flammability and odor control.

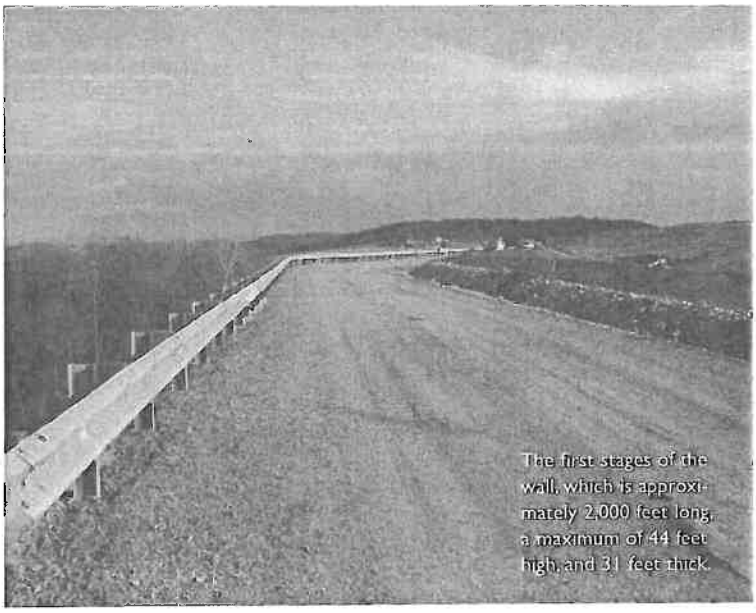
A handful of vendors provide ADC material that meets ASTM specs, Miller says. The mulch he uses usually contains a combination of wood fibers, polyester or cotton textile fibers, shredded paper, and a polymer to make the hydromulch fluffy, sticky, and more durable. The mulch is dyed brown to make it easy to see where it's been sprayed.

Similar to soil cover, hydromulch lets some rainwater in; however, landfills in New Mexico are very dry and there's very little decomposition. "This mulch is designed to protect the working face from exposure to people, animals, and fire," says Miller.

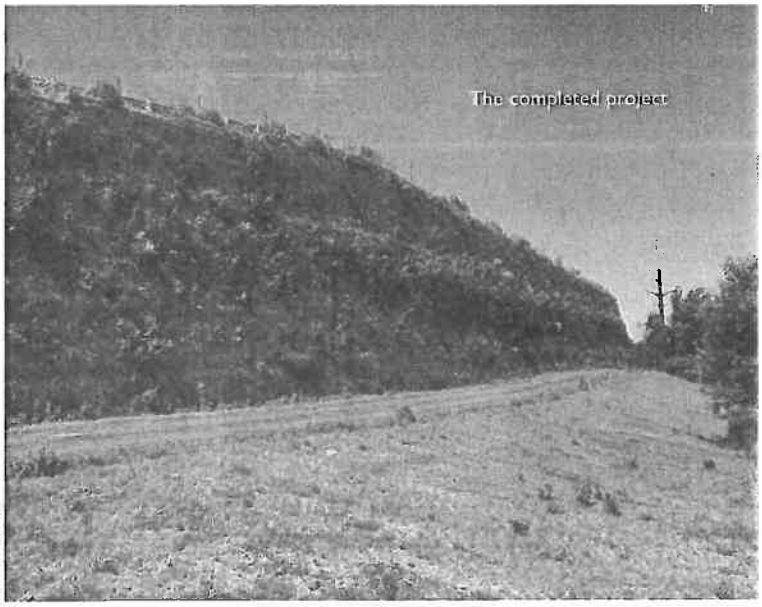
There's a cost associated with the supplies, he says, "but a million dollars worth of materials is going to go a long way. And I have one of the biggest machines available. I could use it to hydromulch a landfill 10 times my size. The hydromulcher will substitute for much of the soil that has to be moved. But soil still does need to be moved. As a substitute for the scraper, I'm getting a dump truck and an excavator for a few hundred-thousand dollars."

While the primary use of the LF120 is to apply ADC at the MSW cell, he also uses it to control erosion and windblown litter. Workers spray hydromulch when trucks are dumping loads of trash and throughout the property.

Miller has added Portland cement to the hydromulch to create a very durable, erosion resistant, one-quarter-inch-thick crust over an area that was excavated in preparation for a



The first stages of the wall, which is approximately 2,000 feet long, a maximum of 44 feet high, and 31 feet thick.



The completed project

Martin & Martin Inc.

new MSW cell. "We shot it with cement several months ago," he says. "It looks the same now as it did then."

He's already looking at the future, and it includes the Finn LF120.

"The potential is there," he says. "In my region, some construction debris piles have been discovered to contain asbestos. We could add Portland cement to encapsulate them until proper disposal was arranged."

Bethlehem Landfill Expansion

When officials at IESI PA Bethlehem Landfill Corp. wanted to change stormwater drainage patterns and add capacity to their MSW landfill, they consulted Martin & Martin Inc., an engineering and planning firm based in Pennsylvania that specializes in solid waste management.

"They were looking to redirect stormwater runoff away from a sensitive watershed," says Kevin Bodner, Martin & Martin's vice president for field operations and the project manager for the expansion. "They also wanted to maximize the current permitted footprint capacity while looking several years down the road for potential expansion."

After a geotechnical investigation that included several borings, Martin & Martin chose the solution: a MSE wall. MSE walls consist of a series of layers of compacted earth stabilized by layers of geogrid.

"MSE walls allow for a vertical boundary to extend the limits of the trash, which increases the capacity of landfills with minimal increase to their footprint," says Bodner. "In this case, the wall also allowed us to 'tip' the final disposal area perimeter in order to direct runoff to the east and south rather than to the north or west."

Martin & Martin chose Tensar's ADD³ Capacity Improvement Systems, which uses two geogrids from Tensar Corp. in Alpharetta, GA. Tensar's Uniaxial (UX) geogrid and Biaxial (BX1120) geogrid stabilize the layers of compacted earth that form the wall and the backfill, as well as the liner system above the landfill.

"We'd done a landfill expansion project on another site with Tensar," notes Bodner. "We have a very positive relationship with the folks at Tensar, and the client's experience with Tensar was very positive."

Tensar's Uniaxial geogrids are manufactured from high-density polyethylene and engineered to have high reliability and little settling. They're highly resistant to installation damage as well as to long-term chemical and biological degradation, and can be used with a variety of backfill materials, including recycled concrete.

The Biaxial geogrids are blends of polypropylene, copolymers, and additives. They resist high dynamic loads over the short term and moderate loads over longer time periods.

Tensar designed the wall with input from Martin & Martin. "We did a lot of work on this site with Doug Brown of Tensar," says Bodner. "He was very helpful."

The wall added 2.5 acres of new, usable lined footprint as well as extensive overtopping to the existing 113-acre site.

It was built in two sections. Latona Trucking of Pittston, PA, was

the general contractor for the first, and NAPA Development Corp. of Windgap, PA, was the contractor for the second. Both contractors were responsible for excavating the existing soils to the design base grades to ensure that the proper embedment grade for the wall base was achieved. They also placed and compacted the fill for the wall construction.

The first section was approximately 1,200-feet long and was finished in 2011. The backfill, approximately 30,000 to 40,000 cubic yards of a rock and sand mix, came from onsite. The remaining 800 feet was completed in 2016. For this phase, the landfill purchased approximately 12,000 cubic yards of aggregate.

The face of the wall consists of a stack of welded L-shaped wire baskets 18-inches high embedded in backfill. The baskets ensure that the layers are constructed at the proper setback, a maximum of 3 inches. They also act as guides in placing the geogrid.

Pinnacle Design and Build of Cumming, GA, installed the baskets, geogrid, and erosion control blanket for both sections. "Joe Harris, the owner of Pinnacle, was fantastic to work with," notes Bodner.

"The specs for stacking the baskets were relative to the grain size of the soil, the rock for the fill, and the moisture and compaction that need to be achieved, all of which are tested by the CQA [construction quality assurance] inspector," he says.

For each row, or lift, Pinnacle placed a row of baskets along the footprint of the landfill. Workers filled the baskets with topsoil and a seed mix approved by a landscape architect. They placed backfill behind the baskets and compacted the layer with small compaction equipment close to the face of the wall and larger compaction equipment 5 feet from the face. The CQA inspector made sure each lift of soil was compacted without damaging the geogrid.

On the layer of backfill, they placed Tensar's Uniaxial geogrid perpendicular to the face per Tensar's design. They placed the Biaxial geogrid and SC150 erosion control blanket on the face of the wall to hold in the seed and the topsoil in the baskets.

The geogrid layers that extend to the wall face tie the baskets to the wall. "The geogrid is the glue," says Bodner.

Pinnacle crews repeated this process until they achieved the final design top grade. Once the wall was constructed, the general contractor graded the disposal area behind the wall for construction of the liner system.

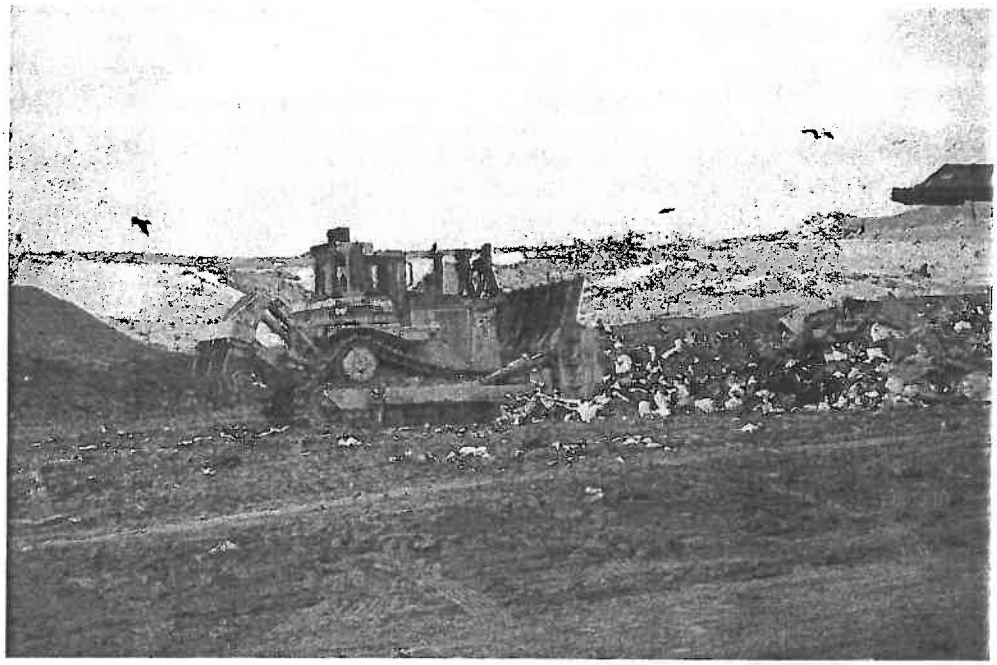
The liner system above the existing landfill consists of, from bottom to top, a 6-inch layer of a compacted clayey soil subbase; a 60-mil textured HDPE geomembrane from Agru America; a composite geonet from SKAPS Industries; a GSL from Agru America; another textured HDPE geomembrane from Agru America; and another layer of the composite geonet from SKAPS Industries.

On top of the liner system, the contractor lay an 18-inch layer of aggregate. Under the observation of the CQA inspector, the contractor carefully placed HDPE leachate collection piping. A perimeter road was then constructed on the top of the wall for access to the landfill.

"Both phases went well," says Bodner. "Obviously with the dry year we had in 2016, the second phase went real well. The contractor also gave the wall face a little dose of water during construction to help establish the vegetation." **MSW**

Janet Aird specializes in agricultural and landscaping topics.

Landfill Rate Increases


Neal Bolton

Dozer landfill work

If you're in the landfill business, hopefully you're running your landfill *like* a business. And in that regard, one of the most fundamental business rules is that there's more money coming in than going out. Because when that is happening, you can pay your bills, buy good equipment, put adequate money into your closure or post closure fund, and even stash some money in the cookie jar for a rainy-day.

But when that financial model gets upside down you have to make a decision. There are three choices. You can reduce costs, you can raise your tipping fee, or you can find some way to bring in additional tonnage, which might increase revenue enough to make the first two options unnecessary. Unfortunately, when faced with these choices, too many managers take the path of least resistance. They go to the board and ask for approval to raise the tipping fee.

Now you might be thinking to yourself, "Least resistance my foot! Hey Bolton, you obviously don't know my board." True, but I still think that's the easy way out, and though it may work fairly well in the short-term, the long-term outlook of relying on raising tipping fees to fix your financial mess, is bleak indeed.

First, raising rates can make your facility less competitive, and might force some of your customers to start looking over the fence—to see if things are a little greener . . . and perhaps a bit less expensive. Sometimes, raising rates can let you avoid asking tough questions—questions that a good manager has to address. You know what I'm talking about.

If you're not asking these questions—and working hard to find answers—you're not really managing your landfill . . . you're just showing up for work.

Okay let's pause right here. Sometimes a rate increase is necessary, and I'm certainly not suggesting that every manager who's ever asked for a rate increase shouldn't have. But in many cases, raising rates is not the answer; at least, it's not the best answer.

While conducting operational assessments, we most often find that landfills with money problems have underlying operational problems, and those problems are usually the result of following the same traditional practices year after year without ever stopping to ask: "Why are we doing it this way?"

Comparing your operation to standard industry practice may highlight certain inefficiencies and provide some ideas on how to reduce operating costs. However, it usually takes a more focused approach, requiring you to apply some specific process improvement tools. Tools such as Six Sigma, Lean, or Value Stream Mapping.

This may sound confusing if you are not familiar with these terms, but in essence, they are simply techniques that let us zero in on specific parts of your operation. They lead us through the process of asking tough, probing questions, such as: "Are we doing this work in the most efficient and most cost-effective way?" Very often, the answer is "No."

Here are a few simple (but specific) questions you can ask about your operation that may give insight of whether or not there is room for improvement.

- Do I have too many machines?
- Do I have too much staff?
- Do I ever spend time, effort, or money to move materials (i.e., stockpiles) more than once?